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## OFFICE OF PERSONNEL MANAGEMENT

### 5 CFR Parts 330 and 731

RIN 3206-AN25

#### Recruitment, Selection, and Placement (General) and Suitability

**AGENCY:** U.S. Office of Personnel Management.

**ACTION:** Final rule.

**SUMMARY:** The U.S. Office of Personnel Management (OPM) is issuing a final rule revising its regulations pertaining to when, during the hiring process, a hiring agency can request information typically collected during a background investigation from an applicant for Federal employment. OPM is making this change to promote compliance with Merit System Principles as well as the goals of the Federal Interagency Reentry Council and the President's Memorandum of January 31, 2014, "Enhancing Safeguards to Prevent the Undue Denial of Federal Employment Opportunities to the Unemployed and Those Facing Financial Difficulty Through No Fault of Their Own." In addition, the final rule will help agencies comply with the President's Memorandum of April 29, 2016, "Promoting Rehabilitation and Reintegration of Formerly Incarcerated Individuals." The intended effect of this rule is to encourage more individuals with the requisite knowledge, skills, and ability to apply for Federal positions by making it more clear that the Government provides a fair opportunity to compete for Federal employment to applicants from all segments of society, including those with prior criminal histories or who have experienced financial difficulty through no fault of their own.

**DATES:** *Effective date:* This final rule is effective January 3, 2017.

*Compliance date:* March 31, 2017. As discussed below, OPM recognizes that there are legitimate, job/position-related reasons why a hiring agency may need to determine suitability at an earlier stage in the employment process. As such, this rule allows agencies to request from OPM an exception to accommodate such circumstances. Requests for an exception must be submitted to OPM by the agency's Chief Human Capital Officer (or equivalent) at the agency headquarters level. To permit agencies time to request exceptions where appropriate, this rule will have a compliance date of March 31, 2017.

**FOR FURTHER INFORMATION CONTACT:** Mr. Mike Gilmore by telephone on (202) 606-2429, by fax at (202) 606-4430, by TTY at (202) 418-3134, or by email at [Michael.gilmore@opm.gov](mailto:Michael.gilmore@opm.gov).

**SUPPLEMENTARY INFORMATION:** On May 2, 2016, OPM issued a proposed rule at 81 FR 26173, to amend 5 CFR parts 330 and 731. Specifically, OPM proposed revisions to its regulations that would prohibit a hiring agency from making specific inquiries concerning an applicant's criminal or adverse credit background of the sort asked on the Optional Form (OF) 306, "Declaration for Federal Employment" in its "Background Information" section, or in other forms used to determine suitability or conduct background investigations for Federal employment, until the hiring agency has made a conditional offer of employment to the applicant. The proposed rule also allows agencies to request from OPM an exception to collect background information earlier in the hiring process. OPM recognizes there are legitimate, job/position-related reasons why a hiring agency may need to disqualify candidates with significant issues (including criminal history) from particular types of positions they are seeking to fill or to determine suitability at an earlier stage in the employment process. OPM received a total of 25 sets of comments: 17 from individuals, three from federal agencies, two from professional organizations, one from a trade association, one from a coalition of civic advocacy groups, and one from a private corporation. OPM's responses to the comments are discussed below.

## Discussion of Comments

### *Comments Generally Opposed to the Proposed Rule*

Several individuals provided general comments opposing the proposed rule (two of these comments were not specific). These comments are as follows:

One individual commented that Federal agencies should always consider an applicant's criminal background, and that all job announcements should advise anyone with a conviction record not to apply. A second commenter likewise stated that all resumes for Federal employment be "unblemished" by criminal history. OPM is not adopting these suggestions.

While OPM agrees that Federal agencies must consider an applicant's criminal background as part of the suitability determination required for positions covered by part 731 of this chapter, agencies should not prohibit the consideration of applications from persons with conviction records during the selection process itself. Moreover, in most cases, the separate suitability determination can and should occur after the selection process and a conditional offer have been made, thereby separating criminal history as an aspect of the suitability determination from the factors that are relevant at the time of the initial assessment process. This aligns actual requirements with what we believe to be the predominant current practice, so that they better comport with the Merit System Principle stating that selection should be based solely on knowledge, skill, and ability, 5 U.S.C. 2301, and thus will encourage more individuals with the requisite knowledge, skills, and ability to apply for Federal positions.

There are some positions for which Federal statute bars the employment of persons convicted of certain offenses. There may also be circumstances where a clean criminal history record must itself be one of the qualifications for a particular position, in light of the duties to be performed, and, therefore, becomes part of the examination for testing applicants for appointment in the competitive service that the President (and, in turn, through presidential redelegation, OPM) is entitled to prescribe. 5 U.S.C. 3301, 3302, 3304; E.O. 10577, as amended. Where criminal history-based disqualifications have a disparate



impact, the agency will need to be prepared to demonstrate that they are job-related and consistent with business necessity in order to defend its decisions from a challenge related to equal employment opportunity. Moreover, applicants cannot be found unsuitable on the basis of criminal conduct unless there is a nexus between that conduct and the efficiency of the service. Agencies have ample guidance relating to how to determine that nexus. Consistent with these principles, the proposed rule was intended to provide applicants from all segments of society, including those with prior criminal histories, a fair opportunity to compete for Federal employment.

One commenter stated that some applicants should be eliminated from consideration at the start of the hiring process based on the severity of their criminal offense, the nature of the offense vis-a-vis the duties of the position being filled, and whether the position being filled requires a security clearance. OPM agrees that certain positions may require inquiries into applicants' criminal or adverse credit history to be conducted at the start of the hiring process, and the proposed rule allows agencies to request an exception from OPM to accommodate such circumstances. But OPM cannot agree that it is appropriate, as a general rule, to eliminate applicants from consideration based upon their criminal history, before the assessment process has even occurred. The purpose of this rule is to defer the suitability process, where criminal history must and will be considered as part of an overall assessment of character and conduct, until after the assessment of relative knowledge, skills, and abilities that leads to selection of the best-qualified candidate and the conditional offer of employment. The suitability rules expressly provide for the nature of the position and the nature and seriousness of the offense to be taken into account as additional considerations during the suitability process. See 5 CFR 731.202(c). Permitting agencies to consider criminal history information in isolation, outside of the suitability process, could result in an initial selection process not exclusively based upon each candidate's qualifications and relative level of knowledge, skills, and ability with respect to the position. And it might result in non-selection without the procedural protections that a final suitability action provides, which is not ideal. Accordingly, OPM rejects this comment, in part.

#### *Comments in Support of the Proposed Rule*

A coalition representing criminal justice reform groups and civil and human rights advocates strongly supported the proposed rules, stating that when inquiries into criminal history are deferred until the conditional offer of employment, there is more clarity for the agency and the job applicant concerning the reason for a hiring decision based on a background check, and less opportunity for bias in the hiring process.

A professional association cast its general support for the proposed changes, noting that requesting criminal history information on the OF-306, Declaration for Federal Employment, only after a conditional offer of employment has been extended constituted "a sensible compromise" between promoting fair hiring practices and adhering to the suitability requirements pertaining to Federal employment. This organization also supported the proposal to allow OPM to grant limited exceptions to these rules on a position-by-position basis. We note that OPM would characterize what it is doing not as a "compromise," but rather as separating more clearly the process for assessing relative knowledge, skills, and abilities from the process for determining suitability for appointment to a position in a position covered by part 731 of this chapter.

Two individuals also provided comments in general support of the proposed rule.

#### *Comments Pertaining to the Safety, Risk, Integrity of the Civil Service, and Hiring Efficiency*

Three Federal agency commenters, one professional association, one trade association, and four members of the general public commented that the proposed rule would waste government resources, as well as applicants' time, because the hiring agency must begin the employment process but later may have to rescind a conditional offer of employment upon a determination that the applicant is ineligible for federal employment on the basis of suitability, security, facility access, or qualifications criteria. Some of these commenters noted that this could result in further delays because checks would then have to be performed on remaining candidates, or because other candidates would seek employment elsewhere due to the length of the hiring process. Some of these commenters expressed general concern that delaying applicant background screening could lengthen an already-lengthy Federal hiring process,

and could have adverse effects on certain applicants with criminal histories by requiring them to proceed all the way through the application process before learning of their disqualification, and by giving them an unrealistic expectation of their prospects as candidates. In related comments, one individual stated that the proposal would make the federal hiring process more complex and cumbersome.

One of the commenters from a Federal agency had calculated that over 10 percent of its law enforcement applicants who go through its pre-employment screening process are ultimately removed from consideration based on factors such as criminal history, delinquent debt, susceptibility to coercion, illegal use of drugs, and immigration violations, so that deferring the screening process would result in a significant unnecessary expenditure of agency time and resources in examination and qualifications assessment. The agency noted that these expenditures are significant because of its unique, agency- and position-related requirements, including the agency's significant volume of vacancies and applicants; its pre-employment polygraph and medical examination requirements; its law enforcement and national security mission; and its need for its employees to credibly testify in criminal proceedings. Another agency commenter emphasized that the nature, seriousness, recency, and job-relatedness of certain criminal violations would almost certainly be disqualifying for certain positions under OPM's suitability regulations, making deferral of an unfavorable decision especially unfair. The agency cited specific criminal conduct that would render an applicant unsuitable for firefighter, educator, child care worker, motor vehicle operator, or financial/budget positions.

OPM acknowledges there may be instances in which an agency must rescind a job offer based on an applicant's criminal or adverse credit history, and then select another candidate, which could conceivably require that the agency screen and consider additional candidates in certain circumstances. But the commenters present no empirical evidence that changing the timing of background screening will have a general impact on time-to-hire, on the cost of background screening once it occurs, or on the efficiency of the Federal hiring process generally. As noted in the Notice of Proposed Rulemaking (81 FR at 26173), many agencies already wait until the later

stages of the hiring process to collect criminal history information. We also note that these comments do not adequately take into account OPM's concern that early inquiries into an applicant's background, including his or her criminal or credit history, could have the effect of discouraging motivated, well-qualified individuals from applying for a Federal job because they have an arrest record, when the arrest did not result in a conviction or when, following a conviction, they have fully complied with the penalty and have been rehabilitated in the eyes of the law. This discouragement also could impose a cost on the hiring process, by presenting hiring officials with a less competitive candidate pool.

OPM does agree there may be limited circumstances or positions for which it is appropriate for a hiring agency to collect information about applicants' criminal or adverse credit history earlier in the hiring process, rather than at the point at which a conditional offer of employment is made to an applicant. The proposed rule allows for agencies to request an exception from OPM to accommodate such circumstances.

With respect to these commenters' concerns about fairness to applicants, the intent of the proposed rule is to conform regulatory requirements to what we believe is the predominant agency practice and thus better serve the broader public policy ideal of providing applicants from all segments of society, including those with prior criminal histories, a fair opportunity to compete for Federal employment. Deferring consideration of this information to the stage at which suitability is adjudicated separates examining and assessment process from suitability, thereby encouraging applicants with criminal history to join the competition for vacant positions. It also means that the agency defers collection of criminal history information until the stage at which the agency is in a position to undertake a suitability determination, which makes the final decision reviewable and provides certain procedural protections.

Two individuals commented that the proposed rule may have adverse national security implications because it could result in convicted felons having access to sensitive information. A third individual opposed the proposed rule and questioned the wisdom of hiring ex-offenders who may then have access to employees' personal information and to sensitive taxpayer records. OPM disagrees, noting that the proposed rule is not eliminating the need for, nor mitigating the thoroughness of, background investigations and

appropriate related adjudicative processes for applicants for Federal jobs. The proposed rule simply impacts when during the hiring process inquiries into an applicant's criminal or adverse credit history can begin.

Another individual commented that delaying preliminary background screening could also delay the commencement of the full suitability background investigation required before appointment (or to finalize a contingent appointment) in the competitive service or the national security background investigation required to adjudicate eligibility for access to classified information. It is true that it could, in some cases, defer the commencement of the full investigation, but we believe, based upon earlier discussion with agencies, that most agencies already wait until the end of the selection process to commence those investigations. The proposed rule does not, in fact, change the current standard under 736.201(c) that a personnel background investigation may commence no later than the 14th day after placement, but that if the investigation is for a national security-sensitive position, it must both commence and be completed prior to appointment unless one of the waiver or exception conditions described in 5 CFR 1400.202 applies. The proposed rule is fully consistent with the requirement in E.O. 12968 of Aug. 4, 1995, governing investigations for eligibility for access to classified information, which provides that "[a]pplicants . . . required to provide relevant information pertaining to their background and character for use in investigating and adjudicating their eligibility for access" are those who have "received an authorized conditional offer of employment for a position that requires access to classified information." E.O. 12968, 3 CFR, 1995 Comp., p. 391, secs. 1.1(b), 3.2(a), *reprinted as amended in* 5 U.S.C. 3161 note.

One commenter mistakenly believes the proposed rule will weaken background checks, and thus poses a threat to the security of Federal employees, the American people, and U.S. government assets and secrets. The proposed rule does not, in any way, change the need to collect background information after the conditional job offer has been made and to evaluate any known issues prior to appointment (or after an appointment that is contingent upon a favorable adjudication). Similarly, it does not impact the integrity or thoroughness of the background investigation process. The proposed rule only affects the point at which an agency may collect

information about an applicant's criminal or adverse credit history.

Another individual believes the proposed rule will give the perception that the Federal government is establishing a hiring preference for ex-convicts or using Federal jobs as a relief-work or program for ex-convicts, which could demoralize the Government's workforce and discourage talented applicants from applying. This comment does not pertain to the merits of the rule but rather, expresses a concern that the rule will be misperceived to the detriment of the Federal hiring process. OPM believes that this concern is speculative. The proposed rule does not provide a hiring or selection priority for ex-convicts, nor does it allow individuals to be appointed who should be adjudicated unsuitable for Federal employment. Similarly, it has no bearing on whether an individual requires eligibility for access to classified information, and, if so, should be deemed eligible under the adjudicative guidelines for such decisions. The rule simply addresses at which point during the *selection* process an agency may make inquiries into an applicant's background, thereby helping to support a process where selections and conditional offers follow a fair and open competition based on applicants' relative knowledge, skill, and ability. In doing so, the rule is intended to attract all qualified applicants by making it more clear that, subject to certain exceptions, adverse background information will not be collected until after applicants' competencies are assessed, thereby reinforcing the notion that the Federal government is a model employer.

Three commenters supported deferring the collection of applicants' criminal history information until later in the hiring process, but proposed alternative approaches that they believed would achieve a better balance between fairness versus timeliness, and efficiency. A commenter from a Federal agency suggested the rule be modified to allow agencies to administer the OF-306 when an employee is determined to be within reach for selection. Another commenter from a Federal agency suggested that the rule be modified to allow agencies to administer the OF-306 at the time of scheduling an interview, *i.e.*, after preliminary qualifications screening but before selection. A professional association recommended following an example from state government, of conducting criminal history screening after an interview as part of the final selection process. While all of these approaches have merit, OPM is not adopting them

at this time because assessment instruments are not uniform across civil service examinations. Some examinations have an interview component while others do not; some employ multiple interviews. Permitting criminal history screening at the time of a conditional offer provides a uniform standard that is not dependent on the specific instruments that are being used in a competitive examination to assess applicant competencies.

#### *Exception Based on Location or Type of Position*

A professional organization commented that the process by which agencies may seek exceptions to collect information earlier in the process about applicants' criminal or credit history (on a case-by-case basis) could result in additional delays. OPM will provide further guidance after the publication of this final rule, but notes that an agency will not have to wait until it has a vacant position to request an exception. If there is a position or group of positions within the agency for which there is a legitimate need to collect information earlier in the process, the hiring agency may request an exception at any time. Once an agency receives an exception from OPM to collect background information from applicants for a particular position or group of positions earlier in the hiring process, the agency will not be required to request an exception subsequently, or each time, the position is being filled thereafter.

Another professional organization suggested that OPM make clear in the final rule that exceptions from the proposed changes must be requested prior to the posting of any vacancy announcement to which it will apply. Of course if an agency requests an exception on the ground that it is necessary to ask for certain background information as an aspect of determining whether a particular applicant is *qualified* for the position, then, the agency, of necessity, would be required to make that clear in advance of posting the job opportunity announcement. OPM agrees with this suggestion, however, even when the exception is to be requested in order to enable the agency to adjudicate suitability in advance, and has amended proposed 5 CFR part 330 subpart M accordingly.

This organization suggested OPM modify 5 CFR 330.1300 by including specific conditions under which OPM may grant an exception to these provisions. OPM is not adopting this suggestion. OPM is not yet in a position to anticipate all of the circumstances that could warrant an exception, and

wishes to gain experience with the regulation, and explore further the sorts of situations agencies may bring to its attention, before it limits its discretion to a list of specific conditions. Therefore we prefer, at least for now, to provide examples of the types of factors OPM will consider in determining whether to grant an exception.

The same organization also suggested that the final rule include a provision requiring agencies which are granted an exception to provide notice of the exception in their job announcements for positions for which the exception was granted. OPM agrees that agencies which receive exceptions should provide notice of the exception in their job announcements. Among other things, an agency that receives an exception in order to use background information as an aspect of assessing qualifications will, of necessity, need to disclose the qualifications and how they will be assessed as part of the job opportunity announcement. We do not believe a requirement in the final rule is necessary; OPM will require notice in its approval letters granting such exceptions.

One commenter from an agency and one individual suggested that OPM, in the final rule, specifically exempt from these provisions positions with law enforcement and national security duties. We see no reason why an agency filling a position that is national security sensitive cannot defer the collection of background information until after a putative selection, based upon relative degree of knowledge, skills, and abilities, has been made. Many agencies already do this. Moreover, even as to law enforcement positions, OPM is not adopting this suggestion. Because specific duties and agency requirements may differ, we prefer to rely on the mechanism for exceptions described in the proposed rule which allows agencies to request an exception for specific positions to collect background information pertaining to an applicant's criminal or adverse credit history earlier in the hiring process.

A coalition representing criminal justice reform groups and civil and human rights advocates recommended that OPM permit no exception allowing agencies to collect information about applicants' criminal or adverse credit history prior to a conditional offer of employment. OPM is not adopting this suggestion. OPM leaves open the possibility that for certain positions there may be valid, job and position-related reasons why an agency may seek to disqualify applicants with significant criminal or adverse credit history

backgrounds early in the process (such as law enforcement positions requiring the eventual appointee to be in a position to testify in legal proceedings). For these reasons OPM is retaining the exception provision.

The coalition commented that, in the event the exception provision is retained in the final rule, OPM should place the burden of proof on agencies seeking exceptions, should adjudicate requests under a rigorous standard of proof, and should give the public the opportunity to respond in opposition to an agency's request for exception. OPM does not adopt this suggestion. Currently, there are no limitations on the point at which agencies may initiate the collection of background information. The decision to impose the restriction is a policy decision, not a legal requirement. Accordingly, we do not believe that a uniform burden and standard of proof or a public notice-and-comment process is necessary or would assist us in our decision-making process, and it would be likely to unnecessarily delay the hiring process. The manner in which OPM grants exceptions must be flexible.

#### *Other Comments*

One agency commented that asking applicants whether they have been fired from a job, as is asked on the OF-306, in connection with competitive hiring is a valid question and that restricting employers from doing so before making a selection hinders the employer from fully evaluating applicants and choosing the best candidate. Another agency commented that it needs to use the OF-306 prior to a conditional offer of employment because it is not just a background screening form, but is also used to collect important applicant information related to an applicant's citizenship, Selective Service registration status, military service and type of discharge, and relatives. This information is needed to ensure that candidates meet legal requirements for appointment in competitive hiring. OPM agrees that inquiries into an applicant's prior employment may have a bearing on his or her fitness for the job and points out that the proposed rule does not restrict agencies from collecting information about an applicant's prior employment prior to making a selection. The context of the proposed rule is information of the sort asked on the OF-306's 'Background Information' section specific to an applicant's criminal or adverse credit history. These provisions also do not prevent a hiring agency from collecting information about prior work history earlier in the hiring process. OPM has

amended the final rule to provide greater clarity with respect to this issue.

OPM notes in this regard that agencies are not required to sponsor or conduct separate information collections subject to Office of Management and Budget (OMB) clearance in order to ask these kinds of questions to applicants as part of the competitive Civil Service hiring process. Under OMB's regulations implementing the Paperwork Reduction Act (PRA), "[e]xaminations designed to test the aptitude, abilities, or knowledge of the persons tested and the collection of information for identification or classification in connection with such examinations" do not constitute information collections subject to the PRA's requirements. See 5 CFR 1320.3(h)(7).

One individual asked whether the proposed rule was "politically motivated" for an electoral purpose. It was not. The origins of the proposed rule began several years ago. OPM proposed this rule to better harmonize the requirements concerning the timing and objectives of the merit selection process and the suitability function.

One professional organization supports the proposal to include these rules under 5 CFR part 731 to ensure that any non-selections based on information from the OF-306 are appealable to the Merit Systems Protection Board (MSPB) under 5 CFR part 731.501. It appears the commenter may have misinterpreted the proposed rule. Only suitability actions as defined in 5 CFR part 731.203 (cancellation of eligibility, removal, cancellation of reinstatement rights, and debarment) are appealable to the MSPB. Nonselection is not appealable, as stated in 5 CFR 302.406(g) and 731.203(b).

The same organization recommended that OPM codify in the final rules the mitigating factors described in section 2(b)(i-iii) of the Presidential memorandum titled, "Promoting Rehabilitation and Reintegration of Formerly Incarcerated Individuals" (81 FR 26993, 26995). OPM is not adopting this suggestion because these criteria pertain to occupational licensure, not to whether an individual is suitable for Federal employment. The purpose of the proposed rule is to affect at what point in the hiring process an agency may make inquiries into an applicant's background, not to impact the criteria used to determine an applicant's suitability for employment. However, we note that separate sections of this Memorandum are relevant to this rule. Section 1 formally reconstitutes the Federal Interagency Reentry Council as a Presidentially-established Council;

section 1(a)(xvii) formalizes OPM's membership; and section 2(a) directs that "Agencies making suitability determinations for Federal employment shall review their procedures for evaluating an applicant's criminal records to ensure compliance with 5 CFR part 731 and any related, binding guidance issued by the Office of Personnel Management, with the aim of evaluating each individual's character and conduct." OPM expects that this rule will assist agencies in complying with the President's mandate.

This organization also asked that OPM amend its suitability regulations to require an agency to include a record of any exception granted by OPM, permitting it to conduct suitability screening prior to a conditional offer of employment, as part of the "materials relied upon" in charging an individual. OPM does not accept this recommendation, because the timing of a suitability inquiry is unrelated to the charges brought against an applicant, appointee, or employee in a proposed suitability action.

A coalition representing criminal justice reform groups and civil and human rights advocates recommended that OPM implement a centralized means of collecting data on the impact of the proposed rule by documenting the number of conditional offers and final hiring decisions of persons with prior convictions. The coalition believes this data would help maintain the integrity of the background check process and also help with oversight. OPM is not adopting this suggestion as part of the rulemaking but will oversee agencies' compliance with the rule, as part of the merit system audit and compliance process under Civil Service Rules V and X.

The coalition also suggested the proposed rules should apply to positions filled in the excepted service. OPM notes these provisions do apply to certain positions in the excepted service. OPM is not accepting this recommendation as to all excepted service positions, but notes that under the current suitability regulations at 5 CFR 731.101(b), the definition of "Covered Position" includes a small subset of excepted service positions within OPM's jurisdiction, namely positions in the excepted service "where the incumbent can be noncompetitively converted to the competitive service. . . ."

For other positions in the excepted service, OPM generally lacks the authority to prescribe qualification, fitness, or suitability standards or to regulate the timing of employer inquiries. For those positions excepted

from the competitive service by Acts of Congress, hiring procedures and standards for making qualification or fitness determinations may be prescribed by statute. Where the statute is silent, or where the exception from the competitive service is made by the President (or by OPM under presidential delegation), Civil Service Rule VI, § 6.3(b) states that "[t]o the extent permitted by law and the provisions of this part, appointments and position changes in the excepted service shall be made in accordance with such regulations and practices as the head of the agency concerned finds necessary." See 5 CFR 6.3(b) (codifying this section of the Rule). Agency heads have the discretion to decide whether or not to establish criteria for making fitness determinations and determine whether their standards are equivalent to suitability standards established by OPM (but must consider OPM guidance when exercising this discretion). See Section 3 of E.O. 13488 of January 16, 2009, 3 CFR, 2009 Comp., p. 189.

The coalition notes, in support of its comment, that under Civil Service Rule VI, § 6.3(a), "OPM, in its discretion, may by regulation prescribe conditions under which excepted positions may be filled in the same manner as competitive positions are filled and conditions under which persons so appointed may acquire a competitive status in accordance with the Civil Service Rules and Regulations." The coalition cites this provision as "clear authority" for OPM to impose identical hiring requirements on the excepted service. However, the cited provision is not authority for OPM to *override* the discretion given to agencies in filling positions in the excepted service. Rather, it is a mechanism for OPM to *permit* agencies to hire for the excepted service in the same manner as for the competitive service and upon doing so, to give competitive status (*i.e.*, the ability to be noncompetitively assigned to positions in the competitive service) to excepted service employees who have been hired in that manner. See 5 CFR 212.301, 302.102(c).

The coalition suggested that OPM include language in the final rule that requires agencies to comply with title VII of the Civil Rights Act of 1964, and Equal Employment Opportunity Commission (EEOC) guidelines pertaining to the use of conviction records in hiring decisions, including an individualized assessment of applicants' criminal history. OPM is not adopting this suggestion because these rules only pertain to the timing of inquiries into an applicant's criminal or adverse credit history, not to the selection process for

Federal employment, and agencies have an independent obligation to comply with title VII.

#### *Changes to the OF-306*

One agency and a coalition representing criminal justice reform groups and civil and human rights advocates suggested OPM also make changes to the OF-306 to facilitate the rule's implementation. OPM is not addressing these comments at this time because the OF-306 and other investigative questionnaires are not promulgated through rulemaking, but through the separate PRA process. The comments may be resubmitted when the information collections are up for renewal under the PRA.

One individual suggested that OPM remove the requirement to provide a Social Security number (SSN) on the OF-306. OPM is not adopting this suggestion because it is beyond the scope of the proposed rule, which pertains to when during the hiring process an agency may collect information about an applicant's criminal or adverse credit history.

#### *Comments Outside the Scope of the Proposed Rule*

A private company commented that the proposed rule will inadvertently deter private sector employers from taking advantage of the Work Opportunity Tax Credit (WOTC), which is designed to encourage private employers to hire people with criminal histories, among others. This company requests that OPM clarify in the final rule that private employers can use the WOTC credit without violating these provisions. This comment is beyond the scope of the proposed regulations, which only pertain to Federal employment. OPM suggests private companies consult the Internal Revenue Service for information concerning the WOTC.

The same company suggested that OPM make clear in the final rule that these provisions only pertain to Federal employment. OPM is not adopting this suggestion because we do not believe such clarification is necessary. By statute and under the Civil Service Rules, OPM's jurisdiction in these matters is limited to Federal employment.

One organization similarly expressed concern that the proposed rule may persuade state and local governments to enact regulatory or contractual measures which, in turn, impose burdensome requirements on private investigative and security firms. The comment is not accompanied by a specific recommendation related to the

rulemaking, and is speculative, so there is no basis for OPM to consider the comment.

A coalition representing criminal justice reform groups and civil and human rights advocates recommended that OPM also extend these rules to its contractors. OPM cannot adopt this suggestion as part of the rulemaking, which pertains only to competitive Federal hiring, not contracting.

One individual asked whether there is evidence that "many" agencies administer the Optional Form (OF) 306, "Declaration for Federal Employment" prior to the point at which a tentative job offer is made. OPM stated in the Supplementary Information section of the proposed rule that to the contrary "many agencies already . . . wait until the later stages of the hiring process to collect this kind of information." (81 FR at 26173.) This assertion is based upon the results of a survey we conducted on this matter. This survey was developed and issued to all Chief Human Capital Officers Act agencies. Eighteen (18) agencies/sub-agencies responded to the survey. The comment was not accompanied by a recommendation related to the rulemaking, so there is no basis to consider the comment.

Two commenters opposed the proposed rule in the mistaken belief that the rule's purpose was to improve employment opportunities for individuals who had become criminals "through no fault of their own." The commenters were apparently confused by a citation, in the proposed rule's Supplementary Information (81 FR at 26174), to a Presidential Memorandum, "Enhancing Safeguards to Prevent the Undue Denial of Federal Employment Opportunities to the Unemployed and Those Facing Financial Difficulty Through No Fault of Their Own (79 FR 7045). OPM cited the memorandum as a basis to defer the collection of certain applicant employment or credit information until the later stages of the hiring process, not for the reasons the commenters suggested. Because the comments were based on a faulty premise, OPM did not consider them.

One commenter asked that OPM revise the proposed rule to improve the formula for cost-of-living allowances for annuities. The comment was outside the scope of the proposal and was not considered.

#### **Executive Order 13563 and Executive Order 12866, Regulatory Review**

The Office of Management and Budget has reviewed this rule in accordance with E.O. 13563 and 12866.

#### **Regulatory Flexibility Act**

I certify that these regulations will not have a significant economic impact on a substantial number of small entities because the regulations pertain only to Federal agencies and employees.

#### **E.O. 13132, Federalism**

This regulation will not have substantial direct effects on the States, on the relationship between the National Government and the States, or on distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 13132, it is determined that this rule does not have sufficient federalism implications to warrant preparation of a Federalism Assessment.

#### **E.O. 12988, Civil Justice Reform**

This regulation meets the applicable standard set forth in section 3(a) and (b)(2) of Executive Order 12988.

#### **Unfunded Mandates Reform Act of 1995**

This rule will not result in the expenditure by State, local or tribal governments of more than \$100 million annually. Thus, no written assessment of unfunded mandates is required.

#### **Congressional Review Act**

This action pertains to agency management, personnel and organization and does not substantially affect the rights or obligations of non-agency parties and, accordingly, is not a "rule" as that term is used by the Congressional Review Act (Subtitle E of the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA)). Therefore, the reporting requirement of 5 U.S.C. 801 does not apply.

#### **Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35)**

This final regulatory action will not impose any additional reporting or recordkeeping requirements under the Paperwork Reduction Act.

#### **List of Subjects**

##### *5 CFR Part 330*

Armed forces reserves, District of Columbia, Government employees.

##### *5 CFR Part 731*

Administrative practices and procedures, Government employees.

U.S. Office of Personnel Management

**Beth F. Cobert,**  
*Acting Director.*

Accordingly, OPM is amending 5 CFR parts 330 and 731 as follows:

## PART 330—RECRUITMENT, SELECTION, AND PLACEMENT (GENERAL)

■ 1. The authority citation for part 330 continues to read as follows:

**Authority:** 5 U.S.C. 1104, 1302, 3301, 3302, 3304, and 3330; E.O. 10577, 3 CFR, 1954–58 Comp., p. 218; Section 330.103 also issued under 5 U.S.C. 3327; Subpart B also issued under 5 U.S.C. 3315 and 8151; Section 330.401 also issued under 5 U.S.C. 3310; Subparts F and G also issued under Presidential Memorandum on Career Transition Assistance for Federal Employees, September 12, 1995; Subpart G also issued under 5 U.S.C. 8337(h) and 8456(b).

■ 2. Add subpart M, consisting of § 330.1300 to read as follows:

### Subpart M—Timing of Background Investigations

#### § 330.1300 Timing of suitability inquiries in competitive hiring.

A hiring agency may not make specific inquiries concerning an applicant's criminal or credit background of the sort asked on the OF-306 or other forms used to conduct suitability investigations for Federal employment (*i.e.*, inquiries into an applicant's criminal or adverse credit history) unless the hiring agency has made a conditional offer of employment to the applicant. Agencies may make inquiries into an applicant's Selective Service registration, military service, citizenship status, or previous work history, prior to making a conditional offer of employment to an applicant.

However, in certain situations, agencies may have a business need to obtain information about the background of applicants earlier in the hiring process to determine if they meet the qualifications requirements or are suitable for the position being filled. If so, agencies must request an exception from the Office of Personnel Management in order to determine an applicant's ability to meet qualifications or suitability for Federal employment prior to making a conditional offer of employment to the applicant(s). OPM will grant exceptions only when the agency demonstrates specific job-related reasons why the agency needs to evaluate an applicant's criminal or adverse credit history earlier in the process or consider the disqualification of candidates with criminal backgrounds or other conduct issues from particular types of positions. OPM will consider such factors as, but not limited to, the nature of the position being filled and whether a clean criminal history record would be essential to the ability to perform one of the duties of the position effectively.

OPM may also consider positions for which the expense of completing the examination makes it appropriate to adjudicate suitability at the outset of the process (*e.g.*, a position that requires that an applicant complete a rigorous training regimen and pass an examination based upon the training before his or her selection can be finalized). A hiring agency must request and receive an OPM-approved exception prior to issuing public notice for a position for which the agency will collect background information prior to completion of the assessment process and the making of a conditional offer of employment.

## PART 731—SUITABILITY

■ 3. The authority citation for part 731 continues to read as follows:

**Authority:** 5 U.S.C. 1302, 3301, 7301; E.O. 10577, 3 CFR 1954–1958 Comp., p. 218, as amended; E.O. 13467, 3 CFR 2009 Comp., p. 198; E.O. 13488, 3 CFR 2010 Comp., p. 189; 5 CFR parts 1, 2 and 5.

■ 4. In § 731.103, revise paragraph (d) to read as follows:

#### § 731.103 Delegation to agencies.

\* \* \* \* \*

(d)(1) A hiring agency may not make specific inquiries concerning an applicant's criminal or credit background of the sort asked on the OF-306 or other forms used to conduct suitability investigations for Federal employment (*i.e.*, inquiries into an applicant's criminal or adverse credit history) unless the hiring agency has made a conditional offer of employment to the applicant. Agencies may make inquiries into an applicant's Selective Service registration, military service, citizenship status, or previous work history, prior to making a conditional offer of employment to an applicant. However, in certain situations, agencies may have a business need to obtain information about the suitability or background of applicants earlier in the process. If so, agencies must request an exception from the Office of Personnel Management, in accordance with the provisions of 5 CFR part 330 subpart M.

(2) OPM reserves the right to undertake a determination of suitability based upon evidence of falsification or fraud relating to an examination or appointment at any point when information giving rise to such a charge is discovered. OPM must be informed in all cases where there is evidence of material, intentional false statements, or deception or fraud in examination or

appointment, and OPM will take a suitability action where warranted.

\* \* \* \* \*

[FR Doc. 2016–28782 Filed 11–30–16; 8:45 am]

BILLING CODE 6325–39–P

## OFFICE OF PERSONNEL MANAGEMENT

### 5 CFR Part 532

RIN 3206–AN38

### Prevailing Rate Systems; Redefinition of Certain Appropriated Fund Federal Wage System Wage Areas

**AGENCY:** U.S. Office of Personnel Management.

**ACTION:** Final rule.

**SUMMARY:** The U.S. Office of Personnel Management (OPM) is issuing a final rule to redefine the geographic boundaries of several appropriated fund Federal Wage System (FWS) wage areas for pay-setting purposes. Based on reviews of Metropolitan Statistical Area (MSA) boundaries in a number of wage areas, OPM is redefining the following wage areas: Salinas-Monterey, CA; San Francisco, CA; New London, CT; Central and Western Massachusetts; Cincinnati, OH; Dayton, OH; Southeastern Washington-Eastern Oregon; and Spokane, WA.

**DATES:** *Effective date:* This regulation is effective on December 1, 2016.

*Applicability date:* This change applies on the first day of the first applicable pay period beginning on or after January 3, 2017.

**FOR FURTHER INFORMATION CONTACT:** Madeline Gonzalez, by telephone at (202) 606–2858 or by email at [pay-leave-policy@opm.gov](mailto:pay-leave-policy@opm.gov).

**SUPPLEMENTARY INFORMATION:** On June 24, 2016, OPM issued a proposed rule (81 FR 41255) to redefine the following counties:

- San Benito County, CA, from the Salinas-Monterey, CA, area of application to the San Francisco, CA, area of application;
- Windham County, CT, from the New London, CT, area of application to the Central and Western Massachusetts area of application;
- Union County, IN; from the Dayton, OH, area of application to the Cincinnati, OH, area of application;
- Columbia County, WA, from the Spokane area of application to the Southeastern Washington-Eastern Oregon area of application.

The Federal Prevailing Rate Advisory Committee, the national labor-management committee responsible for

advising OPM on matters concerning the pay of FWS employees, reviewed and recommended these changes by consensus.

The 30-day comment period ended on July 25, 2016. OPM received one comment in support of the proposal and one comment requesting OPM consider moving another county in the State of California, Mendocino County, CA, from the Rest of U.S. (RUS) General Schedule (GS) locality pay area to the San Jose-San Francisco-Oakland, CA GS locality pay area. GS and FWS pay areas are administered under different regulations. The comment is therefore beyond the scope of the proposed rule.

### Regulatory Flexibility Act

I certify that these regulations will not have a significant economic impact on a substantial number of small entities because they will affect only Federal agencies and employees.

### List of Subjects in 5 CFR Part 532

Administrative practice and procedure, Freedom of information, Government employees, Reporting and recordkeeping requirements, Wages.

U.S. Office of Personnel Management.

**Beth F. Cobert,**

*Acting Director.*

Accordingly, OPM is amending 5 CFR part 532 as follows:

### PART 532—PREVAILING RATE SYSTEMS

■ 1. The authority citation for part 532 continues to read as follows:

**Authority:** 5 U.S.C. 5343, 5346; § 532.707 also issued under 5 U.S.C. 552.

■ 2. Appendix C to subpart B is amended by revising the wage area listings for the Salinas-Monterey, CA; San Francisco, CA; New London, CT; Central and Western Massachusetts; Cincinnati, OH; Dayton, OH, Southeastern Washington-Eastern Oregon; and Spokane, WA, wage areas to read as follows:

#### Appendix C to Subpart B of Part 532—Appropriated Fund Wage and Survey Areas

*	*	*	*	*
<b>CALIFORNIA</b>				
*	*	*	*	*
<b>Salinas-Monterey</b>				
<i>Survey Area</i>				

California:  
Monterey

*Area of Application. Survey area.*

*	*	*	*	*
<b>San Francisco</b>				
California:				
Alameda				
Contra Costa				
Marin				
Napa				
San Francisco				
San Mateo				
Santa Clara				
Solano				
<i>Area of Application. Survey area plus:</i>				

California:				
Mendocino				
San Benito				
Santa Cruz				
Sonoma				

*	*	*	*	*
<b>CONNECTICUT</b>				
*	*	*	*	*
<b>New London</b>				
<i>Survey Area</i>				

Connecticut:  
New London  
*Area of Application. Survey area.*

*	*	*	*	*
<b>MASSACHUSETTS</b>				
*	*	*	*	*
<b>Central and Western Massachusetts</b>				
<i>Survey Area</i>				

Massachusetts:  
The following cities and towns in:  
*Hampden County*  
Agawam  
Chicopee  
East Longmeadow  
Feeding Hills  
Hampden  
Holyoke  
Longmeadow  
Ludlow  
Monson  
Palmer  
Southwick  
Springfield  
Three Rivers  
Westfield  
West Springfield  
Wilbraham  
*Hampshire County*  
Easthampton  
Granby  
Hadley  
Northampton  
South Hadley  
*Worcester County*  
Warren  
West Warren

*Area of Application. Survey area plus:*

Connecticut:				
Windham				
Massachusetts:				
Berkshire				
Franklin				
Worcester (except Blackstone and Millville)				
The following cities and towns in:				
<i>Hampden County</i>				
Blandford				
Brimfield				

Chester  
Granville  
Holland  
Montgomery  
Russell  
Tolland  
Wales  
*Hampshire County*  
Amherst  
Belchertown  
Chesterfield  
Cummington  
Goshen  
Hatfield  
Huntington  
Middlefield  
Pelham  
Plainfield  
Southampton  
Ware  
Westhampton  
Williamsburg  
Worthington  
*Middlesex County*  
Ashby  
Shirley  
Townsend  
New Hampshire:  
Belknap  
Carroll  
Cheshire  
Grafton  
Hillsborough  
Merrimack  
Sullivan  
Vermont:  
Addison  
Bennington  
Caledonia  
Essex  
Lamoille  
Orange  
Orleans  
Rutland  
Washington  
Windham  
Windsor

*	*	*	*	*
<b>OHIO</b>				
<b>Cincinnati</b>				
<i>Survey Area</i>				

Indiana:  
Dearborn  
Kentucky:  
Boone  
Campbell  
Kenton  
Ohio:  
Clermont  
Hamilton  
Warren  
*Area of Application. Survey area plus:*  
Indiana:  
Franklin  
Ohio  
Ripley  
Switzerland  
Union  
Kentucky:  
Bracken  
Carroll  
Gallatin  
Grant  
Mason

Pendleton  
Ohio:  
Adams  
Brown  
Butler  
Highland

\* \* \* \*

#### Dayton

Ohio:  
Champaign  
Clark  
Greene  
Miami  
Montgomery  
Preble

*Area of Application. Survey area plus:*

Indiana:  
Randolph  
Wayne

Ohio:  
Auglaize  
Clinton  
Darke  
Logan  
Shelby

\* \* \* \*

#### WASHINGTON

\* \* \* \*

#### Southeastern Washington-Eastern Oregon

*Survey Area*

Oregon:  
Umatilla  
Washington:  
Benton  
Franklin  
Walla Walla  
Yakima

*Area of Application. Survey area plus:*

Oregon:  
Baker  
Grant  
Harney  
Malheur  
Morrow  
Union  
Wallowa  
Wheeler

Washington:  
Columbia  
Kittitas (Only includes the Yakima Firing Range portion)

#### Spokane

*Survey Area*

Washington:  
Spokane

*Area of Application. Survey area plus:*

Idaho:  
Benewah  
Bonner  
Boundary  
Clearwater  
Idaho  
Kootenai  
Latah  
Lewis  
Nez Perce  
Shoshone  
Washington:  
Adams  
Asotin

Chelan (Does not include the North Cascades National Park portion)

Douglas  
Ferry  
Garfield  
Grant  
Kittitas (Does not include the Yakima Firing Range portion)  
Lincoln  
Okanogan  
Pend Oreille  
Stevens  
Whitman

\* \* \* \*

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**BILLING CODE 6325-39-P**

## COUNCIL OF THE INSPECTORS GENERAL ON INTEGRITY AND EFFICIENCY

### 5 CFR Part 9801

**RIN 3219-AA00**

### Privacy Act Regulations

**AGENCY:** Council of the Inspectors General on Integrity and Efficiency.

**ACTION:** Final rule.

**SUMMARY:** The Council of the Inspectors General on Integrity and Efficiency (CIGIE) is issuing this final rule to establish its procedures relating to access, maintenance, disclosure, and amendment of records that are in a CIGIE system of records under the Privacy Act of 1974 (Privacy Act). This final rule also establishes rules of conduct for CIGIE personnel who have responsibilities under the Privacy Act.

**DATES:** This final rule is effective January 3, 2017.

**FOR FURTHER INFORMATION CONTACT:** Atticus J. Reaser, General Counsel, CIGIE, (202) 292-2600.

### SUPPLEMENTARY INFORMATION:

#### Background Information

CIGIE published a proposed rule in the *Federal Register*, 81 FR 61628, September 7, 2016, to provide the procedures and guidelines under which CIGIE will implement the Privacy Act. The proposed rule provided a 60-day comment period, which ended on November 7, 2016. CIGIE received one timely and responsive comment, which was submitted by an individual. The comment supported the regulation and reflected no suggested changes.

CIGIE is making one technical citation format change. The citation to “the Inspector General Act of 1978, Public Law 95-452, 92 Stat. 1101 (codified as amended at 5 U.S.C. app)” reflected in the proposed rule is being changed in this final rule to “the Inspector General

Act of 1978, as amended, 5 U.S.C. app.” This is a technical modification and does not reflect a substantive change. There were no other modifications made to the proposed rule. For the reasons set forth herein and in the preamble to the proposed rule, CIGIE is publishing this final rule.

### Executive Orders 12866 and 13563

In promulgating this rule, CIGIE has adhered to the regulatory philosophy and the applicable principles of regulation set forth in section 1 of Executive Order 12866, Regulatory Planning and Review. The Office of Management and Budget (OMB) has determined that this rule is not “significant” under Executive Order 12866.

### Regulatory Flexibility Act

These regulations will not have a significant economic impact on a substantial number of small entities. Therefore, a regulatory flexibility analysis as provided by the Regulatory Flexibility Act, as amended, is not required.

### Paperwork Reduction Act

These regulations impose no additional reporting and recordkeeping requirements. Therefore, clearance by OMB is not required.

### Federalism (Executive Order 13132)

This rule does not have Federalism implications, as set forth in Executive Order 13132. It will 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.

### List of Subjects in 5 CFR Part 9801

Information, Privacy, Privacy Act, Records.

For the reasons set forth in the preamble, CIGIE adds part 9801 to title 5 of the Code of Federal Regulations as follows:

## PART 9801—PRIVACY ACT REGULATIONS

### Subpart A—General Provisions

Sec.

9801.101 Purpose and scope.

9801.102 CIGIE organization.

9801.103 Definitions.

9801.104 Rules for determining if an individual is the subject of a record.

9801.105 Employee standards of conduct.

9801.106 Use and collection of social security numbers.

9801.107 Other rights and services.



**Subpart B—Access to Records and Accounting of Disclosures**

Sec.

- 9801.201 Requests for access.
- 9801.202 Response to requests.
- 9801.203 Granting access.
- 9801.204 Special procedures: Medical records.
- 9801.205 Appeals from denials of requests for access to records.
- 9801.206 Response to appeal of a denial of access.
- 9801.207 Fees.
- 9801.208 Requests for accounting of record disclosures.

**Subpart C—Amendment of Records**

Sec.

- 9801.301 Requests for amendment of record.
- 9801.302 Response to requests.
- 9801.303 Appeal from adverse determination on amendment.
- 9801.304 Response to appeal of adverse determination on amendment; disagreement statements.
- 9801.305 Assistance in preparing request to amend a record or to appeal an initial adverse determination.

**Authority:** Section 11 of the Inspector General Act of 1978, as amended, 5 U.S.C. app.; 5 U.S.C. 301, 552a; 31 U.S.C. 9701.

**Subpart A—General Provisions****§ 9801.101 Purpose and scope.**

This part contains the regulations of the Council of the Inspectors General on Integrity and Efficiency (CIGIE) implementing the Privacy Act of 1974, 5 U.S.C. 552a. This part sets forth the basic responsibilities of CIGIE with regard to CIGIE's compliance with the requirements of the Privacy Act and offers guidance to members of the public who wish to exercise any of the rights established by the Privacy Act with regard to records maintained by CIGIE. These regulations should be read in conjunction with the Privacy Act, which explains in more detail individuals' rights.

**§ 9801.102 CIGIE organization.**

(a) *Centralized program.* Except as stated in paragraph (b) of this section, CIGIE has a centralized Privacy Act program, with one office receiving and coordinating the processing of all Privacy Act requests to CIGIE.

(b) *Integrity Committee records.* The Integrity Committee of CIGIE (IC) is the single exception to CIGIE's centralized Privacy Act program. By statute, all records received or created by the IC in fulfilling its responsibilities are collected and maintained separately as IC records by the official of the Federal Bureau of Investigation (FBI) serving on the IC. Currently, all such records are maintained by the FBI in the FBI's Central Records System and are subject

to the system of records notices and the Privacy Act policies and regulations applicable to that system. See 28 CFR part 16, subpart D. Accordingly, except as stated in paragraph (c) of this section, because IC records are not maintained by CIGIE, this part does not apply to requests or appeals regarding IC records.

(c) *Acceptance of requests and appeals.* CIGIE will accept initial requests or appeals regarding CIGIE records and regarding IC records maintained by the FBI on behalf of the FBI. Requests and appeals regarding IC records will be referred to the FBI for processing and direct response to the requester by the FBI.

**§ 9801.103 Definitions.**

(a) For purposes of this part the terms *individual*, *maintain*, *record*, *routine use*, and *system of records*, shall have the meanings set forth in 5 U.S.C. 552a(a).

(b) *CIGIE* means the Council of the Inspectors General on Integrity and Efficiency and includes its predecessor entities, the Executive Council on Integrity and Efficiency and the President's Council on Integrity and Efficiency.

(c) *Days*, unless stated as "calendar days," are working days and do not include Saturdays, Sundays, or Federal holidays.

(d) *IC* means the CIGIE Integrity Committee established under section 11(d) of the Inspector General Act of 1978, as amended, 5 U.S.C. app. (Inspector General Act).

(e) *Request for access* to a record means a request made under Privacy Act subsection (d)(1).

(f) *Request for amendment* of a record means a request made under Privacy Act subsection (d)(2).

(g) *Request for an accounting* means a request made under Privacy Act subsection (c)(3).

(h) *Requester* means an individual who makes a request for access, a request for amendment, or a request for an accounting under the Privacy Act.

**§ 9801.104 Rules for determining if an individual is the subject of a record.**

An individual seeking to determine if a specific CIGIE system of records contains a record pertaining to the individual must follow the procedures set forth for access to records in § 9801.201(a), (b)(1) and (2), (c), and (d). A request to determine if an individual is the subject of a record will ordinarily be responded to within 10 days, except when CIGIE determines otherwise, in which case the request will be acknowledged within 10 days and the individual will be informed of the

reasons for the delay and an estimated date by which a response will be issued.

**§ 9801.105 Employee standards of conduct.**

CIGIE will inform its employees involved in the design, development, operation, or maintenance of any system of records, or in maintaining any record, of the provisions of the Privacy Act, including the Act's civil liability and criminal penalty provisions. Unless otherwise permitted by law, an employee of CIGIE shall:

(a) Collect from individuals only the information that is relevant and necessary to discharge the responsibilities of CIGIE;

(b) Collect information about an individual directly from that individual whenever practicable when the information may result in adverse determinations about an individual's rights, benefits, and privileges under Federal programs;

(c) Inform each individual from whom information is collected of:

(1) The legal authority to collect the information and whether providing it is mandatory or voluntary;

(2) The principal purpose for which CIGIE intends to use the information;

(3) The routine uses CIGIE may make of the information; and

(4) The effects on the individual, if any, of not providing the information;

(d) Maintain no system of record without public notice and notify appropriate CIGIE officials of the existence or development of any system of records that is not the subject of a current or planned public notice;

(e) Maintain all records that are used by CIGIE in making any determination about an individual with such accuracy, relevance, timeliness, and completeness as is reasonably necessary to ensure fairness to the individual in the determination;

(f) Except as to disclosures made to an agency or made under the Freedom of Information Act, 5 U.S.C. 552 (FOIA), make reasonable efforts, prior to disseminating any record about an individual, to ensure that the record is accurate, relevant, timely, and complete;

(g) Maintain no record describing how an individual exercises his or her First Amendment rights, unless it is expressly authorized by statute or by the individual about whom the record is maintained, or is pertinent to and within the scope of an authorized law enforcement activity;

(h) When required by the Privacy Act, maintain an accounting in the specified form of all disclosures of records by CIGIE to persons, organizations, or agencies;

(i) Maintain and use records with care to prevent the unauthorized or inadvertent disclosure of a record to anyone. No record contained in a CIGIE system of record shall be disclosed to another person, or to another agency outside CIGIE, except pursuant to a written request by, or with the prior written consent of, the individual to whom the record pertains, unless the disclosure is otherwise authorized by the Privacy Act; and

(j) Notify the appropriate CIGIE official of any record that contains information that the Privacy Act does not permit CIGIE to maintain.

#### **§ 9801.106 Use and collection of social security numbers.**

(a) *No denial of right, benefit, or privilege.* Individuals may not be denied any right, benefit, or privilege as a result of refusing to provide their social security numbers, unless the collection is required by Federal statute; and

(b) *Notification to individual.* Individuals requested to provide their social security numbers must be informed of:

(1) Whether providing social security numbers is mandatory or voluntary;

(2) The statutory or regulatory authority that authorizes the collection of social security numbers; and

(3) The uses that will be made of the numbers.

#### **§ 9801.107 Other rights and services.**

Nothing in this part shall be construed to entitle any person, as of right, to any service or to the disclosure of any record to which such person is not entitled under the Privacy Act.

### **Subpart B—Access to Records and Accounting of Disclosures**

#### **§ 9801.201 Requests for access.**

(a) *How addressed.* A requester seeking access to records pertaining to the requester in a CIGIE system of records should submit a written request that includes the words “Privacy Act Request” on both the envelope and at the top of the request letter to the Executive Director, Council of the Inspectors General on Integrity and Efficiency, 1717 H Street NW., Suite 825, Washington, DC 20006.

(b) *Description of records sought.* (1) A request should contain a specific reference to the CIGIE system of records from which access to the records is sought. Notices of CIGIE systems of records subject to the Privacy Act are published in the **Federal Register**, and copies of the notices are available on CIGIE’s Web site at [www.ignet.gov](http://www.ignet.gov), or upon request from CIGIE’s Office of General Counsel.

(2) If the written inquiry does not refer to a specific system of records, it must describe the records that are sought in enough detail to enable CIGIE personnel to locate the system of records containing them with a reasonable amount of effort.

(3) The request should state whether the requester wants a copy of the record or wants to examine the record in person.

(c) *Verification of identity.* A requester seeking access to records pertaining to the requester must verify their identity in their request. The request must state the requester’s full name, current address, and date and place of birth. The requester must sign the request and the signature must either be notarized or state, “Under penalty of perjury, I hereby declare that I am the person named above and I understand that any falsification of this statement is punishable under the provisions of Title 18, United States Code (U.S.C.), Section 1001 by a fine of not more than \$10,000 or by imprisonment of not more than five years, or both; and that requesting or obtaining any record(s) under false pretenses is punishable under the provisions of Title 5, U.S.C., Section 552a(i)(3) as a misdemeanor and by a fine of not more than \$5,000.” In order to help the identification and location of requested records, the requester may optionally include their social security number. No identification shall be required if the records are required by 5 U.S.C. 552 to be released.

(d) *Verification of guardianship.* When making a request as the parent or guardian of a minor or as the guardian of someone determined by a court to be incompetent for access to records about that individual, the requester must establish:

(1) The identity of the individual who is the subject of the record, by stating the name, current address, date and place of birth, and, at the requester’s option, the social security number of the individual;

(2) The requester’s identity, as required in paragraph (c) of this section;

(3) That the requester is the parent or guardian of that individual, which may be established by providing a copy of the individual’s birth certificate showing the requester’s parentage or by providing a court order establishing the requester’s guardianship; and

(4) That the requester is acting on behalf of that individual in making the request.

#### **§ 9801.202 Response to requests.**

A request for access will ordinarily be responded to within 10 days, except

when CIGIE determines otherwise, in which case the request will be acknowledged within 10 days and the requester will be informed of the reasons for the delay and an estimated date by which a response will be issued. A response to a request for access should include the following:

(a) A statement that there is a record or records as requested or a statement that there is not a record in the system of records;

(b) The method of access (if a copy of all the records requested is not provided with the response);

(c) The amount of any fees to be charged for copies of records under § 9801.207, if applicable;

(d) The name and title of the official responsible for the response; and

(e) If the request is denied in whole or in part, or no record is found in the system, a statement of the reasons for the denial, or a statement that no record has been found, and notice of the procedures for appealing the denial or no record finding.

#### **§ 9801.203 Granting access.**

(a) *Means of access.* (1) The methods for allowing access to records, when such access has been granted by CIGIE, are:

(i) Examination in person in a designated office during the hours specified by CIGIE; or

(ii) Providing copies of the records.

(2) When a requester has not indicated whether he wants a copy of the record or wants to examine the record in person, CIGIE may choose the means of granting access. However, the means chosen should not unduly impede the requester’s right of access. A requester may elect to receive a copy of the records after having examined them.

(b) *Accompanying individual.* If the requester is granted in person access to examine the records, the requester may be accompanied by another individual of the requester’s choice during the course of the examination of the records. CIGIE may require the requester to submit a signed statement authorizing the accompanying individual’s access to the records.

(c) *Certified copies.* CIGIE will not furnish certified copies of records. When copies are to be furnished, they may be provided as determined by CIGIE.

(d) *Original records.* When the requester seeks to obtain original documentation, CIGIE reserves the right to limit the request to copies of the original records.

**§ 9801.204 Special procedures: Medical records.**

In the event CIGIE receives a request pursuant to § 9801.201 for access to medical records (including psychological records) whose disclosure CIGIE determines would be harmful to the individual to whom they relate, it may refuse to disclose the records directly to the requester but shall transmit them to a physician designated by the requester.

**§ 9801.205 Appeals from denials of requests for access to records.**

(a) *How addressed.* A requester may submit a written appeal of the decision by CIGIE to deny an initial request for access to records or a no record response to the Chairperson, Council of the Inspectors General on Integrity and Efficiency, 1717 H Street NW., Suite 825, Washington, DC 20006. The words "Privacy Act Appeal" should be included on the envelope and at the top of the letter of appeal.

(b) *Deadline and content.* The appeal must be received by CIGIE within 60 days of the date of the letter denying the access request or reflecting the no record finding and should contain a brief description of the records involved or copies of the relevant correspondence from CIGIE. The appeal should attempt to refute the reasons given by CIGIE in support of its decision to deny the initial request for access or no record finding.

**§ 9801.206 Response to appeal of a denial of access.**

(a) *Access granted.* If the Chairperson or the Chairperson's designee determines that access to the records should be granted, the response will state how access will be provided if the records are not included with the response.

(b) *Denial affirmed.* Any decision that either partially or fully affirms the initial decision to deny access or no record finding shall inform the requester of the right to seek judicial review of the decision in accordance with the Privacy Act (5 U.S.C. 552a(g)).

(c) *When appeal is required.* If a requester wishes to seek review by a court of any adverse determination or denial of a request, the requester must first appeal it under § 9801.205.

**§ 9801.207 Fees.**

(a) *No fees for most services.* Services for which fees will not be charged:

- (1) The search and review time expended by CIGIE to produce a record;
- (2) The first copy of the records provided; and

(3) CIGIE making the records available to be personally reviewed by the requester.

(b) *Fees for additional copies.* When a requester requests additional copies of records, CIGIE will assess the requester a fee of \$.20 per page. CIGIE will bill requester in arrears for such fees, except as follows:

(1) If the total fee for additional copies amounts to more than \$25.00, the requester will be notified of the fee amount. Except as specified in paragraph (b)(2) of this section, upon requester's written agreement to pay the assessed fees, CIGIE will provide the additional copies without prepayment of such fees (*i.e.*, payment will be accepted in arrears).

(2) An advance payment before additional copies of the records are made will be required if:

(i) CIGIE determines that the total fee to be assessed under this section exceeds \$250.00. When such a determination is made, the requester will be notified of the determination and will be required to submit an advance payment of an amount up to the total fee. The amount of the advanced payment will be at the sole discretion of CIGIE and will be based, in part, on whether requester has a history of prompt payment of Privacy Act fees. If the required advanced payment is an amount less than the total fee, requester will be required to submit a written agreement to pay any fees not paid in advance; or

(ii) The requester has previously failed to pay a previously assessed Privacy Act fee in a timely fashion (*i.e.*, within 30 days of the date of the billing). In such cases, the requester will be required to pay the full amount outstanding plus any applicable interest as provided by paragraph (c) of this section and to make an advance payment of the full amount of the determined fee before CIGIE begins to process a new request for additional copies.

(c) *Interest charges.* For additional copies provided to requester that result in fees assessed, CIGIE will begin levying interest charges on an unpaid balance starting on the 31st day following the day on which the billing was sent. Interest will be assessed at the rate prescribed under 31 U.S.C. 3717 and will accrue from the date of the billing.

(d) *Payment address.* Payment of fees should be made by either a personal check, bank draft or a money order that is payable to the Department of the Treasury of the United States and mailed or delivered to: Privacy Officer, Council of the Inspectors General on

Integrity and Efficiency, 1717 H Street NW., Suite 825, Washington, DC 20006.

**§ 9801.208 Requests for accounting of record disclosures.**

(a) *How made and addressed.* Except where accountings of disclosures are not required to be kept (as stated in paragraph (b) of this section), a requester may request an accounting of any disclosure that has been made by CIGIE to another person, organization, or agency of any record about the requester. This accounting contains the date, nature, and purpose of each disclosure, as well as the name and address of the person, organization, or agency to which the disclosure was made. A requester seeking an accounting of record disclosures must follow the procedures set forth for access to records in § 9801.201(a), (b)(1) and (2), (c), and (d).

(b) *Where accountings are not required.* CIGIE is not required to provide accountings to requesters where they relate to:

(1) Disclosures for which accountings are not required to be kept, including disclosures that are made to officers and employees of CIGIE and disclosures that are made under the FOIA. For purposes of this part, officers and employees of CIGIE includes, in part, CIGIE's membership, as addressed in section 11 of the Inspector General Act, when such members are acting in their capacity as CIGIE members;

(2) Disclosures made to law enforcement agencies for authorized law enforcement activities in response to written requests from those law enforcement agencies specifying the law enforcement activities for which the disclosures are sought; or

(3) Disclosures made from law enforcement systems of records that have been exempted from accounting requirements.

**Subpart C—Amendment of Records****§ 9801.301 Requests for amendment of record.**

(a) *How addressed.* A requester seeking to amend a record or records pertaining to requester in a CIGIE system of records should submit a written request that includes the words "Privacy Act Amendment Request" on both the envelope and at the top of the request letter to the Executive Director, Council of the Inspectors General on Integrity and Efficiency, 1717 H Street NW., Suite 825, Washington, DC 20006. Records not subject to the Privacy Act will not be amended in accordance with these provisions.

(b) *Contents of request.* A request to amend a record in a CIGIE system of records must include:

(1) The name of the system of records and a brief description of the record proposed for amendment. In the event the request to amend the record is the result of the requester having gained access to the record in accordance with the provisions concerning access to records as set forth in subpart B of this part, copies of previous correspondence between the requester and CIGIE will serve in lieu of a separate description of the record.

(2) The exact portion of the record the requester seeks to have amended should be indicated clearly. If possible, proposed alternative language should be set forth, or, at a minimum, the reasons why the requester believes the record is not accurate, relevant, timely, or complete should be set forth with enough particularity to permit CIGIE to not only to understand the requester's basis for the request, but also to make an appropriate amendment to the record.

(c) *Burden of proof.* The requester has the burden of proof when seeking the amendment of a record. The requester must furnish sufficient facts to persuade the appropriate system manager of the inaccuracy, irrelevance, untimeliness, or incompleteness of the record.

(d) *Identification requirement.* When the requester's identity has been previously verified pursuant to § 9801.201, further verification of identity is not required as long as the communication does not suggest a need for verification. If the requester's identity has not been previously verified, the appropriate system manager may require identification validation as described in § 9801.201.

#### **§ 9801.302 Response to requests.**

(a) *Time limit for acknowledging a request for amendment.* To the extent possible, CIGIE will acknowledge receipt of a request to amend a record or records within 10 working days.

(b) *Determination on an amendment request.* The decision of CIGIE in response to a request for amendment of a record in a system of records may grant in whole or deny any part of the request to amend the record.

(1) If CIGIE grants the request, the appropriate system manager will amend the record(s) and provide a copy of the amended record(s) to the requester. To the extent an accounting of disclosure has been maintained, the system manager shall advise all previous recipients of the record that an amendment has been made and give the substance of the amendment. Where

practicable, the system manager shall send a copy of the amended record to previous recipients.

(2) If CIGIE denies the request in whole or in part, the reasons for the denial will be stated in the response letter. In addition, the response letter will state:

(i) The name and address of the official with whom an appeal of the denial may be lodged; and

(ii) A description of any other procedures which may be required of the requester in order to process the appeal.

#### **§ 9801.303 Appeal from adverse determination on amendment.**

(a) *How addressed.* A requester may submit a written appeal of the decision by CIGIE to deny an initial request to amend a record in a CIGIE system of records to the Chairperson, Council of the Inspectors General on Integrity and Efficiency, 1717 H Street NW., Suite 825, Washington, DC 20006. The words "Privacy Act Appeal" should be included on the envelope and at the top of the letter of appeal.

(b) *Deadline and content.* The appeal must be received by CIGIE within 60 days of the date of the letter denying the request and should contain a brief description of the record(s) involved or copies of the correspondence from CIGIE and the reasons why the requester believes that the disputed information should be amended.

#### **§ 9801.304 Response to appeal of adverse determination on amendment; disagreement statements.**

(a) *Response timing.* The Chairperson should make a final determination in writing not later than 30 days from the date the appeal was received. The 30-day period may be extended for good cause. Notice of the extension and the reasons therefor will be sent to the requester within the 30-day period.

(b) *Amendment granted.* If the Chairperson determines that the record(s) should be amended in accordance with the requester's request, the Chairperson will take the necessary steps to advise the requester and to direct the appropriate system manager:

(1) To amend the record(s); and

(2) To notify previous recipients of the record(s) for which there is an accounting of disclosure that the record(s) have been amended.

(c) *Denial affirmed.* If the appeal decision does not grant in full the request for amendment, the decision letter will notify the requester that the requester may:

(1) Obtain judicial review of the decision in accordance with the terms of the Privacy Act at 5 U.S.C. 552a(g); and

(2) File a statement setting forth their reasons for disagreeing with the decision.

(d) *Requester's disagreement statement.* A requester's disagreement statement must be concise. CIGIE has the authority to determine the "conciseness" of the statement, taking into account the scope of the disagreement and the complexity of the issues.

(e) *Provision of requester's disagreement statement.* In any disclosure of information about which an individual has filed a proper statement of disagreement, CIGIE will clearly note any disputed portion(s) of the record(s) and will provide a copy of the statement to persons or other agencies to whom the disputed record or records has been disclosed and for whom an accounting of disclosure has been maintained. A concise statement of the reasons for not making the amendments requested may also be provided.

#### **§ 9801.305 Assistance in preparing request to amend a record or to appeal an initial adverse determination.**

Requesters may seek assistance in preparing a request to amend a record or an appeal of an initial adverse determination, or to learn further of the provisions for judicial review, by contacting CIGIE's Privacy Officer by email at [privacy@cigie.gov](mailto:privacy@cigie.gov) or by mail at Privacy Officer, Council of the Inspectors General on Integrity and Efficiency, 1717 H Street NW., Suite 825, Washington, DC 20006.

Dated: November 23, 2016.

**Michael E. Horowitz,**  
Chairperson of the Council of the Inspectors General on Integrity and Efficiency.

[FR Doc. 2016-28897 Filed 11-30-16; 8:45 am]

BILLING CODE 6820-C9-P

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

[Docket No. FAA-2016-6692; Directorate Identifier 2016-NE-13-AD; Amendment 39-18725; AD 2016-24-08]

RIN 2120-AA64

#### **Airworthiness Directives; Rolls-Royce plc Turbofan Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for all

Rolls-Royce plc (RR) RB211-Trent 875-17, RB211-Trent 877-17, RB211-Trent 884-17, RB211-Trent 884B-17, RB211-Trent 892-17, RB211-Trent 892B-17, and RB211-Trent 895-17 turbofan engines. This AD requires repetitive inspections of the engine upper bifurcation fairing and repairing or replacing any fairing that fails inspection. This AD was prompted by a report of cracking and material release from an engine upper bifurcation fairing. We are issuing this AD to prevent failure of the engine fire protection system, engine fire, and damage to the airplane.

**DATES:** This AD becomes effective January 5, 2017.

**ADDRESSES:** For service information identified in this final rule, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, England, DE24 8BJ; phone: 011-44-1332-242424; fax: 011-44-1332-249936; email: [http://www.rolls-royce.com/contact/civil\\_team.jsp](http://www.rolls-royce.com/contact/civil_team.jsp); Internet: <https://customers.rolls-royce.com/public/rollsroycecare>. You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

**Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6692; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Wego Wang, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7134; fax: 781-238-7199; email: [wego.wang@faa.gov](mailto:wego.wang@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to the specified products. The NPRM was published in the **Federal Register** on July 15, 2016 (81 FR 46000). The NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

Inspection of in-service Rolls-Royce RB211 Trent 800 engines has identified cracking and/or material release from the upper bifurcation fairing. This fairing hardware mates to the aeroplane thrust reverser upper bifurcation forward fire seal. Both sets of hardware create the engine firewall to isolate the engine compartment fire zone, which is a firewall feature of the aeroplane type design. Damage (missing materials and holes/openings) to the upper bifurcation fairing creates a breach of the engine fire wall, which may decrease the effectiveness of the engine fire detection and suppression systems due to excess fan air entering the engine compartment fire zone. This could delay or prevent the fire detection and suppression system from functioning properly, and can result in an increased risk of prolonged burning, potentially allowing a fire to reach unprotected areas of the engine, strut and wing.

You may obtain further information by examining the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6692.

**Comments**

We gave the public the opportunity to participate in developing this AD. We considered the comment received.

**Request To Remove Reference to Guidance in Compliance**

American Airlines, Inc. (AAL) requested that paragraph (e)(3)(ii) in this AD be revised to eliminate the

references to Aircraft Maintenance Manual (AMM) Task 70-20-02 and to OMat 632. AAL indicated that AMM 70-20-02 requires the use of OMat 653 and TAM (PSM-5) TST panels for testing fluorescent penetrants for contamination and effectiveness. AAL noted that the Overhaul Material Manual (OMat 6) allows the use of any products specified in the SAE-AMS-2644 Qualified Product List Group 1A2 as an alternative to OMat 653.

We disagree. Paragraph (e)(3)(ii) in this AD refers to AMM Task 70-20-02 and OMat 632 as guidance that operators may use when performing fluorescent penetrant inspection. This AD does not require that AMM TASK 70-20-02 or OMat 632 be followed when performing fluorescent penetrant inspection. We did not change this AD.

**Conclusion**

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

**Related Service Information**

RR has issued Alert Non-Modification Service Bulletin (NMSB) RB.211-72-AJ165, dated March 31, 2016. The NMSB describes procedures for inspecting and, if necessary, repairing or replacing the engine upper bifurcation fairing.

**Costs of Compliance**

We estimate that this AD affects 125 engines installed on airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

ESTIMATED COSTS				
Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection .....	3.25 work-hours × \$85 per hour = \$276.25 .....	\$0	\$276.25	\$34,531

We estimate the following costs to do any necessary replacements that would

be required based on the results of the proposed inspection. We estimate that 5

engines will need this repair and 5 engines will need this replacement:

## ON-CONDITION COSTS

Action	Labor cost	Parts cost	Cost per product
Repair of engine upper bifurcation fairing .....	8 work-hours × \$85 per hour = \$680 .....	\$500	\$1,180
Replacement of engine upper bifurcation fairing .....	30 work hours × \$85 per hour = \$2,550 .....	500	3,050

**Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. 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.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

**Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect 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.

For the reasons discussed above, I certify this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator,

the FAA amends 14 CFR part 39 as follows:

**PART 39—AIRWORTHINESS DIRECTIVES**

- 1. The authority citation for part 39 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2016–24–08 Rolls-Royce plc:** Amendment 39–18725; Docket No. FAA–2016–6692; Directorate Identifier 2016–NE–13–AD.

**(a) Effective Date**

This AD becomes effective January 5, 2017.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Rolls-Royce plc (RR) RB211-Trent 875-17, RB211-Trent 877-17, RB211-Trent 884-17, RB211-Trent 884B-17, RB211-Trent 892-17, RB211-Trent 892B-17, and RB211-Trent 895-17 turbofan engines.

**(d) Reason**

This AD was prompted by a report of cracking and material release from an engine upper bifurcation fairing. We are issuing this AD to prevent failure of the engine fire protection system, engine fire, and damage to the airplane.

**(e) Actions and Compliance**

Comply with this AD within the compliance times specified, unless already done.

- (1) Within 7,500 engine flight hours (FHs) time since new, or since last inspection, or within 150 flight cycles (FCs) after the effective date of this AD, whichever occurs later, inspect the engine upper bifurcation fairing for cracks or missing material. Use paragraph (e)(3) of this AD to perform the inspections.

- (2) Repeat the inspection required by this AD within every 7,500 engine FHs time since last inspection.

- (3) Inspect the engine upper bifurcation fairing as follows. Refer to Figure 1 of RR Alert Non-Modification Service Bulletin (NMSB) RB.211–72–AJ165, dated March 31, 2016, for guidance on upper bifurcation fairing inspection locations.

- (i) Visually inspect upper bifurcation fairing seal face 22, seal support 23, and zone A for any cracks or material loss on the right side.

(A) If fairing seal face 22 is found to have released material, repair or replace the fairing before further flight.

(B) If there is a single crack found on fairing seal face 22, shorter than 6 mm, repair or replace the fairing within 100 engine flight cycles, or at the next shop visit, whichever occurs sooner.

(C) If there is a single crack, longer than 6 mm, found on fairing seal face 22, repair or replace the fairing within 15 engine FCs or at the next shop visit, whichever occurs sooner.

(D) If there are two or more cracks found on fairing seal face 22, replace the fairing within 15 engine FCs or at next shop visit, whichever occurs sooner.

(E) If there is any cracking or material loss found on seal support 23, replace the fairing within 15 engine FCs or at next shop visit, whichever occurs sooner.

(ii) If the visual inspection required by paragraph (e)(3)(i) of this AD does not detect any crack, fluorescent penetrant inspect zone A. Refer to AMM TASK 70–20–02, Water Washable Fluorescent Penetrant Inspection (Maintenance Process 213), or OMat 632, high sensitivity fluorescent penetrant inspection, for guidance on fluorescent penetrant inspection.

(A) If a crack shorter than 6 mm is detected, repair or replace the fairing within 100 engine FCs, or at the next shop visit, whichever occurs sooner.

(B) If a crack longer than 6 mm is detected, repair or replace the fairing within 15 engine FCs or at the next shop visit, whichever occurs sooner.

**(f) Definition**

For the purpose of this AD, a "shop visit" is defined as induction of an engine into the shop for maintenance involving the separation of pairs of major mating engine flanges, except that the separation of engine flanges solely for the purposes of transportation without subsequent engine maintenance does not constitute an engine shop visit.

**(g) Alternative Methods of Compliance (AMOCs)**

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

**(h) Related Information**

- (1) For more information about this AD, contact Wego Wang, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781–238–7134; fax: 781–238–7199; email: wego.wang@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency AD 2016-0084, dated April 28, 2016, for more information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2016-6692.

(3) RR Alert NMSB RB.211-72-AJ165, dated March 31, 2016, which is not incorporated by reference in this AD, can be obtained from RR, using the contact information in paragraph (h)(4) of this AD.

(4) For service information identified in this AD, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, England, DE24 8BJ; phone: 011-44-1332-242424; fax: 011-44-1332-249936; email: [http://www.rolls-royce.com/contact/civil\\_team.jsp](http://www.rolls-royce.com/contact/civil_team.jsp); Internet: <https://customers.rolls-royce.com/public/rollsroycecare>.

(5) You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

#### (i) Material Incorporated by Reference

None.

Issued in Burlington, Massachusetts, on November 16, 2016.

**Colleen M. D'Alessandro,**

*Manager, Engine & Propeller Directorate, Aircraft Certification Service.*

[FR Doc. 2016-28663 Filed 11-30-16; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 71

[Docket No. FAA-2016-7417; Airspace Docket No. 16-AWA-4]

**RIN 2120-AA66**

#### Amendment of Class C Airspace; El Paso International Airport, TX

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** This action amends Class C airspace at El Paso International Airport, El Paso, TX, by removing a cutout from the Class C airspace area that excludes the airspace within a 2-mile radius of West Texas Airport and the airspace beyond an 8-mile arc from the El Paso International Airport beginning at the 115° bearing from the airport clockwise to the Rio Grande River. Additionally, this rule removes West Texas Airport from the Class C airspace description as the airport is closed, and amends the El Paso International Airport geographic coordinates to coincide with the FAA's aeronautical database. The FAA is taking this action to enable more efficient operations at El Paso International Airport.

**DATES:** Effective date 0901 UTC, February 2, 2017. The Director of the Federal Register approves this incorporation by reference action under Title 1, Code of Federal Regulations, part 51, subject to the annual revision of FAA Order 7400.11 and publication of conforming amendments.

**ADDRESSES:** FAA Order 7400.11A, Airspace Designations and Reporting Points, and subsequent amendments can be viewed online at [http://www.faa.gov/air\\_traffic/publications/](http://www.faa.gov/air_traffic/publications/). For further information, you can contact the Airspace Policy Group, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; telephone: (202) 267-8783. The Order is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of FAA Order 7400.11A at NARA, call (202) 741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal-regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal-regulations/ibr_locations.html).

FAA Order 7400.11, Airspace Designations and Reporting Points, is published yearly and effective on September 15.

#### FOR FURTHER INFORMATION CONTACT:

Colby Abbott, Airspace Policy Group, Office of Airspace Services, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; telephone: (202) 267-8783.

#### SUPPLEMENTARY INFORMATION:

##### Authority for This Rulemaking

The FAA's authority to issue rules regarding 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 Subtitle VII, Part A, Subpart I, Section 40103. Under that section, the FAA is charged with prescribing regulations to assign the use of the airspace necessary to ensure the safety of aircraft and the efficient use of airspace. This regulation is within the scope of that authority as it amends the El Paso, TX, Class C airspace area to preserve the safe and efficient flow of air traffic in the El Paso, TX, area.

##### History

On August 17, 2016, the FAA published in the **Federal Register** a notice of proposed rulemaking (NPRM) to modify the Class C airspace at El Paso International Airport, El Paso, TX (81

FR 54752), Docket No. FAA-2016-7417. Interested parties were invited to participate in this rulemaking effort by submitting written comments on the proposal. One comment was received supporting the FAA's proposed action.

#### Availability and Summary of Documents for Incorporation by Reference

This document amends FAA Order 7400.11A, Airspace Designations and Reporting Points, dated August 3, 2016, and effective September 15, 2016. FAA Order 7400.11A is publicly available as listed in the **ADDRESSES** section of this document. FAA Order 7400.11A lists Class A, B, C, D, and E airspace areas, air traffic service routes, and reporting points.

#### The Rule

The FAA is amending Title 14, Code of Federal Regulations (14 CFR) part 71 by modifying the El Paso International Airport, El Paso, TX, Class C airspace area. This action removes the cutout and reduced perimeter boundary arc that excludes the airspace extending upward from 5,200 feet MSL to and including 8,000 feet MSL within a 2-mile radius of the West Texas Airport, and the airspace beyond an 8-mile arc from the El Paso International Airport beginning at the 115° bearing from the airport clockwise to the Rio Grande River. Since West Texas Airport (renamed Horizon Airport in 2004) is permanently closed and the property sold for non-aviation uses, the purpose for the exclusions no longer exists. Thus, the FAA is removing the words “. . . that airspace beyond an 8-mile arc from the El Paso International Airport beginning at the 115° bearing from the airport clockwise to the Rio Grande River, and that airspace within a 2-mile radius of the West Texas Airport, and . . .” from the regulatory text. The West Texas Airport name and geographic coordinate references are also removed from the Class C airspace description.

Additionally, this action amends the exclusion language pertaining to the Class C airspace extending upward from 5,200 feet MSL to and including 8,000 feet MSL from “. . . that airspace within Mexico, and that airspace west of long 106°27'02" W.” to “. . . that airspace west of long. 106°27'02" W., and that airspace within Mexico.” This change is editorial for format and clarity to standardize the exclusion information associated with the Class C airspace surface area and shelf.

Lastly, this action updates the El Paso International Airport geographic coordinates to reflect the current airport reference point information in the



FAA's aeronautical database from "lat. 31°48'24" N., long. 106°22'40" W." to "lat. 31°48'26" N., long. 106°22'35" W."

Class C airspace areas are published in paragraph 4000 of FAA Order 7400.11A, dated August 3, 2016, and effective September 15, 2016, which is incorporated by reference in 14 CFR 71.1. The Class C airspace area modification in this document will be published subsequently in the Order.

#### Regulatory Notices and Analyses

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore: (1) Is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under Department of Transportation (DOT) Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that will only affect air traffic procedures and air navigation, it is certified that this rule, when promulgated, will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### Environmental Review

The FAA has determined that this action of modifying the El Paso International Airport, El Paso, TX, Class C airspace area by removing a cutout from the Class C airspace area that excludes the airspace within a 2-mile radius of West Texas Airport (now closed) and the airspace beyond an 8-mile arc from the El Paso International Airport beginning at the 115° bearing from the airport clockwise to the Rio Grande River, removing the West Texas Airport and geographic coordinate references from the Class C airspace description, and amending the El Paso International Airport geographic coordinates to reflect the current airport reference point information contained in the FAA's aeronautical database qualifies for categorical exclusion under the National Environmental Policy Act and its implementing regulations at 40 CFR part 1500, and in accordance with FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Paragraph 5–6.5a, which categorically excludes from further environmental review [R]ulemaking actions that designate or modify classes of airspace areas, airways, routes, and reporting points. This action is not expected to cause any potentially significant

environmental impacts. In accordance with FAA Order 1050.1F, paragraph 5–2 regarding Extraordinary Circumstances, this action has been reviewed for factors and circumstances in which a normally categorically excluded action may have a significant environmental impact requiring further analysis, and it is determined that no extraordinary circumstances exist that warrant preparation of an environmental assessment.

#### List of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

#### Adoption of the Amendment

In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR part 71 as follows:

#### PART 71—DESIGNATION OF CLASS A, B, C, D, AND E AIRSPACE AREAS; AIR TRAFFIC SERVICE ROUTES; AND REPORTING POINTS

■ 1. The authority citation for part 71 continues to read as follows:

**Authority:** 49 U.S.C. 106(f), 106(g); 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959–1963 Comp., p. 389.

#### § 71.1 [Amended]

■ 2. The incorporation by reference in 14 CFR 71.1 of the FAA Order 7400.11A, Airspace Designations and Reporting Points, dated August 3, 2016, and effective September 15, 2016, is amended as follows:

*Paragraph 4000 Subpart C—Class C Airspace.*

\* \* \* \* \*

#### ASW TX C El Paso International Airport, TX [Amended]

El Paso International Airport, TX  
(Lat. 31°48'26" N., long. 106°22'35" W.)

That airspace extending upward from the surface to and including 8,000 feet MSL within a 5-mile radius of the El Paso International Airport, excluding that airspace west of long. 106°27'02" W., and that airspace within Mexico; and that airspace extending upward from 5,200 feet MSL to and including 8,000 feet MSL within a 10-mile radius of the El Paso International Airport, excluding that airspace west of long. 106°27'02" W., and that airspace within Mexico.

Issued in Washington, DC, on November 22, 2016.

**Leslie M. Swann,**

*Acting Manager, Airspace Policy Group.*

[FR Doc. 2016–28726 Filed 11–30–16; 8:45 am]

**BILLING CODE 4910–13–P**

## DEPARTMENT OF COMMERCE

### Bureau of Industry and Security

#### 15 CFR Part 740

[160519443–6999–02]

RIN 0694–AG97

#### Temporary Exports to Mexico Under License Exception TMP

**AGENCY:** Bureau of Industry and Security, Commerce.

**ACTION:** Final rule.

**SUMMARY:** This final rule aligns the time limit of License Exception Temporary Imports, Exports, Reexports, and Transfers (in-country) (TMP), which authorizes, among other things, certain temporary exports to Mexico, with the time limit of Mexico's Decree for the Promotion of Manufacturing, Maquiladora and Export Services (IMMEX) program. Currently, TMP allows for the temporary export and reexport of various items subject to the Export Administration Regulations (EAR), as long as the items are returned no later than one year after export, reexport, or transfer if not consumed or destroyed during the period of authorized use. Other than a four-year period for certain personal protective equipment, the one-year limit extends to all items shipped under license exception TMP. However, the one-year period does not align with the time constraints of Mexico's IMMEX program, which allows imports of items for manufacturing operations on a time limit that may exceed 18 months. This rule amends TMP to complement the timeline of the IMMEX program. Under this amendment, items temporarily exported or reexported under license exception TMP and imported under the provisions of the IMMEX program would be authorized to remain in Mexico for up to four years from the date of export or reexport.

**DATES:** *Effective:* January 3, 2017.

**FOR FURTHER INFORMATION CONTACT:** Regulatory Policy Division, Office of Exporter Services, Bureau of Industry and Security, by telephone (202) 482–2440 or email: [RPD2@bis.doc.gov](mailto:RPD2@bis.doc.gov).

#### SUPPLEMENTARY INFORMATION:

##### Overview

Mexico's Decree for the Promotion of Manufacturing, Maquiladora and Export Services, known as IMMEX, is a platform used by U.S. and foreign manufacturers to lower production costs by temporarily importing production materials into Mexico. Created in 2006, IMMEX is the product of the merger of



two previous Mexican economic policies: The Maquiladora program, which was designed to attract foreign investment by exempting temporary imports from taxes, and the Temporary Import Program to Promote Exports (PITEX), which incentivized Mexican companies to grow and compete in foreign markets by providing temporary import benefits. Under IMMEX, companies located in Mexico are not subject to quotas and do not have to pay taxes on items temporarily imported and manufactured, transformed, or repaired before reexport.

Under IMMEX, the length of time that imports may remain in Mexico is commodity dependent, with some items allowed to remain in-country for 18 months or more. These time allotments are greater than the time limits for License Exception Temporary Imports, Exports, Reexports, and Transfers (in-country) (TMP) allowed under § 740.9(a)(14) of the EAR. With few exceptions, items exported under TMP, if not consumed or destroyed during the authorized use abroad, must be returned to the United States one year after the date of export. The discrepancy between the time periods of IMMEX and TMP reduces the efficacy of both policies, thereby hindering the shipment of items subject to the EAR to and from Mexico.

U.S. companies that produce items subject to the EAR and ship those items to Mexico under IMMEX have notified the Bureau of Industry and Security of this discrepancy and have requested that BIS amend the EAR to increase compatibility with IMMEX. Considering the strength of Mexico's export control regime, as exemplified by its accession as a member to the Wassenaar Arrangement, the Australia Group, and the Nuclear Suppliers Group, BIS published the proposed rule 81 FR 57505 on August 23, 2016 (known hereafter as the August 23 rule) proposing to amend § 740.9(a) to account for IMMEX's time limit. For the purpose of simplicity, BIS did not propose to match the various time periods instituted by IMMEX. Instead, the rule proposed to revise § 740.9(a)(8) to allow temporary exports and reexports to remain in Mexico for up to four years, which accommodates the maximum available time that temporarily imported items may remain in Mexico under IMMEX and is in parallel with the validity period of BIS's licenses. Additionally, the August 23 rule proposed to revise introductory paragraph § 740.9(a)(14) to include a reference to § 740.9(a)(8) as an exception to the one-year time limit of TMP. BIS received only one comment regarding the rule, in which the user expressed

support for the potential change in the regulations. Because BIS received only one comment, which was positive, regarding the August 23 rule, this final rule implements the proposed rule without change.

### Export Administration Act

Although the Export Administration Act of 1979, as amended, expired on August 20, 2001, the President, through Executive Order 13222 of August 17, 2001, 3 CFR, 2001 Comp., p. 783 (2002), as amended by Executive Order 13637 of March 8, 2013, 78 FR 16129 (March 13, 2013), and as extended by the Notice of August 4, 2016, 81 FR 52585 (August 4, 2016), has continued the EAR in effect under the International Emergency Economic Powers Act. BIS continues to carry out the provisions of the Export Administration Act, as appropriate and to the extent permitted by law, pursuant to Executive Order 13222.

### Rulemaking Requirements

1. Executive Orders 13563 and 12866 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. This rule has been determined to be not significant for the purposes of Executive Order 12866.

2. Notwithstanding any other provision of law, no person is required to respond to, nor is subject to a penalty for failure to comply with, a collection of information, subject to the requirements of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*) (PRA), unless that collection of information displays a currently valid Office of Management and Budget (OMB) Control Number. This rule does not contain any collections of information.

3. This rule does not contain policies with Federalism implications as that term is defined in Executive Order 13132.

4. The Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 *et seq.*, generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to the notice and comment rulemaking requirements

under the Administrative Procedure Act (5 U.S.C. 553) or any other statute. Under section 605(b) of the RFA, however, if the head of an agency certifies that a rule will not have a significant economic impact on a substantial number of small entities, the statute does not require the agency to prepare a regulatory flexibility analysis. Pursuant to section 605(b), the Chief Counsel for Regulation, Department of Commerce, certified to the Chief Counsel for Advocacy, Small Business Administration at the proposed rule stage that this rule would not have a significant economic impact on a substantial number of small entities.

### Number of Small Entities

The Bureau of Industry and Security (BIS) does not collect data on the size of entities that apply for and are issued export licenses. Although BIS is unable to estimate the exact number of small entities that would be affected by this rule, it acknowledges that this rule would affect some unknown number.

### Economic Impact

BIS believes that this final rule will not have a significant economic impact because exporters are already using other provisions of the EAR to participate in IMMEX. Currently, exporters participating in IMMEX are using TMP for exports of a one-year duration. If the item is to remain in Mexico longer than one year, exporters are required to either use another license exception or apply for a license that will address a specific time limit. This final rule merely extends the eligibility period for TMP to four years to complement the lengthy IMMEX time limit which could be 18 months or more, depending on circumstances. Extending the time limit of TMP to four years provides exporters flexibility in complying with the EAR and allows them to take fuller advantage of the privileges granted by IMMEX. While such a provision should reduce the paperwork burden to exporters, BIS does not believe increasing the time limit will lead to a significant increase in exports to Mexico. Rather, this final rule is consistent with the principle of the EAR in easing the unnecessary regulatory burden to exporters.

### List of Subjects in 15 CFR Part 740

Administrative practice and procedure, Exports, Reporting and recordkeeping requirements.

Accordingly, 15 CFR part 740 of the EAR (15 CFR parts 730–774) is amended as follows:

**PART 740—[AMENDED]**

■ 1. The authority citation for part 740 continues to read as follows:

**Authority:** 50 U.S.C. 4601 *et seq.*; 50 U.S.C. 1701 *et seq.*; 22 U.S.C. 7201 *et seq.*; E.O. 13026, 61 FR 58767, 3 CFR, 1996 Comp., p. 228; E.O. 13222, 66 FR 44025, 3 CFR, 2001 Comp., p. 783; Notice of August 4, 2016, 81 FR 52587 (August 8, 2016).

■ 2. Section 740.9 is amended by revising paragraph (a)(8) and the introductory text of paragraph (a)(14) to read as follows:

**§ 740.9 Temporary imports, exports, reexports, and transfers (in-country) (TMP).**

\* \* \* \* \*

(a) \* \* \*

(8) *Assembly in Mexico.* Commodities may be exported to Mexico under Customs entries that require return to the United States after processing, assembly, or incorporation into end products by companies, factories, or facilities participating in Mexico's in-bond industrialization program (IMMEX) under this paragraph (a)(8), provided that all resulting end-products (or the commodities themselves) are returned to the United States as soon as practicable but no later than four years after the date of export or reexport.

\* \* \* \* \*

(14) *Return or disposal of items.* With the exception of items described in paragraphs (a)(8) and (11) of this section, all items exported, reexported, or transferred (in-country) under this section must, if not consumed or destroyed in the normal course of authorized temporary use abroad, be returned to the United States or other country from which the items were so transferred as soon as practicable but no later than one year after the date of export, reexport, or transfer (in-country). Items not returned shall be disposed of or retained in one of the following ways:

\* \* \* \* \*

**Kevin J. Wolf,**

*Assistant Secretary for Export Administration.*

[FR Doc. 2016-28893 Filed 11-30-16; 8:45 am]

**BILLING CODE 3510-33-P**

**DEPARTMENT OF ENERGY****Federal Energy Regulatory Commission****18 CFR Parts 375 and 388**

[Docket No. RM17-5-000; Order No.832]

**Regulations Implementing the FOIA Improvement Act of 2016 and Clarifying the FOIA Regulations**

**AGENCY:** Federal Energy Regulatory Commission, Department of Energy.

**ACTION:** Final rule.

**SUMMARY:** On June 30, 2016, President Obama signed the Freedom of Information Act Improvement Act of 2016. The Act requires agencies to revise their regulations within 180 days to account for the new statutory mandates. After undertaking a review of Commission regulations in accordance with Section 3 of the Act, the Commission is revising its FOIA regulations to incorporate the statutory mandates. Additionally, this rule updates the delegation regulations with respect to determinations made by the General Counsel in response to FOIA administrative appeals.

**DATES:** This rule will become effective January 3, 2017.

**FOR FURTHER INFORMATION CONTACT:**

Mark Hershfield, Office of the General Counsel, 888 First Street NE., Washington, DC 20426, (202) 502-8597, [mark.hershfield@ferc.gov](mailto:mark.hershfield@ferc.gov).

Christopher MacFarlane, Office of the General Counsel, 888 First Street NE., Washington, DC 20426, (202) 502-6761, [christopher.macfarlane@ferc.gov](mailto:christopher.macfarlane@ferc.gov).

**SUPPLEMENTARY INFORMATION:**

**ORDER NO. 832**

**FINAL RULE**

**I. Introduction**

1. On June 30, 2016, President Obama signed the Freedom of Information Act (FOIA) Improvement Act of 2016 (FOIA Improvement Act or the Act).<sup>1</sup> The Act directs agencies to: (1) Make information that has been requested and disclosed three times publically accessible in an electronic format;<sup>2</sup> (2) institute a sunset period of 25 years on records protected under the deliberative

process privilege; (3) codify the Department of Justice's foreseeability of harm standard when rendering FOIA determinations;<sup>3</sup> (4) take reasonable steps to segregate exempt information from nonexempt information; (5) limit fees in unusual circumstances when the agency response is delayed; and (6) provide additional notice requirements to FOIA requesters in agency determination letters.

2. Section 3 of the Act requires agencies to revise their regulations to account for the new statutory mandates. The Act provides that agencies must revise their rules within 180 days to incorporate the statutory changes. Accordingly, the Commission is revising its regulations to implement the FOIA Improvement Act. Consistent with the FOIA administrative appeal provisions in section 388.110, the Commission also is clarifying under section 375.309 that the General Counsel or a designee may issue final determinations on administrative FOIA appeals.

**II. Discussion**

3. After undertaking a review of Commission regulations in accordance with Section 3 of the Act, the Commission is revising its FOIA regulations in 18 CFR 388.106–388.10, as follows.

*A. Revisions to Section 375.309*

4. The FOIA administrative appeal provisions in section 388.110 provide that a FOIA administrative appeal must be directed to the General Counsel for determination, and that the General Counsel or the General Counsel's designee will make a determination on that appeal within the statutory timeframe.<sup>4</sup> Consistent with the Commission's FOIA administrative appeal provisions in section 388.110, the Commission is clarifying, in section 375.309, that the General Counsel or a designee will provide determinations in response to FOIA administrative appeals.

*B. Revisions to Section 388.106*

5. The FOIA Improvement Act requires agencies to “make available for public inspection in an electronic format” records that have been released and “that have been requested 3 or more times.” Section 388.106 concerns Commission records available in the public reference room at the

<sup>1</sup> FOIA Improvement Act of 2016, Public Law 114-185, 130 Stat. 538 (June 2016). The Act also requires several actions that do not necessitate a revising of the regulations such as FOIA officers offering additional FOIA training.

<sup>2</sup> See Proactive Disclosure of Non-Exempt Agency Information: Making Information Available Without the Need to File a FOIA Request, OIP Guidance (Oct. 5, 2015), <https://www.justice.gov/oip/oip-guidance-5>.

<sup>3</sup> See 5 U.S.C. 552(b)(5)(2012) (incorporating various privileges including the deliberative process privilege covering “inter-agency or intra-agency memorandums or letters which would not be available by law to a party other than an agency in litigation with the agency.”)

<sup>4</sup> See 5 U.S.C. 552(a)(6)(A)(iii) (2012).

Commission's headquarters or on the Commission's Web site. The Commission is revising that section to codify this requirement.

#### C. Revisions to Section 388.107

6. The FOIA Improvement Act provides that the deliberative process privilege no longer exempts a document that is 25 years or older. Section 388.107 describes material that is exempt from public disclosure under the Commission's regulations, and a provision in that section describes material that would traditionally fall under the protection of deliberative process privilege. The Commission is revising section 388.107(e) to reflect the 25 year limitation on material that would otherwise be exempt under the deliberative process privilege.

#### D. Revisions to Section 388.108

7. The FOIA Improvement Act requires agencies to codify the Department of Justice's foreseeable harm standard. Under that standard, agencies "shall withhold information" under the FOIA "only if the agency reasonably foresees that disclosure would harm an interest protected by an exemption" or "disclosure is prohibited by law." The standard does not require the release of material "that is otherwise prohibited from disclosure by law, or otherwise exempted from disclosure under [Exemption] 3." The Act also directs agencies to make reasonable efforts to segregate and release nonexempt material. Consistent with Section 3 of the Act, the Commission revises section 388.108 to codify these practices.

#### E. Revisions to Section 388.109

8. The Act directs agencies to waive processing fees, under certain unusual circumstances, where the agency's response was delayed.<sup>5</sup> The Commission is revising its regulations on FOIA processing fees, section 388.109, to provide for fee waivers in the unusual circumstances described in the Act.

#### F. Revisions to Section 388.110

9. The FOIA Improvement Act also provides changes to administrative appeals and provides mandatory language that must go in initial response letters. The Act requires that all determination letters must notify the requester that they can seek assistance from the FOIA Public Liaison. Each adverse FOIA determination letter must

notify the requester of the option to seek dispute resolution services from Office of Government Information Services (OGIS).

10. The Act also directs Agencies to extend the timeframe to file an administrative appeal from 45 days to at least 90 days. Additionally, the Act mandates that agencies advise requesters that they may seek the assistance of OGIS when the agency extends the response time by ten or more days for unusual circumstances. The Commission will take these steps and revises section 388.110 of its regulations to codify this practice.

### III. Information Collection Statement

11. Office of Management and Budget (OMB) regulations require OMB to approve certain information collection requirements imposed by agency rule.<sup>6</sup> However, this instant Final Rule does not contain any information collection requirements. Therefore, compliance with OMB regulations is not required.

### IV. Environmental Analysis

12. The Commission is required to prepare an Environmental Assessment or an Environmental Impact Statement for any action that may have a significant adverse effect on the human environment.<sup>7</sup> Issuance of this Final Rule does not represent a major federal action having a significant adverse effect on the human environment under the Commission's regulations implementing the National Environmental Policy Act of 1969. Part 380 of the Commission's regulations lists exemptions to the requirement to draft an Environmental Analysis or Environmental Impact Statement. Included is an exemption for procedural, ministerial, or internal administrative actions.<sup>8</sup> This rulemaking is exempt under that provision.

### V. Regulatory Flexibility Act

13. The Regulatory Flexibility Act of 1980 (RFA)<sup>9</sup> generally requires a description and analysis of final rules that will have significant economic impact on a substantial number of small entities. This Final Rule makes procedural modifications as directed by statute. The Commission certifies that it will not have a significant economic impact upon participants in Commission proceedings. An analysis under the RFA is not required.

### VI. Document Availability

14. In addition to publishing the full text of this document in the **Federal Register**, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through the Commission's Home Page (<http://www.ferc.gov>) and in the Commission's Public Reference Room during normal business hours (8:30 a.m. to 5:00 p.m. Eastern time) at 888 First Street NE., Room 2A, Washington, DC 20426.

15. From the Commission's Home Page on the Internet, this information is available on eLibrary. The full text of this document is available on eLibrary in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number excluding the last three digits of this document in the docket number field.

16. User assistance is available for eLibrary and the Commission's Web site during normal business hours from FERC Online Support at (202) 502-6652 (toll free at 1-866-208-3676) or email at [ferconlinesupport@ferc.gov](mailto:ferconlinesupport@ferc.gov), or the Public Reference Room at (202) 502-8371, TTY (202) 502-8659. Email the Public Reference Room at [public.reference@ferc.gov](mailto:public.reference@ferc.gov).

### VII. Effective Date

17. The Commission is issuing this rule as a Final Rule without a period for public comment. Under 5 U.S.C. 553(b)(3)(A), notice and comment procedures are unnecessary for "interpretative rules, general statements of policy, or rules of agency organization, procedure, or practice . . ." This rule merely makes modification to existing procedures as directed by statute. The rule will not significantly affect regulated entities or the general public.

18. These regulations are effective January 3, 2017.

#### List of Subjects

##### 18 CFR Part 375

Authority delegations (Government agencies), Seals and insignia, Sunshine Act.

##### 18 CFR Part 388

Confidential business information, Freedom of information.

By the Commission.

Issued: November 17, 2016.

**Nathaniel J. Davis, Sr.,**  
Deputy Secretary.

In consideration of the foregoing, the Commission amends parts 375 and 388, Chapter I, Title 18, Code of Federal Regulations, as follows:

<sup>5</sup> See Prohibition on Assessing Certain Fees When the FOIA's Time Limits Are Not Met, OIP Guidance (Oct. 19, 2016), [https://www.justice.gov/oip/oip-guidance/prohibition\\_on\\_assessing\\_certain\\_fees\\_when\\_foia\\_time\\_limits\\_not\\_met](https://www.justice.gov/oip/oip-guidance/prohibition_on_assessing_certain_fees_when_foia_time_limits_not_met).

<sup>6</sup> 5 CFR 1320.12 (2016).

<sup>7</sup> *Regulations Implementing the National Environmental Policy Act of 1969*, Order No. 486, (Dec. 17, 1987), FERC Stats. & Regs. ¶ 30,783 (1987).

<sup>8</sup> 18 CFR 380.4(a)(1) (2016).

<sup>9</sup> 5 U.S.C. 601-12 (2012).

**PART 375—THE COMMISSION**

■ 1. The authority citation for part 375 continues to read as follows:

**Authority:** 5 U.S.C. 551–557; 15 U.S.C. 717–717w, 3301–3432; 16 U.S.C. 791–825r, 2601–2645; 42 U.S.C. 7101–7352.

■ 2. In § 375.309, paragraph (h) is added and reserved, and paragraph (i) is added to read as follows

**§ 375.309 Delegations to the General Counsel.**

\* \* \* \* \*

(h) [Reserved]

(i) Deny or grant, in whole or in part, an appeal of a Freedom of Information Act determination by the Director of the Office of External Affairs.

**PART 388—INFORMATION AND REQUESTS**

■ 3. The authority citation for part 388 continues to read as follows:

**Authority:** 5 U.S.C. 301–305, 551, 552 (as amended), 553–557; 42 U.S.C. 7101–7352.

■ 4. Amend § 388.106 by adding paragraph (b)(24) to read as follows

**§ 388.106 Requests for Commission records available in the Public Reference Room and from the Commission's Web site, <http://www.ferc.gov>.**

\* \* \* \* \*

(b) \* \* \*

(24) Records that have been requested three or more times and determined eligible for public disclosure will be made publicly available on the Commission's Web site or through other electronic means.

\* \* \* \* \*

■ 5. Amend § 388.107 by revising paragraph (e) to read as follows

**§ 388.107 Commission records exempt from public disclosure.**

\* \* \* \* \*

(e) Interagency or intraagency memoranda or letters which would not be available by law to a party other than an agency in litigation with the agency, except that the deliberative process privilege shall not exempt any record 25 years or older.

\* \* \* \* \*

■ 6. Amend § 388.108 by revising paragraph (c)(4) and adding paragraph (c)(5) to read as follows:

**§ 388.108 Requests for Commission records not available through the Public Reference Room (FOIA requests).**

\* \* \* \* \*

(c) \* \* \*

(4) The Director will consider whether partial disclosure of information is possible whenever it is determined that

a document is exempt and will take reasonable steps to segregate and release nonexempt information.

(5) The Director will only withhold information where it is reasonably foreseeable that disclosure would harm an interest protected by an exemption or disclosure is prohibited by law or otherwise exempted from disclosure under FOIA Exemption 3.

\* \* \* \* \*

■ 7. Amend § 388.109 by adding paragraph (f) to read as follows

**§ 388.109 Fees for record requests.**

\* \* \* \* \*

(f) The Commission will not charge search fees (or duplication fees for requesters with preferred fee status) where, after extending the time limit for unusual circumstances, as described in § 388.110, the Director does not provide a timely determination.

(1) If there are unusual circumstances, as described in § 388.110, and there are more than 5,000 responsive pages to the request, the Commission may charge search fees (or, for requesters in preferred fee status, may charge duplication fees) where the requester received timely written notice and the Commission has discussed with the requester via written mail, electronic mail, or telephone (or made not less than 3 good-faith attempts to do so) how the requester could effectively limit the scope of the request; or

(2) If a court determines that exceptional circumstances exist, the Commission's failure to comply with a time limit will be excused for the length of time provided by the court order.

■ 8. Amend § 388.110 by revising paragraph (a) and adding paragraph (b)(5) to read as follows:

**§ 388.110 Procedure for appeal of denial of requests for Commission records not publicly available or not available through the Public Reference Room, denial of . . . fee waiver or reduction, and denial of requests for expedited processing.**

\* \* \* \* \*

(a)(1) Determination letters shall indicate that a requester may seek assistance from the FOIA Public Liaison. A person whose request for records, request for fee waiver, or request for expedited processing is denied in whole or in part may seek dispute resolution services from the Office of Government Information Services, or may appeal the determination to the General Counsel or General Counsel's designee within 90 days of the determination.

(2) Appeals filed pursuant to this section must be in writing, addressed to the General Counsel of the Commission,

and clearly marked "Freedom of Information Act Appeal." Such an appeal received by the Commission not addressed and marked as indicated in this paragraph will be so addressed and marked by Commission personnel as soon as it is properly identified and then will be forwarded to the General Counsel. Appeals taken pursuant to this paragraph will be considered to be received upon actual receipt by the General Counsel.

(3) The General Counsel or the General Counsel's designee will make a determination with respect to any appeal within 20 working days after the receipt of such appeal. An appeal of the denial of expedited processing will be considered as expeditiously as possible within the 20 working day period. If, on appeal, the denial of the request for records, fee reduction, or expedited processing is upheld in whole or in part, the General Counsel or the General Counsel's designee will notify the person making the appeal of the provisions for judicial review of that determination.

(b) \* \* \*

(5) Whenever the Commission extends the time limit, pursuant to paragraph (b)(1) of this section, by more than ten additional working days, the written notice will notify the requester of the right to seek dispute resolution services from the Office of Government Information Services.

[FR Doc. 2016–28811 Filed 11–30–16; 8:45 am]

**BILLING CODE 6717–01–P**

**INTERNATIONAL TRADE COMMISSION****19 CFR Part 201****FOIA Improvement Act; Rules of General Application**

**AGENCY:** United States International Trade Commission.

**ACTION:** Final rule.

**SUMMARY:** The United States International Trade Commission ("Commission") issues a final rule amending its Rules of Practice and Procedure concerning rules of general application to reflect amendments to the Freedom of Information Act ("FOIA") made by the FOIA Improvement Act of 2016 ("Improvement Act"). Among other things, the Improvement Act requires the Commission to amend its FOIA regulations to extend the deadline for administrative appeals for FOIA decisions, to add information on dispute resolution services, and to amend the

way the Commission charges fees for FOIA requests.

**DATES:** This regulation is effective January 3, 2017.

**FOR FURTHER INFORMATION CONTACT:** Lisa R. Barton, Secretary, telephone (202) 205-2000 or Brian R. Battles, Esquire, Office of the General Counsel, United States International Trade Commission, telephone (202) 708-4737. Hearing-impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal at 202-205-1810. General information concerning the Commission may also be obtained by accessing its Web site at <https://www.usitc.gov>.

**SUPPLEMENTARY INFORMATION:** The preamble below is designed to assist readers in understanding these amendments to the Commission's Rules of Practice and Procedure.

### Background

Section 335 of the Tariff Act of 1930 (19 U.S.C. 1335) authorizes the Commission to adopt such reasonable procedures, rules, and regulations as it deems necessary to carry out its functions and duties.

This rulemaking amends the Commission's existing Rules of Practice and Procedure and reflects changes to the FOIA by the Improvement Act. The Improvement Act addresses a range of procedural issues. Among other things, it requires that agencies establish a minimum of 90 days for requesters to file an administrative appeal and that they provide dispute resolution services at various times throughout the FOIA process. The Improvement Act also updates how fees are charged.

The United States International Trade Commission amends 19 CFR part 201 as follows:

- By amending § 201.18:
  - To change the appeals deadline from sixty days to ninety days;
  - To indicate that the Commission's FOIA Public Liaison is available to offer dispute resolution services and to provide contact information for the Commission's FOIA Public Liaison and the Office of Government Information Services.

- By amending § 201.20, to add new paragraphs (c)(5), (c)(6), and (c)(7) to provide additional limitations on the fees charged by the Commission.

### Good Cause for Final Adoption

The Commission ordinarily promulgates amendments to the Code of Federal Regulations in accordance with the notice-and-comment rulemaking procedure in section 553 of the

Administrative Procedure Act (APA) (5 U.S.C. 553). That procedure entails publication of notice of proposed rulemaking in the **Federal Register** that solicits public comment on the proposed amendments, consideration by the Commission of public comments on the content of the amendments, and publication of the final amendments at least 30 days prior to their effective date.

In this instance, however, the Commission has determined that the notice and public comment procedure is unnecessary. Section 553(b)(3)(B) of the APA authorizes agencies to dispense with notice and comment procedures for rules when the agency finds that there is "good cause" in concluding 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 proposed amendments are required by statute, do not involve Commission discretion, and provide additional protections to the public. Given these factors, the Commission finds good cause to conclude that the notice and public comment procedure are unnecessary.

### Regulatory Analysis of Proposed Amendments to the Commission's Rules

The Commission has determined that these rules do not meet the criteria described in section 3(f) of Executive Order 12866 (58 FR 51735, October 4, 1993) and thus do not constitute a "significant regulatory action" for purposes of the Executive Order.

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) is inapplicable to this rulemaking because it is not one for which a notice of proposed rulemaking is required under 5 U.S.C. 553(b) or any other statute.

These rules do not contain federalism implications warranting the preparation of a federalism summary impact statement pursuant to Executive Order 13132 (64 FR 43255, August 4, 1999).

No actions are necessary under title II of the Unfunded Mandates Reform Act of 1995, Pubic Law 104-4 (2 U.S.C. 1531-1538) because the rules will not result in the expenditure by state, local, and tribal governments, in the aggregate, or by the private sector, of \$100,000,000 or more in any one year (adjusted annually for inflation), and will not significantly or uniquely affect small governments.

These rules are not "major rules" as defined by section 251 of the Small Business Regulatory Enforcement Fairness Act of 1996 (5 U.S.C. 801 *et seq.*). Moreover, they are exempt from

the reporting requirements of that Act because they contain rules of agency organization, procedure, or practice that do not substantially affect the rights or obligations of non-agency parties.

These rules are not subject to section 3504(h) of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*), since they do not contain any new information collection requirements.

### List of Subjects in 19 CFR Part 201

Administrative practice and procedure, Claims, Classified information, Confidential business information, Freedom of information, Privacy, Reporting and recordkeeping requirements.

As stated in the preamble, part 201 of chapter II, title 19 of the Code of Federal Regulations is amended as follows:

### PART 201—RULES OF GENERAL APPLICATION

- 1. The authority citation for part 201 continues to read as follows:

**Authority:** 19 U.S.C. 1335; 19 U.S.C. 2482, unless otherwise noted.

- 2. In § 201.18, paragraphs (b) and (f) are revised to read as follows:

#### § 201.18 Denial of requests, appeals from denial.

\* \* \* \* \*

(b) An appeal from a denial of a request must be received within ninety days of the date of the letter of denial and shall be made to the Commission and addressed to the Chairman, United States International Trade Commission, 500 E Street SW., Washington, DC 20436. Any such appeal shall be in writing, and shall indicate clearly in the appeal, and if the appeal is in paper form on the envelope, that it is a "Freedom of Information Act Appeal." An appeal may be made either in paper form, or electronically by contacting the Commission at <http://www.usitc.gov/foia.htm>.

\* \* \* \* \*

(f) A response to an appeal will advise the requester that the Commission's FOIA Public Liaison officer and the Office of Government Information Services both offer mediation services to resolve disputes between FOIA requesters and Federal agencies as a non-exclusive alternative to litigation. The requester may contact the Commission's FOIA Public Liaison officer by telephone (202-205-2595) or email ([foia.se.se@usitc.gov](mailto:foia.se.se@usitc.gov)) or the Office of Government Information Services at National Archives and Records Administration, 8601 Adelphi Road—OGIS, College Park, Maryland 20740-6001.

■ 3. In § 201.20, add paragraphs (c)(5) through (7) to read as follows:

**§ 201.20 Fees.**

\* \* \* \* \*

(c) \* \* \*

(5) The Commission will not charge fees if it fails to comply with any time limit under the FOIA or these regulations, and if it has not timely notified the requester, in writing, that an unusual circumstance exists. If an unusual circumstance exists, and timely written notice is given to the requester, the Commission will have an additional 10 working days to respond to the request before fees are automatically waived under this paragraph.

(6) If the Commission determines that unusual circumstances apply and that more than 5,000 pages are necessary to respond to a request, it may charge fees if it has provided a timely written notice to the requester and discusses with the requester via mail, Email, or telephone how the requester could effectively limit the scope of the request (or make at least three good faith attempts to do so).

(7) If a court has determined that exceptional circumstances exist, a failure to comply with time limits imposed by these regulations or FOIA shall be excused for the length of time provided by court order.

\* \* \* \* \*

By order of the Commission.

Issued: November 25, 2016.

**Katherine M. Hiner,**

*Acting Supervisory Attorney.*

[FR Doc. 2016-28819 Filed 11-30-16; 8:45 am]

**BILLING CODE 7020-02-P**

## DEPARTMENT OF THE TREASURY

### Financial Crimes Enforcement Network

#### 31 CFR Part 1010

#### RIN 1506-AB27

#### Supplemental Information Regarding the Final Rule Imposing the Fifth Special Measure Against FBME Bank, Ltd.

**AGENCY:** Financial Crimes Enforcement Network (“FinCEN”).

**ACTION:** Supplement to final rule.

**SUMMARY:** In its September 20, 2016 order, the U.S. District Court for the District of Columbia remanded to FinCEN the final rule imposing a prohibition on covered financial institutions from opening or maintaining correspondent accounts for, or on behalf of, FBME Bank, Ltd. In its memorandum opinion accompanying

that order, the Court stated that the agency had not responded meaningfully to FBME’s comments regarding the agency’s treatment of aggregate Suspicious Activity Report (SAR) data. The Court found that those comments challenged FinCEN’s interpretation of SAR data on at least four distinct grounds. In this supplement to the final rule, FinCEN provides further explanation addressing FBME’s comments.

**DATES:** December 1, 2016.

**FOR FURTHER INFORMATION CONTACT:** The FinCEN Resource Center at (800) 767-2825 or [regcomments@fincen.gov](mailto:regcomments@fincen.gov).

#### SUPPLEMENTARY INFORMATION:

##### I. Background

In its September 20, 2016 order, the U.S. District Court for the District of Columbia remanded to FinCEN the final rule imposing a prohibition on covered financial institutions from opening or maintaining correspondent accounts for, or on behalf of, FBME Bank, Ltd. (FBME). In its memorandum opinion accompanying that order, the Court stated that the agency had not responded meaningfully to FBME’s comments regarding the agency’s treatment of aggregate SAR data. In this supplement to the final rule, FinCEN notes that FBME’s comments regarding FinCEN’s use of SARs in the rulemaking process reflect a misunderstanding of SARs generally and how FinCEN analyzed and used SARs in this rulemaking.

As an initial matter, FBME overstates the centrality of the use of SARs in FinCEN’s determination that FBME is of primary money laundering concern. As reflected in the agency’s Notice of Finding (NOF), Final Rule, and Administrative Record, far from being the only evidence that informed FinCEN’s determination that FBME is of primary money laundering concern, the agency’s analysis of SARs simply affirmed FinCEN’s concern surrounding FBME’s involvement in money laundering that was informed by other information in the Administrative Record. For instance, as detailed in the NOF, this information included: (1) An FBME customer’s receipt of a deposit of hundreds of thousands of dollars from a financier for Lebanese Hezbollah; (2) providing financial services to a financial advisor for a major transnational organized crime figure; (3) FBME’s facilitation of funds transfers to an FBME account involved in fraud against a U.S. person, with the FBME customer operating the alleged fraud scheme later being indicted in the United States District Court for the

Northern District of Ohio; and (4) FBME’s facilitation of U.S. sanctions evasion through its extensive customer base of shell companies, including at least one FBME customer that was a front company for a U.S.-sanctioned Syrian entity, the Scientific Studies and Research Center, which used its FBME account to process transactions through the U.S. financial system.

Set forth below are summaries of FBME’s four arguments in its comments surrounding FinCEN’s interpretation of SARs and the agency’s responses.

1. FBME argues that SARs are so over-inclusive—“sweeping in [so many] transactions that are perfectly legitimate”—that “categorically” viewing SARs as indicative of illicit transactions is “invalid and improper.”

In its January 26, 2016 comments, FBME asserted that:

To paint FBME as posing a significant threat to U.S. and other financial institutions, FinCEN relies on limited and misleading statistical data regarding “suspicious wire transfers” as well as biased reports from financial institutions seeking to offload responsibility for their own actions. During the hearing before Judge Cooper, FinCEN revealed that the statistical data relied upon in the NOF was based on SARs. But such reliance is categorically invalid and improper. To begin, we know of no instance, prior to this proceeding, in which FinCEN has equated any particular SARs data or rate as indicative of a problem under Section 311 [of the USA PATRIOT Act]. Nor is such use valid. To the contrary, it ignores the purpose of a SAR, which involves a designedly low threshold for the sake of erring on the side of over-inclusion—sweeping in transactions that are perfectly legitimate, simply to ensure there is scrutiny of them to ensure against any issue. It is spurious in this light to take a SAR or any number of them as evidencing the illegitimacy of any transaction or set thereof—not to mention as evidence that a particular bank is one of “primary money laundering concern” under Section 311.<sup>1</sup>

Contrary to FBME’s assumptions, FinCEN analyzed the SARs as qualitative evidence of activity conducted by FBME that reflected one of FinCEN’s primary concerns about FBME—specifically, a “[s]ignificant [v]olume” of “[o]bscured [t]ransactions” as indicated in part by the size and number of “[w]ire transfers related to suspected shell company activities.” NOF, 79 FR at 42640. While FinCEN recognizes that actual wrongdoing does not necessarily underlie the suspicious activity described in any particular SAR, many of the SARs relating to FBME described typical indicators of shell company activity. As FinCEN has explained, it is particularly concerned, among other things, by the lack of

<sup>1</sup> FBME’s January 26, 2016 Comments, pp. 50–51.

transparency associated with transactions by FBME's shell company customers, and the high volume of U.S. dollar transactions conducted by these shell companies with no apparent business purpose. March 31, 2016 Final Rule, 81 FR at 18487. Therefore, when reviewing SARs associated with such activity, FinCEN appropriately concluded that they were indicative of potential money laundering. In addition to the SARs as well as other information available to FinCEN discussed in the NOF and Final Rule, the agency's concerns were supported by FBME's own acknowledgement in its January 26, 2016 comment that it transacted with shell companies.

Moreover, with respect to FBME's claim that SARs are over-inclusive, based on FinCEN's extensive experience with SAR filings and the other illicit conduct at FBME detailed in the NOF, Final Rule, and Administrative Record, FinCEN assesses it more likely that the SARs understate the size and frequency of shell company and other suspicious activity conducted by FBME. The SARs include only the information that financial institutions identified and reported to FinCEN; they do not necessarily reflect all suspicious transactions engaged in by FBME. FinCEN assesses that such is the case here given FinCEN's determination that FBME has sought to evade anti-money laundering (AML) regulations, has ignored the Central Bank of Cyprus' AML directives, and that following the issuance of the NOF, FBME employees took various measures to obscure information, all of which may have undermined the ability of U.S. financial institutions to detect and report all of FBME's suspicious activity.

2. FBME argues that while the absolute dollar amounts of transactions tagged as "suspicious" might appear high on the surface, they represented a small proportion of FBME's overall transactions.

FBME notes that while the NOF highlighted "at least 4,500 suspicious wire transfers through U.S. correspondent accounts that totaled at least \$875 million between November 2006 and March 2013," that figure represented, according to FBME, "only 0.55% of the total amount of transfers and 0.81% of the [U.S. dollar] amount of transfers conducted by FBME during this period."<sup>2</sup> In other words, FBME asserts without supporting evidence that the SARs reflect a small portion of the bank's total transactions. But the final rule never suggested otherwise; FinCEN may identify a bank as a financial

institution of primary money laundering concern pursuant to Section 311 even if it has extensive legitimate activities.

FinCEN considered the volume of suspicious transactions in absolute terms—not whether such money laundering was a greater percentage of FBME's activities than that suggested in FBME's comments. FBME's comment incorrectly assumes that FinCEN's focus in the NOF was, or should have been, based upon a percentage of suspicious activity by FBME's customers. To the contrary, FinCEN made clear it was concerned by the substantial volume of all suspicious activity at the bank, including the suspicious activity reported in SARs and that described in other sources available to the agency and included in the Administrative Record. The overall amount of such activity informed FinCEN's evaluation of the "extent to which" FBME has been "used to facilitate or promote money laundering"<sup>3</sup> and its conclusion that "FBME facilitated a substantial volume of money laundering through the bank for many years."<sup>4</sup> FinCEN finds the opportunity for money laundering of such a magnitude and through so many transactions to be "substantial" because, in absolute terms, it poses a significant threat to the U.S. and international financial systems, potentially allowing large amounts of funding to pass to terrorist or criminal activity. FinCEN does not find that the size of a bank that facilitates a substantial amount of money laundering is determinative of the threat posed by that activity. Adopting such an assumption would essentially permit significant volumes of money to pass through large banks. In any event, for the reasons described in the preceding section, FinCEN assesses that it is more likely that, if anything, the SARs understate the size and frequency of suspicious activity conducted by FBME.

3. FBME criticizes FinCEN for "fail[ing] to consider alternative bases for the increase in SARs involving FBME \* \* \* between April 2013 and April 2014," particularly the "Cypriot financial crisis and attendant controls."

FinCEN recognizes that suspicious activity and reports of such activity could be influenced by a number of factors, including financial developments within a country or internationally, but FinCEN views this scenario as inapplicable in this case. SARs typically deal with suspicious activity by individuals and entities conducting transactions, not systemic issues involving debt defaults and

liquidity challenges by financial institutions. FinCEN did not rely on any suggestion that the number of SAR filings involving FBME increased during the Cypriot financial crisis as compared to past periods in the analysis. In addition, FinCEN finds no reason to assume that any renewed focus on Cypriot financial controls would decrease rather than increase the credibility of SAR filings as to FBME, let alone decrease the credibility of those filings to such an extent as to undermine its finding of a substantial volume of shell company activity at FBME. Finally, the NOF highlighted suspected shell company activities accounting for hundreds of millions of dollars between 2006–2014;<sup>5</sup> such activity was not limited to the period of the Cypriot financial crisis.

4. FBME faults FinCEN for failing to provide either a "point of comparison between FBME and other \* \* \* banks that [the agency] considers similarly situated but less deserving of suspicion given their SAR statistics," or "any baseline for the SARs statistics it considers standard or acceptable for an international bank like FBME."

Again, FBME misunderstands the role that SARs played in FinCEN's analysis, incorrectly assuming that the analysis necessarily depended on a relative comparison to other banks. FBME appears to assume that SAR filings, or the absolute number and size of suspicious transactions described in such filings, are not in themselves relevant, but instead that only *relative* SAR rates among banks can be an indication of significant suspicious activity. FinCEN finds this assumption unwarranted. FinCEN found that the SAR filings discussed in the NOF informative of significant shell company activity at FBME to be "substantial" because, in absolute terms, it poses a significant threat to the U.S. and international financial system, potentially allowing large amounts of funding to pass to terrorist or criminal activity. This conclusion did not depend on comparison with other banks.

In addition, as noted in the NOF and Final Rule, FinCEN concluded that FBME has sought to evade AML regulations, has ignored the Central Bank of Cyprus' AML directives, and that following the issuance of the NOF, FBME employees took various measures to obscure information. These facts distinguish FBME from other Cypriot banks and may have undermined the ability of U.S. financial institutions to detect all of FBME's suspicious activity,

<sup>3</sup> 31 U.S.C. 5318A(c)(2)(B)(i).

<sup>4</sup> 79 FR 42639 (July 22, 2014).

<sup>5</sup> 79 FR 42639 at 42640 (July 22, 2014).

<sup>2</sup> FBME's January 26, 2016 Comments, p. 52.



underscoring the high likelihood that SARs involving FBME are actually under-inclusive. Given FinCEN's concern regarding FBME's willingness to evade AML regulations that may have inhibited the identification of suspicious activity by U.S. financial institutions, a comparison of SARs filed on FBME compared to other Cypriot financial institutions would not necessarily portray the relevant risk posed by FBME.

More broadly, FinCEN notes that setting a benchmark as FBME suggests could simply set a target for banks or customers wishing to evade money laundering controls. Instead, the agency reviews relevant information and determines whether all of that information, taken together, justifies action under Section 311. FinCEN is daily immersed in the global flow of financial intelligence, including SARs, and is tasked as a policy matter with identifying concerns within that intelligence stream. As discussed above, FinCEN assesses that the volume of shell company activity reflected in the Administrative Record, including SARs filed on FBME, is substantial.

Dated: November 23, 2016.

**Jamal El-Hindi,**

*Deputy Director, Financial Crimes Enforcement Network.*

[FR Doc. 2016-28752 Filed 11-30-16; 8:45 am]

**BILLING CODE 4810-02-P**

## DEPARTMENT OF HOMELAND SECURITY

### Coast Guard

#### 33 CFR Part 117

[Docket No. USCG-2016-1015]

#### **Drawbridge Operation Regulation; New Jersey Intracoastal Waterway (NJICW), Point Pleasant Canal, Point Pleasant, NJ**

**AGENCY:** Coast Guard, DHS.

**ACTION:** Notice of deviation from drawbridge regulation.

**SUMMARY:** The Coast Guard has issued a temporary deviation from the operating schedule that governs the S.R. 88/Veterans Memorial Bridge across the NJICW (Point Pleasant Canal), mile 3.0, at Point Pleasant, NJ. The deviation is necessary to facilitate and complete urgent bridge maintenance. This deviation allows the bridge to remain in the closed-to-navigation position.

**DATES:** The deviation is effective 9 p.m. on Wednesday, December 7, 2016 to 6 a.m. on Thursday, December 8, 2016.

**ADDRESSES:** The docket for this deviation, [USCG-2016-1015] is available at <http://www.regulations.gov>. Type the docket number in the "SEARCH" box and click "SEARCH". Click on Open Docket Folder on the line associated with this deviation.

**FOR FURTHER INFORMATION CONTACT:** If you have questions on this temporary deviation, call or email Mr. Michael Thorogood, Bridge Administration Branch Fifth District, Coast Guard, telephone 757-398-6557, email [Michael.R.Thorogood@uscg.mil](mailto:Michael.R.Thorogood@uscg.mil).

**SUPPLEMENTARY INFORMATION:** The New Jersey Department of Transportation, who owns the S.R. 88/Veterans Memorial Bridge, has requested a temporary deviation from the current operating schedule is set out in 33 CFR 117.5, to facilitate replacement of a defective coupling and floating shaft of the bridge.

Under this temporary deviation, the bridge will be in the closed-to-navigation position at 9 p.m. December 7, 2016 to 6 a.m. December 8, 2016. The bridge is a vertical lift bridge and has a vertical clearance in the closed-to-navigation position of 31 feet above mean high water.

The Point Pleasant Canal is used by a variety of vessels including, recreational vessels and tug and barge traffic. The Coast Guard has carefully considered the nature and volume of vessel traffic on the waterway in publishing this temporary deviation.

Vessels able to pass through the bridge in the closed-to-navigation position may do so at any time. The bridge will not be able to open for emergencies and there is no immediate alternative route for vessels to pass in the closed position. The Coast Guard will also inform the users of the waterway through our Local and Broadcast Notices to Mariners of the change in operating schedule for the bridge so that vessel operators can arrange their transits to minimize any impact caused by the temporary deviation.

In accordance with 33 CFR 117.35(e), the drawbridge must return to its regular operating schedule immediately at the end of the effective period of this temporary deviation. This deviation from the operating regulations is authorized under 33 CFR 117.35.

Dated: November 28, 2016.

**Hal R. Pitts,**

*Bridge Program Manager, Fifth Coast Guard District.*

[FR Doc. 2016-28852 Filed 11-30-16; 8:45 am]

**BILLING CODE 9110-04-P**

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 180

[EPA-HQ-OPP-2014-0919; FRL-9952-88]

#### **Muscodor albus Strain SA-13 and the Volatiles Produced on Rehydration; 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 *Muscodor albus* strain SA-13 and the volatiles produced on rehydration in and on all food commodities when used in accordance with label directions and good agricultural practices. Marrone Bio Innovations, 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 *Muscodor albus* strain SA-13 and the volatiles produced on rehydration under FFDCA.

**DATES:** This regulation is effective December 1, 2016. Objections and requests for hearings must be received on or before January 30, 2017, 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-2014-0919, 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](mailto: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](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(g), 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-2014-0919 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 January 30, 2017. 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-

2014-0919, 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 January 28, 2015 (80 FR 4527) (FRL-9921-55), 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 4F8271) by Marrone Bio Innovations, Inc. (MBI), 2121 Second Street, Suite B-107, Davis, CA 95618. The petition requested that 40 CFR part 180 be amended by establishing an exemption from the requirement of a tolerance for residues of sterile grain inoculated with *Muscodor albus* strain SA-13 in or on all food commodities. That document referenced a summary of the petition prepared by the petitioner MBI, which is available in the docket via <http://www.regulations.gov>. There were no comments received in response to this notice of filing.

EPA revised the active ingredient name from "sterile grain inoculated with *Muscodor albus* strain SA-13" to "*Muscodor albus* strain SA-13 and the volatiles produced on rehydration." The reason for this change is explained in Unit III.C.

### 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 or tolerance exemption 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 EPA 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 toxicity and exposure data on *Muscodor albus* strain SA-13 and the volatiles produced on rehydration 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 November 8, 2016, document entitled "Federal Food, Drug, and Cosmetic Act (FFDCA) Considerations for *Muscodor albus* Strain SA-13 and the Volatiles Produced on Rehydration." 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 *Muscodor albus* strain SA-13 is not toxic, is not pathogenic, and is not infective. Further, the volatiles produced by *Muscodor albus* strain SA-13 are not toxic. Although there may be some exposure to residues of *Muscodor albus* strain SA-13 when used as a fungicide, nematocide, insecticide or bactericide on food, there is no potential for adverse effects due to the lack of toxicity, pathogenicity, or infectivity. EPA also determined that retention of the Food Quality Protection Act Safety Factor (FQPA SF) was not necessary as part of the qualitative assessment conducted for *Muscodor albus* strain SA-13 and the volatiles produced on rehydration.

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 *Muscodor albus* strain SA-13 and the volatiles produced on rehydration. Therefore, an exemption from the requirement of a tolerance is established for residues of *Muscodor albus* strain SA-13 and the volatiles produced on rehydration in or on all food commodities when used in accordance with label directions and good agricultural practices.

#### *B. Analytical Enforcement Methodology*

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

#### *C. Revision to the Requested Tolerance Exemption*

One modification has been made to the requested tolerance exemption. When MBI first submitted this petition in 2014, it described the pesticide chemical as “sterile grain inoculated with *Muscodor albus* strain SA-13.” After conducting a review of this petition and evaluating a tolerance exemption established in 2005 for another strain of *Muscodor albus* (QST 20799) (70 FR 56569), which has the same mode of action as *Muscodor albus* strain SA-13, EPA is changing the pesticide chemical name to “*Muscodor albus* strain SA-13 and the volatiles produced on rehydration.” This revision better reflects the possible residues that may occur on food commodities and the data/information submitted to support the petition.

#### **IV. Statutory and Executive Order Reviews**

This action establishes a tolerance exemption under FFDCA section 408(d) in response to a petition submitted to EPA. 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 exemption in this action, 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. As a result, this action does not alter the relationships or distribution of power and responsibilities established by Congress in the preemption provisions of FFDCA section 408(n)(4). As such, EPA 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, EPA 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 EPA’s 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: November 15, 2016.

**Jack 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 § 180.1340 to subpart D to read as follows:

#### **§ 180.1340 *Muscodor albus* strain SA-13 and the volatiles produced on rehydration; exemption from the requirement of a tolerance.**

An exemption from the requirement of a tolerance is established for residues of *Muscodor albus* strain SA-13 and the volatiles produced on rehydration in or on all food commodities when used in accordance with label directions and good agricultural practices.

[FR Doc. 2016-28884 Filed 11-30-16; 8:45 am]

**BILLING CODE 6560-50-P**

#### **ENVIRONMENTAL PROTECTION AGENCY**

#### **40 CFR Part 180**

**[EPA-HQ-OPP-2015-0412; FRL-9950-89]**

#### **Quizalofop Ethyl; Pesticide Tolerances**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** This regulation establishes tolerances for residues of quizalofop ethyl in or on crayfish and rice grain. Nissan Chemical Industries, Ltd. requested these tolerances under the Federal Food, Drug, and Cosmetic Act (FFDCA).

**DATES:** This regulation is effective December 1, 2016. Objections and requests for hearings must be received on or before January 30, 2017, 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-2015-0412, 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:**

Michael Goodis, 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](mailto: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 EPA's tolerance regulations at 40 CFR part 180 through the Government Printing Office's e-CFR site at [http://www.ecfr.gov/cgi-bin/text-id?&c=ecfr&tpl=/ecfrbrowse/Title40/40tab\\_02.tpl](http://www.ecfr.gov/cgi-bin/text-id?&c=ecfr&tpl=/ecfrbrowse/Title40/40tab_02.tpl). To access the OCSPP test guidelines referenced in this document electronically, please go to <http://www.epa.gov/test-guidelines-pesticides-and-toxic-substances>.

*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-2015-0412 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 January 30, 2017. 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-2015-0412, 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. Summary of Petitioned-For Tolerance**

In the **Federal Register** of August 26, 2015 (80 FR 51759) (FRL-9931-74), EPA issued a document pursuant to FFDCA section 408(d)(3), 21 U.S.C. 346a(d)(3), announcing the filing of a pesticide petition (PP 5F8367) by Lewis and Harrison, LLC, 122 C St. NW., Suite 505, Washington, DC 20001 (on behalf of Nissan Chemical Industries, Ltd., 7-1, 3-chome, Kanda-Nishiki-cho, Chiyoda-ku, Tokyo 101-0054, Japan). The petition requested that 40 CFR 180.441 be amended by establishing tolerances for residues of the herbicide quizalofop-p-ethyl ester, ethyl-(R)-(2-(4-((6-chloroquinoxalin-2-yl)oxy)phenoxy)propanoate), and its acid metabolite quizalofop-P, R-(2-(4-((6-quinoxalin-2-yl)oxy)phenoxy)propanoic acid, and the S enantiomers of both the ester and the acid, all expressed as quizalofop-P-ethyl ester, in or on crayfish at 0.04 parts per million (ppm) and rice, grain at 0.05 ppm. That document referenced a

summary of the petition prepared by Nissan Chemical Industries, Ltd., the registrant, which is available in the docket, <http://www.regulations.gov>. There were no comments received in response to the notice of filing.

Based upon review of the data supporting the petition, EPA changed the tolerance expression for rice grain and corrected the commodity definition for crayfish. The reasons for these changes are explained in Unit IV.C.

**III. Aggregate Risk Assessment and Determination of Safety**

Section 408(b)(2)(A)(i) of FFDCA allows EPA to establish a tolerance (the legal limit for a pesticide chemical residue in or on a food) only if EPA determines that the tolerance is "safe." Section 408(b)(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. Section 408(b)(2)(C) of FFDCA requires 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 . . ."

Consistent with FFDCA section 408(b)(2)(D), and the factors specified in FFDCA section 408(b)(2)(D), EPA has reviewed the available scientific data and other relevant information in support of this action. EPA has sufficient data to assess the hazards of and to make a determination on aggregate exposure for quizalofop ethyl, including exposure resulting from the tolerances established by this action. EPA's assessment of exposures and risks associated with quizalofop ethyl follows.

*A. Toxicological Profile*

EPA has evaluated the available toxicity data and considered its validity, completeness, and reliability as well as the relationship of the results of the studies 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.

Quizalofop ethyl is a 50/50 racemic mixture of R- and S-enantiomers. Quizalofop-P-ethyl, the purified R-

enantiomer, is the pesticidally-active isomer. Since the toxicological profiles of quizalofop ethyl and quizalofop-P-ethyl are similar, the available toxicity studies are adequate to support both compounds. For the purposes of this final rule, both quizalofop ethyl and quizalofop-P-ethyl are collectively referred to as “quizalofop ethyl”.

Quizalofop ethyl has very low acute toxicity via the oral, dermal, and inhalation routes of exposure, is not an eye or skin irritant, and is not a skin sensitizer. There were no adverse effects observed in the oral toxicity studies that could be attributable to a single-dose exposure.

Repeated-dose toxicity studies indicate the liver as the target organ, as evidenced by increased liver weights and histopathological changes. Following oral administration, quizalofop ethyl is rapidly excreted via urine and feces. In the subchronic oral toxicity rat study, effects of decreased body weight gains, increased liver weight, and centrilobular liver cell enlargement were observed. In the subchronic oral toxicity dog study, an increased incidence of testicular atrophy was observed. In the combined chronic toxicity/carcinogenicity study in rats, an increased incidence of centrilobular liver cell enlargement was observed in both sexes and mild anemia in males.

No dermal toxicity effects were observed in the subchronic dermal toxicity rabbit study at up to the limit dose. Subchronic inhalation toxicity is assumed to be equivalent to oral toxicity. In the chronic oral toxicity dog study, no toxicity effects were observed at the highest dose tested (HDT).

In the rat and rabbit developmental toxicity studies, maternal effects

including decreased body weight gains and food consumption were observed; no developmental effects were observed at up to the HDT. In the two-generation reproduction toxicity study in rats, maternal effects including decreased body weight and body weight gains were observed at the same dose level that resulted in prenatal and postnatal effects (decreased percentage of pups born alive and decreased pup weights).

Although tumors were observed in male and female mice after exposure to quizalofop, the overall evidence for carcinogenicity is weak, as discussed in supporting documents. Additionally, the point of departure used for establishing the chronic reference dose for quizalofop is significantly lower (30X) than the dose that induced tumors in male and female mice. EPA has determined that quantification of cancer risk using a non-linear approach would adequately account for all chronic toxicity, including carcinogenicity, which could result from exposure to quizalofop ethyl.

Quizalofop ethyl does not show evidence of neurotoxicity, based on no evidence of neurotoxicity or neuropathology in the available toxicology studies. There was also no evidence of adverse effects on the functional development of pups observed in the rat reproduction toxicity study. Quizalofop ethyl showed no evidence of immunotoxicity.

Specific information on the studies received and the nature of the adverse effects caused by quizalofop ethyl as well as the no-observed-adverse-effect-level (NOAEL) and the lowest-observed-adverse-effect-level (LOAEL) from the toxicity studies can be found at <http://www.regulations.gov> in document,

“Quizalofop-P-ethyl. Human Health Risk Assessment in Support of the Proposed New Use on Rice” in docket ID number EPA-HQ-OPP-2015-0412.

#### *B. Toxicological Points of Departure/Levels of Concern*

Once a pesticide's toxicological profile is determined, EPA identifies toxicological points of departure (POD) and levels of concern to use in evaluating the risk posed by human exposure to the pesticide. For hazards that have a threshold below which there is no appreciable risk, the toxicological POD is used as the basis for derivation of reference values for risk assessment. PODs are developed based on a careful analysis of the doses in each toxicological study to determine the dose at which the NOAEL and the LOAEL are identified. Uncertainty/safety factors (UF) are used in conjunction with the POD to calculate a safe exposure level—generally referred to as a population-adjusted dose (PAD) or a reference dose (RfD)—and a safe margin of exposure (MOE). For non-threshold risks, the Agency assumes that any amount of exposure will lead to some degree of risk. Thus, the Agency estimates risk in terms of the probability of an occurrence of the adverse effect expected in a lifetime. For more information on the general principles EPA uses in risk characterization and a complete description of the risk assessment process, see <http://www.epa.gov/pesticides-science-and-assessing-pesticide-risks/assessing-human-health-risk-pesticides>.

A summary of the toxicological endpoints for quizalofop ethyl used for human risk assessment is shown in Table 1 of this unit.

TABLE 1—SUMMARY OF TOXICOLOGICAL DOSES AND ENDPOINTS FOR QUIZALOFOP ETHYL FOR USE IN HUMAN HEALTH RISK ASSESSMENT

Exposure/scenario	Point of departure and uncertainty/safety factors	RfD, PAD, LOC for risk assessment	Study and toxicological effects
Acute dietary (all populations) .....	No hazard attributable to a single-dose exposure was identified.		
Chronic dietary (all populations) ....	NOAEL = 0.9 mg/kg/day ..... UF <sub>A</sub> = 10x ..... UF <sub>H</sub> = 10x ..... FQPA SF = 1x .....	Chronic RfD = 0.009 mg/kg/day ... cPAD = 0.009 mg/kg/day .....	<i>Combined Chronic Toxicity/Carcinogenicity Rat Study</i> LOAEL = 3.7 mg/kg/day based on mild anemia in males and increased number of liver masses and centrilobular enlargement of the liver in both sexes

FQPA SF = Food Quality Protection Act Safety Factor. LOAEL = lowest-observed-adverse-effect-level. mg/kg/day = milligram/kilogram/day. NOAEL = no-observed-adverse-effect-level. PAD = population adjusted dose (a = acute, c = chronic). RfD = reference dose. UF = uncertainty factor. UF<sub>A</sub> = extrapolation from animal to human (interspecies). UF<sub>H</sub> = potential variation in sensitivity among members of the human population (intraspecies).

### C. Exposure Assessment

1. *Dietary exposure from food and feed uses.* In evaluating dietary exposure to quizalofop ethyl, EPA considered exposure under the petitioned-for tolerances as well as all existing quizalofop ethyl tolerances in 40 CFR 180.441. EPA assessed dietary exposures from quizalofop ethyl in food as follows:

i. *Acute exposure.* Quantitative acute dietary exposure and risk assessments are performed for a food-use pesticide, if a toxicological study has indicated the possibility of an effect of concern occurring as a result of a one-day or single exposure. No such effects were identified in the toxicological studies for quizalofop ethyl; therefore, a quantitative acute dietary exposure assessment is unnecessary.

ii. *Chronic exposure.* In conducting the chronic dietary exposure assessment EPA used the food consumption data from the USDA 2003–2008 National Health and Nutrition Examination Survey, What We Eat in America (NHANES/WWEIA). As to residue levels in food, EPA incorporated tolerance-level residues, 100 percent crop treated (PCT) for all commodities, and default processing factors for all processed commodities except sunflower oil.

iii. *Cancer.* Based on the data summarized in Unit III.A., EPA has concluded that quizalofop ethyl does not pose a cancer risk to humans. Therefore, a dietary exposure assessment for the purpose of assessing cancer risk is unnecessary.

iv. *Anticipated residue and percent crop treated (PCT) information.* EPA did not use anticipated residue and/or PCT information in the dietary assessment for quizalofop ethyl. Tolerance level residues and/or 100 PCT were assumed for all food commodities.

2. *Dietary exposure from drinking water.* The Agency used screening level water exposure models in the dietary exposure analysis and risk assessment for quizalofop ethyl in drinking water. These simulation models take into account data on the physical, chemical, and fate/transport characteristics of quizalofop ethyl. Further information regarding EPA drinking water models used in pesticide exposure assessment can be found at <http://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/about-water-exposure-models-used-pesticide>.

Based on the Modified Tier 1 Rice Model and Pesticide Root Zone Model Ground Water (PRZM GW) model, the estimated drinking water concentrations (EDWCs) of quizalofop ethyl for chronic exposures for non-cancer assessments

are estimated to be 127 parts per billion (ppb) for surface water and 89 ppb for ground water.

Modeled estimates of drinking water concentrations were directly entered into the dietary exposure model. For chronic dietary risk assessment, the water concentration value of 127 ppb was used to assess the contribution to drinking water.

3. *From non-dietary exposure.* The term “residential exposure” is used in this document to refer to non-occupational, non-dietary exposure (e.g., for lawn and garden pest control, indoor pest control, termiticides, and flea and tick control on pets). Quizalofop ethyl is not registered for any specific use patterns that would result in residential exposure.

4. *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 quizalofop ethyl to share a common mechanism of toxicity with any other substances, and quizalofop ethyl does not appear to produce a toxic metabolite produced by other substances. For the purposes of this tolerance action, therefore, EPA has assumed that quizalofop ethyl 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/pesticide-science-and-assessing-pesticide-risks/cumulative-assessment-risk-pesticides>.

### D. Safety Factor for Infants and Children

1. *In general.* Section 408(b)(2)(C) of FFDCA provides that 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 EPA determines based on reliable data 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 (FQPA SF). In applying this provision, EPA either retains the default value of 10X, or uses a different additional safety factor when reliable

data available to EPA support the choice of a different factor.

2. *Prenatal and postnatal sensitivity.* As summarized in Unit III.A., results from the rat and rabbit developmental toxicity and the two-generation rat reproduction toxicity studies indicated no qualitative or quantitative evidence of increased susceptibility in developing fetuses or in the offspring following prenatal and/or postnatal exposure to quizalofop ethyl.

3. *Conclusion.* EPA has determined that reliable data show the safety of infants and children would be adequately protected if the FQPA SF were reduced to 1X. That decision is based on the following findings:

i. The toxicity database for quizalofop ethyl is complete.

ii. There is no indication that quizalofop ethyl is a neurotoxic chemical and there is no need for a developmental neurotoxicity study or additional UFs to account for neurotoxicity.

iii. There is no qualitative or quantitative evidence that quizalofop ethyl results in increased susceptibility in *in utero* rats or rabbits in the prenatal developmental studies or in young rats in the two-generation reproduction study.

iv. There are no residual uncertainties identified in the exposure databases. The dietary food exposure assessments were performed based on 100 PCT and tolerance-level residues. EPA made conservative (protective) assumptions in the ground and surface water modeling used to assess exposure to quizalofop ethyl in drinking water. These assessments will not underestimate the exposure and risks posed by quizalofop ethyl.

### E. Aggregate Risks and Determination of Safety

EPA determines whether acute and chronic dietary pesticide exposures are safe by comparing aggregate exposure estimates to the acute PAD (aPAD) and chronic PAD (cPAD). For linear cancer risks, EPA calculates the lifetime probability of acquiring cancer given the estimated aggregate exposure. Short-, intermediate-, and chronic-term risks are evaluated by comparing the estimated aggregate food, water, and residential exposure to the appropriate PODs to ensure that an adequate MOE exists. Since there are no residential uses for quizalofop ethyl, the aggregate risk assessment only includes exposure estimates from dietary consumption of food and drinking water.

1. *Acute risk.* An acute aggregate risk assessment takes into account acute exposure estimates from dietary

consumption of food and drinking water. No adverse effect resulting from a single-dose exposure was identified and no acute dietary endpoint was selected. Therefore, quizalofop ethyl is not expected to pose an acute risk.

2. *Chronic risk.* Using the exposure assumptions described in this unit for chronic exposure, EPA has concluded that chronic exposure to quizalofop ethyl from food and water will utilize 97% of the cPAD for all infants less than 1 year old, the population group receiving the greatest exposure.

3. *Short- and intermediate-term risk.* Short- and intermediate-term aggregate exposure takes into account short- and intermediate-term residential exposure plus chronic exposure to food and water (considered to be a background exposure level). Because there are no residential uses, quizalofop ethyl is not expected to pose short- or intermediate-term risk.

4. *Aggregate cancer risk for U.S. population.* Based on the lack of evidence of carcinogenicity in two adequate rodent carcinogenicity studies, quizalofop ethyl is not expected to pose a cancer risk to humans.

5. *Determination of safety.* Based on these risk assessments, 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 quizalofop ethyl residues.

#### IV. Other Considerations

##### A. Analytical Enforcement Methodology

Adequate enforcement methodologies (Modified Meth-147, liquid chromatography-mass spectrometry/mass spectrometry (LC-MS/MS) for plant commodities including rice; Modified BASF Method Number D1416 (LC-MS/MS) for crustaceans; and AMR-515-86, AMR-623-86, AMR-627-86, AMR-845-87, and AMR-846-87, all High Performance Liquid Chromatography (HPLC) methods using ultraviolet detection for livestock commodities) are available to enforce the tolerance expression.

The methods may be requested from: Chief, Analytical Chemistry Branch, Environmental Science Center, 701 Mapes Rd., Ft. Meade, MD 20755-5350; telephone number: (410) 305-2905; email address: [residuemethods@epa.gov](mailto:residuemethods@epa.gov).

##### 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 quizalofop ethyl.

##### C. Revisions to Petitioned-For Tolerances

EPA changed the proposed tolerance expression for rice grain from the detection of “quizalofop-P-ethyl and its acid metabolite quizalofop-P, and the S enantiomers of both the ester and the acid, all expressed as quizalofop-P-ethyl ester” to “quizalofop ethyl residues convertible to 2-methoxy-6-chloroquinoline, expressed as the stoichiometric equivalent of quizalofop ethyl” to match the expression of the other existing plant commodities since the same common moiety analytical method is used for enforcement. EPA also changed the proposed commodity name from “crayfish” to the correct definition of “fish-shellfish, crustacean”.

#### V. Conclusion

Therefore, tolerances are established for residues of quizalofop ethyl in or on fish-shellfish, crustacean at 0.04 ppm and rice, grain at 0.05 ppm.

#### VI. Statutory and Executive Order Reviews

This action establishes tolerances 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).

#### VII. 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: November 10, 2016.

Michael Goodis,

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 § 180.441:

■ a. Add alphabetically the commodity in the table in paragraph (a)(1).

■ b. Add paragraph (a)(3).

The additions read as follows:

§ 180.441 Quizalofop ethyl; tolerances for residues.

- (a) \* \* \*
- (1) \* \* \*

Commodity	Parts per million
Rice, grain	0.05

\* \* \*

(3) Tolerances are established for residues of the herbicide quizalofop-P-ethyl, including its metabolites and degradates, in or on the commodities in the following table. Compliance with the tolerance levels specified in the following table is to be determined by measuring quizalofop ethyl and quizalofop acid, expressed as the stoichiometric equivalent of quizalofop ethyl, in or on the commodity.

Commodity	Parts per million
Fish-shellfish, crustacean	0.04

\* \* \*

[FR Doc. 2016-28873 Filed 11-30-16; 8:45 am]

BILLING CODE 6560-50-P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 1, 25, 73 and 74

[GN Docket No. 15-236; FCC 16-128]

Review of Foreign Ownership Policies for Broadcast, Common Carrier and Aeronautical Radio Licensees

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this Report and Order, the Federal Communications Commission (Commission) extends its streamlined foreign ownership rules and procedures that apply to common carrier and certain aeronautical licensees under Section 310(b)(4) of the Communications Act of 1934, as amended (the “Act”) to broadcast licensees, with certain modifications to tailor them to the broadcast context. The Commission also reforms the methodology used by both common carrier and broadcast licensees that are, or are controlled by, U.S. public companies to assess compliance with the 20 percent foreign ownership limit in Section 310(b)(3), and the 25 percent foreign ownership benchmark in Section 310(b)(4) of the Act, in order to reduce regulatory burdens on applicants and licensees. Finally, the Commission makes certain technical corrections and clarifications to its foreign ownership rules.

DATES: Effective January 30, 2017, except for the amendments to 47 CFR 1.5000 through 1.5004, 25.105, 73.1010 and 74.5 which will be effective upon approval of information collection requirements by the Office of Management and Budget (OMB). The Commission will publish a separate document in the Federal Register announcing the effective date of these rule changes.

ADDRESSES: Federal Communications Commission, 445 12th Street SW., Washington, DC 20554. The Commission will seek comments from the Office of Management and Budget (OMB), other Federal agencies and the general public on the Paperwork Reduction Act (PRA) information collection requirements contained herein in a separate notice to be published in Federal Register.

FOR FURTHER INFORMATION CONTACT: Kimberly Cook or Francis Gutierrez, Telecommunications and Analysis Division, International Bureau, FCC, (202) 418-1480 or via email to Kimberly.Cook@fcc.gov, Francis.Gutierrez@fcc.gov. On PRA

matters, contact Cathy Williams, Office of the Managing Director, FCC, (202) 418-2918 or via email to Cathy.Williams@fcc.gov.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission’s Report and Order in GN Docket No. 15-236, FCC 16-128, adopted September 29, 2016 and released on September 30, 2016. The full text of the Report and Order is available for inspection and copying during normal business hours in the FCC Reference Center, 445 12th Street SW., Washington, DC 20554. The document also is available for download over the Internet at [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2016/db0930/FCC-16-128A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0930/FCC-16-128A1.pdf).

Synopsis of Report and Order

1. The Report and Order modifies the foreign ownership filing and review process for broadcast licensees by extending the streamlined rules and procedures developed for foreign ownership reviews for common carrier and certain aeronautical licensees under Section 310(b)(4) of the Communications Act of 1934, as amended (the “Act”), to the broadcast context with certain limited exceptions.<sup>1</sup> Recognizing the difficulty U.S. public companies face in ascertaining their foreign ownership, this Report and Order also reforms the methodology used by both common carrier and broadcast licensees that are, or are controlled by, U.S. public companies to assess compliance with the foreign ownership limits in Sections 310(b)(3) and 310(b)(4) of the Act, respectively. In particular, the reformed methodology provides a framework for a publicly traded licensee or controlling U.S. parent to ascertain its foreign ownership using information that is “known or reasonably should be known” to the company in the ordinary

<sup>1</sup> For ease of reference, this Report and Order refers to broadcast, common carrier, aeronautical en route and aeronautical fixed radio station applicants and licensees (including broadcast permittees) and to common carrier spectrum lessees collectively as “licensees” unless the context warrants otherwise. This Report and Order also uses the term “common carrier” or “common carrier licensees” to encompass common carrier, aeronautical en route and aeronautical fixed radio station applicants and licensees unless the context applies only to common carrier licensees. “Spectrum lessees” are defined in Section 1.9003 of Part 1, Subpart X (“Spectrum Leasing”). 47 CFR 1.9003. This Report and Order also refers to aeronautical en route and aeronautical fixed licensees collectively as “aeronautical” licensees. In using this shorthand, this Report and Order does not include other types of aeronautical radio station licenses issued by the Commission.



course of business, thereby eliminating the need for shareholder surveys.<sup>2</sup>

2. The Commission believes these changes will facilitate investment from new sources of capital at a time of growing need for investment in this important sector of the nation's economy, while continuing to satisfy the requirements of Section 310 and the policies reflected in this Report and Order. The Commission also finds that adopting a standardized filing and review process for broadcast licensees' requests to exceed the 25 percent foreign ownership benchmark in Section 310(b)(4), as the Commission has done for common carrier licensees, will provide the broadcast sector with greater transparency and more predictability, and reduce regulatory burdens and costs. As is the case with common carrier licensees, this standardized filing and review process will provide a clearer path for foreign investment in broadcast licensees that is more consistent with the U.S. domestic investment process, while continuing to protect important interests related to national security, law enforcement, foreign policy, trade policy, and other public policy goals.<sup>3</sup>

3. Section 310 of the Act requires the Commission to review foreign investment in radio station licensees.<sup>4</sup> This section imposes specific

restrictions on who may hold certain types of radio licenses. The provisions of Section 310 apply to applications for initial radio licenses, applications for assignments and transfers of control of radio licenses, and spectrum leasing arrangements under the Commission's secondary market rules.<sup>5</sup> Section 310(b)(3) prohibits foreign individuals, governments, and corporations from owning more than 20 percent of the capital stock of a broadcast, common carrier, or aeronautical radio station licensee.<sup>6</sup> Section 310(b)(4) establishes a 25 percent benchmark for investment by foreign individuals, governments, and corporations in U.S.-organized entities that directly or indirectly control a U.S. broadcast, common carrier, or aeronautical radio licensee. A foreign individual, government, or entity may own, directly or indirectly, more than 25 percent (and up to 100 percent) of the stock of a U.S.-organized entity that holds a controlling interest in a broadcast, common carrier, or aeronautical radio licensee, unless the Commission finds that the public interest will be served by refusing to permit such foreign ownership.

4. Licensees may request Commission approval of their controlling U.S. parents' foreign ownership under Section 310(b)(4) by filing a petition for declaratory ruling.<sup>7</sup> Licensees must

obtain Commission approval *before* direct or indirect foreign ownership of their U.S. parent companies exceeds 25 percent. When presented with a petition for declaratory ruling, the Commission assesses, in each particular case, whether the foreign interests presented for approval by the licensee are in the public interest, consistent with the Commission's Section 310(b)(4) policy framework. The Commission's public interest analysis also considers national security, law enforcement, foreign policy, or trade policy issues that may be raised by the foreign ownership. The Commission coordinates as necessary and appropriate with the relevant Executive Branch agencies and accords deference to their expertise in identifying and interpreting issues of concern related to these matters. The Commission evaluates concerns raised by the Executive Branch agencies in light of all the issues raised by a particular Section 310(b)(4) petition, and the Commission makes an independent decision on whether the foreign interests presented for approval by the licensee are in the public interest.

5. This Report and Order modifies the foreign ownership filing and review process for broadcast licensees and the revised methodology broadcast and common carrier licensees that are, or are controlled by, U.S. public companies will use to determine and certify their compliance with the statutory foreign ownership limits. The Commission replaces the *ad hoc* case-by-case procedures for requesting approval of foreign ownership of broadcast licensees with specific rules that incorporate the same streamlined procedures used for common carrier licensees—with limited broadcast-specific provisions—except those procedures associated with Section 310(b)(3) forbearance. Second, the Commission adopts a new methodology for broadcast and common carrier licensees that are, or are controlled by, U.S. public companies to use in determining and certifying compliance with Sections 310(b)(3) and 310(b)(4), respectively. The methodology relies on information that is known or reasonably should be known to the publicly traded licensee or U.S. parent company in the ordinary course of business. This Report and Order discusses issues related to how frequently the public company must review its foreign ownership, as well as compliance requirements for publicly traded licensees and U.S. parent companies to remedy a breach of the foreign ownership limits in Sections 310(b)(3) and 310(b)(4) or of conditions in a licensee's Section 310(b)(4) ruling.

<sup>2</sup> For ease of reference, this Report and Order refers to "shareholders" and "interest holders" interchangeably. A "shareholder" (or "stockholder") refers generally to an individual or entity that owns one or more of a company's shares and in whose name the share certificate is issued. Most shares of U.S. publicly traded companies today are held in the name of an intermediary bank or broker on behalf of a client account. The voting rights (if any) associated with a particular share of a company may be held by one or more persons/entities. This Report and Order refers to any person or entity that holds the right to vote or to direct the voting of a share of a company's stock as a "beneficial owner." The beneficial owner(s) of a share may or may not hold the equity (*i.e.*, the pecuniary) interest in the share. This Report and Order refers to any person or entity that has the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, a share as the "equity interest holder."

<sup>3</sup> The new rules adopted in this Report and Order will be codified in Part 1, Subpart T, Sections 1.5000 through 1.5004 of the Commission's rules and are appended to the Report and Order.

<sup>4</sup> A "station license" is defined in the Act as "that instrument of authorization required by [the] Act or the rules and regulations of the Commission made pursuant to [the] Act, for the use or operation of apparatus for transmission of energy, or communications, or signals by radio by whatever name the instrument may be designated by the Commission." 47 U.S.C. 153(49). For example, the Commission issues radio station licenses for the provision of broadcast, wireless personal communications services, cellular, microwave, aeronautical en route, and mobile satellite services. See also 47 U.S.C. 319 (construction permits). For ease of reference, this Report and Order refers to "radio station licenses" as "licenses" unless the context warrants otherwise.

<sup>5</sup> Under the Commission's secondary market rules, spectrum lessees (and spectrum sublessees) providing common carrier service are subject to the same foreign ownership requirements that apply to common carrier licensees under Sections 310(a) and (b) of the Act. Spectrum leasing is not currently permitted under the broadcast service rules.

<sup>6</sup> In the *2012 Foreign Ownership First Report and Order*, the Commission determined to forbear from applying the foreign ownership limits in Section 310(b)(3) to the class of common carrier licensees in which the foreign investment is held in the licensee through U.S.-organized entities that do not control the licensee, to the extent the Commission determines such foreign ownership is consistent with the public interest under the policies and procedures that apply to the Commission's public interest review of foreign ownership subject to Section 310(b)(4) of the Act. The Commission codified the forbearance approach in the *2013 Foreign Ownership Second Report and Order*. The Commission's forbearance authority does not extend to broadcast or aeronautical radio station licensees covered by Section 310(b)(3). See 47 U.S.C. 160.

<sup>7</sup> Under the Commission's Section 310(b)(3) forbearance approach applicable to common carrier licensees, common carrier licensees have the option to file a petition for declaratory ruling requesting prior Commission approval to exceed the 20 percent foreign ownership limits in Section 310(b)(3) where the foreign ownership interests would be held in the licensee through intervening U.S.-organized entities that do not control the licensee. For ease of reference, and because the Commission's forbearance authority does not extend to broadcast or aeronautical licensees covered by Section 310(b)(3), this Report and Order generally refers to petitions for declaratory ruling filed under Section 310(b)(4) of the Act, unless the context warrants otherwise.



These compliance requirements take into account that certain breaches may be due to circumstances beyond the licensee's control that were not reasonably foreseeable to or known by the licensee with the exercise of the required due diligence. The Report and Order addresses the compliance obligations of privately held entities. Finally, the Commission adopts certain corrections and clarifications to its existing foreign ownership rules, and discusses transition issues.

### Extending Streamlined Common Carrier Foreign Ownership Procedures to Broadcast Licensees

6. The Commission adopts the *2015 Foreign Ownership NPRM* proposal to apply the foreign ownership rules and procedures applicable to common carrier licensees to broadcast licensees, with certain exceptions and modifications further discussed below. It is clear from the Commission's experience that the common carrier rules for reviewing foreign ownership petitions create an efficient process that benefits filers without harm to the public. The process also helps ensure that the Commission is able to fulfill its obligations under Section 310(b) with respect to foreign ownership, while coordinating applications and petitions with the relevant Executive Branch agencies, as needed. Notably, among other changes, broadcast petitioners will now be able to request: (1) Approval of up to and including 100 percent aggregate foreign ownership (voting and/or equity) by unnamed and future foreign investors in the controlling U.S. parent of a broadcast licensee, subject to certain conditions; (2) approval for any named foreign investor that proposes to acquire a less than 100 percent controlling interest to increase the interest to 100 percent at some future time; and (3) approval for any non-controlling named foreign investor to increase its voting and/or equity interest up to and including a non-controlling interest of 49.99 percent at some future time.<sup>8</sup> Other routine common carrier

<sup>8</sup> For example, under the common carrier foreign ownership rules that the Commission is extending to broadcasters, a licensee filing a Section 310(b)(4) petition to allow foreign ownership of its controlling U.S. parent to exceed 25 percent may include in its petition a request that the Commission specifically approve a named foreign investor's acquisition of up to and including a non-controlling 49.99 percent interest in the U.S. parent at some future time. If, after grant of the initial petition, the foreign investor seeks to acquire any additional equity or voting interests in the U.S. parent above 49.99 percent interests, i.e., the thresholds approved in the initial ruling, the licensee must file a new Section 310(b)(4) petition to obtain Commission approval *before* the foreign investor acquires any additional interests.

terms and conditions will also apply to broadcast rulings, such as those involving subsidiaries and affiliates and the insertion of new foreign-organized companies into the controlling U.S. parent's vertical ownership chain. There is significant support for these proposals in the record, and the Commission finds that the public interest will be served by applying these rules to broadcast petitions for declaratory ruling filed pursuant to Section 310(b)(4).

7. In addition, the Commission adopts its proposal that broadcast petitioners need to obtain specific approval only for foreign investors (i.e., foreign individuals, entities, or a "group" of foreign individuals or entities) that hold or would hold, directly or indirectly, more than 5 percent, and in certain circumstances, more than 10 percent of the U.S. parent's voting and/or equity interests, or a controlling interest in the U.S. parent. The *2013 Foreign Ownership Second Report and Order* details the policy objectives under Section 310(b) that informed the selection of these specific approval criteria. The Commission, in that item, sought to balance a number of factors in identifying the types of foreign investments that warrant specific approval. Ultimately, the Commission determined that the specific approval thresholds it adopted struck an important balance between the agency's twin objectives of reducing the regulatory costs and burdens associated with foreign investment in common carriers and protecting important interests related to national security, law enforcement, and public safety. The Commission further held that the specific approval thresholds it adopted were tailored to those foreign investors that the company should reasonably be able to identify and whose interests rise to the level that may be relevant to the actual concerns applicable to the Section 310(b) review of foreign ownership in the common carrier context. The Commission finds this reasoning equally applicable to broadcast petitioners, and conclude that the public interest is best served by harmonizing the specific approval requirements, thereby providing consistency in the application of Section 310(b) to all subject licensees, regardless of service.

8. As indicated in the *2015 Foreign Ownership NPRM*, the Commission finds that there are instances in which it is appropriate to distinguish between broadcast licensees and common carrier

Commission grant of the licensee's new petition would constitute a modification of the licensee's initial ruling.

licensees to minimize disruption to broadcasters. Based on the Commission's review of the record, the Commission adopts its proposal to modify particular rules as they would apply to broadcast petitioners to reflect the distinct nature and precedent of the broadcast service, as discussed below.

### Specific Modifications for Broadcast Licensees

9. *Disclosable Interest Holders.* Under the existing rules, common carrier licensees filing petitions for declaratory ruling regarding proposed foreign investments under Section 310(b) must include the name, address, citizenship, and principal business(es) of any individual or entity, regardless of citizenship, that directly or indirectly holds or would hold, after effectuation of any planned ownership changes described in the petition, at least 10 percent of the equity or voting interests in the controlling U.S. parent of the petitioning common carrier licensee or a controlling interest.<sup>9</sup> The 10 percent threshold was adopted to ensure consistency with the ownership disclosure requirements that apply to most common carrier applicants under the existing licensing rules, while preserving a meaningful opportunity for the Executive Branch agencies to review petitions for national security, law enforcement, foreign policy, and trade policy concerns.

10. Consistent with the record, the Commission adopts its proposal to utilize the attribution rules and policies applicable to broadcasters to determine those U.S. and foreign interests that must be disclosed in Section 310(b)(4) petitions involving broadcast stations.<sup>10</sup> The disclosure requirement is designed to ensure that the Commission has sufficient information to understand the licensee's ownership structure and to

<sup>9</sup> Similarly, when a foreign individual or foreign-organized entity requires specific approval under Section 1.991(i) of the rules, the petition must include the information specified in Section 1.991(j), including the name and citizenship of any individual or entity that holds, or would hold, directly and/or indirectly, through one or more intervening entities, 10 percent or more of the equity interests and/or voting interests, or a controlling interest, in the foreign entity for which the petitioner requests specific approval.

<sup>10</sup> The Commission finds that excluding certain attributable interest holders would hinder the Commission's ability to determine the locus of control of a petitioner's U.S. parent company and the potential impact of proposed foreign investment of the management and operations of the broadcast licensee; therefore, the Commission declines to pursue NAB's recommendations. NAB also recommends re-evaluating the broadcast attribution standards. The Commission determines that any consideration of modification of our attribution rules and policies is beyond the scope of the instant proceeding.

verify the identity and ultimate control of the foreign investor for which the petitioner seeks specific approval. Accordingly, in the common carrier context, the Commission relies on the ownership disclosure requirements applicable to most common carriers. The Commission finds that it is similarly appropriate to rely on the attribution rules and policies applicable to broadcast licensees in adopting the broadcast ownership disclosure requirements.

11. This approach provides regulatory certainty and ease of compliance while minimizing disruption to broadcasters. The attribution rules represent longstanding broadcast policy, and broadcasters are familiar with these rules, as they are used in the application and disclosure of multiple ownership, among other requirements. Broadcasters have also structured their organizations in reliance on the attribution standards. Applying the common carrier disclosure requirements to broadcasters would result in undue hardship without producing any discernable public interest benefits. Thus, the Commission does not believe that the public interest would be served by requiring broadcasters to conform to the foreign ownership rules regarding disclosable interests applicable to common carriers.<sup>11</sup>

12. *Specific Approval of Named Foreign Investors.* The Commission extends to broadcast licensees the specific approval rules in Section 1.991(i)–(j), applicable to common carrier licensees, with certain modifications as proposed in the *2015 Foreign Ownership NPRM*. First, broadcast licensees will use the insulation criteria set forth in the broadcast attribution rules for purposes of determining whether a licensee's petition for declaratory ruling must include a request for specific approval of one or more foreign investors because the investor holds, or would hold, directly and/or indirectly, more than 5 percent (or, in certain situations, more than 10 percent) of the controlling U.S. parent's equity or voting interests.<sup>12</sup>

13. Second, to the extent a broadcast licensee identifies a foreign entity that requires specific approval under Section

1.5001(i) of the new rules, the petition must include the information specified in Section 1.5001(j), including the name and citizenship of any individual or entity that holds, or would hold, directly and/or indirectly, through one or more intervening entities, an *attributable* interest in the foreign entity for which the petitioner requests specific approval. The Commission does not believe it would be appropriate to require broadcast petitioners to use the 10 percent standard that applies (and will continue to apply under the new rules) to petitions filed by common carrier licensees. No commenter disagreed with this proposed approach.

14. Several commenters, at times, appeared to conflate the broadcast attribution criteria that the Commission proposed broadcast petitioners use for purposes of identifying their “disclosable U.S. and foreign interest holders” with the specific approval criteria that were proposed to extend to broadcast licensees. The broadcast attribution criteria, however, are not co-extensive with the specific approval requirements that apply to common carrier licensees. These specific approval requirements, as proposed, will apply to broadcast licensees under the new rules—with the limited exception allowing broadcast licensees to calculate whether a foreign investor requires specific approval using the *insulation* criteria that such licensees use in calculating their attributable interests under Section 73.3555. As noted above, the specific approval rules for Section 310(b)(4) petitions require petitioners to request specific approval for any foreign investor that holds, or would hold, directly or indirectly, more than 5 percent, and in certain circumstances, more than 10 percent of the controlling U.S. parent's total outstanding capital stock (equity) and/or voting stock (or a controlling interest). In contrast, the broadcast attribution rules, with limited exception, do not apply to non-voting equity interests. In this respect, the specific approval requirements are broader in scope than the broadcast attribution rules, consistent with Commission precedent that reads Section 310(b) to evince Congress' separate concern with the scope of foreign equity interests in a licensee and any controlling U.S. parent company. The Commission also notes that, because it may be a source of confusion, the general specific approval requirement applies to interests of *more than 5 percent*, not interests of *5 percent or more* as under the broadcast attribution rules. The Commission set the specific approval thresholds in the

*2013 Foreign Ownership Second Report and Order* so they are aligned with the SEC's beneficial ownership reporting requirements.

15. *Insulation Criteria.* The Commission's current rules specify the methodology for calculating the foreign equity and voting interests in the controlling U.S. parent of a common carrier licensee that require specific approval under Section 1.991(i) of the rules. This methodology will now be applicable to broadcast licensees. The *2015 Foreign Ownership NPRM*, however, sought comment on the appropriate insulation criteria for broadcasters for purposes of calculating the percentage of foreign voting interests held indirectly in the controlling U.S. parent through one or more intervening partnerships or limited liability companies (LLCs).

16. The Commission will rely on the insulation criteria applicable to broadcast licensees rather than those applicable to common carriers. Broadcast entities are familiar with these criteria, and many broadcast interests have relied upon and have executed their organizational documents based on these insulation criteria. The Commission agrees with commenters that modifying these agreements would be difficult and costly, and is unable to identify any corresponding public interest benefits in requiring such modification. Therefore, the Commission finds that imposing common carrier insulation criteria on broadcasters for purposes of calculating foreign voting interests for Section 310(b) purposes would create an undue hardship. Ultimately, the Commission finds that consistency with its broadcast insulation rules and policies is appropriate in these circumstances.

17. *Service- and Geographic-Specific Rulings.* Consistent with the common carrier rules, the Commission will not issue broadcast rulings on a service-specific or geographic-specific basis.<sup>13</sup> Licensees will not be required to file new petitions for each broadcast station acquisition. Except as noted below, licensees, including any covered affiliates or subsidiaries, that have rulings for foreign investment in the broadcast service may apply those rulings to after-acquired broadcast licenses, regardless of the broadcast service or the geographic area in which the stations are located. The Commission believes this approach will provide the greatest amount of

<sup>11</sup> The Commission reminds broadcasters that the term “disclosable interest holder” in the foreign ownership context is not coterminous with the use of that term in the auction context. See, e.g., 47 CFR 1.2112(a)(6).

<sup>12</sup> The Commission will issue foreign ownership rulings to broadcast licensees—as the Commission does now in the common carrier context—subject to routine terms and conditions, including the requirement that licensees file a new petition before any previously unapproved foreign investor acquires an interest that requires specific approval.

<sup>13</sup> While this will apply as a routine term and condition under the rules, the Commission retains the discretion to limit the scope of any petition grant based on the facts and circumstances presented in a particular case.

regulatory flexibility possible, is consistent with the existing common carrier practice, and will encourage investment in the domestic transactional market, infusing capital into the industry.<sup>14</sup> The transfer and assignment of individual broadcast station licenses, however, will continue to be subject to petitions to deny and informal objections, where interested parties may comment on whether the particular transaction, including its foreign ownership, is consistent with the public interest.<sup>15</sup>

18. The Commission will, however, limit its foreign ownership rulings to common carrier and broadcast services, as applicable. Entities that have obtained a broadcast ruling may not use that ruling to cover an after-acquired common carrier—and vice versa. As observed in the *2015 Foreign Ownership NPRM*, the Commission has noted previously the important distinctions between common carrier services and broadcast media in the context of the public interest analysis under Section 310(b)(4). Given these considerations, the Commission believes it is appropriate to adopt the tentative conclusion in the *2015 Foreign Ownership NPRM* and require licensees to separately file common carrier petitions from broadcast petitions. However, if the licensee specifically requests approval as both a common carrier and broadcaster, the Commission will entertain such petitions, provided that the petitioner includes all the relevant common carrier and broadcast petition information. If approved, such a ruling would apply to subsequent acquisitions of common carrier and broadcast licenses, subject to any limitations adopted in the particular ruling.<sup>16</sup>

19. *Filing and Processing of Broadcast Petitions.* The *2015 Foreign Ownership NPRM* proposed that broadcast petitions for declaratory ruling be filed electronically as an attachment to the underlying applications for a construction permit, assignment, or

transfer of control that are electronically filed through the Commission's Consolidated Database System (CDBS) or any successor database. Additionally, for those broadcast petitions filed without an underlying broadcast construction permit, assignment, or transfer of control application, the *2015 Foreign Ownership NPRM* proposed that the broadcast petitioner would file its petition for declaratory ruling electronically with the Commission's Office of the Secretary via the Commission's Electronic Comment Filing System (ECFS) as a non-docketed filing.

20. The Commission will adopt the processes described in the *2015 Foreign Ownership NPRM* for the filing and processing of broadcast petitions.<sup>17</sup> Thus, broadcast petitions for declaratory ruling must be filed electronically as an attachment to the underlying applications for a construction permit, assignment, or transfer of control that are electronically filed with the Commission. As proposed in the *2015 Foreign Ownership NPRM*, such applications, if otherwise acceptable for filing, will be placed on public notice denoting that the application is "accepted for filing." This public notice initiates the formal processing of the application, triggers the legal timeframe for the filing of petitions to deny, and provides notice to interested members of the public who may wish to comment on the application. A foreign ownership petition, filed as part of an underlying application, will separately receive a docket number, and the Commission will issue a separate public notice to solicit comment on the petition. A broadcast petition filed in the absence of an underlying broadcast construction permit, assignment, or transfer of control application shall be initially submitted electronically with the Commission's Office of the Secretary via ECFS as a non-docketed filing. The petition will subsequently receive a docket number and a public notice seeking comment will be released. Broadcasters are familiar with filing applications/petitions in the relevant filing systems, and the Commission finds that these procedures will promote regulatory consistency.<sup>18</sup> The

Commission will continue to coordinate applications and petitions with the relevant Executive Branch agencies, as necessary and appropriate.

#### Methodology for Assessing Compliance With Section 310(b)

21. The Commission adopts a methodology for U.S. public companies to assess compliance with the foreign ownership limits in Sections 310(b)(3) and 310(b)(4) of the Act. The Commission adopts the approach proposed in the *2015 Foreign Ownership NPRM* to permit a broadcast or common carrier licensee that is controlled by a U.S. public company to rely on ownership information that is known or reasonably should be known to the public company to determine its aggregate levels of foreign ownership. The Commission adopts the same approach for licensees' determinations of compliance with Section 310(b)(3) to the extent the licensee is a public company. The Commission finds that adopting such a rule for "eligible" publicly traded licensees and U.S. parent companies<sup>19</sup> is supported by the record developed in this proceeding and will provide licensees with greater certainty and reduced burdens in determining their aggregate levels of foreign ownership given the difficulties of ascertaining the identity and citizenship of widely dispersed public company shareholders.

22. The methodology will eliminate the need for publicly traded licensees and U.S. parent companies to attempt to conduct surveys or random samplings of their shares and apply presumptions about the citizenship of their unknown shareholders, based on the informal staff guidance routinely provided to applicants and licensees since the early 1970s. At the same time, the Commission finds that this methodology will allow publicly traded licensees and U.S. parent companies to identify those foreign interest holders likely to have

<sup>14</sup> The Commission emphasizes that rulings are granted to petitioning licensees (and their subsidiaries and affiliates as defined in the rules) pursuant to Final Rules (§ 1.5004(b)), and not to the foreign individuals/entities that are specifically approved in the ruling to hold specified levels of equity and voting interests in the licensee's U.S. parent. Thus, the specifically approved foreign investor cannot rely on the licensee's ruling for purposes of acquiring a controlling or non-controlling interest in an unaffiliated company.

<sup>15</sup> This also affords the relevant Executive Branch agencies opportunity to raise applicable national security, law enforcement, foreign policy, or trade policy concerns.

<sup>16</sup> The transfer and assignment of individual licenses will continue to be subject to the appropriate Commission approval processes.

<sup>17</sup> An applicant shall inform the Commission that it is covered by an existing ruling and that it is in compliance with that ruling if the applicant seeks approval for a subsequent assignment/transfer of control pursuant to the terms and conditions of that ruling.

<sup>18</sup> In circumstances in which a petition involves common carrier and broadcast licenses, filers should comply with all applicable filing requirements for those services. The Commission will tailor the public notice and comment process, as appropriate.

<sup>19</sup> An "eligible" U.S. public company is defined in the new rules as a U.S.-organized company that has issued a class of equity securities for which beneficial ownership reporting is required by security holders and other beneficial owners under sections 13(d) or 13(g) of the Exchange Act and corresponding Exchange Act Rule 13d-1, 17 CFR 240.13d-1. See Final Rules (§ 1.5000(d)). This definition tracks the definition of "public company" in Section 1.990(g)(9) (to be renumbered as Section 1.5000(g)(9)) except that it is limited to U.S.-organized public companies. The Securities and Exchange Commission (SEC) rules and forms referenced in this Report and Order may be eliminated, redesignated, or otherwise modified in the future by the SEC. To ensure that the Commission's rules continue to refer to the correct SEC rules and forms, the Commission delegates to the International Bureau the authority to make technical and ministerial edits to the rules adopted in this Report and Order for this purpose.

the ability to influence company policies and operations. The methodology recognizes the realities of today's marketplace for the equity securities of public companies by allowing companies to focus their compliance efforts and resources on identifying and determining the citizenship of those shareholders that may present a realistic potential to influence or control the company, rather than on those interests that are not influential.

23. The difficulties associated with ascertaining the foreign ownership of U.S. public companies arise, in large part, out of the changing nature of stock ownership in the United States. As commenters note, most shares of publicly traded companies are now held in "street name" (*i.e.*, in the name of an intermediary bank or broker holding legal title to a share on behalf of a third party). In 1934, when Congress adopted the provisions of Section 310(b)(4), only about 10 percent of shares in U.S. markets were held by an individual or institution on behalf of someone else; it has been estimated that at least 85 percent of shares are now held this way. Moreover, as noted below, it has proven increasingly difficult to ascertain the identity, much less the citizenship, of a public company's shareholders.

#### Identification of Interest Holders

24. *Known or Reasonably Should Be Known Standard.* Based on the record, the Commission concludes that a U.S. public company knows, or reasonably should know, in the exercise of due diligence, the identity and citizenship of certain individuals and entities that hold, directly and/or indirectly, equity and/or voting interests in the U.S. public company as described in further detail below. Accordingly, the rules will permit a licensee that is, or is controlled by, a U.S. public company to rely on such information to ascertain the company's foreign equity and voting interests under Sections 310(b)(3) and 310(b)(4).

25. The Commission finds record support for its conclusion that U.S. public companies should know the identity of shareholders that report their beneficial ownership, or other persons who may be identified in such report as holding a pecuniary interest, in the equity securities of the company pursuant to Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Exchange Act Rule 13d-1. In general, Exchange Act Rule 13d-1 requires a person or "group" that becomes, directly or indirectly, the "beneficial owner" of more than 5 percent of a class

of equity securities registered under Section 12 of the Exchange Act to report the acquisition to the SEC.<sup>20</sup> The absence of a reporting requirement under Exchange Act Rule 13d-1 for beneficial owners of 5 percent or less of a class of equity securities also means that the identity and citizenship of such smaller shareholders may not be readily available to the issuing company.<sup>21</sup>

26. The rules adopted today will require that licensees or their controlling U.S. parents that are eligible U.S. public companies within the meaning of the rules review the beneficial ownership reports, Schedules 13D and 13G, filed with the SEC, and monitor other widely available sources of information about institutional ownership of U.S. publicly traded equity securities, specifically, information derived from SEC Form 13F reports, as the Commission expects they do now in the ordinary course of business.<sup>22</sup> Generally, Schedule 13D is

<sup>20</sup> For purposes of Exchange Act Rule 13d-1, Exchange Act Rule 13d-3(a) defines a beneficial owner of a security to include any person who, directly or indirectly, through any contract, arrangement, understanding, relationship, or otherwise has or shares voting power, which includes the power to vote, or to direct the voting of, such security; and/or investment power, which includes the power to dispose, or to direct the disposition of, such security. 17 CFR 240.13d-3(a). Exchange Act Rule 13d-1(i) defines the term "equity security" as any equity security of a class which is registered pursuant to Section 12 of that Act as well as certain equity securities of insurance companies and equity securities issued by closed-end investment companies registered under the Investment Company Act of 1940. The term "equity security," however, does not include securities of a class of non-voting securities. *Id.* § 240.13d-1(i).

<sup>21</sup> The Commission agrees with commenters that small, unknown interest holders that hold 5 percent or less of a U.S. public company's outstanding shares or qualified institutional investors that hold interests of 10 percent or less, as a general rule, do not have the ability or pose a realistic potential to exert influence or control over that U.S. public company.

<sup>22</sup> For example, various SEC forms filed by issuers, including their annual reports (or proxy statements) and quarterly reports, require the issuer to include a beneficial ownership table that contains, *inter alia*, the name and address of any individual or entity, or "group" (as that term is used in Section 13(d)(3) of the Exchange Act), who is known to the issuer to be the beneficial owner of more than 5 percent of any class of the issuer's voting securities (not limited to securities registered pursuant to Section 12 of the Exchange Act) and the percentage of the class held. Thus, Item 403 requires that issuers include beneficial ownership of any class of their voting securities regardless of whether the securities are registered under Section 12 of the Exchange Act (in contrast to the requirements of Exchange Act Rule 13d-1, which requires reporting of beneficial ownership of an issuer's equity securities (defined in Section 13d-1(i) as generally including only registered, voting securities). Pursuant to Item 403 of Regulation S-K, issuers must determine their beneficial ownership in accordance with Exchange Act Rule 13d-3 (applicable as well to Schedules 13D and 13G). For purposes of Item 403, the issuer "shall be deemed to know the contents of any statements

required to be filed by any person who acquires, directly or indirectly, beneficial ownership exceeding 5 percent of a class of an issuer's equity securities (as defined by Exchange Act Rule 13d-1(i)). Schedule 13D must be filed with the SEC within 10 days after the acquisition that triggered the reporting requirement and must include, among other things, the identity and citizenship of the direct and indirect beneficial owners of the equity securities and the purpose of the transaction—including whether it is to acquire control.

27. Qualified institutional investors may use an abbreviated "short-form" disclosure statement, known as Schedule 13G, pursuant to Exchange Act Rule 13d-1(b), to report their beneficial ownership in excess of 5 percent of a class of equity securities, including amounts in excess of 10 percent, to the SEC, when the institutional investor acquires its shares "in the ordinary course of [its] business and not with the purpose nor with the effect of changing or influencing the control of the issuer. . . ." Where an institutional investor's beneficial ownership exceeds 5 percent, but not 10 percent, of a class of equity securities in a given calendar year, the Schedule 13G need not be filed until 45 days after the end of the calendar year (and only then if the investor or "group" continues to own more than 5 percent at year end). Exchange Act Rule 13d-1(b) covers a broad range of institutional investors, such as registered brokers and dealers, banks, insurance companies, investment companies, investment advisers, employee benefit plans, and savings associations.

28. Both the Schedule 13D and 13G include citizenship information for the beneficial owner. In the case of a Schedule 13D that is filed by a general or limited partnership, syndicate or other group, which group could include a limited liability company, the schedule also requires, *inter alia*, the identity and citizenship of each partner of a general partnership, each partner who is denominated as a general partner or who functions as a general partner of such limited partnership, each member of such syndicate or group, and each person controlling such partner or member. When the Schedule 13D is filed by a corporation, the schedule similarly requires, *inter alia*, the

filed with [the SEC] pursuant to Section 13(d) or 13(g) of the Exchange Act." When applicable, the issuer may rely upon information set forth in such statements unless it "knows or has reason to believe that such information is not complete or accurate or that a statement or amendment should have been filed and was not."

identity and citizenship of each executive officer and director, each person controlling the corporation, and each executive officer and director of any corporation or other person ultimately in control of such corporation. Thus, U.S. public companies should review Schedules 13D and 13G to identify their interest holders (and to determine their citizenship).

29. In addition, licensees and controlling U.S. parents should assess the ownership of their publicly traded equity securities more broadly through additional sources of information; specifically, institutional equity ownership information about U.S. publicly traded companies which is available from a variety of entities, including, for example: (i) Internet-based news and other sources; and (ii) data gatherers that compile and distribute information and analysis about ownership of publicly traded equity securities for a fee. A considerable amount of such equity ownership information is based on the quarterly Form 13F reports that are required under Section 13(f) of the Exchange Act and the rules thereunder. Form 13F is required to be filed with the SEC within 45 days of the end of each calendar quarter by an institutional investment manager, including a foreign-organized manager, with investment discretion over an aggregate value of \$100 million or more in U.S. exchange-traded equity securities. Such securities, referred to as “Section 13(f) securities,” generally are the common stock of issuers that are listed and traded on the primary U.S. stock exchanges.<sup>23</sup> Each Form 13F report discloses, as of the end of the calendar quarter, the number of shares in each reportable Section 13(f) security over which the Form 13F reporting manager exercised investment discretion. While a Form 13F report does not necessarily reveal the ultimate beneficial owner of a company’s U.S. exchange-traded stock, it provides material insight into the holders of such stock, and can be an important element in determining ultimate voting control.<sup>24</sup> The

Commission finds that information available in the Form 13F about the institutional ownership of its shares reasonably should be known to the company in the ordinary course of business.

30. A U.S. public company also can avail itself of certain other sources of reliable information about the ownership of its publicly traded stock, available in the ordinary course of business. First, U.S. public companies should know the ownership of the shares registered with the company and the shares held by officers and directors. Second, U.S. public companies should know the citizenship of at least some of the shareholders of the company’s securities that are not publicly traded (e.g., non-registered securities (whether voting or non-voting) held by pre-IPO founders of the company and non-registered voting shares held by beneficial owners required to be identified in a company’s annual reports (or proxy statements) and quarterly reports). Third, other shareholders and their citizenship may be known to the public company, including those identified as a result of shareholder litigation, financing transactions, and proxies voted at annual or other meetings. Fourth, shareholders whose interests and citizenship are actually known to the company by whatever source, whether the interests exceed 5 percent or not, will be considered “known” under the new rules, and companies will be required to include such equity and/or voting interests in calculating the percentages of their foreign voting interests and their foreign equity interests under Section 310(b). For example, information gleaned from Schedules 13D and 13G may indicate that the company has foreign beneficial owners holding interests in excess of 5 percent of a particular class of voting stock that does not equate to an interest exceeding 5 percent of the company’s total outstanding shares of voting stock. Nevertheless, the rules will treat these interests as “known.” The Commission requires U.S. public companies to include all of the above-mentioned

information in their foreign ownership calculations.<sup>25</sup>

31. The methodology adopted in this Report and Order generally will not require U.S. public companies to identify *de minimis* interest holders. NOBO shareholders that are not otherwise identifiable (as through SEC filings) are such *de minimis* interest holders. Nonetheless, Comcast and NAB recommend that the Commission deem any information that, upon reasonable inquiry, a company receives from NOBOs to be reasonably identifiable. The Commission declines to require U.S. public companies, as a matter of course, to send out NOBO letters to obtain citizenship information, as was required in the *Pandora Declaratory Ruling*. Based on the Commission’s experience and the comments received, the Commission does not believe such letters consistently generate responses from addressees. Therefore, any information gleaned directly through NOBO letters may be incomplete or redundant, and thus potentially difficult to reconcile with the citizenship information obtained using the methodology adopted in this Report and Order.<sup>26</sup>

32. The Commission recognizes that SEC Schedules 13D and 13G provide limited information as to those persons or entities that hold the pecuniary interests associated with a public company’s voting shares that are subject to reporting under Exchange Act Rule 13d-1.<sup>27</sup> Notwithstanding the limited information that may be publicly available as to a company’s equity interest holders, the Commission does not believe that Section 310(b) allows the Commission to limit its foreign ownership review to include only those investors that possess voting rights in a

<sup>25</sup> As more information regarding the citizenship of beneficial owners becomes available as a result of improved, revised or increased disclosure requirements, registries or databases, the Commission expects U.S. public companies to include such information for purposes of determining their foreign ownership levels.

<sup>26</sup> However, to the extent a U.S. public company has identified an interest holder under our methodology, direct inquiries—including by letter—are encouraged as noted below.

<sup>27</sup> Information as to those persons holding the pecuniary interest in the company’s voting, equity securities is limited: A beneficial owner required to report under Section 13d-1 by filing the requisite Schedule 13D or Schedule 13G is required to state whether any other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, such securities. If such interests relate to more than 5 percent of the class being reported, however, the Schedule 13D or Schedule 13G requires that such person be identified. However, a listing of the shareholders of an investment company registered under the Investment Company Act of 1940 or the beneficiaries of an employee benefit plan, pension fund, or endowment fund is not required.

<sup>23</sup> Form 13F identifies, among other things, the total number of a public company’s Section 13(f) securities for which the filer (and sometimes its related parties) exercises investment discretion. The Form 13F also identifies voting authority for such positions, although its specialized reporting instruction captures voting authority only over “non-routine” matters (e.g., a contested election of directors; a merger or sale of substantially all of the issuer’s assets).

<sup>24</sup> A Form 13F report also can assist in identifying the citizenship of an equity owner because, as a starting point for determining citizenship, the cover page of Form 13F requires that the filing manager’s

name and address be provided. Form 13F reports are filed on the SEC’s EDGAR database, and list holdings to facilitate the utility to end users of the reported U.S. equity holdings data. Because a material number of institutional investment managers that file Form 13F are registered under the Investment Advisers Act of 1940, the investment adviser registration form, Form ADV, may be useful in this context. For example, Form ADV may have information relevant to determining the citizenship of a registered investment adviser that may be identified in a Schedule 13D/G or Form 13F as holding investment discretion and voting authority for such positions in a public company.

company. The Commission therefore declines to adopt a methodology that focuses only on voting power.<sup>28</sup>

33. *Surveys.* Publicly traded companies have, in the past, attempted to undertake surveys or random sampling of their shareholders' equity and voting interests to determine whether they are in compliance with Section 310(b). As noted above, the methodology adopted in this Report and Order will eliminate the need for a publicly held licensee or controlling U.S. parent to attempt to use surveys or random sampling techniques for purposes of ensuring that the licensee is able to certify compliance with Section 310(b) or obtain the Commission's approval, under Section 310(b)(4), before the U.S. public company's foreign equity and/or voting interests exceed 25 percent.

34. *SEG-100.* The 2015 *Foreign Ownership NPRM* sought comment on whether a public company's participation in the Depository Trust Company's (DTC) SEG-100 program, or an equivalent program, would provide the Commission with sufficient information to discharge its public interest obligations pertaining to foreign ownership in broadcast licensees. Several parents of broadcast licensees participate in SEG-100 or similar programs which allow for the deposit of foreign-owned shares into a segregated account for monitoring foreign owned shares.

35. When an issuer requests to be included in the SEG-100 program, DTC notifies its participating banks/brokers that they must apply SEG-100 procedures to future trades of stock. The issuer may provide specific instructions to DTC to forward to participating banks/brokers regarding how to determine citizenship of potential purchasers of the issuer's stock. DTC participants are obligated to make inquiries of their client account holders and to place the shares of such holders who are non-citizens in the DTC participant's segregated account. Such a process allows issuers, through their transfer agents, to monitor changes in foreign ownership levels and, if the threshold is exceeded, to notify DTC of the number of shares that must be transferred out of SEG-100 accounts.

<sup>28</sup> The methodology the Commission is adopting takes into account that it may not be possible for a publicly traded licensee or U.S. parent, even with the exercise of the required diligence, to identify the individuals or entities that ultimately have the pecuniary interest in voting shares of the company that are subject to reporting by the beneficial owner under Exchange Act Rule 13d-1 (and that therefore should reasonably be known to the company).

36. While the Commission finds that participation in SEG-100 serves as a useful check on monitoring foreign ownership levels and may be used as a tool to prevent transactions that would render a licensee noncompliant with foreign ownership thresholds, the Commission is not persuaded that the SEG-100 program can be used as a standalone method for demonstrating compliance with Section 310(b). The Commission declines, in part, because there are many variables that might impact the effectiveness of the program in any given circumstance. For example, the instructions issuers provide DTC to guide DTC participants in making inquiries could have varying degrees of accuracy and detail. Furthermore, the effectiveness of the program would be impacted by the extent to which participants apply the guidelines in the instructions when making client inquiries to determine their citizenship. The Commission also hesitates to require U.S. public companies that are not currently participating in SEG-100 to enroll in the program. The Commission believes that relying on the methodology outlined above is a more uniform approach that can be implemented consistently. Nonetheless, the Commission recognizes that many companies, broadcasters in particular, participate in SEG-100 and have found its services useful for a range of purposes, including monitoring of compliance with foreign ownership restrictions. Thus, while the Commission will not permit participation in SEG-100 to serve as a standalone compliance methodology, it is not the Commission's intention to discourage the use of this program to the extent that companies find it valuable.

#### Determining Citizenship

37. Based on the record and the Commission's experience with foreign ownership, the Commission provides the following guidance as to the criteria Section 310(b) licensees can use to determine the citizenship of their identifiable interest holders.<sup>29</sup> As discussed above with respect to identifying an eligible U.S. public company's interest holders, the Commission expects licensees will exercise due diligence in determining the citizenship of their identifiable interest holders.

38. Under the new framework, Section 310(b) licensees must make a

determination in the first instance as to whether an identifiable interest holder should be deemed "foreign." The Commission finds that, for purposes of determining the citizenship of their directors, officers, and employees, U.S. public companies should obtain citizenship information through direct inquiry. If the company has other registered shareholders (other than directors, officers, employees), it should rely on publicly available information (if any), and/or attempt to query these interest holders directly to the extent citizenship is not included in the share registry.

39. The Commission also finds that companies are entitled to rely on publicly available information with respect to non-registered identifiable interest holders, including information gleaned from SEC filings that were used to identify the shareholder, other SEC filings made by the interest holder (e.g., a Form ADV where the interest holder is a registered investment adviser), information specifically known to the company, and/or information received by the company through direct inquiries. The Commission finds direct inquiries by the U.S. public company of its identifiable interest holders constitutes a reasonable measure,<sup>30</sup> particularly in circumstances where: (1) The U.S. public company knows or has reason to believe that information reported to the SEC is not complete or accurate or that a statement or amendment should have been, but was not, filed; or (2) the U.S. public company's otherwise known or should be known aggregate foreign equity or voting interests are approaching the statutory limits.

40. If the identifiable interest holder is itself a U.S. public company, some ownership information as to that

<sup>30</sup> A reporting person filing a Schedule 13G as a "parent holding company/control person" pursuant to Sections 13d-1(b)(ii)(G), 13d-1(c), or 13d-1(d), is required to identify the subsidiary(ies) that acquired the shares being reported by the parent/control person. Unless the subsidiary is itself deemed to hold a reportable interest in some or all of same shares (in which case the subsidiary would be required to report, *inter alia*, its identity, citizenship, and number/percentage of shares over which it has sole or shared voting power), the Schedule 13G filed by the parent/control person will not necessarily specify the number/percentage of shares held by the subsidiary or its citizenship. The Commission finds it reasonable to expect that, in these circumstances, the public company will inquire directly with the parent/control person as to the number/percentage of shares over which the subsidiary has voting power (if any). If the subsidiary has the right to vote or direct the voting of the shares, the company should inquire as to subsidiary's place of organization. If the subsidiary is foreign-organized, the company should treat the voting interests in the shares as identifiable foreign voting interests, regardless of the number/percentage of shares held.

<sup>29</sup> The Commission uses the term "identifiable" interest holders to refer to those individuals and entities identified by the licensee using the methodology described in the Report and Order as holding equity and/or voting interests in the publicly traded licensee or controlling U.S. parent.

company should be publicly available, such as in the company's annual reports (or proxy statements) and quarterly reports that it files with the SEC. The Commission finds it reasonable to expect the licensee to make direct inquiries of the U.S. public company where the licensee determines that direct inquiries are necessary to assess the effect that the investing company's foreign ownership may have on the publicly traded licensee's or U.S. parent's aggregate levels of foreign ownership. Depending on the publicly traded licensee's or U.S. parent's individual circumstances, the Commission would expect it to consider whether additional measures are necessary to ensure compliance with the applicable statutory limit, e.g., obtaining the agreement of the U.S. public company investor to assess its own known or reasonably should be known aggregate foreign equity and/or voting interests and to advise the licensee or U.S. parent when such interests reach a level—to be determined by the licensee or U.S. parent—that could render the licensee or U.S. parent non-compliant with Section 310(b). To address instances where the investor may not agree, a licensee (or U.S. parent, as relevant) may choose, but is not required, to have the ability, under its governance documents, to redeem the investor's shares or take other action if necessary to enable the licensee or U.S. parent to remain in compliance with the statutory limits.

41. For purposes of classifying a U.S. public company's identifiable beneficial ownership (voting) interests and equity interests as "U.S." or "foreign," licensees should apply the following guidelines:

42. A licensee may classify beneficial ownership (voting) interests as "U.S." where the licensee has established a reasonable basis for concluding that the beneficial owner and all individuals and entities in the beneficial owner's vertical chain of control are U.S. citizens and/or U.S.-organized entities that are ultimately controlled by U.S. citizens.

43. By contrast, where the beneficial owner is itself a foreign-organized entity, or where there is a foreign-organized entity in the beneficial owner's vertical chain of control, the licensee should classify the voting interest in the shares held by the beneficial owner as "foreign" even where the beneficial owner is ultimately controlled by U.S. citizens.<sup>31</sup>

<sup>31</sup> For example, assume that a Schedule 13D is filed with the SEC with respect to shares of a licensee's publicly traded U.S. parent. The

44. Where the licensee has identified more than one person as beneficially owning the same shares (e.g., where a SEC Schedule 13G is filed on behalf of more than one reporting person with sole or shared power to vote the same shares), and at least one of such persons is foreign, the licensee should classify the voting interests in those shares as foreign even if the other beneficial owner's interests would otherwise warrant treatment as "U.S."

45. With respect to a U.S. public company's identifiable equity interests, the licensee may classify such equity interests as "U.S." where the licensee has established a reasonable basis for concluding that the ultimate beneficiary or beneficiaries of the shares are U.S. citizens or U.S.-organized entities that are controlled by U.S. citizens.<sup>32</sup>

46. There should be very few instances where a widely held, publicly traded licensee or U.S. parent will need to conduct an up-the-chain analysis under the revised methodology for identifying interests that will be subject to a citizenship determination. The

Schedule 13D is filed on behalf of two reporting persons (the beneficial owners), each of which reports holding sole voting power with respect to 7 percent of the U.S. parent's single class of common stock: A foreign-organized limited partnership (described as an investment fund) and a U.S. citizen who is the general partner of the foreign limited partnership. In this example, the block of shares must be counted as foreign voting interests even though a U.S. citizen may have the power to independently vote the foreign-organized investment fund's shares.

<sup>32</sup> As an example, assume that a Schedule 13G is filed with the SEC by a U.S. university's endowment fund to report its beneficial ownership of 7 percent of a publicly traded U.S. parent's single class of common stock. The Schedule 13G states that the endowment fund also holds the pecuniary interest in the reported shares, which constitute 7 percent of the U.S. parent's total outstanding shares. The Schedule 13G and the endowment fund's annual report (which confirms that U.S. citizens control the endowment fund) provide a reasonable basis for treating the equity interests associated with the common stock as "U.S." By contrast, assume that a Schedule 13G is filed by two reporting persons: A qualified institutional investor that is organized in a foreign country in a form equivalent to a Delaware limited liability company; and, the sole member of the limited liability company, who is a U.S. citizen that is also a qualified institutional investor (e.g., an investment adviser). The Schedule 13G states that the reported interests are held on behalf of numerous client accounts and that no person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, such securities. In this example, the U.S. parent would treat the voting interests (which constitute 8 percent of the U.S. parent's total outstanding shares of stock) as "foreign;" however, the U.S. parent would not include the 8 percent equity interest associated with the reported shares in its calculation of foreign equity interests. The Commission finds it reasonable for the U.S. parent to conclude in these circumstances that no person holds the equity interest in the reported shares in an amount exceeding 5 percent of the company's total capital stock.

relevant interests will be limited to those that are known or reasonably should be known to the public company in the ordinary course of business. Similarly, where a licensee has received a Section 310(b)(4) ruling and is monitoring its foreign ownership to ensure compliance with the specific approval requirements in Rule 1.5004(a)(1), the licensee will not need to engage in an up-the-chain analysis of an identifiable interest holder's direct or indirect interest holders, except to the extent any such interest holder could be calculated as holding an equity or voting interest in the U.S. parent in an amount requiring specific approval.<sup>33</sup> The Commission also finds that these guidelines prescribe a reasonable means for licensees to look up the chain of ownership to capture indirect foreign interests. These new guidelines enable companies to use information that reasonably should be known (or that can be, or is, in fact, known) to the companies.

47. The Commission declines, however, to allow the use of shareholder addresses to establish the citizenship of identifiable interest holders. The 2015 *Foreign Ownership NPRM* asked if the Commission should accept shareholder addresses, alone, as a proxy for citizenship.

48. The Commission finds that use of a shareholder's address of record is not, by itself, a reasonable measure to determine citizenship and is unnecessary where, as here, the number of citizenship inquiries will be limited and other sources of information, including direct inquiries, should be available to the public company.<sup>34</sup> It is

<sup>33</sup> For example, assume that a broadcast licensee with a publicly traded controlling U.S. parent has received a Section 310(b)(4) ruling. As part of its on-going monitoring, the licensee's U.S. parent determines from an SEC Schedule 13D that a private equity fund ("Delaware Fund I," which is organized as a Delaware limited liability company) is the beneficial owner of 6 percent of a class of the U.S. parent's equity securities. The parent is able to determine from the Schedule 13D that a U.S. citizen, who is also deemed a reporting person as to the same shares, controls the fund indirectly through another Delaware limited liability company ("Delaware Fund II") that is the sole managing member of Delaware Fund I and is deemed a reporting person as to the same shares. Through direct inquiry with the controlling fund principal, the U.S. parent determines that, with the exception of the sole managing member, Delaware Fund II, all of Delaware Fund I's members are insulated consistent with the broadcast insulation requirements and none holds an equity interest in the fund in an amount that, when multiplied by the fund's 6 percent interest in the U.S. parent, exceeds 5 percent. The U.S. parent need not make any inquiries with respect to the citizenship of the fund's insulated members.

<sup>34</sup> Under the methodology adopted here for determining the citizenship of a public company's identifiable interest holders, a publicly traded



quite possible that a citizen of a foreign country may have or use a U.S. address for mailing purposes. A foreign-organized company may have a U.S. address if the company has a subsidiary or some of its operations in the United States. A foreign company may also have a U.S. address for purposes of its dealings, sales or investments in the United States. In any event, having a U.S. address of record does not provide reasonable assurance that an individual is a U.S. citizen or that an entity with a U.S. address should be treated as a U.S.-organized and U.S.-controlled entity for compliance purposes under Section 310(b). However, if a public company's share registry or other information available to the company identifies a beneficial owner or equity interest holder only with reference to a foreign address, the interests held should be counted as foreign unless the public company conducts a further inquiry to determine that the individual is a U.S. citizen or the entity is a U.S.-organized entity controlled by U.S. citizens.

49. The new rules provide U.S. public companies the flexibility to use relevant and publicly available information for purposes of determining the citizenship of their identifiable interest holders. To the extent the public company cannot obtain some of the information, the company should make direct inquiries with its identifiable interest holders to inform the company's citizenship analysis. The Commission encourages licensees and their controlling U.S. parents to keep the Commission apprised of the extent to which direct inquiries of beneficial owners are, or are not, productive. This will allow the Commission to gauge the effectiveness of the new rules and to adjust this approach as licensees implement the rules in practice.

50. Finally, the *2015 Foreign Ownership NPRM* requested comment on whether the Commission should limit the percentage of a U.S. public company's foreign officers and directors in connection with the Commission's proposed methodology for U.S. public companies. Comcast argues that there should be no requirement that a certain percentage of officers and directors are U.S. citizens. The Commission agrees

licensee's or U.S. parent's citizenship inquiry will be limited to those individuals or entities that are known or reasonably should be known to the public company in the ordinary course of business and thus will exclude interests of 5 percent or less (or 10 percent or less in the case of a qualified institutional investor) unless such interests are in fact known to the company. In such cases, the company is likely to know the citizenship of the interest holder, which may be an officer, director, employee, or former employee of the company.

and declines to establish a specific limit on the percentage of a U.S. public company's foreign officers or directors.<sup>35</sup>

### Calculating Foreign Ownership Levels

51. As discussed above, the Commission finds that only those interests that are known or reasonably should be known to a U.S. public company in the ordinary course of business need to be included for purposes of calculating the company's aggregate levels of foreign ownership under Section 310(b). Thus, for purposes of calculating aggregate levels of foreign ownership under Section 310(b), a licensee that is, or is controlled by, an eligible U.S. public company will base its foreign ownership calculations on the public company's known or reasonably should be known foreign equity and voting interests as specified above. The licensee will then aggregate the public company's known or reasonably should be known foreign voting interests and separately aggregate its known or reasonably should be known foreign equity interests. If the public company's known or reasonably should be known foreign voting interests *and* its known or reasonably should be known foreign equity interests do not exceed 25 percent (20 percent in the case of a publicly traded licensee subject to Section 310(b)(3)) of the company's total outstanding voting shares *or* 25 percent (20 percent in the case of a publicly traded licensee subject to Section 310(b)(3)) of the company's total outstanding shares (whether voting or non-voting), respectively, then the company shall be deemed compliant under the Commission's rules with the applicable statutory limit.

52. As an example of how the methodology would work, assume that a licensee's controlling U.S. parent is an eligible U.S. public company. The publicly traded U.S. parent has one class of stock consisting of 100 total outstanding shares of common voting stock. The licensee (and/or the U.S. parent on its behalf) has exercised the required due diligence in following the above-described methodology for identifying and determining the citizenship of the U.S. parent's known or reasonably should be known interest holders. The U.S. public company has

<sup>35</sup> The Commission's proposed methodology rule for U.S. public companies also included an eligibility requirement that the company be headquartered in the United States. The Commission declines to adopt this proposed restriction in the absence of comment on it, and because the restriction may conflict with other federal rules and policies.

identified one foreign shareholder that owns 6 shares (*i.e.*, 6 percent of the total outstanding shares) and another foreign shareholder that owns 4 shares (*i.e.*, 4 percent of the total outstanding shares). The licensee would add the U.S. parent's known foreign shares and divide the sum by the number of the U.S. parent's total outstanding shares. In this example, the licensee's U.S. parent would be calculated as having an aggregate 10 percent foreign equity interests and 10 percent foreign voting interests (6 + 4 foreign shares = 10 foreign shares; 10 foreign shares divided by 100 total outstanding shares = 10 percent). Thus, in this example, the licensee would be deemed compliant with Section 310(b)(4).

53. The extrapolation approach supported by several commenters would assume that the percentage of unknown equity and voting interests that are foreign is the same as the percentage of known equity and voting interests that are foreign. The Commission finds it unnecessary to apply any presumed percentage of foreign ownership to the unidentifiable shareholders of a U.S. public company in light of the Commission's finding that small, unknown interest holders, as a general rule, do not have the ability or pose a realistic potential to exert influence of control over such company.<sup>36</sup>

54. The Commission also asked whether the public interest would be served by permitting a U.S. public company to have up to an aggregate less than 50 percent (or some higher level) non-controlling foreign investment, even with individual investments that may be required to be reported under the Exchange Act Rule 13d-1, without individual review and approval. The Commission declines to do so in this Report and Order. The Commission's actions in this Report and Order provide a more carefully tailored approach that addresses the commenters' concerns in a way that is consistent with the Commission's statutory obligations. The Commission intends to monitor how the rules respond to the needs and concerns of interested parties, and may review these issues again at a later date once the effectiveness of the new rules is evaluated and assessed.

55. Finally, the Commission declines to adopt 21st Century Fox's suggestion that the Commission permit broadcast licensees to determine compliance with the foreign voting prong of Section 310(b)(4) by counting shares of stock actually voted, rather than voting shares

<sup>36</sup> Likewise, the Commission declines to adopt an approach that would apply another multiple to the remaining unknown equity and voting interests.



merely held by non-U.S. shareholders. The Commission finds that a foreign beneficial owner of U.S. public company shares that is known to the company may have the ability, in a particular case, to exert influence over the company regardless of whether the beneficial owner decides to vote its shares on any given matter that requires shareholder approval. The Commission finds that the calculation approach adopted here will rationalize the process for licensees' determinations of compliance with Section 310(b)—with concomitant reductions in the costs and burdens associated with determinations of compliance—without disturbing the substantive standards for its public interest review of foreign ownership.

### Compliance Procedures

56. The Commission concludes that monitoring is a reasonable approach to ensure compliance with the statute and individual foreign ownership rulings. As discussed in below, the Commission formalizes the current equitable practice of recognizing a licensee's good faith efforts to comply with the Section 310(b) requirements, the terms and conditions of a licensee's Section 310(b)(4) ruling, and the Commission's rules.

57. *Monitoring Compliance.* The Commission declines to adopt the periodic compliance and monitoring options proposed by commenters. The Commission finds that limiting monitoring of foreign ownership levels to two- or four-year intervals would not adequately ensure that entities are maintaining compliance with Section 310(b) and/or any relevant foreign ownership rulings. In light of significant steps taken in this Report and Order to simplify the process for U.S. public companies in determining their foreign ownership levels, however, the Commission finds that it is reasonable and appropriate to require companies to ensure their foreign ownership levels are in compliance with the statutory foreign ownership limits and/or their relevant foreign ownership rulings.<sup>37</sup>

58. This approach is consistent with Commission practice and precedent. In the *2013 Foreign Ownership Second Report and Order*, the Commission stated that licensees that receive a foreign ownership ruling have an obligation to monitor and stay ahead of changes in their foreign ownership levels to ensure that the licensee obtains Commission approval before a change in

foreign ownership renders the licensee out of compliance with its ruling(s) or the Commission's rules. The Commission determined that, in the context of common carrier wireless licensees, it would not require periodic certification of compliance with its foreign ownership rulings, but would require certification whenever a licensee files an application with the Commission for a new license, a transfer of control, or an assignment of license that does not also require the filing of a petition for declaratory ruling under the Commission's Section 310(b)(3) forbearance approach or under Section 310(b)(4), as well as certification in renewal applications.<sup>38</sup>

59. The Commission reiterates that licensees, their controlling parent companies, and other entities in the licensee's vertical ownership chain may choose, but are not required, to place restrictions in their bylaws or other organizational documents to enable the licensee to ensure continued compliance with the terms of its ruling. Finally, the Commission encourages broadcast and common carrier licensees to observe the specific monitoring<sup>39</sup> and compliance tools identified in the *2015 Pandora Declaratory Ruling*.<sup>40</sup>

60. *Remedial Procedures.* Under the methodology set forth in the rules adopted in this Report and Order, U.S. public companies will rely on ownership information that is known or reasonably should be known to the U.S. public company in the ordinary course of business, including information obtained from SEC filings, to assess compliance with Section 310(b)(3) and Section 301(b)(4). In certain situations, a company relying on information gleaned from SEC filings in the ordinary course of business to make its foreign ownership determination may not become aware of new investments in the company until after a transaction has occurred and an investor discloses the interest in accordance with the SEC's reporting requirements.

61. Discussed below are certain limited situations relevant to the

Commission's new rules and consistent with existing Commission practice, where a broadcast or common carrier licensee may file a petition for declaratory ruling in the exercise of its required due diligence to remedy its inadvertent non-compliance with the foreign ownership benchmark in Section 310(b)(4) or the terms and conditions of the company's existing Section 310(b)(4) ruling with reasonable assurance that the Commission will not take enforcement action. In providing the following clarifications, the Commission formalizes in the limited context of U.S. public company compliance with Section 310(b) what has been the equitable practice of the Commission in recognizing a licensee's good faith efforts to comply with the Section 310(b) statutory requirements, the terms and conditions of a licensee's Section 310(b)(4) ruling, and the Commission's rules.<sup>41</sup>

62. Where a licensee's controlling U.S. parent is an eligible U.S. public company, the licensee may file a remedial petition for declaratory ruling under Section 310(b)(4) seeking approval of the U.S. parent's above-benchmark, aggregate foreign ownership interests or approval of any particular foreign equity and/or voting interests that require specific approval under the licensee's existing Section 310(b)(4) ruling. Alternatively, the U.S. parent has the option to remedy the non-compliance by, for example, redeeming the foreign interest(s) that rendered the licensee non-compliant with Section 310(b)(4) or the licensee's existing Section 310(b)(4) ruling. In either case, the Commission does not, as a general rule, expect to take enforcement action related to the non-compliance provided that: (1) The licensee notifies the relevant Bureau by letter no later than 10 days after learning of the investment(s) that rendered the licensee non-compliant and specifies in the letter that it will file a petition for declaratory ruling or, alternatively, take remedial action to come into compliance within 30 days of the date it learned of the non-compliant foreign interest(s); and (2) the licensee demonstrates in its petition for declaratory ruling (or in a letter notifying the relevant Bureau that the non-compliance has been timely remedied) that the licensee's non-compliance with the Section 310(b)(4)

<sup>38</sup> Several common carrier and broadcast forms require periodic certification regarding compliance with the foreign ownership limits (e.g., FCC Forms 312, 314–316, 601, 603, 608).

<sup>39</sup> However, the Commission declines to require U.S. public companies, as a matter of course, to send out NOBO letters to obtain citizenship information, as was required in the *Pandora Declaratory Ruling*.

<sup>40</sup> Although the Commission declines to impose a specific periodic certification requirement here, the Commission or the Bureaus may consider such requirements and conditions where appropriate based on specific facts and circumstances in a particular case, in order to ensure continuing compliance with the statute, the Commission's rules, procedures and policies.

<sup>41</sup> The clarification is consistent with the Commission's long-held view that the 25 percent foreign ownership benchmark in Section 310(b)(4) may be exceeded only after the Commission affirmatively finds that the aggregate foreign ownership of a licensee's controlling U.S. parent company in excess of that amount is in the public interest.

<sup>37</sup> The Commission finds that it is reasonable to require privately held entities to monitor their foreign ownership levels, but also continue to consider mitigating circumstances in that context.

benchmark or the terms of the licensee's existing Section 310(b)(4) ruling was due solely to circumstances beyond the licensee's control that were not reasonably foreseeable to or known by the licensee with the exercise of the required due diligence.

63. Where the licensee has opted to file a Section 310(b)(4) petition, the Commission will not require that the licensee's U.S. parent redeem the non-compliant foreign interest(s) or take other action to remedy the non-compliance during the pendency of its petition. If the Commission ultimately declines to approve the petition, however, the licensee must have a mechanism available to come into compliance with Section 310(b)(4) or the terms of its existing ruling, as relevant, within 30 days following the Commission's decision. The Commission reserves the right to require immediate remedial action by the licensee where the Commission finds in a particular case that the public interest requires such action—for example, where the Commission finds, after consultation with the relevant Executive Branch agencies, that the foreign interest presents national security or other significant concerns that require immediate mitigation.

64. The Commission also clarifies that a publicly traded *broadcast* licensee that is, or becomes, non-compliant with the 20 percent statutory limit in Section 310(b)(3) must take steps to come into compliance immediately upon learning of the non-compliance. The Commission does not expect to take enforcement action related to the broadcast licensee's non-compliance provided that: (1) The licensee notifies the relevant Bureau by letter no later than 10 days after learning of the investment(s) that rendered the licensee non-compliant with Section 310(b)(3) and specifies in the letter that it will take remedial action to come into compliance within 30 days of the date it learned of the non-compliant foreign interest(s); and (2) the licensee sufficiently explains that its non-compliance with Section 310(b)(3) was due solely to circumstances beyond the licensee's control that were not reasonably foreseeable to or known by the licensee with the exercise of the required due diligence. In the case of a publicly traded *common carrier* licensee that is, or becomes, non-compliant with Section 310(b)(3), the common carrier licensee may be eligible to file a petition for declaratory ruling under the Commission's Section 310(b)(3) forbearance approach. In such a case, the common carrier licensee will have the option of following the remedial procedures specified above with respect

to publicly traded U.S. parent companies.

65. The Commission does not expect the Commission to take enforcement action related to a licensee's non-compliance with the statutory foreign ownership limits or the terms of a licensee's existing foreign ownership ruling where the Commission finds that the broadcast or common carrier licensee has satisfied the burden of demonstrating that: (1) The licensee exercised due diligence in monitoring its foreign ownership or the foreign ownership of its controlling U.S. parent, as relevant, including whether there are stock redemption provisions in the licensee's or controlling U.S. parent's corporate charter and/or other provisions to promptly remedy foreign ownership violations; and (2) enforcement action by the Commission is not warranted because the licensee's non-compliance with the statutory foreign ownership limits or the terms of the licensee's existing foreign ownership ruling was due solely to circumstances beyond the licensee's control that were not reasonably foreseeable to or known by the licensee with the exercise of the requisite diligence. By avoiding the implications of changes in citizenship of the unidentifiable shareholders of a U.S. public company, the Commission's new rules will substantially reduce the risk that such a situation will occur.

66. The Commission does not in this Report and Order change Commission policy requiring all licensees, including those who use this methodology, to obtain Commission approval before their aggregate direct or indirect foreign ownership exceeds the relevant statutory limits in Section 310(b)(3) or 310(b)(4). All licensees have an affirmative duty to monitor their foreign equity and voting interests. All licensees must calculate these interests in accordance with the Commission's foreign ownership rules and policies. Further, all licensees must otherwise ensure continuing compliance with the provisions of Section 310(b) of the Act.

#### Privately Held Entities

67. The Commission affirms its tentative finding in the *2015 Foreign Ownership NPRM* that privately held entities should have knowledge of all of their owners, including their citizenship, and should be able to track their foreign ownership levels relatively easily. These entities do not face the same challenges in identifying shareholders/interest holders as publicly traded companies (e.g., shares held largely in the name of a bank or broker), and they have greater flexibility

to enact controls—such as restrictions on the transfer of ownership interests—necessary to ensure continued compliance with Section 310(b). Accordingly, the Commission finds that it is reasonable to require privately held entities to continue to account for the ownership of all their voting and non-voting equity interests consistent with the Commission's policies and procedures.

68. However, a privately held entity may use the methodology adopted in this Report and Order that is applicable to U.S. publicly traded companies, e.g., if, in a particular case, there are significant impediments that prevent a privately held entity from conducting an up-the-chain analysis to ascertain all of its indirect ownership interests, including non-voting equity interests held by remote, insulated investors.<sup>42</sup>

#### Legal Authority Under Section 310(b)

69. As required by Sections 310(b)(3) and 310(b)(4), the Commission assesses whether more than 20 percent of the capital stock of the licensee or whether more than 25 percent of the capital stock of the licensee's direct or indirect controlling U.S. parent is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country. The Commission has long held that any equity or voting interest held by an individual other than a U.S. citizen or by a foreign government or an entity organized under the laws of a foreign government must be counted in the application of the statutory limits. The list of cognizable interests includes nearly all forms of equity and voting interests held in the licensee and its controlling U.S. parent. Specifically, in applying the statutory foreign ownership limits, the Commission has interpreted the term "capital stock," as it applies to non-corporate entities, to encompass the many alternative means by which equity and voting interests are held in these entities, including partnership interests, policyholders of mutual insurance companies, church members, union members, and beneficiaries of irrevocable trusts.

70. The Commission has long recognized the difficulty licensees or their controlling U.S. parents face in

<sup>42</sup> Commission staff frequently works with private entities to address and resolve impediments to identifying ownership interests, and the Commission expects that this collaborative process will continue as private entities explore whether it is appropriate to rely on the revised methodology the Commission adopts today for U.S. publicly traded companies.

ascertaining their ownership for purposes of complying with Section 310(b). In 1974, the Commission's Broadcast Bureau recognized that it is impossible to identify the citizenship of all of the shares issued by a widely held public company. Based on the current record, the Commission believes that the methodology adopted in this Report and Order with respect to U.S. public companies is a reasonable approach to implementing the provisions of Sections 310(b)(3) and 310(b)(4), which establish limits of 20 percent and 25 percent, respectively, of the capital stock "owned of record" or voted by foreign investors. The Commission's approach is consistent with the history and purpose of that phrase as adopted in the Communications Act of 1934.

71. The provisions that became Section 310(b)(3) and 310(b)(4) in their current form were enacted as part of the Communications Act of 1934. The Radio Act of 1927 had included a version of what is now Section 310(b)(3)—which applies to interests held in the licensee—but not to holding companies. During the Senate hearings, the President of International Telephone & Telegraph Corporation identified the challenges associated with "practical compliance" with such a requirement for a public company. He noted that "no corporation is ever in a position to know who are the real owners of its stock." As he explained, "All it knows is who are registered as such on its transfer books." Thus, the language of the bill then before the committee, which covered all shares "owned" or voted by foreign investors, was in his view "totally impractical in its present form."

72. Senator Dill, the Chairman of the committee and floor manager of what became the Act, suggested as a solution that the words "as of record" be added to the bill. While he recognized that this would not directly address the problem of "ownership of record . . . in one place and the beneficial and real ownership . . . in an entirely different place," he responded: "I do not know any other way." He rejected the alternative of "set[ting] up a secret service system to follow down every ownership of stock." Following this discussion, the bill was amended to change the word "owned"—in what has become Section 310(b)(3) and also in what has become Section 310(b)(4)—to the phrase "owned of record."

73. The Commission's methodology is consistent with the recognition by Congress, even as early as 1934, of these practical difficulties in ascertaining the ownership of the shares of U.S. public companies. While at that time only about 10 percent of shares were held on

behalf of another person, as noted above it is estimated that at least 85 percent of shares are held in this way today. Thus, as commenters have noted, the owner of record for most shares may be (or be holding on behalf of) an intermediary bank or broker for the ultimate beneficiary. The Commission's methodology requires the licensee to exercise due diligence, including but not limited to review and necessary follow-up based on SEC filings, to ascertain the ultimate ownership and citizenship of its shares. But Congress did not intend for public companies to "set up a secret service system to follow down every ownership of stock," and the Commission does not require them to do so. The Commission thereby gives reasonable meaning to the terms of the Act, and avoid unreasonable consequences. Indeed, the Commission has previously recognized that in calculating compliance with the Section 310(b) limits, licensees must "take reasonable steps" to ensure such compliance. In the past, for public companies such steps have included periodic surveys and random sampling of shareholders, but the Commission has also permitted public companies to use other methods. The Commission's overarching principle has been, and continues to be, that a public company should include foreign ownership information "that [it] has reason to know." Based on the record of this proceeding demonstrating the impracticabilities of using surveys and random sampling to identify foreign ownership when an estimated 85 percent of shares are now held of record on behalf of other persons, the Commission believes that its methodology, which includes a due diligence standard, is a reasonable one that is consistent with its prior guidance.<sup>43</sup>

74. In any event, as a separate and independent basis for adopting the process described in this Report and Order for demonstrating compliance with Section 310(b)(4), Section 310(b)(4) provides the Commission discretion to allow foreign ownership of a licensee's direct or indirect controlling U.S. parent to exceed 25 percent unless the

Commission finds that such ownership is inconsistent with the public interest. The *2015 Foreign Ownership NPRM* requested comment on whether there is a legal and policy basis for concluding that the public interest would be served by permitting small foreign equity and/or voting interests in U.S. public companies—e.g., equity or voting interests that are not required to be reported under Exchange Act Rule 13d-1—without Commission review and approval, even in circumstances where the U.S. public company may have aggregate foreign ownership (or aggregate foreign and unknown ownership) exceeding 25 percent. Pursuant to the discretion afforded by Section 310(b)(4), the Commission determines, on a blanket basis, that unknown equity or voting interests held directly or indirectly in a licensee's publicly traded U.S. parent by a single foreign investor in an amount no greater than 5 percent (or no greater than 10 percent, in the case of such interests held by a qualified institutional investor) do not raise public interest concerns sufficient to outweigh the difficulties of identifying them. Thus, licensees subject to Section 310(b)(4) will no longer be required to seek Commission approval for proposed foreign ownership, except when the aggregate foreign ownership by greater than 5 percent interest holders (or, in the case of qualified institutional investors, greater than 10 percent interest holders), together with any other known or reasonably should be known foreign shareholders, exceeds 25 percent of the U.S. parent's capital stock.

75. The disclosure requirements of Section 13(d) of the Exchange Act informed the Commission's decision, in the *2013 Foreign Ownership Second Report and Order*, to require Section 310(b)(4) petitions filed by common carrier licensees to identify and request specific approval only for those foreign investors that hold or would hold, directly or indirectly, more than 5 percent, and in the case of a qualified institutional investor, more than 10 percent of the U.S. parent's equity and/or voting interests, or a controlling interest. The Commission found that it could exclude a company's 5 percent or less interest holders from the specific approval requirements with little risk of overlooking a foreign investor that possesses a realistic potential for influencing or controlling a licensee. The Commission believes this determination applies with equal force for purposes of the Section 310(b)(4) public interest finding made here.

<sup>43</sup> For the reasons stated above, the Commission agrees that it is inappropriate to rely on mailing addresses as a proxy for citizenship. But the Commission believes that its methodology, which includes a due diligence standard, constitutes a reasonable methodology for use by public companies, and the Commission agrees with the views of commenters that it is not necessary or appropriate to require any methodology for identifying foreign ownership of shares in public companies that hold or control broadcast licenses that differs from that applicable in the common carrier context.

76. Based on the Commission's understanding of the realities of today's marketplace for the equity securities of public companies and its experience in assessing foreign ownership of common carrier licensees, the Commission acknowledges that smaller, unknown interest holders that hold 5 percent or less of a U.S. public company's outstanding shares or qualified institutional investors that hold interests of 10 percent or less are tracked somewhat less directly, based largely on information obtained from Form 13F reports that are filed quarterly with the SEC by certain institutional investment managers. Such institutional ownership information about U.S. publicly traded equities is available from various sources, and typically is monitored in the ordinary course of business by a company whose stock trades publicly on U.S. securities exchanges.

77. The Commission also recognizes and find that interests that are not known to a U.S. public company (generally because they are not subject to reporting requirements under the U.S. federal securities laws and the regulations thereunder), and that the public company cannot reasonably be expected to know in the ordinary course of business, are not contrary to the public interest in the absence of countervailing evidence and do not need to be included for purposes of calculating a licensee's aggregate levels of foreign ownership under Section 310(b). However, the Commission remains concerned that voting and non-voting equity investors that are known to a public company may have the ability in a particular case to exert influence over the affairs of the company.<sup>44</sup>

78. The Commission believes that the public interest benefits of disregarding such smaller foreign interests that cannot be identified consistent with the methodology herein outweigh any potential costs of doing so and will allow companies to focus their efforts on ascertaining the citizenship of those foreign interests that may present a realistic potential to influence or control

the company, rather than on those interests that are not influential. In addition, the methodology will provide certainty and consistency in implementation of the statute, while reducing the burdens associated with a public company's ascertainment of its foreign equity and voting interests. Commenters have stated that this will, in turn, promote public company financing that has access to foreign investment, and may encourage reciprocal trade benefits.

#### Corrections and Clarifications of Existing Rules

79. The Commission adopts corrections and clarifications to the rules. First, in Section 1.5001 of the final rules, which lists the required contents of petitions for declaratory ruling, the Commission adopts its proposal to include a cross-reference to Section 1.5000(c), which imposes the requirement that each applicant, licensee, or spectrum lessee filing a Section 310(b) petition for declaratory ruling certify to the information contained in the petition in accordance with the provisions of Section 1.16 of the Commission's rules.<sup>45</sup> As indicated in the *2015 Foreign Ownership NPRM*, the Commission's experience is that it is not uncommon for petitions to be filed without the required certification and a cross-reference to the certification requirement will highlight to filers this critical aspect of our rules.

80. Second, the Commission adopts its proposal to include two Notes in Section 1.5001(i) of the rules to clarify that certain foreign interests of 5 percent or less may require specific approval in circumstances where there is direct or indirect foreign investment in the U.S. parent in the form of uninsulated partnership interests or uninsulated interests held by members of an LLC. Many limited partners and LLC members hold small equity interests in their respective companies with control of these companies residing in the general partner or managing member, respectively. However, for purposes of identifying foreign interests that require specific approval (and for determining a common carrier licensee's disclosable U.S. and foreign interest holders), uninsulated partners and uninsulated LLC members are deemed to hold the

same *voting* interest as the partnership or LLC holds in the company situated in the next lower tier of the licensee's vertical ownership chain. Depending on the particular ownership structure presented in the petition, an uninsulated foreign limited partner or uninsulated LLC member may require specific approval because the voting interest it is deemed to hold in the U.S. parent exceeds 5 percent and, because it is an uninsulated voting interest, it does not qualify as exempt from the specific approval requirements. The Commission finds that these two Notes will improve the clarity of the specific approval requirements.

81. Third, the Commission sought comment on whether Commission precedent supports the inclusion of additional permissible voting or consent rights in the list of investor protections where the rights do not, in themselves, result in a limited partnership or LLC interest being deemed uninsulated within Section 1.5003 of the proposed rules. The Commission similarly requested comment on the inclusion of additional permissible minority shareholder protections in Section 1.5001(i)(5) of the proposed rules. Because no comments were received, the Commission declines to adopt additional permissible voting or consent rights, or additional permissible minority shareholder protections in this proceeding.

82. Finally, the Commission corrects two cross-references, and makes additional clarifying changes as identified in the *2015 Foreign Ownership NPRM*.

#### Transition Issues

83. Consistent with the process adopted in the *2013 Foreign Ownership Second Report and Order*, the *2015 Foreign Ownership NPRM* proposed to apply prospectively any changes adopted in this proceeding. This approach is appropriate in order to afford the Commission and the relevant Executive Branch agencies an opportunity to evaluate the potential effects of the new rules on licensees that are subject to existing rulings and on pending petitions. No commenter objected to the Commission's tentative proposal. Thus, licensees subject to an existing ruling as of the effective date of the rules adopted in this proceeding will be required to continue to comply with any general and specific terms and conditions of their rulings, including Commission rules and policies in effect

<sup>44</sup> In adopting the equity/debt plus (EDP) rule in the context of the broadcast attribution rules, the Commission observed, *inter alia*, that preferred stockholders which do not have voting rights in a company "might exert significant influence through contractual rights or other methods of access to a licensee," such as negotiating for the right to select the persons who will run for the board of directors. While such opportunities may be more limited in the case of a public company, as compared to a privately held company, the Commission believes such opportunities may nonetheless exist, particularly where a company has one or more classes of stock that are not registered under Section 12 of the Exchange Act.

<sup>45</sup> The certification requirement at Section 1.990(c) of the Commission's rules is now recodified at Section 1.5000(c). The certification requires a statement that the applicant, licensee and/or spectrum lessee has calculated the ownership interests disclosed in its petition based upon its review of the Commission's rules and that the interests disclosed satisfy each of the pertinent standards and criteria set forth in the rules.

at the time the ruling was issued.<sup>46</sup> Further, licensees may request a new ruling under the revised rules adopted herein; however, they are not required to do so. Petitions for declaratory ruling that are pending before the Commission as of the effective date of the rules adopted in this Report and Order will be decided based on the new rules.<sup>47</sup>

### Conclusion

84. In this Report and Order, the Commission adopts a tailored application of the existing rules for review of foreign ownership of common carrier licensees to foreign ownership of broadcast licensees. The Commission also reforms the methodology used by common carrier and broadcast licensees that are, or are controlled by, U.S. public companies to assess compliance with the foreign ownership limits in Sections 310(b)(3) and 310(b)(4) of the Act. As discussed above, the Commission determines that these actions are in the public interest and will continue to protect important interests related to national security, law enforcement, foreign policy, and trade policy, while reducing regulatory burdens and costs, providing greater transparency and predictability, and facilitating investment in U.S. broadcast and telecommunications infrastructure.

### Regulatory Flexibility Act

85. As required by the Regulatory Flexibility Act (RFA), an Initial Regulatory Flexibility Certification was incorporated into the *2015 Foreign Ownership NPRM*. Pursuant to the Regulatory Flexibility Act of 1980, as amended, the Commission's Final Regulatory Flexibility Certification relating to this Report and Order is included below.

### Paperwork Reduction Act of 1995

86. This Report and Order contains new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104–13. The requirements will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies will be invited to comment on the new or modified information

collection requirements contained in this proceeding. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198, *see* 44 U.S.C. 3506(c)(4), the Commission previously sought specific comment on how it might further reduce the information collection burden for small business concerns with fewer than 25 employees. In the Report and Order, we extend the streamlined rules and procedures developed for foreign ownership reviews for common carrier and certain aeronautical licensees under Section 310(b)(4) of the Act to broadcast licensees, with certain modifications to tailor them to the broadcast context. We also reform the methodology used by common carrier and broadcast licensees that are, or are controlled by, U.S. public companies to assess compliance with the foreign ownership limits in Sections 310(b)(3) and 310(b)(4) of the Act. We have assessed the effects of the new rules on small business concerns. We find that the streamlined rules and procedures adopted in the Report and Order will minimize the information collection burden on licensees subject to Section 310(b), including small businesses.

87. In this Report and Order, the Commission extends the streamlined rules and procedures developed for foreign ownership reviews for common carrier and certain aeronautical licensees under Section 310(b)(4) of the Act to the broadcast context. The Commission also reforms the methodology used by common carrier and broadcast licensees that are, or are controlled by, U.S. public companies to assess compliance with the foreign ownership limits in Sections 310(b)(3) and 310(b)(4) of the Act. The Commission has assessed the effects of the new rules on small business concerns. The Commission finds that the streamlined rules and procedures adopted here will minimize the information collection burden on licensees subject to 310(b), including small businesses.

### Congressional Review Act

88. The Commission will include a copy of this Report and Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act. *See* 5 U.S.C. 801(a)(1)(A).

### Final Regulatory Flexibility Certification

89. In this Report and Order, the Commission modifies the foreign ownership filing and review process for broadcast licensees by extending the streamlined rules and procedures

developed for foreign ownership reviews for common carrier and certain aeronautical licensees under Section 310(b)(4) of the Act to the broadcast context with certain limited exceptions. Recognizing the difficulty U.S. public companies face in ascertaining their foreign ownership, the Commission also reforms the methodology used by common carrier and broadcast licensees that are, or are controlled by U.S. public companies to assess compliance with the foreign ownership limits in Sections 310(b)(3) and 310(b)(4) of the Act, respectively. In particular, the reformed methodology provides a framework for a publicly traded licensee or controlling U.S. parent to ascertain its foreign ownership using information that is “known or reasonably should be known” to the company in the ordinary course of business, thereby eliminating the need for costly shareholder surveys.

90. The new rules are designed to provide the industry with greater transparency and reduce to the extent possible the regulatory costs and burdens that our current foreign ownership policies and procedures impose on broadcast, wireless common carrier and aeronautical applicants, licensees, and spectrum lessees. In particular, as is the case with common carrier licensees, the new standardized filing and review process will provide a clearer path for foreign investment in broadcast licensees that is more consistent with the U.S. domestic investment process, while continuing to protect important interests related to national security, law enforcement, foreign policy, and trade policy.

91. The Commission estimates that the rule changes will facilitate the filing of Section 310(b)(4) petitions for declaratory ruling by broadcast licensees while reducing the time and expense associated with such filings. For example, U.S. parent companies of broadcast licensees that seek Commission approval to exceed the 25 percent foreign ownership benchmark in Section 310(b)(4) will be allowed to include in their petitions requests for specific approval of only those foreign investors that hold or would hold a direct or indirect equity and/or voting interest in the U.S. parent that exceeds 5 percent (or exceeds 10 percent in certain circumstances), or a controlling interest in the U.S. parent. As another example, the new rules will allow the U.S. parent to request specific approval for any non-controlling foreign investors named in the Section 310(b)(4) petition to increase their direct or indirect equity and/or voting interests in the U.S. parent at any time after issuance of the Section 310(b)(4) ruling, up to and

<sup>46</sup> Licensees with an existing foreign ownership ruling have an obligation to seek a new ruling under any revised rules *before* exceeding the scope of their rulings. Failure to meet a condition of a foreign ownership ruling may result in monetary sanctions or other enforcement action by the Commission.

<sup>47</sup> If necessary, parties will be given an opportunity to amend any pending foreign ownership petitions to address the revised rules adopted herein.

including a non-controlling 49.99 percent equity and/or voting interest. Similarly, under the new rules the U.S. parent will be permitted to request specific approval for any named foreign investor that proposed to acquire a controlling interest of less than 100 percent to increase the interest to 100 percent at some future time.

92. The Commission requested comment on measures the Commission can take to reduce the costs and burdens associated with licensees' efforts to ensure that they remain in compliance with the statutory foreign ownership requirements. Although it did not receive comments specifically addressing the costs and burdens on small business concerns, the Commission has recognized in the past that the current requirements impose significant costs and burdens. Similarly, by extending the streamlined rules and procedures developed for foreign ownership reviews for common carrier to broadcast, the new rules will reduce the costs and burdens of broadcast licensees. Also, the methodology we adopt will facilitate compliance with the statutory foreign ownership limits and the filing of petitions for declaratory ruling by publicly-traded licensees while reducing the time and expense associated with such filings.

93. Overall, the new rules will reduce costs and burdens currently imposed on licensees, including those licensees that are small entities, and streamline and accelerate the foreign ownership review process, while continuing to ensure that the Commission has the information it needs to carry out our statutory obligations. Moreover, the new rules will improve regulatory flexibility for broadcast and common carrier licensees for purposes of compliance with Section 310(b)(3) and 310(b)(4) of the Act and provide an incentive for enhanced investment in U.S. broadcast and telecommunications infrastructure. Therefore, the Commission certifies that the rules adopted in this Report and Order will not have a significant economic impact on a substantial number of small entities.<sup>48</sup> The Commission will send a copy of this Report and Order, including a copy of this Final Regulatory Flexibility Certification, to the Chief Counsel for Advocacy of the SBA. This final

certification will also be published in the **Federal Register**.

#### Ordering Clauses

94. Accordingly, *it is ordered* pursuant to Sections 1, 2, 4(i), 4(j), 303(r), 309, and 310 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 152, 154(i), 154(j), 303(r), 309, and 310 this Report and Order is *adopted*.

95. *It is further ordered* that parts 1, 25, 73 and 74 of the Commission's rules are *amended* as set forth in the Final Rules.

96. *It is further ordered* that, pursuant to 47 U.S.C. 155(c) and 47 CFR 0.261, the Chief of the International Bureau is *granted delegated authority* to make technical and ministerial edits to the rules adopted in this Report and Order consistent with any technical and ministerial modifications made by the Securities and Exchange Commission to its rules and forms.

97. *It is further ordered* that this Report and Order *shall be effective* 60 days after publication in the **Federal Register**, except those provisions that contain new or modified information collection requirements that require approval by the Office of Management and Budget under the Paperwork Reduction Act *will become effective* after the Commission publishes a notice in the **Federal Register** announcing such approval and the relevant effective date.

98. *It is further ordered* that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, *shall send* a copy of this Report and Order to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. 801(a)(1)(A).

99. *It is further ordered* that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, *shall send* a copy of this Report and Order, including the Final Regulatory Flexibility Certification, to the Chief Counsel for Advocacy of the Small Business Administration.

#### List of Subjects in 47 CFR Parts 1, 25, 73 and 74

Communications common carriers, Radio, Reporting and recordkeeping requirements, Satellites, Telecommunications.

Federal Communications Commission.

**Marlene H. Dortch,**

*Secretary.*

#### Final Rules

For the reasons discussed in the preamble, the Federal Communications

Commission amends 47 CFR parts 1, 25, 73 and 74 as follows:

#### PART 1—PRACTICE AND PROCEDURE

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

**Authority:** 15 U.S.C. 79, *et seq.*; 47 U.S.C. 151, 154(i), 154(j), 155, 157, 160, 201, 225, 227, 303, 309, 310, 332, 1403, 1404, 1451, 1452, and 1455.

#### §§ 1.990 through 1.994 [Removed]

■ 2. In Subpart F, remove the undesignated center heading "Foreign Ownership of Common Carrier, Aeronautical en Route, and Aeronautical Fixed Radio Station Licensees" and §§ 1.990 through 1.994.

■ 3. Add subpart T to part 1 to read as follows:

#### Subpart T—Foreign Ownership of Broadcast, Common Carrier, Aeronautical En Route, and Aeronautical Fixed Radio Station Licensees

Sec.

- 1.5000 Citizenship and filing requirements under section 310(b) of the Communications Act of 1934, as amended.
- 1.5001 Contents of petitions for declaratory ruling under section 310(b) of the Communications Act of 1934, as amended.
- 1.5002 How to calculate indirect equity and voting interests.
- 1.5003 Insulation criteria for interests in limited partnerships, limited liability partnerships, and limited liability companies.
- 1.5004 Routine terms and conditions.

#### Subpart T—Foreign Ownership of Broadcast, Common Carrier, Aeronautical En Route, and Aeronautical Fixed Radio Station Licensees

##### § 1.5000 Citizenship and filing requirements under section 310(b) of the Communications Act of 1934, as amended.

The rules in this subpart establish the requirements and conditions for obtaining the Commission's prior approval of foreign ownership in broadcast, common carrier, aeronautical en route, and aeronautical fixed radio station licensees and common carrier spectrum lessees that would exceed the 25 percent benchmark in section 310(b)(4) of the Act. These rules also establish the requirements and conditions for obtaining the Commission's prior approval of foreign ownership in common carrier (but not broadcast, aeronautical en route or aeronautical fixed) radio station licensees and spectrum lessees that would exceed the 20 percent limit in

<sup>48</sup> In the proceeding in which sections 1.990–1.994 were adopted, the Commission certified that the rules and procedures for analyzing foreign ownership of common carrier and aeronautical radio licensees under Section 310(b)(4), which this Report and Order applies with certain modifications to broadcast licensees, would not have a significant economic impact on a substantial number of small entities.

section 310(b)(3) of the Act. These rules also establish the methodology applicable to eligible U.S. public companies for purposes of determining and ensuring their compliance with the foreign ownership limitations set forth in sections 310(b)(3) and 310(b)(4) of the Act.

(a)(1) A broadcast, common carrier, aeronautical en route or aeronautical fixed radio station licensee or common carrier spectrum lessee shall file a petition for declaratory ruling to obtain Commission approval under section 310(b)(4) of the Act, and obtain such approval, before the aggregate foreign ownership of any controlling, U.S.-organized parent company exceeds, directly and/or indirectly, 25 percent of the U.S. parent's equity interests and/or 25 percent of its voting interests. An applicant for a broadcast, common carrier, aeronautical en route or aeronautical fixed radio station license or common carrier spectrum leasing arrangement shall file the petition for declaratory ruling required by this paragraph at the same time that it files its application.

(2) A common carrier radio station licensee or spectrum lessee shall file a petition for declaratory ruling to obtain approval under the Commission's section 310(b)(3) forbearance approach, and obtain such approval, before aggregate foreign ownership, held through one or more intervening U.S.-organized entities that hold non-controlling equity and/or voting interests in the licensee, along with any foreign interests held directly in the licensee or spectrum lessee, exceeds 20 percent of its equity interests and/or 20 percent of its voting interests. An applicant for a common carrier radio station license or spectrum leasing arrangement shall file the petition for declaratory ruling required by this paragraph at the same time that it files its application. Foreign interests held directly in a licensee or spectrum lessee, or other than through U.S.-organized entities that hold non-controlling equity and/or voting interests in the licensee or spectrum lessee, shall not be permitted to exceed 20 percent.

**Note 1 to paragraph (a):** Paragraph (a)(1) of this section implements the Commission's foreign ownership policies under section 310(b)(4) of the Act, 47 U.S.C. 310(b)(4), for broadcast, common carrier, aeronautical en route, and aeronautical fixed radio station licensees and common carrier spectrum lessees. It applies to foreign equity and/or voting interests that are held, or would be held, directly and/or indirectly in a U.S.-organized entity that itself directly or indirectly controls a broadcast, common carrier, aeronautical en route, or aeronautical fixed radio station licensee or common

carrier spectrum lessee. A foreign individual or entity that seeks to hold a controlling interest in such a licensee or spectrum lessee must hold its controlling interest indirectly, in a U.S.-organized entity that itself directly or indirectly controls the licensee or spectrum lessee. Such controlling interests are subject to section 310(b)(4) and the requirements of paragraph (a)(1) of this section. The Commission assesses foreign ownership interests subject to section 310(b)(4) separately from foreign ownership interests subject to section 310(b)(3).

**Note 2 to paragraph (a):** Paragraph (a)(2) of this section implements the Commission's section 310(b)(3) forbearance approach adopted in the First Report and Order in IB Docket No. 11–133, FCC 12–93 (released Aug. 17, 2012), 77 FR 50628 (Aug. 22, 2012). The section 310(b)(3) forbearance approach applies only to foreign equity and voting interests that are held, or would be held, in a common carrier licensee or spectrum lessee through one or more intervening U.S.-organized entities that do not control the licensee or spectrum lessee. Foreign equity and/or voting interests that are held, or would be held, directly in a licensee or spectrum lessee, or indirectly other than through an intervening U.S.-organized entity, are not subject to the Commission's section 310(b)(3) forbearance approach and shall not be permitted to exceed the 20 percent limit in section 310(b)(3) of the Act, 47 U.S.C. 310(b)(3). The Commission's forbearance approach does not apply to broadcast, aeronautical en route or aeronautical fixed radio station licenses.

**Example 1.** U.S.-organized Corporation A is preparing an application to acquire a common carrier radio license by assignment from another licensee. U.S.-organized Corporation A is wholly owned and controlled by U.S.-organized Corporation B. U.S.-organized Corporation B is 51 percent owned and controlled by U.S.-organized Corporation C, which is, in turn, wholly owned and controlled by foreign-organized Corporation D. The remaining non-controlling 49 percent equity and voting interests in U.S.-organized Corporation B are held by U.S.-organized Corporation X, which is, in turn, wholly owned and controlled by U.S. citizens. Paragraph (a)(1) of this section requires that U.S.-organized Corporation A file a petition for declaratory ruling to obtain Commission approval of the 51 percent foreign ownership of its controlling, U.S.-organized parent, Corporation B, by foreign-organized Corporation D, which exceeds the 25 percent benchmark in section 310(b)(4) of the Act for both equity interests and voting interests. Corporation A is also required to identify and request specific approval in its petition for any foreign individual or entity, or "group," as defined in paragraph (d) of this section, that holds directly and/or indirectly more than 5 percent of Corporation B's total outstanding capital stock (equity) and/or voting stock, or a controlling interest in Corporation B, unless the foreign investment is exempt under § 1.5001(i)(3).

**Example 2.** U.S.-organized Corporation A is preparing an application to acquire a common carrier radio license by assignment

from another licensee. U.S.-organized Corporation A is 51 percent owned and controlled by U.S.-organized Corporation B, which is, in turn, wholly owned and controlled by U.S. citizens. The remaining non-controlling 49 percent equity and voting interests in U.S.-organized Corporation A are held by U.S.-organized Corporation X, which is, in turn, wholly owned and controlled by foreign-organized Corporation Y. Paragraph (a)(2) of this section requires that U.S.-organized Corporation A file a petition for declaratory ruling to obtain Commission approval of the non-controlling 49 percent foreign ownership of U.S.-organized Corporation A by foreign-organized Corporation Y through U.S.-organized Corporation X, which exceeds the 20 percent limit in section 310(b)(3) of the Act for both equity interests and voting interests. U.S.-organized Corporation A is also required to identify and request specific approval in its petition for any foreign individual or entity, or "group," as defined in paragraph (d) of this section, that holds an equity and/or voting interest in foreign-organized Corporation Y that, when multiplied by 49 percent, would exceed 5 percent of U.S.-organized Corporation A's equity and/or voting interests, unless the foreign investment is exempt under § 1.5001(i)(3).

**Example 3.** U.S.-organized Corporation A is preparing an application to acquire a common carrier radio license by assignment from another licensee. U.S.-organized Corporation A is 51 percent owned and controlled by U.S.-organized Corporation B, which is, in turn, wholly owned and controlled by foreign-organized Corporation C. The remaining non-controlling 49 percent equity and voting interests in U.S.-organized Corporation A are held by U.S.-organized Corporation X, which is, in turn, wholly owned and controlled by foreign-organized Corporation Y. Paragraphs (a)(1) and (a)(2) of this section require that U.S.-organized Corporation A file a petition for declaratory ruling to obtain Commission approval of foreign-organized Corporation C's 100 percent ownership interest in U.S.-organized parent, Corporation B, and of foreign-organized Corporation Y's non-controlling, 49 percent foreign ownership interest in U.S.-organized Corporation A through U.S.-organized Corporation X, which exceed the 25 percent benchmark and 20 percent limit in sections 310(b)(4) and 310(b)(3) of the Act, respectively, for both equity interests and voting interests. U.S.-organized Corporation A's petition also must identify and request specific approval for ownership interests held by any foreign individual, entity, or "group," as defined in paragraph (d) of this section, to the extent required by § 1.5001(i).

(b) Except for petitions involving broadcast stations only, the petition for declaratory ruling required by paragraph (a) of this section shall be filed electronically through the International Bureau Filing System (IBFS) or any successor system thereto. For information on filing a petition through IBFS, see part 1, subpart Y and the IBFS homepage at <http://www.fcc.gov/ib>. Petitions for declaratory ruling required



by paragraph (a) of this section involving broadcast stations only shall be filed electronically on the Internet through the Media Bureau's Consolidated Database System (CDBS) or any successor system thereto when submitted to the Commission as part of an application for a construction permit, assignment, or transfer of control of a broadcast license; if there is no associated construction permit, assignment or transfer of control application, petitions for declaratory ruling should be filed with the Office of the Secretary via the Commission's Electronic Comment Filing System (ECFS).

(c)(1) Each applicant, licensee, or spectrum lessee filing a petition for declaratory ruling required by paragraph (a) of this section shall certify to the information contained in the petition in accordance with the provisions of § 1.16 and the requirements of this paragraph. The certification shall include a statement that the applicant, licensee and/or spectrum lessee has calculated the ownership interests disclosed in its petition based upon its review of the Commission's rules and that the interests disclosed satisfy each of the pertinent standards and criteria set forth in the rules.

(2) Multiple applicants and/or licensees shall file jointly the petition for declaratory ruling required by paragraph (a) of this section where the entities are under common control and contemporaneously hold, or are contemporaneously filing applications for, broadcast, common carrier licenses, common carrier spectrum leasing arrangements, or aeronautical en route or aeronautical fixed radio station licenses. Where joint petitioners have different responses to the information required by § 1.5001, such information should be set out separately for each joint petitioner, except as otherwise permitted in § 1.5001(h)(2).

(i) Each joint petitioner shall certify to the information contained in the petition in accordance with the provisions of § 1.16 with respect to the information that is pertinent to that petitioner. Alternatively, the controlling parent of the joint petitioners may certify to the information contained in the petition.

(ii) Where the petition is being filed in connection with an application for consent to transfer control of licenses or spectrum leasing arrangements, the transferee or its ultimate controlling parent may file the petition on behalf of the licensees or spectrum lessees that would be acquired as a result of the proposed transfer of control and certify

to the information contained in the petition.

(3) Multiple applicants and licensees shall not be permitted to file a petition for declaratory ruling jointly unless they are under common control.

(d) The following definitions shall apply to this section and §§ 1.5001 through 1.5004.

(1) *Aeronautical radio* licenses refers to aeronautical en route and aeronautical fixed radio station licenses only. It does not refer to other types of aeronautical radio station licenses.

(2) *Affiliate* refers to any entity that is under common control with a licensee, defined by reference to the holder, directly and/or indirectly, of more than 50 percent of total voting power, where no other individual or entity has *de facto* control.

(3) *Control* includes actual working control in whatever manner exercised and is not limited to majority stock ownership. *Control* also includes direct or indirect control, such as through intervening subsidiaries.

(4) *Entity* includes a partnership, association, estate, trust, corporation, limited liability company, governmental authority or other organization.

(5) *Group* refers to two or more individuals or entities that have agreed to act together for the purpose of acquiring, holding, voting, or disposing of their equity and/or voting interests in the relevant licensee, controlling U.S. parent, or entity holding a direct and/or indirect equity and/or voting interest in the licensee or U.S. parent.

(6) *Individual* refers to a natural person as distinguished from a partnership, association, corporation, or other organization.

(7) *Licensee* as used in §§ 1.5000 through 1.5004 includes a spectrum lessee as defined in § 1.9003.

(8) *Privately held company* refers to a U.S.- or foreign-organized company that has not issued a class of equity securities for which beneficial ownership reporting is required by security holders and other beneficial owners under sections 13(d) or 13(g) of the Securities Exchange Act of 1934, as amended, 15 U.S.C. 78a *et seq.* (Exchange Act), and corresponding Exchange Act Rule 13d-1, 17 CFR 240.13d-1, or a substantially comparable foreign law or regulation.

(9) *Public company* refers to a U.S.- or foreign-organized company that has issued a class of equity securities for which beneficial ownership reporting is required by security holders and other beneficial owners under sections 13(d) or 13(g) of the Securities Exchange Act of 1934, as amended, 15 U.S.C. 78a *et seq.* (Exchange Act) and corresponding

Exchange Act Rule 13d-1, 17 CFR 240.13d-1, or a substantially comparable foreign law or regulation.

(10) *Subsidiary* refers to any entity in which a licensee owns or controls, directly and/or indirectly, more than 50 percent of the total voting power of the outstanding voting stock of the entity, where no other individual or entity has *de facto* control.

(11) *Voting stock* refers to an entity's corporate stock, partnership or membership interests, or other equivalents of corporate stock that, under ordinary circumstances, entitles the holders thereof to elect the entity's board of directors, management committee, or other equivalent of a corporate board of directors.

(12) *Would hold* as used in §§ 1.5000 through 1.5004 includes interests that an individual or entity proposes to hold in an applicant, licensee, or spectrum lessee, or their controlling U.S. parent, upon consummation of any transactions described in the petition for declaratory ruling filed under paragraphs (a)(1) or (2) of this section.

(e)(1) This section sets forth the methodology applicable to broadcast, common carrier, aeronautical en route, and aeronautical fixed radio station licensees and common carrier spectrum lessees that are, or are directly or indirectly controlled by, an eligible U.S. public company for purposes of monitoring the licensee's or spectrum lessee's compliance with the foreign ownership limits set forth in sections 310(b)(3) and 310(b)(4) of the Act and with the terms and conditions of a licensee's or spectrum lessee's foreign ownership ruling issued pursuant to paragraph (a)(1) or (2) of this section. For purposes of this section:

(i) An "eligible U.S. public company" is a company that is organized in the United States; whose stock is traded on a stock exchange in the United States; and that has issued a class of equity securities for which beneficial ownership reporting is required by security holders and other beneficial owners under sections 13(d) or 13(g) of the Securities Exchange Act of 1934, as amended, 15 U.S.C. 78a *et seq.* (Exchange Act) and corresponding Exchange Act Rule 13d-1, 17 CFR 240.13d-1;

(ii) A "beneficial owner" of a security refers to any person who, directly or indirectly, through any contract, arrangement, understanding, relationship, or otherwise has or shares voting power, which includes the power to vote, or to direct the voting of, such security; and

(iii) An "equity interest holder" refers to any person or entity that has the right



to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, a share.

(2) An eligible U.S. public company shall use information that is known or reasonably should be known by the company in the ordinary course of business, as described in this paragraph, to identify the beneficial owners and equity interest holders of its voting and non-voting stock:

(i) Information recorded in the company's share register;

(ii) Information as to shares held by officers, directors, and employees;

(iii) Information reported to the Securities and Exchange Commission (SEC) in Schedule 13D (17 CFR 240.13d-101) and in Schedule 13G (17 CFR 240.13d-102), including amendments filed by or on behalf of a reporting person, and company-specific information derived from SEC Form 13F (17 CFR 249.325);

(iv) Information as to beneficial owners of shares required to be identified in a company's annual reports (or proxy statements) and quarterly reports;

(v) Information as to the identify and citizenship of a beneficial owner and/or equity interest holder where such information is actually known to the public company as a result of shareholder litigation, financing transactions, and proxies voted at annual or other meetings; and

(vi) Information as to the identity and citizenship of a beneficial owner and/or equity interest holder where such information is actually known to the company by whatever source.

(3) An eligible U.S. public company shall use information that is known or reasonably should be known by the company in the ordinary course of business to determine the citizenship of the beneficial owners and equity interest holders, identified pursuant to paragraph (e)(2) of this section, including information recorded in the company's shareholder register, information required to be disclosed pursuant to rules of the Securities and Exchange Commission, other information that is publicly available to the company, and information received by the company through direct inquiries with the beneficial owners and equity interest holders where the company determines that direct inquiries are necessary to its compliance efforts.

(4) A licensee or spectrum lessee that is, or is directly or indirectly controlled by, an eligible U.S. public company, shall exercise due diligence in identifying and determining the citizenship of such public company's

beneficial owners and equity interest holders.

(5) To calculate aggregate levels of foreign ownership, a licensee or spectrum lessee that is, or is directly or indirectly controlled by, an eligible U.S. public company, shall base its foreign ownership calculations on such public company's known or reasonably should be known foreign equity and voting interests as described in paragraphs (e)(2) and (3) of this section. The licensee shall aggregate the public company's known or reasonably should be known foreign voting interests and separately aggregate the public company's known or reasonably should be known foreign equity interests. If the public company's known or reasonably should be known foreign voting interests and its known or reasonably should be known foreign equity interests do not exceed 25 percent (20 percent in the case of an eligible publicly traded licensee subject to section 310(b)(3)) of the company's total outstanding voting shares or 25 percent (20 percent in the case of an eligible publicly traded licensee subject to Section 310(b)(3)) of the company's total outstanding shares (whether voting or non-voting), respectively, the company shall be deemed compliant, under this section, with the applicable statutory limit.

*Example.* Assume that a licensee's controlling U.S. parent is an eligible U.S. public company. The publicly traded U.S. parent has one class of stock consisting of 100 total outstanding shares of common voting stock. The licensee (and/or the U.S. parent on its behalf) has exercised the required due diligence in following the above-described methodology for identifying and determining the citizenship of the U.S. parent's "known or reasonably should be known" interest holders and has identified one foreign shareholder that owns 6 shares (*i.e.*, 6 percent of the total outstanding shares) and another foreign shareholder that owns 4 shares (*i.e.*, 4 percent of the total outstanding shares). The licensee would add the U.S. parent's known foreign shares and divide the sum by the number of the U.S. parent's total outstanding shares. In this example, the licensee's U.S. parent would be calculated as having an aggregate 10 percent foreign equity interests and 10 percent foreign voting interests (6 + 4 foreign shares = 10 foreign shares; 10 foreign shares divided by 100 total outstanding shares = 10 percent). Thus, in this example, the licensee would be deemed compliant with Section 310(b)(4).

**§ 1.5001 Contents of petitions for declaratory ruling under section 310(b) of the Communications Act of 1934, as amended.**

The petition for declaratory ruling required by § 1.5000(a)(1) and/or (2) shall contain the following information:

(a) With respect to each petitioning applicant or licensee, provide its name; FCC Registration Number (FRN); mailing address; place of organization; telephone number; facsimile number (if available); electronic mail address (if available); type of business organization (*e.g.*, corporation, unincorporated association, trust, general partnership, limited partnership, limited liability company, trust, other (include description of legal entity)); name and title of officer certifying to the information contained in the petition.

(b) If the petitioning applicant or licensee is represented by a third party (*e.g.*, legal counsel), specify that individual's name, the name of the firm or company, mailing address and telephone number/electronic mail address.

(c)(1) For each named licensee, list the type(s) of radio service authorized (*e.g.*, broadcast service, cellular radio telephone service; microwave radio service; mobile satellite service; aeronautical fixed service). In the case of broadcast licensees, also list the call sign, facility identification number (if applicable), and community of license or transmit site for each authorization covered by the petition.

(2) If the petition is filed in connection with an application for a radio station license or a spectrum leasing arrangement, or an application to acquire a license or spectrum leasing arrangement by assignment or transfer of control, specify for each named applicant:

(i) The File No(s). of the associated application(s), if available at the time the petition is filed; otherwise, specify the anticipated filing date for each application; and

(ii) The type(s) of radio services covered by each application (*e.g.*, broadcast service, cellular radio telephone service; microwave radio service; mobile satellite service; aeronautical fixed service).

(d) With respect to each petitioner, include a statement as to whether the petitioner is requesting a declaratory ruling under § 1.5000(a)(1) and/or (2).

(e) *Disclosable interest holders—direct U.S. or foreign interests in the controlling U.S. parent.* Paragraphs (e)(1) through (4) of this section apply only to petitions filed under § 1.5000(a)(1) and/or (2) for common carrier, aeronautical en route, and aeronautical fixed radio station applicants or licensees, as applicable. Petitions filed under § 1.5000(a)(1) for broadcast licensees shall provide the name of any individual or entity that holds, or would hold, directly, an attributable interest in the controlling

U.S. parent of the petitioning broadcast station applicant(s) or licensee(s), as defined in the Notes to § 73.3555 of this chapter. Where no individual or entity holds, or would hold, *directly*, an attributable interest in the controlling U.S. parent (for petitions filed under § 1.5000(a)(1)), the petition shall specify that no individual or entity holds, or would hold, *directly*, an attributable interest in the U.S. parent, applicant(s), or licensee(s).

(1) *Direct U.S. or foreign interests of ten percent or more or a controlling interest.* With respect to petitions filed under § 1.5000(a)(1), provide the name of any individual or entity that holds, or would hold, *directly* 10 percent or more of the equity interests and/or voting interests, or a controlling interest, in the controlling U.S. parent of the petitioning common carrier or aeronautical radio station applicant(s) or licensee(s) as specified in paragraphs (e)(4)(i) through (iv) of this section.

(2) *Direct U.S. or foreign interests of ten percent or more or a controlling interest.* With respect to petitions filed under § 1.5000(a)(2), provide the name of any individual or entity that holds, or would hold, *directly* 10 percent or more of the equity interests and/or voting interests, or a controlling interest, in each petitioning common carrier applicant or licensee as specified in paragraphs (e)(4)(i) through (iv) of this section.

(3) Where no individual or entity holds, or would hold, *directly* 10 percent or more of the equity interests and/or voting interests, or a controlling interest, in the controlling U.S. parent (for petitions filed under § 1.5000(a)(1)) or in the applicant or licensee (for petitions filed under § 1.5000(a)(2)), the petition shall state that no individual or entity holds or would hold *directly* 10 percent or more of the equity interests and/or voting interests, or a controlling interest, in the U.S. parent, applicant or licensee.

(4)(i) Where a named U.S. parent, applicant, or licensee is organized as a corporation, provide the name of any individual or entity that holds, or would hold, 10 percent or more of the outstanding capital stock and/or voting stock, or a controlling interest.

(ii) Where a named U.S. parent, applicant, or licensee is organized as a general partnership, provide the names of the partnership's constituent general partners.

(iii) Where a named U.S. parent, applicant, or licensee is organized as a limited partnership or limited liability partnership, provide the name(s) of the general partner(s) (in the case of a limited partnership), any uninsulated

partner, regardless of its equity interest, and any insulated partner with an equity interest in the partnership of at least 10 percent (calculated according to the percentage of the partner's capital contribution). With respect to each named partner (other than a named general partner), the petitioner shall state whether the partnership interest is insulated or uninsulated, based on the insulation criteria specified in § 1.5003.

(iv) Where a named U.S. parent, applicant, or licensee is organized as a limited liability company, provide the name(s) of each uninsulated member, regardless of its equity interest, any insulated member with an equity interest of at least 10 percent (calculated according to the percentage of its capital contribution), and any non-equity manager(s). With respect to each named member, the petitioner shall state whether the interest is insulated or uninsulated, based on the insulation criteria specified in § 1.5003, and whether the member is a manager.

**Note to paragraph (e):** The Commission presumes that a general partner of a general partnership or limited partnership has a controlling (100 percent) voting interest in the partnership. A general partner shall in all cases be deemed to hold an uninsulated interest in the partnership.

(f) *Disclosable interest holders—indirect U.S. or foreign interests in the controlling U.S. parent.* Paragraphs (f)(1) through (3) of this section apply only to petitions filed under § 1.5000(a)(1) and/or § 1.5000(a)(2) for common carrier, aeronautical en route, and aeronautical fixed radio station applicants or licensees, as applicable. Petitions filed under § 1.5000(a)(1) for broadcast licensees shall provide the name of any individual or entity that holds, or would hold, *indirectly*, an attributable interest in the controlling U.S. parent of the petitioning broadcast station applicant(s) or licensee(s), as defined in the Notes to § 73.3555 of this chapter. Where no individual or entity holds, or would hold, *indirectly*, an attributable interest in the controlling U.S. parent (for petitions filed under § 1.5000(a)(1)), the petition shall specify that no individual or entity holds, or would hold, *indirectly*, an attributable interest in the U.S. parent, applicant(s), or licensee(s).

(1) *Indirect U.S. or foreign interests of 10 percent or more or a controlling interest.* With respect to petitions filed under § 1.5000(a)(1), provide the name of any individual or entity that holds, or would hold, *indirectly*, through one or more intervening entities, 10 percent or more of the equity interests and/or voting interests, or a controlling interest, in the controlling U.S. parent of the

petitioning common carrier or aeronautical radio station applicant(s) or licensee(s). Equity interests and voting interests held *indirectly* shall be calculated in accordance with the principles set forth in § 1.5002.

(2) *Indirect U.S. or foreign interests of 10 percent or more or a controlling interest.* With respect to petitions filed under § 1.5000(a)(2), provide the name of any individual or entity that holds, or would hold, *indirectly*, through one or more intervening entities, 10 percent or more of the equity interests and/or voting interests, or a controlling interest, in the petitioning common carrier radio station applicant(s) or licensee(s). Equity interests and voting interests held *indirectly* shall be calculated in accordance with the principles set forth in § 1.5002.

(3) Where no individual or entity holds, or would hold, *indirectly* 10 percent or more of the equity interests and/or voting interests, or a controlling interest, in the controlling U.S. parent (for petitions filed under § 1.5000(a)(1)) or in the petitioning applicant(s) or licensee(s) (for petitions filed under § 1.5000(a)(2)), the petition shall specify that no individual or entity holds *indirectly* 10 percent or more of the equity interests and/or voting interests, or a controlling interest, in the U.S. parent, applicant(s), or licensee(s).

**Note to paragraph (f):** The Commission presumes that a general partner of a general partnership or limited partnership has a controlling interest in the partnership. A general partner shall in all cases be deemed to hold an uninsulated interest in the partnership.

(g)(1) *Citizenship and other information for disclosable interests in common carrier, aeronautical en route, and aeronautical fixed radio station applicants and licensees.* For each 10 percent interest holder named in response to paragraphs (e) and (f) of this section, specify the equity interest held and the voting interest held (each to the nearest one percent); in the case of an individual, his or her citizenship; and in the case of a business organization, its place of organization, type of business organization (e.g., corporation, unincorporated association, trust, general partnership, limited partnership, limited liability company, trust, other (include description of legal entity)), and principal business(es).

(2) *Citizenship and other information for disclosable interests in broadcast station applicants and licensees.* For each attributable interest holder named in response to paragraphs (e) and (f) of this section, describe the nature of the attributable interest and, if applicable, specify the equity interest held and the

voting interest held (each to the nearest one percent); in the case of an individual, his or her citizenship; and in the case of a business organization, its place of organization, type of business organization (e.g., corporation, unincorporated association, trust, general partnership, limited partnership, limited liability company, trust, other (include description of legal entity)), and principal business(es).

(h)(1) *Estimate of aggregate foreign ownership.* For petitions filed under § 1.5000(a)(1), attach an exhibit that provides a percentage estimate of the controlling U.S. parent's aggregate direct and/or indirect foreign equity interests and its aggregate direct and/or indirect foreign voting interests. For petitions filed under § 1.5000(a)(2), attach an exhibit that provides a percentage estimate of the aggregate foreign equity interests and aggregate foreign voting interests held directly in the petitioning applicant(s) and/or licensee(s), if any, and the aggregate foreign equity interests and aggregate foreign voting interests held indirectly in the petitioning applicant(s) and/or licensee(s). The exhibit required by this paragraph must also provide a general description of the methods used to determine the percentages, and a statement addressing the circumstances that prompted the filing of the petition and demonstrating that the public interest would be served by grant of the petition.

(2) *Ownership and control structure.* Attach an exhibit that describes the ownership and control structure of the applicant(s) and/or licensee(s) that are the subject of the petition, including an ownership diagram and identification of the real party-in-interest disclosed in any companion applications. The ownership diagram should illustrate the petitioner's vertical ownership structure, including the controlling U.S. parent named in the petition (for petitions filed under § 1.5000(a)(1)) and either:

(i) For common carrier, aeronautical en route, and aeronautical fixed radio station applicants and licensees, the direct and indirect ownership (equity and voting) interests held by the individual(s) and/or entity(ies) named in response to paragraphs (e) and (f) of this section; or

(ii) For broadcast station applicants and licensees, the attributable interest holders named in response to paragraphs (e) and (f) of this section. Each such individual or entity shall be depicted in the ownership diagram and all controlling interests labeled as such. Where the petition includes multiple petitioners, the ownership of all

petitioners may be depicted in a single ownership diagram or in multiple diagrams.

(i) *Requests for specific approval.* Provide, as required or permitted by this paragraph, the name of each foreign individual and/or entity for which each petitioner requests specific approval, if any, and the respective percentages of equity and/or voting interests (to the nearest one percent) that each such foreign individual or entity holds, or would hold, directly and/or indirectly, in the controlling U.S. parent of the petitioning broadcast, common carrier or aeronautical radio station applicant(s) or licensee(s) for petitions filed under § 1.5000(a)(1), and in each petitioning common carrier applicant or licensee for petitions filed under § 1.5000(a)(2).

(1) Each petitioning broadcast, common carrier or aeronautical radio station applicant or licensee filing under § 1.5000(a)(1) shall identify and request specific approval for any foreign individual, entity, or group of such individuals or entities that holds, or would hold, directly and/or indirectly, more than 5 percent of the equity and/or voting interests, or a controlling interest, in the petitioner's controlling U.S. parent unless the foreign investment is exempt under paragraph (i)(3) of this section. Equity and voting interests held *indirectly* in the petitioner's controlling U.S. parent shall be calculated in accordance with the principles set forth in §§ 1.5002 and 1.5003. Equity and voting interests held *directly* in a petitioner's controlling U.S. parent that is organized as a partnership or limited liability company shall be calculated in accordance with Note 1 to paragraph (i)(3)(ii)(C) of this section.

**Note to paragraph (i)(1):** Solely for the purpose of identifying foreign interests that require specific approval under this paragraph (i), broadcast station applicants and licensees filing petitions under § 1.5000(a)(1) should calculate equity and voting interests in accordance with the principles set forth in §§ 1.5002 and 1.5003 and *not* as set forth in the Notes to § 73.3555 of this chapter, to the extent that there are any differences in such calculation methods. Notwithstanding the foregoing, the insulation of limited partnership, limited liability partnership, and limited liability company interests for broadcast applicants and licensees *shall* be determined in accordance with Note 2(f) of § 73.3555 of this chapter.

(2) Each petitioning common carrier radio station applicant or licensee filing under § 1.5000(a)(2) shall identify and request specific approval for any foreign individual, entity, or group of such individuals or entities that holds, or would hold, directly, and/or indirectly through one or more intervening U.S.-organized entities that do not control

the applicant or licensee, more than 5 percent of the equity and/or voting interests in the applicant or licensee unless the foreign investment is exempt under paragraph (i)(3) of this section. Equity and voting interests held *indirectly* in the applicant or licensee shall be calculated in accordance with the principles set forth in §§ 1.5002 and 1.5003. Equity and voting interests held *directly* in an applicant or licensee that is organized as a partnership or limited liability company shall be calculated in accordance with Note 1 to paragraph (i)(3)(ii)(C) of this section.

**Note 1 to paragraphs (i)(1) and (2):** Certain foreign interests of 5 percent or less may require specific approval under paragraphs (i)(1) and (2). See Note 2 to paragraph (i)(3)(ii)(C) of this section.

**Note 2 to paragraphs (i)(1) and (2):** Two or more individuals or entities will be treated as a "group" when they have agreed to act together for the purpose of acquiring, holding, voting, or disposing of their equity and/or voting interests in the licensee and/or controlling U.S. parent of the licensee or in any intermediate company(ies) through which any of the individuals or entities holds its interests in the licensee and/or controlling U.S. parent of the licensee.

(3) A foreign investment is exempt from the specific approval requirements of paragraphs (i)(1) and (2) of this section where:

(i) The foreign individual or entity holds, or would hold, directly and/or indirectly, no more than 10 percent of the equity and/or voting interests of the U.S. parent (for petitions filed under § 1.5000(a)(1)) or the petitioning applicant or licensee (for petitions filed under § 1.5000(a)(2)); *and*

(ii) The foreign individual or entity does not hold, and would not hold, a controlling interest in the petitioner or any controlling parent company, does not plan or intend to change or influence control of the petitioner or any controlling parent company, does not possess or develop any such purpose, and does not take any action having such purpose or effect. The Commission will presume, in the absence of evidence to the contrary, that the following interests satisfy this criterion for exemption from the specific approval requirements in paragraphs (i)(1) and (2) of this section:

(A) Where the petitioning applicant or licensee, controlling U.S. parent, or entity holding a direct or indirect equity and/or voting interest in the applicant/licensee or U.S. parent is a "public company," as defined in § 1.5000(d)(9), *provided that* the foreign holder is an institutional investor that is eligible to report its beneficial ownership interests in the company's voting, equity

securities in excess of 5 percent (not to exceed 10 percent) pursuant to Exchange Act Rule 13d-1(b), 17 CFR 240.13d-1(b), or a substantially comparable foreign law or regulation. This presumption shall not apply if the foreign individual, entity or group holding such interests is obligated to report its holdings in the company pursuant to Exchange Act Rule 13d-1(a), 17 CFR 240.13d-1(a), or a substantially comparable foreign law or regulation.

**Example.** Common carrier applicant ("Applicant") is preparing a petition for declaratory ruling to request Commission approval for foreign ownership of its controlling, U.S.-organized parent ("U.S. Parent") to exceed the 25 percent benchmark in section 310(b)(4) of the Act. Applicant does not currently hold any FCC licenses. Shares of U.S. Parent trade publicly on the New York Stock Exchange. Based on a review of its shareholder records, U.S. Parent has determined that its aggregate foreign ownership on any given day may exceed an aggregate 25 percent, including a 6 percent common stock interest held by a foreign-organized mutual fund ("Foreign Fund"). U.S. Parent has confirmed that Foreign Fund is not currently required to report its interest pursuant to Exchange Act Rule 13d-1(a) and instead is eligible to report its interest pursuant to Exchange Act Rule 13d-1(b). U.S. Parent also has confirmed that Foreign Fund does not hold any other interests in U.S. Parent's equity securities, whether of a class of voting or non-voting securities. Applicant may, but is not required to, request specific approval of Foreign Fund's 6 percent interest in U.S. Parent.

**Note to paragraph (i)(3)(ii)(A):** Where an institutional investor holds voting, equity securities that are subject to reporting under Exchange Act Rule 13d-1, 17 CFR 240.13d-1, or a substantially comparable foreign law or regulation, in addition to equity securities that are not subject to such reporting, the investor's total capital stock interests may be aggregated and treated as exempt from the 5 percent specific approval requirement in paragraphs (i)(1) and (2) of this section so long as the aggregate amount of the institutional investor's holdings does not exceed 10 percent of the company's total capital stock or voting rights and the investor is eligible to certify under Exchange Act Rule 13d-1(b), 17 CFR 240.13d-1(b), or a substantially comparable foreign law or regulation that it has acquired its capital stock interests in the ordinary course of business and not with the purpose nor with the effect of changing or influencing the control of the company. In calculating foreign equity and voting interests, the Commission does not consider convertible interests such as options, warrants and convertible debentures until converted, unless specifically requested by the petitioner, *i.e.*, where the petitioner is requesting approval so those rights can be exercised in a particular case without further Commission approval.

(B) Where the petitioning applicant or licensee, controlling U.S. parent, or entity holding a direct and/or indirect equity and/or voting interest in the applicant/licensee or U.S. parent is a "privately held" corporation, as defined in § 1.5000(d)(8), *provided that* a shareholders' agreement, or similar voting agreement, prohibits the foreign holder from becoming actively involved in the management or operation of the corporation and limits the foreign holder's voting and consent rights, if any, to the minority shareholder protections listed in paragraph (i)(5) of this section.

(C) Where the petitioning applicant or licensee, controlling U.S. parent, or entity holding a direct and/or indirect equity and/or voting interest in the licensee or U.S. parent is "privately held," as defined in § 1.5000(d)(8), and is organized as a limited partnership, limited liability company ("LLC"), or limited liability partnership ("LLP"), *provided that* the foreign holder is "insulated" in accordance with the criteria specified in § 1.5003.

**Note 1 to paragraph (i)(3)(ii)(C):** For purposes of identifying foreign interests that require specific approval, where the petitioning applicant, licensee, or controlling U.S. parent is itself organized as a partnership or LLC, a general partner, uninsulated limited partner, uninsulated LLC member, and non-member LLC manager shall be deemed to hold a controlling (100 percent) voting interest in the applicant, licensee, or controlling U.S. parent.

**Note 2 to paragraph (i)(3)(ii)(C):** For purposes of identifying foreign interests that require specific approval, where interests are held *indirectly* in the petitioning applicant, licensee, or controlling U.S. parent through one or more intervening partnerships or LLCs, a general partner, uninsulated limited partner, uninsulated LLC members, and non-member LLC managers shall be deemed to hold the same voting interest as the partnership or LLC holds in the company situated in the next lower tier of the petitioner's vertical ownership chain and, ultimately, the same voting interest as the partnership or LLC is calculated as holding in the controlling U.S. parent (for petitions filed under § 1.5000(a)(1)) or in the applicant or licensee (for petitions filed under § 1.5000(a)(2)). See § 1.5002(b)(2)(ii)(A) and (b)(2)(iii)(A). Where a limited partner or LLC member is insulated, the limited partner's or LLC member's voting interest in the controlling U.S. parent (for petitions filed under § 1.5000(a)(1)), or in the applicant or licensee (for petitions filed under § 1.5000(a)(2)) is calculated as equal to the limited partner's or LLC member's equity interest in the U.S. parent or in the applicant or licensee, respectively. See § 1.5002(b)(2)(ii)(B) and (b)(2)(iii)(B). Thus, depending on the particular ownership structure presented in the petition, a foreign general partner, uninsulated limited partner,

LLC member, or non-member LLC manager of an intervening partnership or LLC may be deemed to hold an indirect voting interest in the controlling U.S. parent or in the petitioning applicant or licensee that requires specific approval because the voting interest exceeds the 5 percent amount specified in paragraphs (i)(1) and (2) of this section and, unless the voting interest is otherwise insulated at a lower tier of the petitioner's vertical ownership chain, the voting interest would not qualify as exempt from specific approval under this paragraph (i)(3)(ii)(C) even in circumstances where the voting interest does not exceed 10 percent.

(4) A petitioner may, but is not required to, request specific approval for any other foreign individual or entity that holds, or would hold, a direct and/or indirect equity and/or voting interest in the controlling U.S. parent (for petitions filed under § 1.5000(a)(1)) or in the petitioning applicant or licensee (for petitions filed under § 1.5000(a)(2)).

(5) The minority shareholder protections referenced in paragraph (i)(3)(ii)(B) of this section consist of the following rights:

(i) The power to prevent the sale or pledge of all or substantially all of the assets of the corporation or a voluntary filing for bankruptcy or liquidation;

(ii) The power to prevent the corporation from entering into contracts with majority shareholders or their affiliates;

(iii) The power to prevent the corporation from guaranteeing the obligations of majority shareholders or their affiliates;

(iv) The power to purchase an additional interest in the corporation to prevent the dilution of the shareholder's *pro rata* interest in the event that the corporation issues additional instruments conveying shares in the company;

(v) The power to prevent the change of existing legal rights or preferences of the shareholders, as provided in the charter, by-laws or other operative governance documents;

(vi) The power to prevent the amendment of the charter, by-laws or other operative governance documents of the company with respect to the matters described in paragraph (i)(5)(i) through (v) of this section.

(6) The Commission reserves the right to consider, on a case-by-case basis, whether voting or consent rights over matters other than those listed in paragraph (i)(5) of this section shall be considered permissible minority shareholder protections in a particular case.

(j) For each foreign individual or entity named in response to paragraph (i) of this section, provide the following information:

(1) In the case of an individual, his or her citizenship and principal business(es);

(2) In the case of a business organization:

(i) Its place of organization, type of business organization (e.g., corporation, unincorporated association, trust, general partnership, limited partnership, limited liability company, trust, other (include description of legal entity)), and principal business(es);

(ii)(A) For common carrier, aeronautical en route, and aeronautical fixed radio station applicants and licensees, the name of any individual or entity that holds, or would hold, directly and/or indirectly, through one or more intervening entities, 10 percent or more of the equity interests and/or voting interests, or a controlling interest, in the foreign entity for which the petitioner requests specific approval. Specify for each such interest holder, his or her citizenship (for individuals) or place of legal organization (for entities). Equity interests and voting interests held indirectly shall be calculated in accordance with the principles set forth in § 1.5002.

(B) For broadcast applicants and licensees, the name of any individual or entity that holds, or would hold, directly and/or indirectly, through one or more intervening entities, an attributable interest in the foreign entity for which the petitioner requests specific approval. Specify for each such interest holder, his or her citizenship (for individuals) or place of legal organization (for entities). Attributable interests shall be calculated in accordance with the principles set forth in the Notes to § 73.3555 of this chapter.

(iii)(A) For common carrier, aeronautical en route, and aeronautical fixed radio station applicants and licensees, where no individual or entity holds, or would hold, directly and/or indirectly, 10 percent or more of the equity interests and/or voting interests, or a controlling interest, the petition shall specify that no individual or entity holds, or would hold, directly and/or indirectly, 10 percent or more of the equity interests and/or voting interests, or a controlling interest, in the foreign entity for which the petitioner requests specific approval.

(B) For broadcast applicants and licensees, where no individual or entity holds, or would hold, directly and/or indirectly, an attributable interest in the foreign entity, the petition shall specify that no individual or entity holds, or would hold, directly and/or indirectly, an attributable interest in the foreign entity for which the petitioner requests specific approval.

(k) *Requests for advance approval.*

The petitioner may, but is not required to, request advance approval in its petition for any foreign individual or entity named in response to paragraph (i) of this section to increase its direct and/or indirect equity and/or voting interests in the controlling U.S. parent of the broadcast, common carrier or aeronautical radio station licensee, for petitions filed under § 1.5000(a)(1), and/or in the common carrier licensee, for petitions filed under § 1.5000(a)(2), above the percentages specified in response to paragraph (i) of this section. Requests for advance approval shall be made as follows:

(1) *Petitions filed under § 1.5000(a)(1).* Where a foreign individual or entity named in response to paragraph (i) of this section holds, or would hold upon consummation of any transactions described in the petition, a *de jure* or *de facto* controlling interest in the controlling U.S. parent, the petitioner may request advance approval in its petition for the foreign individual or entity to increase its interests, at some future time, up to any amount, including 100 percent of the direct and/or indirect equity and/or voting interests in the U.S. parent. The petitioner shall specify for the named controlling foreign individual(s) or entity(ies) the maximum percentages of equity and/or voting interests for which advance approval is sought or, in lieu of a specific amount, state that the petitioner requests advance approval for the named controlling foreign individual or entity to increase its interests up to and including 100 percent of the U.S. parent's direct and/or indirect equity and/or voting interests.

(2) *Petitions filed under § 1.5000(a)(1) and/or (2).* Where a foreign individual or entity named in response to paragraph (i) of this section holds, or would hold upon consummation of any transactions described in the petition, a non-controlling interest in the controlling U.S. parent of the licensee, for petitions filed under § 1.5000(a)(1), or in the licensee, for petitions filed under § 1.5000(a)(2), the petitioner may request advance approval in its petition for the foreign individual or entity to increase its interests, at some future time, up to any non-controlling amount not to exceed 49.99 percent. The petitioner shall specify for the named foreign individual(s) or entity(ies) the maximum percentages of equity and/or voting interests for which advance approval is sought or, in lieu of a specific amount, shall state that the petitioner requests advance approval for the named foreign individual(s) or entity(ies) to increase their interests up

to and including a non-controlling 49.99 percent equity and/or voting interest in the licensee, for petitions filed under § 1.5000(a)(2), or in the controlling U.S. parent of the licensee, for petitions filed under § 1.5000(a)(1).

(l) Each applicant, licensee, or spectrum lessee filing a petition for declaratory ruling shall certify to the information contained in the petition in accordance with the provisions of § 1.16 and the requirements of § 1.5000(c)(1).

#### **§ 1.5002 How to calculate indirect equity and voting interests.**

(a) The criteria specified in this section shall be used for purposes of calculating indirect equity and voting interests under § 1.5001.

(b)(1) *Equity interests held indirectly in the licensee and/or controlling U.S. parent.* Equity interests that are held by an individual or entity indirectly through one or more intervening entities shall be calculated by successive multiplication of the equity percentages for each link in the vertical ownership chain, regardless of whether any particular link in the chain represents a controlling interest in the company positioned in the next lower tier.

*Example (for rulings issued under § 1.5000(a)(1)).* Assume that a foreign individual holds a non-controlling 30 percent equity and voting interest in U.S.-organized Corporation A which, in turn, holds a non-controlling 40 percent equity and voting interest in U.S.-organized Parent Corporation B. The foreign individual's equity interest in U.S.-organized Parent Corporation B would be calculated by multiplying the foreign individual's equity interest in U.S.-organized Corporation A by that entity's equity interest in U.S.-organized Parent Corporation B. The foreign individual's equity interest in U.S.-organized Parent Corporation B would be calculated as 12 percent ( $30\% \times 40\% = 12\%$ ). The result would be the same even if U.S.-organized Corporation A held a *de facto* controlling interest in U.S.-organized Parent Corporation B.

(2) *Voting interests held indirectly in the licensee and/or controlling U.S. parent.* Voting interests that are held by any individual or entity indirectly through one or more intervening entities will be determined depending upon the type of business organization(s) in which the individual or entity holds a voting interest as follows:

(i) Voting interests that are held through one or more intervening corporations shall be calculated by successive multiplication of the voting percentages for each link in the vertical ownership chain, except that wherever the voting interest for any link in the chain is equal to or exceeds 50 percent or represents actual control, it shall be

treated as if it were a 100 percent interest.

*Example (for rulings issued under § 1.5000(a)(1)).* Assume that a foreign individual holds a non-controlling 30 percent equity and voting interest in U.S.-organized Corporation A which, in turn, holds a controlling 70 percent equity and voting interest in U.S.-organized Parent Corporation B. Because U.S.-organized Corporation A's 70 percent voting interest in U.S.-organized Parent Corporation B constitutes a controlling interest, it is treated as a 100 percent interest. The foreign individual's 30 percent voting interest in U.S.-organized Corporation A would flow through in its entirety to U.S. Parent Corporation B and thus be calculated as 30 percent ( $30\% \times 100\% = 30\%$ ).

(ii) Voting interests that are held through one or more intervening partnerships shall be calculated depending upon whether the individual or entity holds a general partnership interest, an uninsulated partnership interest, or an insulated partnership interest as specified in paragraphs (b)(2)(ii)(A) and (B) of this section.

(A) *General partnership and other uninsulated partnership interests.* A general partner and uninsulated partner shall be deemed to hold the same voting interest as the partnership holds in the company situated in the next lower tier of the vertical ownership chain. A partner shall be treated as uninsulated unless the limited partnership agreement, limited liability partnership agreement, or other operative agreement satisfies the insulation criteria specified in § 1.5003.

(B) *Insulated partnership interests.* A partner of a limited partnership (other than a general partner) or partner of a limited liability partnership that satisfies the insulation criteria specified in § 1.5003 shall be treated as an insulated partner and shall be deemed to hold a voting interest in the partnership that is equal to the partner's equity interest.

**Note to paragraph (b)(2)(ii):** The Commission presumes that a general partner of a general partnership or limited partnership has a controlling interest in the partnership. A general partner shall in all cases be deemed to hold an uninsulated interest in the partnership.

(iii) Voting interests that are held through one or more intervening limited liability companies shall be calculated depending upon whether the individual or entity is a non-member manager, an uninsulated member or an insulated member as specified in paragraphs (b)(2)(iii)(A) and (B) of this section.

(A) *Non-member managers and uninsulated membership interests.* A non-member manager and an uninsulated member of a limited

liability company shall be deemed to hold the same voting interest as the limited liability company holds in the company situated in the next lower tier of the vertical ownership chain. A member shall be treated as uninsulated unless the limited liability company agreement satisfies the insulation criteria specified in § 1.5003.

(B) *Insulated membership interests.* A member of a limited liability company that satisfies the insulation criteria specified in § 1.5003 shall be treated as an insulated member and shall be deemed to hold a voting interest in the limited liability company that is equal to the member's equity interest.

**§ 1.5003 Insulation criteria for interests in limited partnerships, limited liability partnerships, and limited liability companies.**

(a) A limited partner of a limited partnership and a partner of a limited liability partnership shall be treated as uninsulated within the meaning of § 1.5002(b)(2)(ii)(A) unless the partner is prohibited by the limited partnership agreement, limited liability partnership agreement, or other operative agreement from, and in fact is not engaged in, active involvement in the management or operation of the partnership and only the usual and customary investor protections are contained in the partnership agreement or other operative agreement. These criteria apply to any relevant limited partnership or limited liability partnership, whether it is the licensee, a controlling U.S.-organized parent, or any partnership situated above them in the vertical chain of ownership. Notwithstanding the foregoing, the insulation of limited partnership and limited liability partnership interests for broadcast applicants and licensees shall be determined in accordance with Note 2(f) of § 73.3555 of this chapter.

(b) A member of a limited liability company shall be treated as uninsulated for purposes of § 1.5002(b)(2)(iii)(A) unless the member is prohibited by the limited liability company agreement from, and in fact is not engaged in, active involvement in the management or operation of the company and only the usual and customary investor protections are contained in the agreement. These criteria apply to any relevant limited liability company, whether it is the licensee, a controlling U.S.-organized parent, or any limited liability company situated above them in the vertical chain of ownership. Notwithstanding the foregoing, the insulation of limited liability company interests for broadcast applicants and licensees shall be determined in

accordance with Note 2(f) of § 73.3555 of this chapter.

(c) The usual and customary investor protections referred to in paragraphs (a) and (b) of this section shall consist of:

(1) The power to prevent the sale or pledge of all or substantially all of the assets of the limited partnership, limited liability partnership, or limited liability company or a voluntary filing for bankruptcy or liquidation;

(2) The power to prevent the limited partnership, limited liability partnership, or limited liability company from entering into contracts with majority investors or their affiliates;

(3) The power to prevent the limited partnership, limited liability partnership, or limited liability company from guaranteeing the obligations of majority investors or their affiliates;

(4) The power to purchase an additional interest in the limited partnership, limited liability partnership, or limited liability company to prevent the dilution of the partner's or member's *pro rata* interest in the event that the limited partnership, limited liability partnership, or limited liability company issues additional instruments conveying interests in the partnership or company;

(5) The power to prevent the change of existing legal rights or preferences of the partners, members, or managers as provided in the limited partnership agreement, limited liability partnership agreement, or limited liability company agreement, or other operative agreement;

(6) The power to vote on the removal of a general partner, managing partner, managing member, or other manager in situations where such individual or entity is subject to bankruptcy, insolvency, reorganization, or other proceedings relating to the relief of debtors; adjudicated insane or incompetent by a court of competent jurisdiction (in the case of a natural person); convicted of a felony; or otherwise removed for cause, as determined by an independent party;

(7) The power to prevent the amendment of the limited partnership agreement, limited liability partnership agreement, or limited liability company agreement, or other organizational documents of the partnership or limited liability company with respect to the matters described in paragraph (c)(1) through (c)(6) of this section.

(d) The Commission reserves the right to consider, on a case-by-case basis, whether voting or consent rights over matters other than those listed in



paragraph (c) of this section shall be considered usual and customary investor protections in a particular case.

#### **§ 1.5004 Routine terms and conditions.**

Foreign ownership rulings issued pursuant to §§ 1.5000 through 1.5004 shall be subject to the following terms and conditions, except as otherwise specified in a particular ruling:

(a)(1) *Aggregate allowance for rulings issued under § 1.5000(a)(1).* In addition to the foreign ownership interests approved specifically in a licensee's declaratory ruling issued pursuant to § 1.5000(a)(1), the controlling U.S.-organized parent named in the ruling (or a U.S.-organized successor-in-interest formed as part of a *pro forma* reorganization) may be 100 percent owned, directly and/or indirectly through one or more U.S.- or foreign-organized entities, on a going-forward basis (*i.e.*, after issuance of the ruling) by other foreign investors without prior Commission approval. This "100 percent aggregate allowance" is subject to the requirement that the licensee seek and obtain Commission approval before any foreign individual, entity, or "group" not previously approved acquires, directly and/or indirectly, more than 5 percent of the U.S. parent's outstanding capital stock (equity) and/or voting stock, or a controlling interest, with the exception of any foreign individual, entity, or "group" that acquires an equity and/or voting interest of 10 percent or less, *provided that* the interest is exempt under § 1.5001(i)(3).

(2) *Aggregate allowance for rulings issued under § 1.5000(a)(2).* In addition to the foreign ownership interests approved specifically in a licensee's declaratory ruling issued pursuant to § 1.5000(a)(2), the licensee(s) named in the ruling (or a U.S.-organized successor-in-interest formed as part of a *pro forma* reorganization) may be 100 percent owned on a going forward basis (*i.e.*, after issuance of the ruling) by other foreign investors holding interests in the licensee indirectly through U.S.-organized entities that do not control the licensee, without prior Commission approval. This "100 percent aggregate allowance" is subject to the requirement that the licensee seek and obtain Commission approval before any foreign individual, entity, or "group" not previously approved acquires directly and/or indirectly, through one or more U.S.-organized entities that do not control the licensee, more than 5 percent of the licensee's outstanding capital stock (equity) and/or voting stock, with the exception of any foreign individual, entity, or "group" that acquires an equity and/or voting interest

of 10 percent or less, *provided that* the interest is exempt under § 1.5001(i)(3). Foreign ownership interests held directly in a licensee shall not be permitted to exceed an aggregate 20 percent of the licensee's equity and/or voting interests.

**Note to paragraph (a):** Licensees have an obligation to monitor and stay ahead of changes in foreign ownership of their controlling U.S.-organized parent companies (for rulings issued pursuant to § 1.5000(a)(1)) and/or in the licensee itself (for rulings issued pursuant to § 1.5000(a)(2)), to ensure that the licensee obtains Commission approval before a change in foreign ownership renders the licensee out of compliance with the terms and conditions of its declaratory ruling(s) or the Commission's rules. Licensees, their controlling parent companies, and other entities in the licensee's vertical ownership chain may need to place restrictions in their bylaws or other organizational documents to enable the licensee to ensure compliance with the terms and conditions of its declaratory ruling(s) and the Commission's rules.

*Example 1 (for rulings issued under § 1.5000(a)(1)).* U.S. Corp. files an application for a common carrier license. U.S. Corp. is wholly owned and controlled by U.S. Parent, which is a newly formed, privately held Delaware Corporation in which no single shareholder has *de jure* or *de facto* control. A shareholder's agreement provides that a five-member board of directors shall govern the affairs of the company; five named shareholders shall be entitled to one seat and one vote on the board; and all decisions of the board shall be determined by majority vote. The five named shareholders and their respective equity interests are as follows: Foreign Entity A, which is wholly owned and controlled by a foreign citizen (5 percent); Foreign Entity B, which is wholly owned and controlled by a foreign citizen (10 percent); Foreign Entity C, a foreign public company with no controlling shareholder (20 percent); Foreign Entity D, a foreign pension fund that is controlled by a foreign citizen and in which no individual or entity has a pecuniary interest exceeding one percent (21 percent); and U.S. Entity E, a U.S. public company with no controlling shareholder (25 percent). The remaining 19 percent of U.S. Parent's shares are held by three foreign-organized entities as follows: F (4 percent), G (6 percent), and H (9 percent). Under the shareholders' agreement, voting rights of F, G, and H are limited to the minority shareholder protections listed in § 1.5001(i)(5). Further, the agreement expressly prohibits G and H from becoming actively involved in the management or operation of U.S. Parent and U.S. Corp.

As required by the rules, U.S. Corp. files a section 310(b)(4) petition concurrently with its application. The petition identifies and requests specific approval for the ownership interests held in U.S. Parent by Foreign Entity A and its sole shareholder (5 percent equity and 20 percent voting interest); Foreign Entity B and its sole shareholder (10 percent equity and 20 percent voting interest); Foreign Entity C (20 percent equity

and 20 percent voting interest), and Foreign Entity D (21 percent equity and 20 percent voting interest) and its fund manager (20 percent voting interest). The Commission's ruling specifically approves these foreign interests. The ruling also provides that, on a going-forward basis, U.S. Parent may be 100 percent owned in the aggregate, directly and/or indirectly, by other foreign investors, subject to the requirement that U.S. Corp. seek and obtain Commission approval before any previously unapproved foreign investor acquires more than 5 percent of U.S. Parent's equity and/or voting interests, or a controlling interest, with the exception of any foreign investor that acquires an equity and/or voting interest of ten percent or less, *provided that* the interest is exempt under § 1.991(i)(3).

In this case, foreign entities F, G, and H would each be considered a previously unapproved foreign investor (along with any new foreign investors). However, prior approval for F, G and H would only apply to an increase of F's interest above 5 percent (because the ten percent exemption under § 1.5001(i)(3) does not apply to F) or to an increase of G's or H's interest above 10 percent (because G and H do qualify for this exemption). U.S. Corp. would also need Commission approval before Foreign Entity D appoints a new fund manager that is a non-U.S. citizen and before Foreign Entities A, B, C, or D increase their respective equity and/or voting interests in U.S. Parent, unless the petition previously sought and obtained Commission approval for such increases (up to non-controlling 49.99 percent interests). (See § 1.5001(k)(2).) Foreign shareholders of Foreign Entity C and U.S. Entity E would also be considered previously unapproved foreign investors. Thus, Commission approval would be required before any foreign shareholder of Foreign Entity C or U.S. Entity E acquires (1) a controlling interest in either company; or (2) a non-controlling equity and/or voting interest in either company that, when multiplied by the company's equity and/or voting interests in U.S. Parent, would exceed 5 percent of U.S. Parent's equity and/or voting interests, unless the interest is exempt under § 1.5001(i)(3).

*Example 2 (for rulings issued under § 1.5000(a)(2)).* Assume that the following three U.S.-organized entities hold non-controlling equity and voting interests in common carrier Licensee, which is a privately held corporation organized in Delaware: U.S. corporation A (30 percent); U.S. corporation B (30 percent); and U.S. corporation C (40 percent). Licensee's shareholders are wholly owned by foreign individuals X, Y, and Z, respectively. Licensee has received a declaratory ruling under § 1.5000(a)(2) specifically approving the 30 percent foreign ownership interests held in Licensee by each of X and Y (through U.S. corporation A and U.S. corporation B, respectively) and the 40 percent foreign ownership interest held in Licensee by Z (through U.S. corporation C). On a going-forward basis, Licensee may be 100 percent owned in the aggregate by X, Y, Z, and other foreign investors holding interests in Licensee indirectly, through U.S.-organized entities that do not control Licensee, subject

to the requirement that Licensee obtain Commission approval before any previously unapproved foreign investor acquires more than 5 percent of Licensee's equity and/or voting interests, with the exception of any foreign investor that acquires an equity and/or voting interest of 10 percent or less, *provided that* the interest is exempt under § 1.5001(i)(3). In this case, any foreign investor other than X, Y, and Z would be considered a previously unapproved foreign investor. Licensee would also need Commission approval before X, Y, or Z increases its equity and/or voting interests in Licensee unless the petition previously sought and obtained Commission approval for such increases (up to non-controlling 49.99 percent interests). (See § 1.5001(k)(2).)

(b) *Subsidiaries and affiliates.* A foreign ownership ruling issued to a licensee shall cover it *and* any U.S.-organized subsidiary or affiliate, as defined in § 1.5000(d), whether the subsidiary or affiliate existed at the time the ruling was issued or was formed or acquired subsequently, *provided that* the foreign ownership of the licensee named in the ruling, and of the subsidiary and/or affiliate, remains in compliance with the terms and conditions of the licensee's ruling and the Commission's rules.

(1) The subsidiary or affiliate of a licensee named in a foreign ownership ruling issued under § 1.5000(a)(1) may rely on that ruling for purposes of filing its own application for an initial broadcast, common carrier or aeronautical license or spectrum leasing arrangement, or an application to acquire such license or spectrum leasing arrangement by assignment or transfer of control *provided that* the subsidiary or affiliate, and the licensee named in the ruling, each certifies in the application that its foreign ownership is in compliance with the terms and conditions of the foreign ownership ruling and the Commission's rules.

(2) The subsidiary or affiliate of a licensee named in a foreign ownership ruling issued under § 1.5000(a)(2) may rely on that ruling for purposes of filing its own application for an initial common carrier radio station license or spectrum leasing arrangement, or an application to acquire such license or spectrum leasing arrangement by assignment or transfer of control *provided that* the subsidiary or affiliate, and the licensee named in the ruling, each certifies in the application that its foreign ownership is in compliance with the terms and conditions of the foreign ownership ruling and the Commission's rules.

(3) The certifications required by paragraphs (b)(1) and (2) of this section shall also include the citation(s) of the relevant ruling(s) (*i.e.*, the DA or FCC

Number, FCC Record citation when available, and release date).

(c) *Insertion of new controlling foreign-organized companies.* (1) Where a licensee's foreign ownership ruling specifically authorizes a named, foreign investor to hold a controlling interest in the licensee's controlling U.S.-organized parent, for rulings issued under § 1.5000(a)(1), or in an intervening U.S.-organized entity that does not control the licensee, for rulings issued under § 1.5000(a)(2), the ruling shall permit the insertion of new, controlling foreign-organized companies in the vertical ownership chain above the controlling U.S. parent, for rulings issued under § 1.5000(a)(1), or above an intervening U.S.-organized entity that does not control the licensee, for rulings issued under § 1.5000(a)(2), without prior Commission approval *provided that* any new foreign-organized company(ies) are under 100 percent common ownership and control with the foreign investor approved in the ruling.

(2) Where a previously unapproved foreign-organized entity is inserted into the vertical ownership chain of a licensee, or its controlling U.S.-organized parent, without prior Commission approval pursuant to paragraph (c)(1) of this section, the licensee shall file a letter to the attention of the Chief, International Bureau, within 30 days after the insertion of the new, foreign-organized entity. The letter must include the name of the new, foreign-organized entity and a certification by the licensee that the entity complies with the 100 percent common ownership and control requirement in paragraph (c)(1) of this section. The letter must also reference the licensee's foreign ownership ruling(s) by IBFS File No. and FCC Record citation, if available. This letter notification need not be filed if the ownership change is instead the subject of a *pro forma* application or *pro forma* notification already filed with the Commission pursuant to the relevant broadcast service rules, wireless radio service rules or satellite radio service rules applicable to the licensee.

**Note to paragraph (c)(2):** For broadcast stations, in order to insert a previously unapproved foreign-organized entity that is under 100 percent common ownership and control with the foreign investor approved in the ruling into the vertical ownership chain of the licensee's controlling U.S.-organized parent, as described in paragraph (c)(1) of this section, the licensee must always file a *pro forma* application requesting prior consent of the FCC pursuant to section 73.3540(f) of this chapter.

(3) Nothing in this section is intended to affect any requirements for prior

approval under 47 U.S.C. 310(d) or conditions for forbearance from the requirements of 47 U.S.C. 310(d) pursuant to 47 U.S.C. 160.

*Example (for rulings issued under § 1.5000(a)(1)).* Licensee of a common carrier license receives a foreign ownership ruling under § 1.5000(a)(1) that authorizes its controlling, U.S.-organized parent ("U.S. Parent A") to be wholly owned and controlled by a foreign-organized company ("Foreign Company"). Foreign Company is minority owned (20 percent) by U.S.-organized Corporation B, with the remaining 80 percent controlling interest held by Foreign Citizen C. After issuance of the ruling, Foreign Company forms a wholly-owned, foreign-organized subsidiary ("Foreign Subsidiary") to hold all of Foreign Company's shares in U.S. Parent A. There are no other changes in the direct or indirect foreign ownership of U.S. Parent A. The insertion of Foreign Subsidiary into the vertical ownership chain between Foreign Company and U.S. Parent A would not require prior Commission approval, except for any approval otherwise required pursuant to section 310(d) of the Communications Act and not exempt therefrom as a *pro forma* transfer of control under § 1.948(c)(1).

*Example (for rulings issued under § 1.5000(a)(2)).* An applicant for a common carrier license receives a foreign ownership ruling under § 1.5000(a)(2) that authorizes a foreign-organized company ("Foreign Company") to hold a non-controlling 44 percent equity and voting interest in the applicant through Foreign Company's wholly-owned, U.S.-organized subsidiary, U.S. Corporation A, which holds the non-controlling 44 percent interest directly in the applicant. The remaining 56 percent of the applicant's equity and voting interests are held by its controlling U.S.-organized parent, which has no foreign ownership. After issuance of the ruling, Foreign Company forms a wholly-owned, foreign-organized subsidiary to hold all of Foreign Company's shares in U.S. Corporation A. There are no other changes in the direct or indirect foreign ownership of U.S. Corporation A. The insertion of the foreign-organized subsidiary into the vertical ownership chain between Foreign Company and U.S. Corporation A would not require prior Commission approval.

(d) *Insertion of new non-controlling foreign-organized companies.* (1) Where a licensee's foreign ownership ruling specifically authorizes a named, foreign investor to hold a non-controlling interest in the licensee's controlling U.S.-organized parent, for rulings issued under § 1.5000(a)(1), or in an intervening U.S.-organized entity that does not control the licensee, for rulings issued under § 1.5000(a)(2), the ruling shall permit the insertion of new, foreign-organized companies in the vertical ownership chain above the controlling U.S. parent, for rulings issued under § 1.5000(a)(1), or above an intervening U.S.-organized entity that



does not control the licensee, for rulings issued under § 1.5000(a)(2), without prior Commission approval *provided that* any new foreign-organized company(ies) are under 100 percent common ownership and control with the foreign investor approved in the ruling.

**Note to paragraph (d)(1):** Where a licensee has received a foreign ownership ruling under § 1.5000(a)(2) and the ruling specifically authorizes a named, foreign investor to hold a non-controlling interest directly in the licensee (subject to the 20 percent aggregate limit on direct foreign investment), the ruling shall permit the insertion of new, foreign-organized companies in the vertical ownership chain of the approved foreign investor without prior Commission approval *provided that* any new foreign-organized companies are under 100 percent common ownership and control with the approved foreign investor.

*Example (for rulings issued under § 1.5000(a)(1)).* Licensee receives a foreign ownership ruling under § 1.5000(a)(1) that authorizes a foreign-organized company ("Foreign Company") to hold a non-controlling 30 percent equity and voting interest in Licensee's controlling, U.S.-organized parent ("U.S. Parent A"). The remaining 70 percent equity and voting interests in U.S. Parent A are held by U.S.-organized entities which have no foreign ownership. After issuance of the ruling, Foreign Company forms a wholly-owned, foreign-organized subsidiary ("Foreign Subsidiary") to hold all of Foreign Company's shares in U.S. Parent A. There are no other changes in the direct or indirect foreign ownership of U.S. Parent A. The insertion of Foreign Subsidiary into the vertical ownership chain between Foreign Company and U.S. Parent A would not require prior Commission approval.

*Example (for rulings issued under § 1.5000(a)(2)).* Licensee receives a foreign ownership ruling under § 1.5000(a)(2) that authorizes a foreign-organized entity ("Foreign Company") to hold approximately 24 percent of Licensee's equity and voting interests, through Foreign Company's non-controlling 48 percent equity and voting interest in a U.S.-organized entity, U.S. Corporation A, which holds a non-controlling 49 percent equity and voting interest directly in Licensee. (A U.S. citizen holds the remaining 52 percent equity and voting interests in U.S. Corporation A, and the remaining 51 percent equity and voting interests in Licensee are held by its U.S.-organized parent, which has no foreign ownership. After issuance of the ruling, Foreign Company forms a wholly-owned, foreign-organized subsidiary ("Foreign Subsidiary") to hold all of Foreign Company's shares in U.S. Corporation A. There are no other changes in the direct or indirect foreign ownership of U.S. Corporation A. The insertion of Foreign Subsidiary into the vertical ownership chain between Foreign Company and U.S. Corporation A would not require prior Commission approval.

(2) Where a previously unapproved foreign-organized entity is inserted into the vertical ownership chain of a licensee, or its controlling U.S.-organized parent, without prior Commission approval pursuant to paragraph (d)(1) of this section, the licensee shall file a letter to the attention of the Chief, International Bureau, within 30 days after the insertion of the new, foreign-organized entity; or in the case of a broadcast licensee, the licensee shall file a letter to the attention of the Chief, Media Bureau, within 30 days after the insertion of the new, foreign-organized entity. The letter must include the name of the new, foreign-organized entity and a certification by the licensee that the entity complies with the 100 percent common ownership and control requirement in paragraph (d)(1) of this section. The letter must also reference the licensee's foreign ownership ruling(s) by IBFS File No. and FCC Record citation, if available; or, if a broadcast licensee, the letter must reference the licensee's foreign ownership ruling(s) by CDBS File No., Docket No., call sign(s), facility identification number(s), and FCC Record citation, if available. This letter notification need not be filed if the ownership change is instead the subject of a *pro forma* application or *pro forma* notification already filed with the Commission pursuant to the relevant broadcast service, wireless radio service rules or satellite radio service rules applicable to the licensee.

(e) *New petition for declaratory ruling required.* A licensee that has received a foreign ownership ruling, including a U.S.-organized successor-in-interest to such licensee formed as part of a *pro forma* reorganization, or any subsidiary or affiliate relying on such licensee's ruling pursuant to paragraph (b) of this section, shall file a new petition for declaratory ruling under § 1.5000 to obtain Commission approval *before* its foreign ownership exceeds the routine terms and conditions of this section, and/or any specific terms or conditions of its ruling.

(f) *Continuing compliance.* (1) Except as specified in paragraph (f)(3) of this section, if at any time the licensee, including any successor-in-interest and any subsidiary or affiliate as described in paragraph (b) of this section, knows, or has reason to know, that it is no longer in compliance with its foreign ownership ruling or the Commission's rules relating to foreign ownership, it shall file a statement with the Commission explaining the circumstances within 30 days of the date it knew, or had reason to know,

that it was no longer in compliance therewith. Subsequent actions taken by or on behalf of the licensee to remedy its non-compliance shall not relieve it of the obligation to notify the Commission of the circumstances (including duration) of non-compliance. Such licensee and any controlling companies, whether U.S.- or foreign-organized, shall be subject to enforcement action by the Commission for such non-compliance, including an order requiring divestiture of the investor's direct and/or indirect interests in such entities.

(2) Any individual or entity that, directly or indirectly, creates or uses a trust, proxy, power of attorney, or any other contract, arrangement, or device with the purpose or effect of divesting itself, or preventing the vesting, of an equity interest or voting interest in the licensee, or in a controlling U.S. parent company, as part of a plan or scheme to evade the application of the Commission's rules or policies under section 310(b) shall be subject to enforcement action by the Commission, including an order requiring divestiture of the investor's direct and/or indirect interests in such entities.

(3) Where the controlling U.S. parent of a broadcast, common carrier, aeronautical en route, or aeronautical fixed radio station licensee or common carrier spectrum lessee is an eligible U.S. public company within the meaning of § 1.5000(e), the licensee may file a remedial petition for declaratory ruling under § 1.5000(a)(1) seeking approval of particular foreign equity and/or voting interests that are non-compliant with the licensee's foreign ownership ruling or the Commission's rules relating to foreign ownership; or, alternatively, the licensee may remedy the non-compliance by, for example, redeeming the foreign interest(s) that rendered the licensee non-compliant with the licensee's existing foreign ownership ruling. In either case, the Commission does not expect to take enforcement action related to the non-compliance subject to the requirements specified in paragraphs (f)(3)(i) and (ii) of this section and except as otherwise provided in paragraph (f)(3)(iii) of this section.

(i) The licensee shall notify the relevant Bureau by letter no later than 10 days after learning of the investment(s) that rendered the licensee non-compliant with its foreign ownership ruling or the Commission's rules relating to foreign ownership and specify in the letter that it will file a petition for declaratory ruling under § 1.5000(a)(1) or, alternatively, take remedial action to come into compliance within 30 days of the date

it learned of the non-compliant foreign interest(s).

(ii) The licensee shall demonstrate in its petition for declaratory ruling (or in a letter notifying the relevant Bureau that the non-compliance has been timely remedied) that the licensee's non-compliance with the terms of the licensee's existing foreign ownership ruling or the foreign ownership rules was due solely to circumstances beyond the licensee's control that were not reasonably foreseeable to or known by the licensee with the exercise of the required due diligence.

(iii) Where the licensee has opted to file a petition for declaratory ruling under § 1.5000(a)(1), the Commission will not require that the licensee's U.S. parent redeem the non-compliant foreign interest(s) or take other action to remedy the non-compliance during the pendency of the licensee's petition. If the Commission ultimately declines to approve the petition, however, the licensee must have a mechanism available to come into compliance with the terms of its existing ruling within 30 days following the Commission's decision. The Commission reserves the right to require immediate remedial action by the licensee where the Commission finds in a particular case that the public interest requires such action—for example, where, after consultation with the relevant Executive Branch agencies, the Commission finds that the non-compliant foreign interest presents national security or other significant concerns that require immediate mitigation.

(4) Where a publicly traded common carrier licensee is an eligible U.S. public company within the meaning of § 1.5000(e), the licensee may file a remedial petition for declaratory ruling under § 1.5000(a)(2) seeking approval of particular foreign equity and/or voting interests that are non-compliant with the licensee's foreign ownership ruling or the Commission's rules relating to

foreign ownership; or, alternatively, the licensee may remedy the non-compliance by, for example, redeeming the foreign interest(s) that rendered the licensee non-compliant with the licensee's existing foreign ownership ruling. In either case, the Commission does not, as a general rule, expect to take enforcement action related to the non-compliance subject to the requirements specified in paragraphs (f)(3)(i) and (f)(3)(ii) of this section and except as otherwise provided in paragraph (f)(3)(iii) of this section.

**Note 1 to paragraph (f)(4):** For purposes of this paragraph, the provisions in paragraphs (f)(3)(i) through (f)(3)(iii) that refer to petitions for declaratory ruling under § 1.5000(a)(1) shall be read as referring to petitions for declaratory ruling under § 1.5000(a)(2).

## PART 25—SATELLITE COMMUNICATIONS

■ 4. The authority citation for part 25 is revised to read as follows:

**Authority:** Interprets or applies 47 U.S.C. 154, 301, 302, 303, 307, 309, 310, 319, 332, 605, and 721, unless otherwise noted.

■ 5. Section 25.105 is revised to read as follows:

### § 25.105 Citizenship.

The rules that establish the requirements and conditions for obtaining the Commission's prior approval of foreign ownership in common carrier licensees that would exceed the 20 percent limit in section 310(b)(3) of the Communications Act (47 U.S.C. 310(b)(3)) and/or the 25 percent benchmark in section 310(b)(4) of the Act (47 U.S.C. 310(b)(4)) are set forth in §§ 1.5000 through 1.5004 of this chapter.

## PART 73—RADIO BROADCAST SERVICES

■ 6. The authority citation for part 73 is revised to read as follows:

**Authority:** 47 U.S.C. 154, 303, 309, 310, 334, 336, and 339.

■ 7. Section 73.1010 is amended by revising paragraph (a)(9) and adding paragraph (a)(10) to read as follows:

### § 73.1010 Cross reference to rules in other parts.

\* \* \* \* \*

(a) \* \* \*

(9) Subpart T, "Foreign Ownership of Broadcast, Common Carrier, Aeronautical En Route, and Aeronautical Fixed Radio Station Licensees". (§§ 1.5000 to 1.5004).

(10) Part 1, Subpart W of this chapter, "FCC Registration Number". (§§ 1.8001–1.8005).

\* \* \* \* \*

## PART 74—EXPERIMENTAL RADIO, AUXILIARY, SPECIAL BROADCAST AND OTHER PROGRAM DISTRIBUTIONAL SERVICES

■ 8. The authority citation for part 74 is revised to read as follows:

**Authority:** 47 U.S.C. 154, 302a, 303, 307, 309, 310, 336 and 554.

■ 9. Section 74.5 is amended by revising paragraph (a)(8) and adding paragraph (a)(9) to read as follows:

### § 74.5 Cross reference to rules in other parts.

\* \* \* \* \*

(a) \* \* \*

(8) Subpart T, "Foreign Ownership of Broadcast, Common Carrier, Aeronautical En Route, and Aeronautical Fixed Radio Station Licensees". (§§ 1.5000 to 1.5004).

(9) Part 1, Subpart W of the chapter, "FCC Registration Number". (§§ 1.8001–1.8005).

\* \* \* \* \*

[FR Doc. 2016–28198 Filed 11–30–16; 8:45 am]

**BILLING CODE 6712–01–P**

# Proposed Rules

Federal Register

Vol. 81, No. 231

Thursday, December 1, 2016

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

### Food and Nutrition Service

#### 7 CFR Parts 271, 272 and 273

[FNS 2015–0038]

RIN 0584–AE41

#### Supplemental Nutrition Assistance Program: Student Eligibility, Convicted Felons, Lottery and Gambling, and State Verification Provisions of the Agricultural Act of 2014

**AGENCY:** Food and Nutrition Service (FNS), USDA.

**ACTION:** Proposed rule.

**SUMMARY:** The proposed action would implement four sections of the Agricultural Act of 2014, (2014 Farm Bill), affecting eligibility, benefits, and program administration requirements for the Supplemental Nutrition Assistance Program (SNAP). Section 4007 clarifies that participants in a SNAP Employment & Training (E&T) program are eligible for benefits if they are enrolled or participate in specific programs that will assist SNAP recipients in obtaining the skills needed for the current job market. Section 4008 prohibits anyone convicted of Federal aggravated sexual abuse, murder, sexual exploitation and abuse of children, sexual assault, or similar State laws, and who are also not in compliance with the terms of their sentence or parole or are a fleeing felon, from receiving SNAP benefits. Section 4009 prohibits households containing a member with substantial lottery and gambling winnings from receiving SNAP benefits, until the household meets the allowable financial resources and income eligibility requirements of the program. Section 4009 also provides that State SNAP agencies are required, to the maximum extent practicable, to establish cooperative agreements with gaming entities in the State to identify SNAP recipients with substantial winnings. Section 4015 requires all State agencies to have a system in place

to verify income, eligibility and immigration status.

**DATES:** Written comments must be received on or before January 30, 2017 to be assured of consideration.

**ADDRESSES:** The Food and Nutrition Service, USDA, invites interested persons to submit written comments on this proposed rule. Comments may be submitted in writing by one of the following methods:

- *Preferred Method: Federal eRulemaking Portal:* Go to <http://www.regulations.gov>. Follow the online instructions for submitting comments.
- *Fax:* Submit comments by facsimile transmission to: Sasha Gersten-Paal, Certification Policy Branch, Fax number 703–305–2486.
- *Mail:* Send comments to Sasha Gersten-Paal, Branch Chief, Certification Policy Branch, Program Development Division, FNS, 3101 Park Center Drive, Alexandria, Virginia 22302, 703–305–2507.

All written comments submitted in response to this proposed rule will be included in the record and made available to the public. Please be advised that the substance of comments and the identity of individuals or entities submitting the comments will be subject to public disclosure. FNS will make written comments publicly available online at <http://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:** Sasha Gersten-Paal, Branch Chief, Certification Policy Branch, Program Development Division, Food and Nutrition Service, 3101 Park Center Drive, Alexandria, Virginia 22302, 703–305–2507.

#### SUPPLEMENTARY INFORMATION:

##### Background

##### *Section 4007: Student Eligibility Disqualifications*

Students enrolled at least half-time in an institution of higher education are ineligible to participate in SNAP under section 6(e)(3)(B) of the Food and Nutrition Act of 2008 (the Act), as amended, and 7 CFR 273.5(a). There are several exemptions to this prohibition, one of which is for students assigned to or placed in an institution of higher education under a SNAP E&T program.

Section 4007 of the 2014 Farm Bill (Public Law 113–79) amends Section 6(e)(3)(B) of the Act by providing

additional detail as to what SNAP E&T-assigned education programs and/or courses satisfy the exemption for higher education under a SNAP E&T program. In particular, section 4007 provides that the exemption is limited to those who are enrolled in a course or program of study that is part of a program of career and technical education (as defined in Section 3 of the Carl D. Perkins Career and Technical Education Act of 2006) (the Perkins Act) that may be completed in not more than 4 years at an institution of higher education (as defined in section 102 of the Higher Education Act of 1965), or enrolled in courses for remedial education, basic adult education, literacy, or English as a second language.

Currently, individuals enrolled at least half-time in an institution of higher education are not eligible for SNAP benefits unless the individual meets at least one of the exemption criteria under 7 CFR 273.5(b), including section 273.5(b)(11)(ii), which exempts individuals assigned to an E&T program under section 273.7. The E&T exception to the student rule, as described at section 273.7(e)(1)(vi), includes educational programs or activities to improve basic skills or otherwise improve employability including educational programs determined by the State agency to expand the job search abilities or employability of those subject to the program. The State must establish a link between the education and job-readiness.

The Department of Agriculture (the Department) is proposing to revise section 273.5(b)(11)(ii) to incorporate section 4007's modifications to the eligibility requirements for students who are participating in an E&T education component. The additional language would essentially track the language in Section 4007. Criteria contained at section 273.7(e)(1)(vi) are also proposed to be revised to include courses or programs of study that are part of a program of career and technical education (as defined in section 3 of the Perkins Act). Other criteria contained at section 273.7(e)(1)(vi) would remain unchanged. For example, individuals participating in remedial courses, basic adult education, literacy instruction or English as a second language would also continue to qualify for the student exemption. The purpose of this exemption is to connect participants to

programs that lead to employment and economic self-sufficiency. The Department strives to ensure that SNAP E&T programs are aligned with effective practices in workforce development. As such, for the purpose of this exemption, courses or programs of study that are part of a program of career and technical education may be offered concurrently or contextually with remedial courses, basic adult education, literacy instruction or English as a second language.

Section 3 of the Perkins Act provides a general definition of the term “career and technical education.” The Department understands that States have some discretion to determine what courses meet that general definition. That is, while all States have adopted the basic definition, they also have State-specific criteria as well. For example, States may choose to include more rigorous requirements or specific courses, among other individually-tailored standards. The Department also notes that the program does not have to be receiving Perkins funding, it would just need to meet the general definition. For these reasons, the Department believes that State agencies are in the best position to determine what courses or programs of study are parts of a program that meets the definition of career and technical education under the Perkins Act for SNAP as well. The Department is interested in receiving comments on following this approach.

Section 4007 provides that the course or program of study may be completed in not more than four years. The Department notes that many students pursuing four-year degrees are unable to finish in that time. Therefore, the Department is proposing that students participating in qualifying courses or programs of study that are designed to be completed in up to four years, but actually take longer than four years to complete, satisfy the new requirement.

Thirty-four States offered education components through their E&T programs in FY 2015. These States would need to evaluate whether those components meet the student eligibility criteria proposed in this rule. However, the Department believes that the cost implications of this proposed rule for those States are minimal and the provisions do not materially alter the rights and obligations of SNAP recipients because there would continue to be work requirement exemptions for students enrolled more than half-time in an institution of higher education under section 273.7(b)(viii).

#### *Section 4008: Eligibility Disqualifications for Certain Convicted Felons*

Section 4008 of the 2014 Farm Bill added new section 6(r)(1) to the Act to prohibit anyone convicted of certain sexual crimes, child abuse, and murder who are also not in compliance with the terms of their sentence, or who are fleeing felons or parole or probation violators as described in section 6(k) of the Act, from receiving SNAP benefits. The listed offenses in section 4008 include the following: (i) Aggravated sexual abuse under section 2241 of Title 18, United States Code, (ii) murder under section 1111 of Title 18, United States Code, (iii) sexual exploitation and other abuse of children under chapter 110 of Title 18, United States Code, (iv) a Federal or State offense involving sexual assault, as defined in section 40002(a) of the Violence Against Women Act of 1994 (42 U.S.C. 13925(a)), or (v) an offense under State law determined by the United States Attorney General to be substantially similar to the offenses in (i) through (iii) above.

Section 4008 also imposes a new requirement that individuals applying for SNAP benefits must attest whether the applicant, or any other member of the household, was convicted of any of the listed Federal offenses or substantially similar State offenses. The provisions in section 4008 do not apply to convictions for conduct occurring on or before the date of enactment of the 2014 Farm Bill, February 7, 2014.

Section 4008 also provides that although those disqualified from receiving SNAP benefits under this provision are not SNAP-eligible members of the household, their income and resources are to be considered in determining the eligibility and value of the benefits for the rest of the household.

#### **Disqualification**

The Department is proposing to revise the regulations at section 273.11 by adding a new subsection (section 273.11(s)) to include the language contained in section 4008. The regulatory provision would essentially track the language in the statute, and would specify that the provision would not apply to convictions for conduct occurring on or before February 7, 2014. Fleeing felons and probation or parole violators covered in section 273.11(n) are also cited in proposed section 273.11(s) as ineligible for SNAP benefits.

The Department notes that before passage of the 2014 Farm Bill, section

6(k) of the Act, (reflected at section 273.11(n)), already prohibited certain fleeing felons and probation and parole violators from receiving SNAP benefits. The Department published a proposed rule, Clarification of Eligibility of Fleeing Felons (76 FR 51907), on August 19, 2011, and the final rule (80 FR 54410) on September 10, 2015, to implement section 4112 of the Food, Conservation, and Energy Act of 2008, Public Law 110–246, which required the Secretary of Agriculture to define the terms “fleeing” and “actively seeking.”

Section 4008 does not affect the existing prohibition that precludes fleeing felons and probation or parole violators from obtaining SNAP benefits under section 6(k) of the Act. The proposed § 273.11(s) would extend SNAP ineligibility to those individuals with convictions for Federal or State offenses as described in section 4008 who are also out of compliance with the terms of their sentence. The intent of the proposed subsection(s) is not to exclude individuals who have been convicted of such a crime but who have complied with the terms of their sentence, probation or parole.

This regulatory provision would apply to adults and to minors convicted as adults. It would not apply to minors who are under 18 unless they are convicted as adults. The Department understands that under Federal Law, juvenile offenses are penalized through “juvenile delinquencies” or “juvenile adjudications” rather than convictions and sentences, and that States have similar distinctions. Therefore, the Department believes that Congress did not intend to include such individuals in the prohibition.

Relatedly, section 273.2(j)(2)(vii) lists households that must never be considered categorically eligible for SNAP benefits. Section 273.2(j)(2)(vii)(D) already prohibits a household from being categorically eligible if any member of the household is ineligible under § 273.11(m) by virtue of a conviction for a drug-related felony. In this rule, the Department proposes to revise section 273.2(j)(2)(vii)(D) to add convicted felons under section 273.11(s) and fleeing felons and probation or parole violators under section 273.11(n) to this subsection. This prohibition from categorical eligibility would apply to households containing individuals disqualified as a result of having certain convictions and not being in compliance with the sentence as provided in proposed section 273.11(s). It also would apply to households containing a fleeing felon or individual violating parole or probation, a prohibition which was inadvertently not

captured in the Department's September 10, 2015 rule, *Clarification of Eligibility of Fleeing Felons* (80 FR 54410).

State agencies are reminded that Privacy Act restrictions and confidentiality provisions found at section 11(e)(8) of the Act remain intact for individuals who would be covered by this proposed rule. A request for information about a SNAP recipient or applicant by law enforcement officials must be made during the proper exercise of an official duty. Information about potential convicted felons covered by section 4008 of the 2014 Farm Bill whether it is alleged that they have been convicted for Federal or State crimes listed in section 4008 and are violating their sentences, or who are fleeing felons or parole or probation violators, must not be released to other persons such as bounty hunters, who are not official law enforcement representatives of a Federal or State entity.

State agencies would be required to establish clear and consistent standards for determining whether an individual is not in compliance with the terms of his or her sentence. Those standards must not be arbitrary or capricious. Standards for determining whether someone is a fleeing felon or probation or parole violator are addressed in the final rule titled *Clarification of Eligibility of Fleeing Felons* (80 FR 54410) published on September 10, 2015.

Section 4008 gives the United States Attorney General the authority to determine what statutory crimes and sentences convictions are substantially similar under State law. The U.S. Department of Justice (DOJ) may establish guidelines for determining which State offenses are substantially similar to the Federal offenses listed in section 4008. More information on the matter is forthcoming, through either regulations or guidance from DOJ.

#### **Attestation**

Section 4008 also requires every person applying for SNAP benefits to attest whether the individual, or any member of the household of the individual, has been convicted for a crime covered by this section. The Department proposes to add the attestation requirement to the regulations at new paragraph section 273.2(o). In addition to the language contained in section 4008 regarding attestation, the Department also proposes to incorporate other specific standards and procedures for the attestation into the regulation. Although State agencies do have some discretion with the attestation requirement, basic standards will help ensure consistency

across State agencies. Those standards are proposed as follows below.

Specifically, the individual applying for benefits would be responsible for attesting whether he or she, or any other household member, has been convicted as an adult of the crimes in section 4008. As part of that attestation, the Department would also require that the household attest as to whether any convicted member is complying with the terms of the sentence. The Department does not believe it is feasible for each individual member of the household to attest. If the SNAP household uses an authorized representative, the authorized representative would complete the attestation. State agencies would be required to update their application process to include the attestation requirement. It may be done in writing, verbally, or both, provided that the attestation is legally binding in the State. States could accomplish this by, for example, adding the attestation to the application for benefits, or by updating their interview process to include the attestation. The Department expects that the attestation would take place during the interview process, and anticipates that most attestations will be in writing. If an applicant is not present in person to hand in an application along with the attestation, the Department prefers that the State agency accept a written as opposed to verbal attestation and not require individuals to come into the office solely for the purpose of completing an attestation. To do otherwise could place an undue burden on the household and have a negative effect on program access. The attestation would be documented in the case file. Whatever procedure a State chooses to implement would need to be reasonable and consistent for all households applying for SNAP benefits, and would need to be part of certification and recertification procedures. The Department believes this discretion provides State agencies the flexibility to determine a standard that best suits their needs and administrative structures, while still supporting uniformity and legal enforceability.

The State agency would be required to verify any attestation that no member of the household has been convicted as an adult of the crimes in this section if its veracity is questionable. The State agency would have the discretion to determine what makes an attestation questionable. In the event an attestation is questionable, the State agency would have to evaluate each case separately, using a reasonable standard established by the State to ensure consistency for all

cases, and document the case file accordingly. At a minimum, the Department expects that State agencies would verify each element of the attestation—that the individual has been convicted of a crime listed in section 4008, and that the individual is not in compliance with the terms of their sentence.

The Department is also proposing that the State agency must verify when the household attests that there is a disqualified felon not in compliance with the sentence to avoid any unnecessary confusion on the part of the household. That is, if a SNAP applicant attests to being a convicted felon not in compliance with the sentence, or attests that another member of the household is a convicted felon not in compliance with the sentence, the State agency would be responsible for verifying the disqualified felon status of the individual. The Department believes the State agency is in a better position than applicants to understand the specific requirements of the attestation and to obtain appropriate verification. Also, an applicant who attests for other members of the household may not have all of the information or a clear understanding of the situation involving that household member, and the State agency would be able to more reliably confirm felon status and whether the individual is complying with the sentence. The State agency would need to establish a reasonable standard to ensure consistency for all cases, and document the case file accordingly, in order to properly conduct this verification. The Department proposes to codify this requirement at section 273.2(f)(5)(i). The Department reminds State agencies that under section 273.2(f)(3) they have the option to implement mandatory verification where appropriate.

#### ***Section 4009: Lottery and Gambling Winners***

Section 4009 of the Farm Bill directs the Department to institute new regulations regarding the receipt of substantial lottery or gambling winnings among SNAP households. It provides that any household that receives substantial lottery or gambling winnings, as determined by the Secretary, must lose eligibility for benefits immediately upon receipt of winnings. It also requires that those households remain ineligible until they again meet the allowable financial resources and income eligibility requirements of the Act. Section 4009 also requires the Secretary to set standards for each State agency to establish agreements, to the maximum extent practicable, with entities

responsible for the regulation or sponsorship of gaming in the State to identify SNAP individuals with substantial winnings.

#### **Disqualification for Substantial Lottery or Gambling Winnings**

Section 4009 requires that households that have received substantial lottery or gambling winnings shall immediately lose eligibility for SNAP benefits, and gives the Secretary authority to define what amount constitutes substantial winnings. In order to implement section 4009, the Department is proposing a new 7 CFR 273.11(r) to codify the disqualification and definition. Substantial lottery or gambling winnings would be defined as a cash prize won in a single game equal to or greater than \$25,000 before taxes or other amounts are withheld. If multiple individuals shared in the purchase of a ticket, hand, or similar bet, then only the portion of the winnings allocated to the member of the SNAP household would be counted toward the eligibility determination. Non-cash prizes are not included in the definition of substantial winnings.

FNS based its definition of substantial winnings on the amount that would cause a significant lifestyle change for a majority of SNAP households. Small amounts of winnings that would be quickly spent by a household for common expenses like paying down debt, making car repairs, saving for an apartment security deposit, or buying long put-off necessities would not meet the definition of substantial. One way to understand substantial winnings that would result in a significant lifestyle change is an amount that would push a household's income above the SNAP gross income limits for a household of three considered annually for a given fiscal year. Gross income limits for a household of three would be used to set the threshold because the average SNAP household size is between two and three.

In fiscal year 2017, the gross monthly income limit for a household of three is \$2,184. This value multiplied by 12 and rounded to the nearest five thousand equals \$25,000. FNS proposes rounding to the nearest \$5000 to allow for ease in administration and communication with gaming entities and SNAP recipients. Every new fiscal year the threshold would be re-calculated using the new value for the gross monthly income limit for a household of three for that fiscal year rounded to the nearest five thousand dollars. FNS would provide the adjusted threshold amount to State agencies along with the SNAP income and resource limits each year. FNS asks

for comments on this proposed definition of substantial winnings.

All households certified to receive SNAP benefits would be subject to this rule. If a member of a SNAP household wins a substantial amount, the entire SNAP household would lose eligibility for the program. Section 4009 requires that households disqualified by this provision shall remain ineligible for SNAP until that household meets the allowable financial resources and income eligibility requirements under subsections (c), (d), (e), (f), (g), (i), (k), (l), (m) and (n) of section 5 of the Act.

#### **Cooperative Agreements**

The Department proposes to add a new section 272.17 to codify the requirement in section 4009 by setting standards for States' establishment of cooperative agreements with entities responsible for the regulation or sponsorship of gaming in the State, in order to identify individuals with substantial winnings, as defined by this rule, within their State. Gaming entities would be those entities responsible for the regulation or sponsorship of gaming in the State. Examples include, but are not limited to, State lotteries, casinos, race tracks that permit wagering, off-track betting facilities, State gambling oversight boards, and other entities that regulate gambling in public or private organizations in the State or on Tribal lands. Gaming entities that do not pay-out cash winnings equal to or greater than the substantial amount defined above would not be subject to this rule.

State agencies will not be required to establish cooperative agreements with gaming entities within their State if all gaming activities are deemed illegal by State and Federal law. However, if a State agency becomes aware of a member of a SNAP household receiving benefits within their State who wins substantial lottery or gambling winnings, as defined by this rule, either within or outside their State, then the State agency would be required to enforce this rule for that individual and the individual's household even if gambling is illegal in the State where the household is receiving benefits.

Gaming entities that enter into cooperative agreements with State agencies to identify SNAP recipients with substantial winnings would be responsible for meeting the terms of these agreements. The cooperative agreements would solely allow for the gaming entities to transmit information to State agencies; State agencies would be prohibited from sharing any information about SNAP households with gaming entities. Gaming entities would not be authorized to use data

matches to receive or view information on SNAP households. In addition, section 4009 does not require gaming entities to withhold winnings of a substantial amount, as defined by this rule, from a winner. The Department anticipates gaming entities would only share information with the State agency on individuals who win an amount equal to or greater than a substantial amount, as defined by this rule. The State agency would only use the information obtained through the data matches with gaming entities to identify individuals with substantial winnings, as defined by this rule.

The Department anticipates that a cooperative agreement established between the State agency and a gaming entity would specify that the gaming entity, either directly or through a third party, will share information about individuals with substantial winnings, as defined by this rule, over an agreed upon time period with the State agency. As contained in proposed section 273.17(b), at a minimum these agreements would need to specify the type of information to be shared by the gaming entity, the procedures used to share information, the frequency of sharing information, and the job titles of individuals who would have access to the data. Cooperative agreements should also include safeguards limiting release or disclosure of personally identifiable information to parties outside those included in the agreement.

Because the types of lottery and gambling activities allowed within a State, and the administration and oversight of these games, vary from State to State, State agencies would have discretion in determining which types of games and gaming entities will be subject to this rule; however, the Department expects State agencies to include as many gaming entities in their implementation of this rule as is practicable. State agencies should make a good faith effort to enter into cooperative agreements with entities within their State responsible for the regulation or sponsorship of gaming. If a State agency and a gaming entity cannot come to an agreement after the State agency makes a good faith effort, then the State agency need not continue to pursue an agreement with that gaming entity at that time.

State agencies have some discretion to determine how often matches are made to identify winners. FNS expects State agencies to perform matches as frequently as is feasibly possible to identify SNAP recipients with substantial winnings, as defined in this rule. However, at a minimum, matches would be conducted when a recipient

files a periodic report and at recertification. The Department proposes to codify this requirement at new section 272.17(d). States would be required to include in their State Plan of Operations the names of gaming entities with whom they have cooperative agreements, the frequency of data matches with these entities, and if the State considers information from the data matches verified upon receipt. The Department proposes to codify this requirement at new section 272.17(e).

### Self-Reporting

SNAP recipients would be required to self-report substantial winnings, as defined in this rule, to the State agency administering the household's benefits within 10 days of collecting the winnings regardless of the State where the winnings were won, in accordance with the 10 day reporting timeframes outlined in section 273.12(a)(2). SNAP recipients would be required to report substantial winnings, as defined in this rule, from State lotteries and other gaming entities both in the State where they receive benefits and in other States, as well as any substantial winnings from multi-state lotteries. If a State agency learns through self-reporting that a SNAP recipient received substantial winnings, as defined by this rule, the State agency must act immediately by closing the entire household's case. Before closing a household's case, the State agency may verify information about self-reported substantial winnings, as defined in this rule, if the information is questionable. The Department proposes to codify the reporting requirements surrounding this disqualification at new section 273.12(a)(1)(viii) and section 273.12(a)(5)(vi)(B)(5). The Department also proposes to add to section 273.12(a)(5)(iii)(E) the requirement that households report when a member of the household wins substantial lottery or gambling winnings in accordance with new section 273.11(r).

State agencies must inform SNAP households upon certification that, should any member of the household win substantial lottery or gambling winnings, as defined in this rule, they must contact the State agency within 10 days to reassess their eligibility for SNAP. Section 4009 only applies to eligibility determinations of enrolled SNAP households, not households who are applying to receive benefits. As a result it would not be necessary to include a question on the initial SNAP application asking applicants if anyone in the household has ever won substantial winnings. However, it is at the discretion of the State agency to

determine whether to include a question on the SNAP periodic report or recertification forms asking if anyone in the recipient household has won substantial lottery or gambling winnings, as defined by this rule, since the time of the household's most recent certification. In making this decision States should consider the potential increase in response burden for SNAP households relative to the number of households likely to report substantial winnings.

The Department notes that its rule, Supplemental Nutrition Assistance Program (SNAP): Eligibility, Certification, and Employment and Training Provisions of the Food, Conservation and Energy Act of 2008, is currently in the process to be published as a final rule. That rule also references sections of section 273.12. Assuming that final rule is published by the time this rule is in the final rule process, the Department may be required to re-designate paragraph citations accordingly.

### Verification of Data Matches

Data received through cooperative agreements with gaming entities may come from a wide variety of gaming entities (e.g. public or private entities; local, statewide or national entities) with varying degrees of reliability. Although verification of information about substantial winnings, as defined in this rule, is required, the Department will leave to State discretion whether information received through data matches will be considered verified upon receipt, and if not, how the State will verify that information. States should establish and apply consistent procedures for verifying substantial lottery and gambling winnings in accordance with sections 273.12(a)(5)(vi)(B) and § 273.2(f). The Department proposes to codify the requirement that the State agency verify information that a member of the household has won substantial lottery or gambling winnings in accordance with new sections 272.17(c) and 273.12(a)(5)(vi)(B).

If a State agency identifies a SNAP recipient who has received substantial winnings, as defined by this rule, before the recipient reports the collection of winnings, the State would need to verify that information, if it is not considered verified upon receipt. Procedures established in new section 272.17(c) require that if a household is found to have received, during their certification period, substantial winnings, as defined in this rule, prior to any action to terminate the household's benefits, the State agency shall provide the

household notice, in accordance with the provisions on notices of adverse action appearing in section 273.13. For households that are found to have received substantial winnings at the time of their case's recertification, the State agency shall provide these households with a notice of denial, in accordance with section 273.10(g)(2). The State agency shall also establish claims as appropriate.

The Department recognizes that some States will consider information received through data matches verified upon receipt, whereas other States will need to pursue verification regardless of how the State has chosen to act on changes. Upon receipt of a positive data match, all States would need to take immediate action to either to pursue verification, as needed, and close the case, if appropriate, regardless of whether the State has chosen to act on all changes or to act only on certain changes.

### Eligibility for Previously Disqualified SNAP Households

Section 4009 does not require SNAP applicants to be screened for eligibility based on past lottery or gambling winnings. The only exception would be applicant households containing a member who was previously disqualified for substantial winnings, as defined by this rule, since section 4009 requires that such households remain ineligible until they meet the income and eligibility requirements in the Act detailed in sections 273.8 and 273.9.. The eligibility determinations for these households at the time of re-application would need to be based on the requirements in sections 273.8 and 273.9. To identify members of applicant households previously disqualified for substantial winnings, as defined in this rule, SNAP eligibility workers could conduct a search of past case records or question the household during the interview. The Department feels that including a question on the SNAP application about past disqualification for substantial winnings, as defined in this rule, will unnecessarily burden the vast majority of SNAP applicants not subject to this rule. Other methods, such as those noted above, may be more effective in obtaining the necessary information without adding burden to all SNAP applicants.

### Section 4015: Mandating Certain Verification Systems

Section 4015 of the 2014 Farm Bill amends section 11(p) of the Act by providing that a State agency must use an immigration status verification system established under section 1137



of the Social Security Act (SSA) and an income and eligibility verification system. Before the 2014 Farm Bill, use of these verification systems was optional. In particular, section 11(p) of the Act previously provided that State agencies were not required to use an income and eligibility or immigration status verification system established under section 1137 of the SSA.

#### Immigration Status Verification System

The Department proposes to amend the regulations at 7 CFR 273.2(f)(1)(ii) to largely reflect the statutory language in section 4015 by requiring States to use an immigration status verification system established under section 1137 of the SSA (42 U.S.C. 1320b–7) when verifying immigration status of SNAP applicants.

Section 1137(d)(3) of the SSA (42 U.S.C. 1320b–7(d)(3)) requires verification of immigration status “through an automated or other system” designated by the Immigration and Naturalization Service (INS) for use by the States. INS ceased to exist as a result of the Homeland Security Act of 2002, P.L. 107–296, on March 1, 2003, and its functions were transferred from the Department of Justice to the newly-created Department of Homeland Security (DHS). Three agencies were established within DHS—including the U.S. Citizenship and Immigration Services (USCIS).

USCIS administers the Systematic Alien Verification for Entitlements (SAVE) Program to help Federal, State and local agencies authorized to use the service to verify the immigration status of public benefits applicants. SAVE is an inter-governmental web-based service that provides timely immigration status information, thereby allowing those user agencies to ensure that they are issuing public benefits only to individuals entitled to receive them.

USCIS has confirmed with the Department that there are only two ways a SNAP State agency can verify immigration status with USCIS. Both ways are through the SAVE system—either through an electronic search or a manual G–845 paper form search (there is also a G–845 Supplement form if the State agency would like to request more detailed information on immigration status, citizenship and sponsorship). USCIS offers no other options for a SNAP State agency to verify immigration status, and either method would satisfy the immigration verification requirements of section 4015. Typically, the manual search is available after an initial electronic search if additional verification is

needed. Whether using the electronic search or manual G–845 forms search, the State agency must sign a memorandum of agreement with USCIS to conduct the verification.

Current SNAP regulations at section 273.2(f)(1)(ii) require that States verify the immigration status of non-citizens who apply for SNAP, but do not mandate the use of SAVE to do so. As Section 4015 now mandates that all States use an immigration status verification system established under Section 1137 of the SSA, in effect, it now requires the use of SAVE to verify immigration status. Therefore, the Department is proposing to revise references to SAVE throughout §§ 272 and 273 to reflect this new mandatory requirement.

Since SAVE is administered by another Federal agency that could change the name or other details of the service, the Department proposes to revise section 273.2(f)(1)(ii) to reflect the broader language of section 4015 in the event USCIS makes any changes to that system. Provisions regarding the optional use of SAVE to verify the validity of documents are available at sections 272.11(a) and 273.2(f)(10) and are proposed to be updated only to reflect the new mandatory requirement that the system be one established under section 1137 of the SSA. Other provisions contained at section 272.11 involve necessary logistical steps for the use of SAVE, such as establishing agreements with INS (now USCIS), and administrative requirements such as use of the data, and are unaffected by this proposed rule. Similarly, other requirements at section 273.2(f)(10), regarding procedures in verifying the validity of documents provided by alien applicants, are unaffected by this proposed rule.

All 53 State agencies (including the District of Columbia, Guam and the Virgin Islands) have indicated to FNS that they currently use the SAVE database, so the Department does not believe the requirement will have a big impact on most States. Because SAVE is the system used by USCIS for immigration status verification, State SNAP agencies’ use of SAVE would satisfy the immigration verification requirement in section 4015. Ensuring that all States use an immigration status verification system established under section 1137 of the SSA helps ensure State agencies follow consistent standards in verifying immigration status. The Department may require the State agency to provide written confirmation from USCIS that the system used by the State is an immigration status verification system

established under section 1137 of the SSA.

Although section 4015 does not specifically require State agencies to use the electronic SAVE search, USCIS has indicated its preference for the electronic search over the paper-based G–845 SAVE search. This is because the electronic SAVE search is faster and more efficient. The Department also understands that an electronic SAVE search is more cost effective per search than the paper-based process. For these reasons, the Department encourages State agencies to use an electronic before a manual SAVE search.

As a related matter, the Department is taking this opportunity to propose an update of the terminology used in the current regulations by the Federal agency that handles immigration status issues. Current SNAP regulations refer to the Department of Justice (DOJ) Immigration and Naturalization Service (INS) as the entity responsible for fulfilling Federal immigration functions. As previously noted, INS no longer exists and USCIS now oversees lawful immigration to the United States and naturalization of new American citizens, including the management of SAVE. The Department proposes to update references from INS to USCIS throughout sections 271, 272 and 273 accordingly.

To further clarify existing requirements, this proposed rule would more explicitly include in the regulatory text the requirement that State agencies must verify the immigration status of all non-citizens applying for SNAP benefits. Although an applicant must provide documentation of his or her status when applying for benefits, such as a green card, doing so does not negate the State agency’s responsibility to verify that status with DHS. This is essential because SNAP eligibility workers do not have the expertise to confirm the validity of those documents. Such confirmation must come from the Federal agency charged with overseeing immigration status issues—DHS’ USCIS. This clarification is proposed at sections 273.2(f)(1)(ii) and (f)(10).

Finally, the Department reminds commenters that section 5(i) of the Act and section 273.4(c)(4) of the regulations require that the income and resources of sponsors be deemed to sponsored non-citizens when they apply for SNAP (with exceptions for particular vulnerable populations as listed at section 273.4(c)(3)). Sponsored non-citizens applying for SNAP are required to provide information and documentation about their sponsor’s income and resources. The Department understands that SAVE search results



provide information on whether or not a non-citizen has a sponsor. The Department proposes to add section 273.2(f)(10)(vi) to allow State agencies to use SAVE to confirm whether an affidavit of support has been executed in accordance with the deeming requirements at section 273.4(c)(2). Since the electronic or manual SAVE searches provide information on whether an individual has an executed affidavit of support (USCIS Form I-864 or I-864A), and sponsor deeming is required, State agencies may use that information as a means to check whether an applicant has a sponsor.

#### **Income and Eligibility Verification System (IEVS)**

Section 4015 also requires States to use an income and eligibility verification system established under Section 1137 of the SSA in accordance with standards set by the Secretary. Standards for IEVS already exist at section 272.8(a)(1), section 273.2(b)(2) and section 273.2(f)(9). Except for updating these provisions to remove the optional use of IEVS, the Department proposes to maintain current requirements without change. States would need to maintain a system that ensures compliance with the applicant verification standards in section 273.2(f). Those standards contain procedures on, for example, items requiring mandatory verification and verification when questionable, describes sources of verification, among other standards.

#### **Procedural Matters**

##### *Executive Order 12866 and 13563*

Executive Orders 12866 and 13563 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.

This proposed rule has been determined to be not significant and was not reviewed by the Office of Management and Budget (OMB) in conformance with Executive Order 12866.

##### *Regulatory Impact Analysis*

This rule has been designated as not significant by the Office of Management

and Budget, therefore, no Regulatory Impact Analysis is required.

##### *Regulatory Flexibility Act*

The Regulatory Flexibility Act (5 U.S.C. 601–612) requires Agencies to analyze the impact of rulemaking on small entities and consider alternatives that would minimize any significant impacts on a substantial number of small entities. Pursuant to that review, it has been certified that this rule would not have a significant impact on a substantial number of small entities. While there may be some burden/impact on State agencies and small entities involved in the gaming industries, the impact is not significant as the burden would be on State agencies to ensure appropriate cooperative agreements are entered into.

##### *Unfunded Mandates Reform Act*

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local and Tribal governments and the private sector. Under section 202 of the UMRA, the Department generally must prepare a written statement, including a cost benefit analysis, for proposed and final rules with “Federal mandates” that may result in expenditures by State, local or Tribal governments, in the aggregate, or the private sector, of \$146 million or more (when adjusted for inflation; GDP deflator source: Table 1.1.9 at <http://www.bea.gov/iTable>) in any one year. When such a statement is needed for a rule, Section 205 of the UMRA generally requires the Department to identify and consider a reasonable number of regulatory alternatives and adopt the most cost effective or least burdensome alternative that achieves the objectives of the rule. This proposed rule does not contain Federal mandates (under the regulatory provisions of Title II of the UMRA) for State, local and Tribal governments or the private sector of \$146 million or more in any one year. Thus, the rule is not subject to the requirements of sections 202 and 205 of the UMRA.

##### *Executive Order 12372*

SNAP is listed in the Catalog of Federal Domestic Assistance Programs under 10.551. For the reasons set forth in the final rule in 7 CFR part 3015, subpart V, and related Notice (48 FR 29115, June 24, 1983), this program is included in the scope of Executive Order 12372 which requires intergovernmental consultation with State and local officials.

##### *Federalism Summary Impact Statement*

Executive Order 13132 requires Federal agencies to consider the impact of their regulatory actions on State and local governments. Where such actions have federalism implications, agencies are directed to provide a statement for inclusion in the preamble to the regulations describing the agency’s considerations in terms of the three categories called for under Section (6)(b)(2)(B) of Executive Order 13121. The Department has considered the impact of this rule on State and local governments and has determined that this rule does not have federalism implications. Therefore, under section 6(b) of the Executive Order, a federalism summary is not required.

##### *Executive Order 12988, Civil Justice Reform*

This proposed rule has been reviewed under Executive Order 12988, Civil Justice Reform. This rule is intended to have preemptive effect with respect to any State or local laws, regulations or policies which conflict with its provisions or which would otherwise impede its full and timely implementation. This rule is not intended to have retroactive effect unless so specified in the Effective Dates section of the final rule. Prior to any judicial challenge to the provisions of the final rule, all applicable administrative procedures must be exhausted.

##### *Civil Rights Impact Analysis*

FNS has reviewed this proposed rule in accordance with USDA Regulation 4300–4, “Civil Rights Impact Analysis,” to identify any major civil rights impacts the rule might have on program participants on the basis of age, race, color, national origin, sex or disability. After a careful review of the rule’s intent and provisions, FNS has determined that the changes to SNAP regulations in this proposed rule are driven by legislation and therefore required. The Department specifically prohibits the State and local government agencies that administer the program from engaging in discriminatory actions. Discrimination in any aspect of program administration is prohibited by SNAP regulations, the Food and Nutrition Act of 2008, the Age Discrimination Act of 1975, Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990 and Title VI of the Civil Rights Act of 1964. Where State agencies have options, and they choose to implement a certain provision, they must implement it in such a way that it complies with these

requirements and the regulations at 7 CFR 272.6.

**Student Provision:** This provision implements the provision requiring that the exception provided to participants of a SNAP E&T program is limited to those who are enrolled in a course or program of study that is part of a program of career and technical education (as defined in Section 3 of the Carl D. Perkins Career and Technical Education Act of 2006) that may be completed in not more than 4 years at an institution of higher education (as defined in section 102 of the Higher Education Act of 1965), or enrolled in courses for remedial education, basic adult education, literacy, or English as a second language.

**Impact on Households:** This mandatory change will be applied uniformly across households. Classification in an E&T program is not based on status in a protected class.

**Impact on State Agencies:** Thirty-four States offer education components through their E&T programs in FY 2015. These States will need to evaluate whether those components meet the student eligibility criteria proposed in this rule. Impacts are expected to be minimal.

**Felon Disqualification:** This provision disqualifies individuals who are convicted of certain crimes who are also not in compliance with the terms of their sentence or fleeing felons from receiving SNAP benefits, and requires individuals convicted of those crimes to attest to same.

**Impact on Households:** The household will be responsible for honestly representing whether any household member has been convicted of the stated crimes. This change is also mandatory and will impact all houses uniformly regardless of status in a protected class. The Department does not have any information that individuals in a protected class are more likely to violate the terms of their sentence or probation or parole. The Department therefore does not anticipate a greater impact on any protected class.

**Impact on State agencies:** State agencies will be required to update their application processes to obtain the attestation and document same in the case file. State agencies will also be responsible for verifying that those individuals are disqualified felons.

**Lottery and Gambling Winnings Disqualification:** This provision disqualifies individuals who receive substantial lottery or gambling winnings from receiving SNAP benefits.

**Impact on Households:** This provision is intended to make households that

receive a substantial amount of gambling or lottery winnings ineligible for SNAP. All SNAP households will be subject to this provision equally, whereby if a SNAP household receives substantial winnings they will be made ineligible for benefits until they again meet normal program income and resource requirements.

**Impact on State agencies:** State agencies are required to implement a data matching system with entities within the state that are involved in lotteries and gaming. As such, this rule will have an impact on those entities involved in cooperative agreements with the State agencies.

**Income and Eligibility and Immigration Verification Systems:** This provision requires States to have an income and eligibility and immigration verification system.

**Impact on Households:** This provision will not impact households directly. The Department anticipates that the only potential impact on households will be a benefit in that non-citizens applying for SNAP benefits will have their immigration status verified through more consistent methods across States.

**Impact on State agencies:** States were required to implement the immigration verification system immediately upon implementation of the 2014 Farm Bill. The vast majority of States already had a system in place that adheres to these requirements. Many States already have an income and eligibility verification in place already as well. For those reasons, the Department does not anticipate that this provision will result in a significant impact on State agencies.

**Training and Outreach:** SNAP is administered by State agencies which communicate program information and program rules based on Federal law and regulations to those within their jurisdiction, including individuals from protected classes that may be affected by program changes. After the passage of the 2014 Farm Bill, the Department worked with State agencies to ensure their understanding of the changes required by these provisions. The Department released an implementation memorandum on these provisions on March 21, 2014. The Department also shared guidance through a Question & Answer memorandum on June 10, 2014, to address the State agencies' questions and concerns and ensure clarity on requirements for implementing the requirement.

The Department participated in a May 21, 2014, Tribal Consultation on the lottery provision, during which the Department received no significant feedback or questions.

The Department maintains a public Web site that provides basic information on each program, including SNAP.

Interested persons, including potential applicants, applicants, and participants can find information about these changes as well as State agency contact information, downloadable applications, and links to State agency Web sites and online applications.

**Finding and Conclusion:** After careful review of the rule's intent and provisions, and the characteristics of SNAP households and individual participants, the Department has determined that this proposed rule will not have a disparate impact on any group or class of persons.

#### *Executive Order 13175*

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. The Department participated in a Tribal Consultation on the Lottery provisions of this rule. Tribal organizations with gaming facilities may be approached by the State(s) in which they are located to participate in the cooperative agreements to identify individuals with significant lottery or gambling winnings. The Department also notes that the regulatory changes proposed in this rule regarding students enrolled more than half-time and certain convicted felons will not have a greater substantial direct effect on tribal organizations than all other applicants applying for SNAP. We are unaware of any current Tribal laws that could be in conflict with the final rule.

#### *Paperwork Reduction Act*

The Paperwork Reduction Act of 1995 (44 U.S.C. Chap. 35; 5 CFR 1320) requires the Office of Management and Budget (OMB) approve all collections of information by a Federal agency before they can be implemented. Respondents are not required to respond to any collection of information unless it displays a current valid OMB control number. This rule proposes information collections that are subject to review and approval by the Office of Management and Budget; therefore, FNS is submitting for public comment the changes in the information collection

burden that would result from adoption of the proposals in the rule. In accordance with the Paperwork Reduction Act of 1995, this notice invites the general public and other public agencies to comment on this proposed information collection.

This is a new collection for proposed rule, Lottery and Gambling Winners in the Supplemental Nutrition Assistance Program, which would require States to make ineligible SNAP participants with substantial lottery or gambling winnings and establish cooperative agreements with gaming entities within their States to identify SNAP participants with substantial winnings. The provisions regarding students, felon disqualification and State eligibility verification systems in this proposed rule do not contain information collection requirements subject to approval by OMB under the Paperwork Reduction Act of 1994.

State agencies will be required to make minimal, one-time changes to their application process in order to comply with the provisions of the felon disqualification attestation requirement. Since State agencies are already required to verify the immigration status of non-citizens applying for the program, the impact of this provision is negligible. Other minimal burdens imposed on State agencies by this proposed rule are usual and customary within the course of their normal business activities. These changes are contingent upon OMB approval under the Paperwork Reduction Act of 1995. When the information collection requirements have been approved, FNS will publish a separate action in the **Federal Register** announcing OMB's approval.

Comments on this information collection pursuant this proposed rule must be received on or before January 30, 2017.

Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions that were used; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) 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: Mary Rose Conroy, Food and Nutrition Service, U.S. Department of Agriculture, 3101 Park Center Drive, Room 810, Alexandria, VA 22302. Comments may also be submitted via fax to the attention of Mary Rose Conroy at 703-305-2803 or via email to [maryrose.conroy@fns.usda.gov](mailto:maryrose.conroy@fns.usda.gov). 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 approval. All comments will be a matter of public record.

**Title:** Supplemental Nutrition Assistance Program: Student Eligibility, Convicted Felons, Lottery and Gambling, and State Verification Provisions of the Agricultural Act of 2014.

**OMB Number:** 0584-NEW.

**Expiration Date:** [Not Yet Determined.]

**Type of Request:** New collection

**Abstract:** This proposed rule is intended to implement several section of the Agricultural Act of 2014 including section 4009 (Ending Supplemental Nutrition Assistance Program Benefits for Lottery or Gambling Winners). This provision makes households in which a members receives substantial lottery and gambling winnings (as determined by the Secretary) ineligible for SNAP until they meet allowable financial resources and income eligibility requirements. The provision also requires States to establish cooperative agreements, to the maximum extent practicable, with entities responsible for gaming in their State in order to identify individuals with substantial winnings.

This rule does not require any recordkeeping burden. Reporting detail burden information is provided below.

#### **Estimates of the Hour Burden of the Reporting of Information**

##### *First Year Burden Hours*

The affected public for this collection is 53 State SNAP agencies, 53 State public agency gaming entities, and 159 private business gaming entities. It is estimated that each of the 53 State SNAP agencies will establish cooperative agreements once with one State public agency gaming entity within the State and 3 private business gaming entities within the State for a total of 212 annual responses which will take approximately 320 hours per response for a total of 67,840 annual

burden hours. This one time activity includes time for the State SNAP agency to reach out to the State public agency gaming entities and private business gaming entities in the State, negotiate terms for sharing identifying information of winners, establish secure connections for sharing information, and to complete all necessary reviews of agreements by legal counsel and State leadership. Each of the 53 State public agency gaming entities will also incur a burden entering into cooperative agreements with their State SNAP agency, which will take approximately 320 hours per response for a total of 16,960 burden hours. This one time activity includes time for the State public agency gaming entity to negotiate terms for sharing identifying information of winners, establish secure connections for sharing information, and to complete all necessary reviews of agreements by legal counsel and State public agency gaming entity leadership. It is estimated that each of 159 affected private business gaming entities will establish cooperative agreements once with their respective State SNAP agency, which will take approximately 320 hours per response for a total of 50,880 annual burden hours. Our estimate assumes all 53 State SNAP agencies receiving SNAP funding will implement this rule despite large variations in gaming activities from State to State.

It is estimated that each of the 53 State SNAP agencies will create a data matching system once to match information on winners from State public agency gaming entities and private business gaming entities within the State with SNAP participation lists, which will take approximately 160 hours per response for a total of 8,480 annual burden hours. All State SNAP agencies currently make use of other computerized data matching systems (e.g. SAVE for immigration verification), so costs assume States will re-program existing systems.

##### *Ongoing Yearly Costs*

Once the matching system is in place, for every year thereafter, the State public agency and private business gaming entities will have to enter information into the system for every individual who wins over the threshold for winnings. There is no national database of how many people win large amounts of money in State lotteries or through other gaming activities. For this estimate, it is assumed that each of the 53 State public agency gaming entities would have 200 individuals who win over the threshold in a given year for a total of 10,600 annual responses. It will

take approximately 0.08 hours for the State public agency gaming entity to identify the winner and enter the appropriate information into the matching system for a total of 848 annual burden hours per year. In addition, it is estimated that each of the 159 private business gaming entities will identify 100 individuals per year who have won over the threshold for a total of 15,900 annual responses. It will take approximately 0.08 hours for the private business gaming agency to identify the winner and enter the appropriate information into the matching system for a total of 1,272 annual burden hours per year.

Once the matching system is in place, for every year thereafter, the matches between the winner list and SNAP participation list should occur automatically and with negligible cost. For this estimate, it is assumed that each of the 53 State SNAP agencies will positively match with the one State

public agency and three private business gaming entities in their respective States an average of 35 records per year for a total annual response of approximately 1,855 SNAP participants nationally. Each of 53 State SNAP agencies will have to identify among the responses above those that are misidentified as SNAP participants because of a similar name, inaccurate reporting etc. FNS anticipates that each of the 53 State SNAP agencies will receive approximately 5 total annual records with misidentified participants for a total annual response of 265 records. It will take approximately 0.667 hours to identify these types of misidentifications for a total annual burden of 176.76 burden hours. Additionally, each of the 53 State SNAP agencies will have to follow-up with and disqualify SNAP participants discovered through the above matches to have actual substantial lottery or gambling winnings. FNS anticipates

approximately 30 records annually per State SNAP agency will be households with actual substantial winnings and it will take approximately 1 hour of the State SNAP agency's time for this activity for a total of approximately 1590 annual burden hours.

Lottery or gambling winners who lose eligibility for SNAP will need to be re-evaluated according to normal program rules if they again decide to apply for SNAP benefits. In order to identify applicants who were previously disqualified due to substantial winnings, eligibility workers may conduct a routine search of past enrollment files at the time of application. In most cases, eligibility workers are already doing this search to identify other relevant information for the current household application, and as a result the cost is negligible.

There is no recordkeeping burden required for this information collection request.

Reg. Section	Respondent type	Description of activity	Estimated number of respondents	Annual report or record filed	Total annual responses	Number of burden hours per response	Estimated total burden hours	Hourly wage rate* (\$)	Estimate cost to respondents (\$)
7 CFR 272.17 .....	State SNAP Agency Managers.	Establish cooperative agreements with State public agency and private business gaming entities.**	53	4	212	320	67,840	\$45.64	\$3,096,217.60
7 CFR 272.17 .....	State Public Agency Gaming Entity Managers.	Establish cooperative agreements with State SNAP agency.**	53	1	53	320	16,960	45.64	774,054.40
7 CFR 272.17 .....	State SNAP Agency Managers.	Create a data matching system with State public agency and private business gaming entities.**	53	1	53	160	8,480	45.64	387,027.20
272.17 and 273.11(r).	State SNAP Agency Eligibility Worker.	Eligibility worker follow-up—misidentified winners.	53	5	265	0.667	176.76	20.41	3,607.57
7 CFR 272.17 and 7 CFR 273.11(r).	State SNAP Agency Eligibility Worker.	Eligibility worker follow-up—true winners.	53	30	1590	1	1590	20.41	32,451.90
7 CFR 272.17 .....	State Public Agency Gaming Entity Staff Member.	Input data into data matching system for use by State SNAP agency.	53	200	10,600	0.08	848	18.46	15,654.08
State Agency Subtotal Reporting			53	241	12,773	.....	95,894.76	.....	4,309,012.60
7 CFR 272.17 .....	Private Business Gaming Entity Managers.	Establish cooperative agreements with State SNAP agency.**	159	1	159	320	50,880	71.79	3,652,675.20
7 CFR 272.17 .....	Private Business Gaming Entity Staff Member.	Input data into data matching system for use by State SNAP agency.	159	100	15,900	0.08	1272	13.25	16,854

Reg. Section	Respondent type	Description of activity	Estimated number of respondents	Annual report or record filed	Total annual responses	Number of burden hours per response	Estimated total burden hours	Hourly wage rate* (\$)	Estimate cost to respondents (\$)
Business Subtotal Reporting			159	101	16,059	.....	52,152	.....	3,669,529.20
States and Business Reporting Grand Total Burden Estimates			212	.....	28,832	.....	148,046.76	.....	7,978,541.80

\* Based on the Bureau of Labor Statistics May 2014 Occupational and Wage Statistics. The salaries of State SNAP agency managers and public gaming entity managers are considered to be "General and Operations Managers, Local Government (11-1021)." The salaries of private gaming entity managers are considered to be "General and Operations Managers, Management in Companies and Enterprises (11-1021)." The salaries of private gaming entity managers are considered to be "Gaming Managers (11-9071)." The salaries of the eligibility workers are considered to be "Eligibility Interviewers, Government Programs (43-4061)." The salaries of public gaming entity staff member are considered to be "Information and Record Clerks, All Other (43-4199)." The salaries of private gaming entity staff member are considered to be "Gaming Cage Workers (43-3041)." (<http://www.bls.gov/oes/home.htm>).

\*\* These are only first year costs and are not expected to re-occur annually.

## Description of Costs and Assumptions

The estimate of respondent cost is based on the burden estimates and utilizes the Department of Labor, Bureau of Labor Statistic, May 2015 National Occupational and Wage Statistics, Occupational Groups (11-1021), (11-9071), (43-4061), (43-4199), and (43-3041).

The total annual cost to respondents is \$7,978,541.80. This includes \$3,669,529.20 for Business and \$4,309,012.60 for State Agencies. It is estimated that State SNAP agency managers in the General and Operations Managers for Local Government occupation group (11-1021) in the 53 State SNAP agencies will spend a total of 67,840 hours to establish cooperative agreements with State public agency and private business gaming entities at a rate of \$45.64 per hour for a total estimated cost of \$3,096,217.60 for all respondents in the first year.

It is estimated that State public agency gaming entity managers in the General and Operations Managers for Local Government occupation group (11-1021) in the 53 State SNAP agencies will spend a total of 16,960 hours to establish cooperative agreements with State SNAP agencies at a rate of \$45.64 per hour for a total estimated cost of \$774,054.40 for all respondents in the first year.

It is estimated that State SNAP agency managers in the General and Operations Managers for Local Government occupation group (11-1021) in the 53 State SNAP agencies will spend a total of 8480 hours to establish data matching systems with State public agency and private business gaming entities at a rate of \$45.64 per hour for a total estimated cost of \$387,027.20 for all respondents in the first year.

It is estimated that State SNAP agency eligibility workers in the Eligibility, Interviews, Government Programs occupation group (43-4061) in the 53 State SNAP agencies will spend a total of 176.76 hours to review matches for misidentified winners at a rate of \$20.41

per hour for a total estimated cost of \$3,607.57 for all respondents annually.

It is estimated that State SNAP agency eligibility workers in the Eligibility, Interviews, Government Programs occupation group (43-4061) in the 53 State SNAP agencies will spend a total of 1590 hours to follow-up with and disqualify correctly matched winners at a rate of \$20.41 per hour for a total estimated cost of \$32,451.90 for all respondents annually.

It is estimated that State public agency gaming entity staff in the Information and Record Clerks, All Other occupation group (43-4199) in the 53 State public agency gaming entities will spend a total of 848 hours to enter appropriate information into the data matching system with the State SNAP agency at a rate of \$18.46 per hour for a total estimated cost of \$15,654.08 for all respondents annually.

It is estimated that private gaming entity managers in the General and Operations Managers, Management in Companies and Enterprises occupation group (11-1021) in the 159 private business gaming entities will spend a total of 50,880 hours to establish cooperative agreements with State SNAP agencies at a rate of \$71.79 per hour for a total estimated cost of \$3,652,675.20 for all respondents in the first year.

It is estimated that private business gaming entity staff in the Gaming Cage Workers occupation group (43-3041) in the 159 private business gaming entities will spend a total of 1272 hours to enter appropriate information into the data matching system with the State SNAP agency at a rate of \$13.25 per hour for a total estimated cost of \$16,854 for all respondents annually.

## E-Government Act Compliance

The Department is committed to complying with the E-Government Act of 2002, 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

### 7 CFR Part 271

Food stamps, Grant programs—social programs, Reporting and recordkeeping requirements.

### 7 CFR Part 272

Alaska, Civil rights, Supplemental Nutrition Assistance Program, Grant programs—social programs, Penalties, Reporting and recordkeeping requirements.

### 7 CFR Part 273

Administrative practice and procedures, Aliens, Claims, Supplemental Nutrition Assistance Program, Fraud, Grant programs—social programs, Penalties, Reporting and recordkeeping requirements, Social Security, Students.

For the reasons set forth in the preamble, 7 CFR parts 271, 272 and 273 are proposed to be amended as follows:

- 1. The authority citation for Parts 271, 272 and 273 continue to read as follows:

Authority: 7 U.S.C. 2011–2036.

## PART 271—GENERAL INFORMATION AND DEFINITIONS

- 2. In § 271.2:

- a. In the definition for Alien Status Verification Index (ASVI), remove the words "Immigration and Naturalization Service" and add in its place the words "United States Citizenship and Immigration Services (USCIS)".

- b. Remove the definition for "Immigration and Naturalization Service (INS)."

- c. Add a definition for "United States Citizenship and Immigration Services (USCIS)".

The addition to read as follows:

### § 271.2 Definitions.

\* \* \* \* \*

*United States Citizenship and Immigration Services (USCIS)* means the U.S. Citizenship and Immigration

Services, U.S. Department of Homeland Security.”

\* \* \* \* \*

## PART 272—REQUIREMENTS FOR PARTICIPATING STATE AGENCIES

■ 3. In § 272.11 (b) and (d), remove the word “INS” and add in its place the word “USCIS”.

■ 4. Revise the first sentence of § 272.8(a)(1), to read as follows:

### § 272.8 State income and eligibility verification system.

(a) \* \* \*

(1) State agencies shall maintain and use an income and eligibility verification system (IEVS), as specified in this section. \* \* \*

\* \* \* \* \*

■ 5. Revise § 272.11(a) to read as follows:

### § 272.11 Systematic Alien Verification for Entitlements (SAVE) Program.

(a) General. A State agency shall use an immigration status verification system established under Section 1137 of the Social Security Act (42 U.S.C. 1320b–7) to verify the eligible status of all aliens applying for SNAP benefits. USCIS maintains the Systematic Alien Verification for Entitlements (SAVE) Program to conduct such verification.

\* \* \* \* \*

■ 6. Add § 272.17, to read as follows:

### § 272.17 Data matching for substantial lottery or gambling winnings.

(a) General. Each State agency, to the maximum extent practicable, shall establish cooperative agreements with gaming entities within their State to identify members of certified households who have won substantial lottery or gambling winnings as defined in § 273.11(r).

(b) Cooperative Agreements. State agencies, to the maximum extent practicable, shall enter into cooperative agreements with the gaming entities responsible for the regulation or sponsorship of gaming in the State. Cooperative agreements should specify the type of information to be shared by the gaming entity, the procedures used to share information, the frequency of sharing information, and the job titles of individuals who will have access to the data. Cooperative agreements shall also include safeguards limiting release or disclosure of personally identifiable information of SNAP recipients who are the subject of data matches.

(c) Use of match data. States shall provide a system for:

(1) Comparing information obtained from gaming entities about individuals with substantial winnings with

databases of currently certified households within the State;

(2) The reporting of instances where there is a match;

(3) If match information is not considered verified upon receipt, the verification of matches to determine their accuracy in accordance with § 273.2(f);

(4) If during a household’s certification period, the household is found to have received substantial winnings, as defined in § 273.11(r), prior to any action to terminate the household’s benefits, the State agency shall provide the household notice in accordance with the provisions on notices of adverse action appearing in § 273.13. For households that are found to have received substantial winnings at the time of the household’s recertification, the State agency shall notify such households, in accordance with the provisions on notices of denial appearing in § 273.10(g)(2); and

(5) The establishment and collection of claims as appropriate.

(d) Frequency of data matches. The State agency shall perform data matches as frequently as is feasibly possible to identify SNAP recipients with substantial winnings, as defined in § 273.11(r); however, at a minimum the State agency shall conduct data matches when a household files a periodic report and at the time of the household’s recertification.

(e) State Plan of Operations. The State agency shall include as an attachment to the annual State Plan of Operations, as required in accordance with § 272.2, the names of gaming entities with which the State agency has entered into cooperative agreements, the frequency of data matches with such entities, and if information is considered verified upon receipt.

## PART 273—CERTIFICATION OF ELIGIBLE HOUSEHOLDS

■ 7. In Part 273, remove the word “INS” wherever it appears and add in its place “USCIS”.

■ 8. In § 273.2:

■ a. Revise the first sentence of paragraph (b)(2);

■ b. Revise the first sentence of paragraph (f)(1)(ii)(A) and add new second sentence;

■ c. Amend paragraph (f)(5)(i) by adding a sentence at the end of paragraph;

■ d. Amend paragraph (f)(9) by revising the paragraph heading and paragraphs (i) and (ii);

■ e. Revise the paragraph heading and introductory text of (f)(10);

■ f. Add paragraph (f)(10)(vi);

■ g. Revise § 273.2(j)(2)(vii)(D);

■ h. Add new paragraph (o).

The revisions and additions to read as follows:

### § 273.2 Office operations and application processing.

\* \* \* \* \*

(b) \* \* \*

(2) \* \* \* In using IEVS in accordance with paragraph (f)(9) of this section, it must notify all applicants for food stamp benefits at the time of application and at each recertification through a written statement on or provided with the application form that information available through IEVS will be requested, used and may be verified through collateral contact when discrepancies are found by the State agency, and that such information may affect the household’s eligibility and level of benefits. \* \* \*

\* \* \* \* \*

(f) \* \* \*

(1) \* \* \*

(ii) \* \* \*

(A) The State agency shall verify the eligible status of all aliens applying for SNAP benefits by using an immigration status verification system established under Section 1137 of the Social Security Act (42 U.S.C. 1320b–7). FNS may require State agencies to provide written confirmation from USCIS that the system used by the State is an immigration status verification system established under Section 1137 of the Social Security Act. \* \* \*

\* \* \* \* \*

(5) \* \* \*

(i) \* \* \* However, if a SNAP applicant’s attestation regarding disqualified felon status described in § 273.2(o) is questionable, the State agency shall verify the attestation. The State agency shall verify the felon status when an applicant affirmatively attests that he or she or a member of their household is such a convicted felon and is not in compliance with the sentence. Each element of an affirmative attestation—that the individual has been convicted of a crime listed at § 273.11(s), and that the individual is not in compliance with the terms of their sentence—shall be verified. In conducting verifications of both questionable attestations and affirmative attestations under this paragraph the State agency shall establish reasonable, consistent standards, evaluate each case separately, and document the case file accordingly.

\* \* \* \* \*

(9) *Mandatory use of IEVS.* (i) The State agency must obtain information through IEVS in accordance with procedures specified in § 272.8 of this

chapter and use it to verify the eligibility and benefit levels of applicants and participating households.

(ii) The State agency must access data through the IEVS in accordance with the disclosure safeguards and data exchange agreements required by part 272.

\* \* \* \* \*

(10) Use of SAVE. Households are required to submit documentation for each alien applying for SNAP benefits in order for the State agency to verify their immigration statuses. State agencies shall verify the validity of such documents through an immigration status verification system established under Section 1137 of the Social Security Act (42 U.S.C. 1320b–7) in accordance with § 272.11 of this chapter. USCIS maintains the SAVE system to conduct this verification. When using SAVE to verify immigration status, State agencies shall use the following procedures:

\* \* \* \* \*

(vi) State agencies may use information contained in SAVE search results to confirm whether a non-citizen has a sponsor who has signed a legally binding affidavit of support when evaluating the non-citizen's application for SNAP benefits in accordance with the deeming requirements described in § 273.4(c)(2).

\* \* \* \* \*

(j) \* \* \*  
(2) \* \* \*  
(vii) \* \* \*

(D) Any member of that household is ineligible under § 273.11(m) by virtue of a conviction for a drug-related felony, under § 273.11(n) for being a fleeing felon or a probation or parole violator, or under § 273.11(s) for having a conviction for certain crimes and not being in compliance with the sentence.

\* \* \* \* \*

(o) Each State agency shall require the individual applying for SNAP benefits to attest to whether the individual or any other member of the household has been convicted of a crime as an adult as described in § 273.11(s) and whether any convicted member is complying with the terms of the sentence.

(1) The State agency shall update its application process, including certification and recertification procedures, to include the attestation requirement. It may be done in writing, verbally, or both, provided that the attestation is legally binding in the law of the State. Whatever procedure a State chooses to implement must be reasonable and consistent for all households applying for SNAP benefits.

(2) The State agency shall document this attestation in the case file.

(3) The State agency shall establish standards for determining what makes an attestation under this subsection questionable and for verifying a questionable attestation as described in § 273.2(f)(2).

■ 9. Revise § 273.5(b)(11)(ii), to read as follows:

#### § 273.5 Students.

\* \* \* \* \*

(b) \* \* \*

(11) \* \* \*

(ii) An employment and training program under § 273.7, subject to the condition that the course or program of study, as determined by the State agency:

(A) is part of a program of career and technical education (as defined in section 3 of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302) designed to be completed in not more than 4 years at an institution of higher education (as defined in section 102 of the Higher Education Act of 1965 (20 U.S.C. 2296)); or

(B) is limited to remedial courses, basic adult education, literacy, or English as a second language.

\* \* \* \* \*

■ 10. Revise § 273.7(e)(1)(vi) to read as follows:

#### § 273.7 Work provisions.

\* \* \* \* \*

(e) \* \* \*

(1) \* \* \*

(vi) Educational programs or activities to improve basic skills or otherwise improve employability including educational programs or activities determined by the State agency to expand the job search abilities or employability of those subject to the program.

(A) Allowable educational programs or activities may include, but are not limited to, courses or programs of study that are part of a program of career and technical education (as defined in section 3 of the Carl D. Perkins Act of 2006), high school or equivalent educational programs, remedial education programs to achieve a basic literacy level, and instructional programs in English as a second language.

(B) Only educational programs or activities that enhance the employability of the participants are allowable. A link between the education and job-readiness must be established for a component to be approved.

\* \* \* \* \*

■ 11. In § 273.11:

■ a. Amend paragraph (c)(1) introductory text by revising the sentence after the paragraph heading; and

■ b. Add paragraphs (r) and (s).

The revisions and additions to read as follows:

#### § 273.11 Action on households with special circumstances.

\* \* \* \* \*

(c) \* \* \*

(1) \* \* \* The eligibility and benefit level of any remaining household members of a household containing individuals determined ineligible because of a disqualification for an intentional Program violation, a felony drug conviction, their fleeing felon status, noncompliance with a work requirement of § 273.7, imposition of a sanction while they were participating in a household disqualified because of failure to comply with workfare requirements, or certain convicted felons as provided at § 273.11(s) shall be determined as follows:

\* \* \* \* \*

(r) *Disqualification for Substantial Lottery or Gambling Winnings.* Any household certified to receive benefits shall lose eligibility for benefits immediately upon receipt by any individual in the household of substantial lottery or gambling winnings, as defined in paragraph (r)(2) of this section. The household shall report the receipt of substantial winnings to the State agency in accordance with the reporting requirements contained in § 273.12(a)(5)(iii)(E)(3) and within the time-frame described in § 273.12(a)(2). The State agency shall also take action to disqualify any household identified as including a member with substantial winnings in accordance with § 272.17.

(1) *Regaining Eligibility.* Such households shall remain ineligible until they meet the allowable resources and income eligibility requirements described in §§ 273.8 and 273.9, respectively.

(2) *Substantial Winnings.*— (i) *In General.* Substantial lottery or gambling winnings are defined as a cash prize equal to or greater than \$25,000 won in a single game before taxes or other withholdings. If multiple individuals shared in the purchase of a ticket, hand, or similar bet, then only the portion of the winnings allocated to the member of the SNAP household would be counted in the eligibility determination.

(ii) *Adjustment.* The value of substantial winnings shall be adjusted annually, as needed, by multiplying the gross monthly income limit for a



household of three by 12 months and rounding the value to the nearest \$5000.

(s) Disqualification for certain convicted felons. An individual shall not be eligible for SNAP benefits if:

(1) The individual is convicted as an adult of:

(i) Aggravated sexual abuse under Section 2241 of Title 18, United States Code;

(ii) Murder under Section 1111 of Title 18, United States Code;

(iii) An offense under Chapter 110 of Title 18, United States Code;

(iv) A Federal or State offense involving sexual assault, as defined in 40002(a) of the Violence Against Women Act of 1994 (42 U.S.C. 13925(a)); or

(v) An offense under State law determined by the Attorney General to be substantially similar to an offense described in clause (i), (ii), or (iii) and

(2) The individual is not in compliance with the terms of the sentence of the individual or the restrictions under § 273.11(n).

(3) The disqualification contained in this subsection shall not apply to a conviction if the conviction is for conduct occurring on or before February 7, 2014.

■ 12. In § 273.12:

■ a. Add paragraph (a)(1)(viii)

■ b. Revise paragraph (a)(4)(iv)

■ c. Revise paragraph (a)(5)(iii)(E); and

■ d. Revise paragraph (a)(5)(vi)(B).

The revisions to read as follows:

#### § 273.12 Requirements for Change Reporting Households.

(a) \* \* \*

(1) \* \* \*

(viii) whenever a member of the household wins substantial lottery or gambling winnings in accord with § 273.11(r).

(4) \* \* \*

(iv) *Content of the quarterly report form.* The State agency may include all of the items subject to reporting under paragraph (a)(1) of this section in the quarterly report, except changes reportable under paragraphs (a)(1)(vii) of this section, or may limit the report to specific items while requiring that households report other items through the use of the change report form.

(5) \* \* \*

(iii) \* \* \*

(E) The periodic report form shall be the sole reporting requirement for any information that is required to be reported on the form, except that a household required to report less frequently than quarterly shall report:

(1) when the household monthly gross income exceeds the monthly gross income limit for its household size in

accordance with paragraph (a)(5)(v) of this section;

(2) whenever able-bodied adults subject to the time limit of § 273.24 have their work hours fall below 20 hours per week, averaged monthly, and;

(3) whenever a member of the household wins substantial lottery or gambling winnings in accord with § 273.11(r).

\* \* \* \* \*

(vi) \* \* \*

(B) \* \* \*

(1) The household has voluntarily requested that its case be closed in accordance with § 273.13(b)(12);

(2) The State agency has information about the household's circumstances considered verified upon receipt;

(3) A household member has been identified as a fleeing felon or probation or parole violator in accord with § 273.11(n);

(4) There has been a change in the household's PA grant, or GA grant in project areas where GA and food stamp cases are jointly processed in accord with § 273.2(j)(2); or

(5) The State agency has verified information (including information considered verified upon receipt) that a member of a SNAP household has won substantial lottery or gambling winnings in accordance with § 273.11(r).

\* \* \* \* \*

Dated: November 17, 2016.

**Audrey Rowe,**

*Administrator, Food and Nutrition Service.*

[FR Doc. 2016-28520 Filed 11-30-16; 8:45 am]

BILLING CODE 3410-30-P

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2016-9430; Directorate Identifier 2016-NM-051-AD]

RIN 2120-AA64

#### Airworthiness Directives; ATR-GIE Avions de Transport Régional Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain ATR-GIE Avions de Transport Régional Model ATR42-500 and Model ATR72-102, -202, -212, and -212A airplanes. This proposed AD was prompted by reports of failure of emergency power

supply units (EPSUs) in production and in service. This proposed AD would require an inspection to determine the part number and serial number of each EPSU, and replacement if necessary. We are proposing this AD to address the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by January 17, 2017.

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

• *Federal eRulemaking Portal:* Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

• *Fax:* 202-493-2251.

• *Mail:* U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

• *Hand Delivery:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For ATR service information identified in this NPRM, contact ATR—GIE Avions de Transport Régional, 1, Allée Pierre Nadot, 31712 Blagnac Cedex, France; telephone +33 (0) 5 62 21 62 21; fax +33 (0) 5 62 21 67 18; email [continued.airworthiness@atr.fr](mailto:continued.airworthiness@atr.fr); Internet <http://www.aerochain.com>.

For COBHAM service information identified in this NPRM, contact COBHAM 174-178 Quai de Jemmapes, 75010, Paris, France; telephone +33 (0) 1 53 38 98 98; fax +33 (0) 1 42 00 67 83.

You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

#### Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9430; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Shahram Daneshmandi, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate,

FAA, 1601 Lind Avenue SW., Renton, WA 98057–3356; telephone 425–227–1112; fax 425–227–1149.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA–2016–9430; Directorate Identifier 2016–NM–051–AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments. We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2016–0070, dated April 11, 2016; corrected April 12, 2016 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”); to correct an unsafe condition for certain ATR–GIE Avions de Transport Régional

Model ATR42–500 and Model ATR72–102, –202, –212, and –212A airplanes. The MCAI states:

Some failure cases have been reported of emergency power supply units (EPSU), Part Number (P/N) 301–3100 Amdt [Amendment] A, both on the production line and in service. The results of the technical investigations revealed that these failures could have been caused by a defective internal electronic component, which could affect the EPSU internal battery charge.

To address this potential unsafe condition, ATR issued Service Bulletin (SB) ATR42–33–0050 and SB ATR72–33–1043 to provide instructions to inspect EPSUs.

For the reason described above, this [EASA] AD requires identification and replacement of the affected EPSUs with serviceable units.

This [EASA] AD was republished to correct two typographical errors in paragraph (3) of the [EASA] AD and to specify the correct Revision (3) of the Cobham SB 301–3100–33–002.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA–2016–9430.

Related Service Information Under 1 CFR Part 51

ATR has issued Service Bulletin ATR42–33–0050, Revision 01, dated January 26, 2016; and ATR Service Bulletin ATR72–33–1043, Revision 01, dated January 26, 2016. This service information describes procedures for inspecting an EPSU to determine the

part number, serial number, and amendment level, and replacing the EPSU. These documents are distinct since they apply to different airplane models.

Cobham has issued COBHAM Service Bulletin 301–3100–33–002, Revision 3, dated July 30, 2015, which describes procedures for modifying an EPSU by replacing the printed circuit board.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA’s Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of these same type designs.

Costs of Compliance

We estimate that this proposed AD affects 11 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

ESTIMATED COSTS				
Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection .....	1 work-hour × \$85 per hour = \$85 per EPSU.	\$0	\$85 per EPSU (4 EPSUs per airplane) ....	\$3,740

We estimate the following costs to do any necessary replacements that would be required based on the results of the proposed inspection. We have no way of determining the number of airplanes that might need these replacements:

ON-CONDITION COSTS			
Action	Labor cost	Parts cost	Cost per product
Replacement .....	1 work-hour × \$85 per hour = \$85 per EPSU .....	Not available .....	\$85

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. 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.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for

safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect 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.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator,

the FAA proposes to amend 14 CFR part 39 as follows:

### PART 39—AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701.

#### § 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

#### ATR—GIE Avions de Transport Régional:

Docket No. FAA–2016–9430; Directorate Identifier 2016–NM–051–AD.

#### (a) Comments Due Date

We must receive comments by January 17, 2017.

#### (b) Affected ADs

None.

#### (c) Applicability

This AD applies to the ATR—GIE Avions de Transport Régional airplanes, certificated in any category, identified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Model ATR42–500 airplanes, all manufacturer serial numbers (MSNs), except those on which ATR Modification 6780 has been embodied in production.

(2) Model ATR72–102, –202, –212, and –212A airplanes, all MSNs on which ATR Model 3715 has been embodied in production, except those on which ATR Modification 6780 has been embodied in production.

#### (d) Subject

Air Transport Association (ATA) of America Code 33, Lights.

#### (e) Reason

This AD was prompted by reports of failure of emergency power supply units (EPSUs) in production and in service. We are issuing this AD to detect and correct defective internal electronic components, which could adversely affect the EPSU internal battery. This condition could result in a partial or total loss of emergency lighting, possibly affecting passenger evacuation during an emergency situation.

#### (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

#### (g) Inspection of EPSU and Corrective Action

Within 12 months after the effective date of this AD, inspect each EPSU on the airplane to determine the part number and serial number. For any EPSU having part number (P/N) 301–3100 Amendment (Amdt) A and a serial number identified in figure 1 to paragraph (g) of this AD, and that does not have a control sticker marked with “SIL 301–3100–33–001”: Except as provided by paragraph (i) of this AD, before further flight, replace the EPSU with a serviceable unit, as specified in paragraph (h) of this AD, in accordance with the Accomplishment Instructions of ATR Service Bulletin ATR42–33–0050, Revision 01, dated January 26, 2016; or Service Bulletin ATR72–33–1043, Revision 01, dated January 26, 2016; as applicable. A review of airplane maintenance records may be done in lieu of inspection of the EPSUs on the airplane if the part number and serial number of each EPSU can be positively determined from that review.

FIGURE 1 TO PARAGRAPH (g) OF THIS AD—AFFECTED SERIAL NUMBERS OF EPSU P/N 301–3100 AMDT A

Affected Serial Numbers of EPSU P/N 301–3100 Amdt A

2905	4929	4960	4994	5025	5077	5113	5156
2906	4930	4961	4995	5026	5079	5114	5157
3401	4931	4962	4996	5027	5080	5115	5158
3697	4932	4963	4997	5028	5081	5116	5159
3825	4933	4964	4998	5029	5082	5117	5160
4343	4934	4965	4999	5031	5083	5118	5161
4420	4935	4966	5000	5032	5084	5119	5162
4634	4936	4967	5001	5033	5085	5120	5163
4706	4937	4968	5002	5034	5086	5121	5164
4707	4938	4969	5003	5038	5087	5122	5166
4708	4939	4970	5004	5041	5088	5123	5171
4709	4940	4971	5005	5042	5089	5124	5172
4710	4941	4972	5006	5046	5090	5125	5173
4711	4942	4973	5007	5047	5091	5126	5174
4712	4943	4976	5008	5050	5092	5127	5175
4713	4944	4977	5009	5052	5096	5128	5176
4714	4945	4978	5010	5054	5097	5129	5177
4715	4946	4979	5011	5055	5098	5130	5178
4716	4947	4980	5012	5056	5099	5131	5179
4717	4948	4981	5013	5058	5100	5132	5180
4718	4949	4982	5014	5059	5101	5133	5181
4719	4950	4983	5015	5065	5103	5134	5182
4720	4951	4984	5016	5067	5104	5135	5183
4721	4952	4985	5017	5068	5105	5136	5184
4722	4953	4986	5018	5069	5106	5138	5185
4723	4954	4987	5019	5070	5107	5139	5186
4724	4955	4988	5020	5071	5108	5140	5187

FIGURE 1 TO PARAGRAPH (g) OF THIS AD—AFFECTED SERIAL NUMBERS OF EPSU P/N 301–3100 AMDT A—Continued

4745	4956	4989	5021	5072	5109	5147	None
4926	4957	4990	5022	5073	5110	5153	None
4927	4958	4991	5023	5075	5111	5154	None
4928	4959	4993	5024	5076	5112	5155	None

**(h) Definition of Serviceable EPSU**

For the purpose of this AD, a serviceable EPSU is one that meets the criteria in paragraph (h)(1), (h)(2), or (h)(3) of this AD.

(1) Has P/N 301–3100 Amtd A and a serial number that is not included figure 1 to paragraph (g) of this AD.

(2) Has P/N 301–3100 Amtd A, a serial number that is included in figure 1 to paragraph (g) of this AD, but has a control sticker marked with “SIL 301–3100–33–001.”

(3) Has P/N 301–3100 Amtd B, or later amendment.

**(i) Alternative Modification of Affected EPSU**

In lieu of the replacement required by paragraph (g) of this AD, modification of an affected EPSU may be done in accordance with the Accomplishment Instructions of COBHAM Service Bulletin 301–3100–33–002, Revision 3, dated July 30, 2015.

**(j) Parts Installation Prohibition**

As of the effective date of this AD, no person may install on any airplane any EPSU having P/N 301–3100 Amtd A and a serial number identified in figure 1 to paragraph (g) of this AD, unless it has a control sticker marked with “SIL 301–3100–33–001”.

**(k) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using the service information identified in paragraph (k)(1) or (k)(2) of this AD, provided it can be determined that no EPSU having a serial number listed in figure 1 to paragraph (g) of this AD has been installed on that airplane since the actions in the applicable service bulletin were completed.

(1) ATR Service Bulletin ATR42–33–0050, dated December 11, 2015.

(2) ATR Service Bulletin ATR72–33–1043, dated December 11, 2015.

**(l) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, International Branch, ANM–116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Shahram Daneshmandi, Aerospace Engineer, International Branch, ANM–116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057–3356; telephone 425–227–1112; fax 425–227–1149. Information may be emailed to: 9-ANM-116-

AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM–116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or ATR—GIE Avions de Transport Régional's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

**(m) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2016–0070, dated April 11, 2016; corrected April 12, 2016; for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA–2016–9430.

(2) For ATR service information identified in this AD, contact ATR—GIE Avions de Transport Régional, 1, Allée Pierre Nadot, 31712 Blagnac Cedex, France; telephone +33 (0) 5 62 21 62 21; fax +33 (0) 5 62 21 67 18; email [continued.airworthiness@atr.fr](mailto:continued.airworthiness@atr.fr); Internet <http://www.aerochain.com>. For Cobham service information identified in this AD, contact COBHAM 174–178 Quai de Jemmapes, 75010, Paris, France; telephone +33 (0) 1 53 38 98 98; fax +33 (0) 1 42 00 67 83. You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425–227–1221.

Issued in Renton, Washington, on November 17, 2016.

**Phil Forde,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 2016–28618 Filed 11–30–16; 8:45 am]

**BILLING CODE 4910–13–P**

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA–2014–0363; Directorate Identifier 2014–NE–08–AD]

**RIN 2120–AA64**

**Airworthiness Directives; Rolls-Royce plc Turbofan Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to supersede airworthiness directive (AD) 2015–17–19 that applies to all Rolls-Royce plc (RR) RB211 Trent 768–60, 772–60, and 772B–60 turbofan engines. AD 2015–17–19 requires inspection of the fan case low-pressure (LP) fuel tubes and associated clips and the fuel oil heat exchanger (FÖHE) mounts and associated hardware. Since we issued AD 2015–17–19, fractures on the LP fuel return tube at mid-span locations were found with resulting fuel leaks. This proposed AD would require a modification, which terminates the repetitive inspections. We are proposing this AD to prevent failure of the fan case LP fuel tubes, which could lead to an in-flight shutdown, loss of thrust control, and damage to the airplane.

**DATES:** We must receive comments on this proposed AD by January 30, 2017.

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- *Fax:* 202–493–2251.

- *Mail:* U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- *Hand Delivery:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, England, DE248BJ; phone:

011-44-1332-242424; fax: 011-44-1332-249936; email: [http://www.rolls-royce.com/contact/civil\\_team.jsp](http://www.rolls-royce.com/contact/civil_team.jsp); Web site: <https://www.aeromanager.com>. You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

#### Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0363; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the mandatory continuing airworthiness information, regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

#### FOR FURTHER INFORMATION CONTACT:

Wego Wang, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7134; fax: 781-238-7199; email: [wego.wang@faa.gov](mailto:wego.wang@faa.gov).

#### SUPPLEMENTARY INFORMATION:

#### Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2014-0363; Directorate Identifier 2014-NE-08-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

#### Discussion

On August 20, 2015, we issued AD 2015-17-19, Amendment 39-18252 (80 FR 55232, September 15, 2015), ("AD 2015-17-19") for RR RB211 Trent 768-60, 772-60, and 772B-60 turbofan engines. AD 2015-17-19 requires

inspection of the fan case LP fuel tubes and associated clips and the FOHE mounts and associated hardware. AD 2015-17-19 resulted from fuel leaks caused by damage to the fan case LP fuel tube. We issued AD 2015-17-19 to prevent failure of the fan case LP fuel tube, which could lead to an in-flight shutdown, loss of thrust control, and damage to the airplane.

#### Actions Since AD 2015-17-19 Was Issued

Since we issued AD 2015-17-19, fractures on the LP fuel return tube at mid-span locations were found with resulting fuel leaks. Also since we issued AD 2015-17-19, the European Aviation Safety Agency (EASA) has issued AD 2016-0120, dated June 17, 2016, which supersedes EASA AD 2014-0243, Revision 1, dated December 10, 2014 and Correction, dated March 23, 2015.

#### Related Service Information Under 1 CFR Part 51

RR has issued Alert Non-Modification Service Bulletin (NMSB) RB.211-73-AH522, Revision 4, dated January 18, 2016; Alert NMSB RB.211-73-AH837, Revision 1, dated November 6, 2015; and Alert Service Bulletin (ASB) RB.211-73-AJ366, Initial Issue and Supplement, dated May 3, 2016. Alert NMSB RB.211-73-AH522, Revision 4, dated January 18, 2016 describes procedures for inspecting and, if necessary, replacing worn rubber sections of the P-clip. Alert NMSB RB.211-73-AH837, Revision 1, dated November 6, 2015 describes procedures for inspecting and, if necessary, replacing the P-clip attaching bracket, supporting hardware, and low-pressure (LP) fuel tube. Alert SB RB.211-73-AJ366, Initial Issue and Supplement, dated May 3, 2016 describes procedures for modification of the routing of fuel, oil, and hydraulic tube assemblies. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the **ADDRESSES** section.

#### Other Related Service Information

RR has issued SB RB.211-73-F343, Revision 4, dated May 26, 2011. The service information describes procedures for replacing the fuel tube assemblies and supporting hardware.

#### FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or

develop in other products of these same type designs.

#### Proposed AD Requirements

This proposed AD would retain the requirements of AD 2015-17-19, (80 FR 55232, September 15, 2015), except it would require a modification, which terminates the repetitive inspections. This proposed AD would add a mandatory terminating action to the repetitive inspections by incorporating ASB RB.211-73-AJ366, Initial Issue and Supplement, dated May 3, 2016.

#### Costs of Compliance

We estimate that this proposed AD affects 108 engines installed on airplanes of U.S. registry. We also estimate that it would take about 6 hours per engine to perform the inspections in this proposed AD. The average labor rate is \$85 per hour. We also estimate that 54 of the engines will fail the inspections required by this AD. Replacement parts cost about \$4,031 per engine.

We also estimate that it would take about 50 hours per engine to modify each engine. The modification would cost about \$150,000 per engine. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$16,931,754.

#### Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. 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.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

#### Regulatory Findings

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect 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.

For the reasons discussed above, I certify that the proposed regulation:

(1) Is not a “significant regulatory action” under Executive Order 12866,

(2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### PART 39—AIRWORTHINESS DIRECTIVES

■ 1. The authority citation for part 39 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701.

##### § 39.13 [Amended]

■ 2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2015–17–19, Amendment 39–18252 (80 FR 55232, September 15, 2015), and adding the following new AD:

**Rolls-Royce plc:** Docket No. FAA–2014–0363; Directorate Identifier 2014–NE–08–AD.

##### (a) Comments Due Date

We must receive comments by January 30, 2017.

##### (b) Affected ADs

This AD supersedes AD 2015–17–19, Amendment 39–18252 (80 FR 55232, September 15, 2015).

##### (c) Applicability

This AD applies to all Rolls-Royce plc (RR) RB211 Trent 768–60, 772–60, and 772B–60 turbofan engines, if fitted with fuel tube, part number (P/N) FW53576, which was incorporated through RR production modification 73–F343 or which were modified in service in accordance with RR Service Bulletin (SB) RB.211–73–F343, Revision 4, dated May 26, 2011.

##### (d) Unsafe Condition

This AD was prompted by fractures found on the low-pressure (LP) fuel return tube at mid span locations with resulting fuel leaks. We are issuing this AD to prevent failure of

the fan case LP fuel tube, which could lead to an in-flight engine shutdown, loss of thrust control, and damage to the airplane.

#### (e) Compliance

Comply with this AD within the compliance times specified, unless already done.

(1) Within 800 flight hours (FH) after October 20, 2015 (the effective date of AD 2015–17–19, Amendment 39–18252 (80 FR 55232, September 15, 2015)), or prior to further flight, whichever occurs later, and thereafter at intervals not to exceed 800 FH, inspect the clip at the uppermost fan case LP fuel tube clip position, CP4881, and support bracket, P/N FW26692. Use Accomplishment Instructions, paragraph 3.A, of RR Alert Non-Modification Service Bulletin (NMSB) RB.211–73–AH837, Revision 1, dated November 6, 2015, or paragraph 3.A. or 3.B. of RR Alert NMSB RB.211–73–AH522, Revision 4, dated January 18, 2016, to do the inspection.

(i) If the clip at the uppermost clip position, CP4881, fails inspection, before further flight, replace the clip with a part eligible for installation and inspect the fan case LP fuel tube, P/N FW53576, for fretting, and clips for cracks or failure, according to Accomplishment Instructions, paragraph 3.A. of RR Alert NMSB RB.211–73–AH837, Revision 1, dated November 6, 2015, or paragraph 3.A. or 3.B. of RR Alert NMSB RB.211–73–AH522, Revision 4, dated January 18, 2016.

(ii) If the support bracket, P/N FW26692, fails inspection, before further flight, replace the bracket with a part eligible for installation and inspect the fan case LP fuel tube, P/N FW53576, and clips for cracks or failure, according to Accomplishment Instructions, paragraph 3.A. of RR Alert NMSB RB.211–73–AH837, Revision 1, dated November 6, 2015, or paragraph 3.A. or 3.B. of RR Alert NMSB RB.211–73–AH522, Revision 4, dated January 18, 2016.

(2) Within 4,000 FH since new or 800 FH after October 20, 2015 (the effective date of AD 2015–17–19, Amendment 39–18252 (80 FR 55232, September 15, 2015)), or prior to further flight, whichever occurs later, and thereafter at intervals not to exceed 4,000 FH, inspect the fan case LP fuel tube, P/N FW53576, and clips, and the fuel oil heat exchanger (FOHE) mounts and hardware, for damage, wear, or fretting. Use paragraph 3.A. or 3.B., Accomplishment Instructions, of RR Alert NMSB RB.211–73–AH522, Revision 4, dated January 18, 2016, to do the inspection.

(i) If the fan case LP fuel tube, P/N FW53576, fails inspection, before further flight, replace the fuel tube and clips with parts eligible for installation.

(ii) If any FOHE mount or hardware shows signs of damage, wear, or fretting, before further flight, replace the damaged part with a part eligible for installation.

(3) At each shop visit after the effective date of this AD, inspect the fan case LP fuel tubes, P/Ns FW26589, FW36335, FW26587, FW53577, and FW53576, and clips, and the FOHE mounts and hardware, for damage, wear, or fretting. Use paragraphs 3.B.(1) and 3.B.(2) of RR Alert NMSB RB.211–73–AH522, Revision 4, dated January 18, 2016, to do the inspection.

(i) If any fan case LP fuel tube fails inspection, before further flight, replace the fuel tube and clips with parts eligible for installation.

(ii) If any FOHE mount or hardware shows signs of damage, wear, or fretting, before further flight, replace the damaged part with a part eligible for installation.

(4) If you replace any fan case LP fuel tube, clip, FOHE mount, or hardware as a result of the inspections in paragraphs (e)(1), (2), or (3) of this AD, you must still continue to perform the repetitive inspections specified in paragraphs (e)(1), (2), and (3) of this AD, until you comply with paragraph (e)(6) of this AD.

(5) No reports requested in any of the Alert NMSBs that are referenced in paragraphs (e)(1), (2), and (3) of this AD are required by this AD.

(6) During the next shop visit after the effective date of this AD, modify the engine in accordance with the Accomplishment Instructions, paragraphs (B) and (C), Section 3, of RR Alert Service Bulletin (ASB) RB.211–73–AJ366, Initial Issue and Supplement, dated May 3, 2016.

(7) After the effective date of this AD, do not install an M07 module, unless it is modified in accordance with the Accomplishment Instructions, paragraphs (B) and (C), Section 3, of RR ASB RB.211–73–AJ366, Initial Issue and Supplement, dated May 3, 2016.

#### (f) Credit for Previous Actions

If, before the effective date of this AD, you performed the inspections and corrective actions required by paragraph (e) of this AD using RR NMSB RB.211–73–G848, Revision 3, dated June 12, 2014; or RR Alert NMSB RB.211–73–AH837, Revision 1, dated November 6, 2015; or paragraph 3.A. or 3.B. of RR Alert NMSB RB.211–73–AH522, Revision 4, dated January 18, 2016; or any earlier version of those NMSBs, you met the inspection requirements in paragraph (e) of this AD.

#### (g) Mandatory Terminating Action

Modification of an engine, as required by paragraph (e)(6) of this AD, constitutes terminating action for the repetitive inspections required by paragraphs (e)(1), (2), (3), and (4) of this AD.

#### (h) Definitions

For the purposes of this AD:

(1) An “engine shop visit” is the induction of an engine into the shop for maintenance involving the separation of pairs of major mating engine flanges, except that the separation of engine flanges solely for the purposes of transportation without subsequent engine maintenance is not an engine shop visit.

(2) The fan case LP fuel tubes and clips, and the FOHE mounts and hardware, are eligible for installation if they have passed the inspection requirements of paragraphs (e)(1), (2), and (3) of this AD.

#### (i) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs to this AD. Use the procedures found in 14 CFR 39.19 to

make your request. You may email your request to: [ANE-AD-AMOC@faa.gov](mailto:ANE-AD-AMOC@faa.gov).

#### (j) Related Information

(1) For more information about this AD, contact Wego Wang, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7134; fax: 781-238-7199; email: [wego.wang@faa.gov](mailto:wego.wang@faa.gov).

(2) Refer to MCAI European Aviation Safety Agency (EASA) AD 2016-0120, dated June 17, 2016, which supersedes EASA AD 2014-0243, Revision 1, dated December 10, 2014 and Correction dated March 23, 2015, for more information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2014-0363.

(3) Rolls-Royce plc has issued SB RB.211-73-F343, Revision 4, dated May 26, 2011; Alert NMSB RB.211-73-AH522, Revision 4, dated January 18, 2016; Alert NMSB RB.211-73-AH837, Revision 1, dated November 6, 2015; and ASB RB.211-73-AJ366, Initial Issue and Supplement, dated May 3, 2016. These service bulletins can be obtained from Rolls-Royce plc, using the contact information in paragraph (j)(4) of this AD.

(4) For service information identified in this AD, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, England, DE248BJ; phone: 011-44-1332-242424; fax: 011-44-1332-249936; email: [http://www.rolls-royce.com/contact/civil\\_team.jsp](http://www.rolls-royce.com/contact/civil_team.jsp); Web site: <https://www.aeromanager.com>.

(5) You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on November 2, 2016.

**Robert J. Ganley,**

*Acting Manager, Engine & Propeller Directorate, Aircraft Certification Service.*

[FR Doc. 2016-27923 Filed 11-30-16; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 71

[Docket No. FAA-2016-9178; Airspace Docket No. 16-ASO-12]

**RIN 2120-AA66**

### Proposed Amendment of VOR Federal Airways; Eastern United States

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** This action proposes to modify VOR Federal airways V-16, V-94 and V-124, in the eastern United

States due to the planned decommissioning of the Jacks Creek, TN, VOR/DME navigation aid.

**DATES:** Comments must be received on or before January 17, 2017. The Director of the Federal Register approves this incorporation by reference action under title 1, Code of Federal Regulations, part 51, subject to the annual revision of FAA, Order 7400.11 and publication of conforming amendments.

**ADDRESSES:** Send comments on this proposal to the U.S. Department of Transportation, Docket Operations, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590; telephone: 1 (800) 647-5527 or (202) 366-9826. You must identify FAA Docket No. FAA-2016-9178 and Airspace Docket No. 16-ASO-12 at the beginning of your comments. You may also submit comments through the Internet at <http://www.regulations.gov>.

FAA Order 7400.11A, Airspace Designations and Reporting Points, and subsequent amendments can be viewed online at [http://www.faa.gov/air\\_traffic/publications/](http://www.faa.gov/air_traffic/publications/). For further information, you can contact the Airspace Policy Group, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; telephone: (202) 267-8783. The Order is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of FAA Order 7400.11A at NARA, call (202) 741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal-regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal-regulations/ibr_locations.html).

FAA Order 7400.11, Airspace Designations and Reporting Points, is published yearly and effective on September 15.

**FOR FURTHER INFORMATION CONTACT:** Paul Gallant, Airspace Policy Group, Office of Airspace Services, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; telephone: (202) 267-8783.

#### SUPPLEMENTARY INFORMATION:

#### Authority for This Rulemaking

The FAA's authority to issue rules regarding 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 Subtitle VII, Part A, Subpart I, Section 40103. Under that section, the FAA is charged with

prescribing regulations to assign the use of the airspace necessary to ensure the safety of aircraft and the efficient use of airspace. This regulation is within the scope of that authority as it would modify three air traffic service route structures in the eastern United States to maintain the efficient flow of air traffic.

#### Comments Invited

Interested parties are invited to participate in this proposed rulemaking by submitting such written data, views, or arguments as they may desire. Comments that provide the factual basis supporting the views and suggestions presented are particularly helpful in developing reasoned regulatory decisions on the proposal. Comments are specifically invited on the overall regulatory, aeronautical, economic, environmental, and energy-related aspects of the proposal.

Communications should identify both docket numbers (FAA Docket No. FAA-2016-9178 and Airspace Docket No. 16-ASO-12) and be submitted in triplicate to the Docket Management Facility (see **ADDRESSES** section for address and phone number). You may also submit comments through the Internet at <http://www.regulations.gov>.

Commenters wishing the FAA to acknowledge receipt of their comments on this action must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments to FAA Docket No. FAA-2016-9178 and Airspace Docket No. 16-ASO-12." The postcard will be date/time stamped and returned to the commenter.

All communications received on or before the specified comment closing date will be considered before taking action on the proposed rule. The proposal contained in this action may be changed in light of comments received. All comments submitted will be available for examination in the public docket both before and after the comment closing date. A report summarizing each substantive public contact with FAA personnel concerned with this rulemaking will be filed in the docket.

#### Availability of NPRM's

An electronic copy of this document may be downloaded through the Internet at <http://www.regulations.gov>. Recently published rulemaking documents can also be accessed through the FAA's Web page at [http://www.faa.gov/air\\_traffic/publications/airspace\\_amendments/](http://www.faa.gov/air_traffic/publications/airspace_amendments/).

You may review the public docket containing the proposal, any comments received and any final disposition in



person in the Dockets Office (see **ADDRESSES** section for address and phone number) between 9:00 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays. An informal docket may also be examined during normal business hours at the office of the Eastern Service Center, Federal Aviation Administration, Room 210, 1701 Columbia Ave., College Park, GA, 30337.

#### Availability and Summary of Documents for Incorporation by Reference

This document proposes to amend FAA Order 7400.11A, *Airspace Designations and Reporting Points*, dated August 3, 2016 and effective September 15, 2016. FAA Order 7400.11A is publicly available as listed in the **ADDRESSES** section of this proposed rule. FAA Order 7400.11A lists Class A, B, C, D, and E airspace areas, air traffic service routes, and reporting points.

#### The Proposal

The FAA is proposing an amendment to Title 14, Code of Federal Regulations (14 CFR) part 71 to modify the descriptions of VOR Federal airways V-16, V-94 and V-124, due to the planned decommissioning of the Jacks Creek, TN, VOR/DME. The proposed route changes are described below.

**V-16:** V-16 extends between Los Angeles, CA, and Boston, MA. The FAA proposes to modify that portion of the route that reads “. . . Marvell, AR; Holly Springs, MS; Jacks Creek, TN; Shelbyville, TN . . . .” To read as follows: “. . . Marvell, AR; to Holly Springs, MS. From Shelbyville, TN; . . . .” thus eliminating Jacks Creek, TN, from the route.

**V-94:** V-94 extends between Blythe, CA and Bowling Green, KY. The FAA proposes to terminate the route at Holly Springs, MS, thus eliminating the segments of the route from Holly Springs, MS, through Jacks Creek, TN, to Bowling Green, KY.

**V-124:** V-124 extends between Bonham, TX and Graham, TN. The FAA proposes to terminate the route at Gilmore, AR, thus eliminating the segments from Gilmore, AR, through Jacks Creek, TN, to Graham, TN.

Domestic VOR Federal airways are published in paragraph 6010(a) of FAA Order 7400.11A, dated August 3, 2016 and effective September 15, 2016, which is incorporated by reference in 14 CFR 71.1. The VOR Federal airways listed in this document would be subsequently published in the Order.

#### Regulatory Notices and Analyses

The FAA has determined that this proposed regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore: (1) Is not a “significant regulatory action” under Executive Order 12866; (2) is not a “significant rule” under Department of Transportation (DOT) Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that will only affect air traffic procedures and air navigation, it is certified that this proposed rule, when promulgated, will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

#### Environmental Review

This proposal will be subject to an environmental analysis in accordance with FAA Order 1050.1F, “Environmental Impacts: Policies and Procedures” prior to any FAA final regulatory action.

#### List of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

#### The Proposed Amendment

In consideration of the foregoing, the Federal Aviation Administration proposes to amend 14 CFR part 71 as follows:

#### PART 71—DESIGNATION OF CLASS A, B, C, D, AND E AIRSPACE AREAS; AIR TRAFFIC SERVICE ROUTES; AND REPORTING POINTS

- 1. The authority citation for part 71 continues to read as follows:

**Authority:** 49 U.S.C. 106(f), 106(g); 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959–1963 Comp., p. 389.

##### § 71.1 [Amended]

- 2. The incorporation by reference in 14 CFR 71.1 of FAA Order 7400.11A, *Airspace Designations and Reporting Points*, dated August 3, 2016 and effective September 15, 2016, is amended as follows:

*Paragraph 6010(a) Domestic VOR Federal Airways.*

\* \* \* \* \*

##### V-16 [Amended]

From Los Angeles, CA; Paradise, CA; Palm Springs, CA; Blythe, CA; Buckeye, AZ; Phoenix, AZ; INT Phoenix 155° and

Stanfield, AZ, 105° radials; Tucson, AZ; San Simon, AZ; INT San Simon 119° and Columbus, NM, 277° radials; Columbus, El Paso, TX; Salt Flat, TX; Wink, TX; INT Wink 066° and Big Spring, TX, 260° radials; Big Spring; Abilene, TX; Bowie, TX; Bonham, TX; Paris, TX; Texarkana, AR; Pine Bluff, AR; Marvell, AR; to Holly Springs, MS. From Shelbyville, TN; Hinch Mountain, TN; Volunteer, TN; Holston Mountain, TN; Pulaski, VA; Roanoke, VA; Lynchburg, VA; Flat Rock, VA; Richmond, VA; INT Richmond 039° and Patuxent, MD, 228° radials; Patuxent; Smyrna, DE; Cedar Lake, NJ; Coyle, NJ; INT Coyle 036° and Kennedy, NY, 209° radials; Kennedy; INT Kennedy 040° and Calverton, NY 261° radials; Calverton; Norwich, CT; Boston, MA. The airspace within Mexico and the airspace below 2,000 feet MSL outside the United States is excluded. The airspace within Restricted Areas R-5002A, R-5002C, and R-5002D is excluded during their times of use. The airspace within Restricted Areas R-4005 and R-4006 is excluded.

##### V-94 [Amended]

From Blythe, CA, INT Blythe 094° and Gila Bend, AZ, 299° radials; Gila Bend; Stanfield, AZ; 55 miles, 74 miles, 95 MSL, San Simon, AZ; Deming, NM; Newman, TX; Salt Flat, TX; Wink, TX; Midland, TX; Tuscola, TX; Glen Rose, TX; Cedar Creek, TX; Gregg County, TX; Elm Grove, LA; Monroe, LA; Greenville, MS; to Holly Springs, MS.

##### V-124 [Amended]

From Bonham, TX, via Paris, TX; Hot Springs, AR; Little Rock, AR; to Gilmore, AR.  
\* \* \* \* \*

Issued in Washington, DC, on November 22, 2016.

**Leslie M. Swann,**

*Acting Manager, Airspace Policy Group.*

[FR Doc. 2016–28728 Filed 11–30–16; 8:45 am]

**BILLING CODE 4910–13–P**

#### LIBRARY OF CONGRESS

##### Copyright Office

##### 37 CFR Parts 201, 202

[Docket No. 2016–8]

#### Group Registration of Contributions to Periodicals

**AGENCY:** U.S. Copyright Office, Library of Congress.

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** The U.S. Copyright Office is proposing to amend the regulation governing the group registration option for contributions to periodicals to reflect certain upgrades that will soon be made to the electronic registration system. The proposed rule will require groups of contributions to be filed through the Office’s electronic registration system. In addition, it will modify the deposit

requirement for this option by requiring applicants to submit their contributions in a digital format and to upload those files through the electronic system. The proposed rule will increase the efficiency of the registration process for both the Office and copyright owners alike.

**DATES:** Comments on the proposed rule must be made in writing and must be received in the U.S. Copyright Office no later than January 3, 2017.

**ADDRESSES:** For reasons of government efficiency, the Copyright Office is using the regulations.gov system for the submission and posting of public comments in this proceeding. All comments are therefore to be submitted electronically through regulations.gov. Specific instructions for submitting comments are available on the Copyright Office Web site at <http://copyright.gov/rulemaking/grcp/>. If electronic submission of comments is not feasible due to lack of access to a computer and/or the Internet, please contact the Office using the contact information below for special instructions.

**FOR FURTHER INFORMATION CONTACT:** Robert J. Kasunic, Associate Register of Copyrights and Director of Registration Policy and Practice, or Erik Bertin, Deputy Director of Registration Policy and Practice, by telephone at 202-707-8040.

#### SUPPLEMENTARY INFORMATION:

##### I. Background

When Congress enacted the Copyright Act of 1976, it authorized the Register of Copyrights (the “Register”) to issue regulations specifying the administrative classes of works for the purpose of seeking a registration, and the nature of the deposit required for each such class. In addition, Congress gave the Register the discretion to allow groups of related works to be registered with one application and one filing fee, a procedure known as “group registration.” See 17 U.S.C. 408(c)(1). Pursuant to this authority, the Register issued regulations permitting the U.S. Copyright Office (the “Office”) to issue group registrations for certain limited categories of works, provided that certain conditions have been met. See generally 37 CFR 202.3(b)(5)–(10).

Without prejudice to the Register’s general authority to create group registration options under section 408(c)(1) of the Copyright Act at the Register’s discretion, Congress also specifically directed the Register, under section 408(c)(2), to issue regulations allowing works by the same individual author to be registered as a group, if

those works were first published within a twelve-month period as contributions to periodicals (including newspapers).<sup>1</sup> 17 U.S.C. 408(c)(2). In particular, section 408(c)(2) states that “the Register of Copyrights shall establish regulations specifically permitting a single registration for a group of works by the same individual author, all first published as contributions to periodicals, including newspapers, within a twelve-month period, on the basis of a single deposit, application, and registration fee, under the following conditions—(A) if the deposit consists of one copy of the entire issue of the periodical, or of the entire section in the case of a newspaper, in which each contribution was first published; and (B) if the application identifies each work separately, including the periodical containing it and its date of first publication.” *Id.*

As the legislative history explains, allowing “a number of related works to be registered together as a group represent[ed] a needed and important liberalization of the law.” H.R. Rep. No. 94–1476, at 154 (1976); S. Rep. No. 94–473, at 136 (1975). Congress recognized that requiring applicants to submit separate applications for certain types of works may be so burdensome and expensive that authors and copyright owners may forgo registration altogether, since copyright registration is not a prerequisite to copyright protection. *Id.* If copyright owners do not submit their works for registration under this permissive system, the public record will not contain any information concerning those works. This creates a void in the public record that diminishes the value of the Office’s database. At the same time, when large numbers of works are bundled together in one application, information about the individual works may not be adequately captured. Therefore, group registration options require careful balancing of the need for an accurate public record and the need for an efficient method of facilitating the registration of such works.

##### II. The Current Group Registration Option for Contributions to Periodicals

In 1978, the Office issued an interim rule that established a procedure for registering groups of contributions to

periodicals. See 43 FR 965 (Jan. 5, 1978). This interim rule is largely still in effect today, with the exception of one amendment discussed below. See 37 CFR 202.3(b)(8). The Office refers to this procedure as a “group registration for contributions to periodicals” or “GRCP.” Applicants may use this option if they satisfy the requirements set forth in the regulation. First, all the contributions must be created by the same individual, and none of them can be a work made for hire. *Id.*

§ 202.3(b)(8)(i)(A), (B). Second, all the works must be first published as a contribution to a periodical, and they must be published within a twelve-month period (e.g., October 1, 2014 through September 30, 2015). In other words, the contributions do not have to be published during the same calendar year, but “the earliest and latest contributions must not have been first published more than twelve months apart.” *Id.* § 202.3(b)(8)(i)(C) n.2. And, third, if the contributions were first published before March 1, 1989, each contribution must contain an appropriate copyright notice. *Id.* § 202.3(b)(8)(i)(D).

The current regulation states that the applicant must complete and submit a paper application using Form TX, Form VA, or Form PA. It also states that the application “should be filed in the [administrative] class appropriate to the nature of authorship in the majority of the contributions.”<sup>2</sup> *Id.* 202.3(b)(8)(ii)(A) & n.3. For instance, Form TX should be used if the group primarily contains textual material (such as articles, editorials, essays, etc.), Form VA should be used if the group primarily contains visual material (such as photographs, cartoons, illustrations, etc.), and Form PA should be used if the group primarily contains works of the performing arts (such as music, sound recordings, dramas, etc.). In addition, the applicant must complete and submit an “adjunct form” known as Form GR/CP, which is specifically designed for providing information about the particular group of contributions that is being registered. *Id.* § 202.3(b)(8)(ii)(B).

In all cases, the application must “contain the information required by the form and its accompanying instructions.” *Id.* § 202.3(b)(8)(ii)(A), (B). The instructions for Form GR/CP state that the application must identify “each contribution separately, including the periodical containing it and its date

<sup>1</sup> A bill introduced last year in Congress would maintain the Office’s general authority to create group registration options, but would eliminate the provision specifically directing the Office to establish a group option for contributions to periodicals and specifying the precise requirements for that option. See Copyright Office for the Digital Economy Act, H.R. 4241, 114th Cong., § 3(b)(1) (2015).

<sup>2</sup> There is a limited exception to this rule that is set forth in footnote 3 to the current regulation. As discussed in Section III.A.1 below, that exception is now obsolete. Therefore, the Office is proposing to remove footnote 3 from the regulation.

of first publication.”<sup>3</sup> Form GR/CP ([http://copyright.gov/forms/formgr\\_tx.pdf](http://copyright.gov/forms/formgr_tx.pdf)). Specifically, applicants are instructed to provide the title of each contribution that is included in the group, the title of the periodical where each contribution was first published, the volume and issue number (if any) and issue date for each periodical, and the page number where each contribution appeared. The instructions for Form GR/CP also state that the applicant must satisfy one other requirement: The copyright claimant for each contribution must be the same person or organization. This requirement does not appear in the current regulation, although it has appeared in the instructions for Form GR/CP since at least July 2012.

Under the current regulations there is no limit on the number of contributions that may be registered with the GRCP option. The current regulations also provide that the applicant must submit the contributions in the precise form in which they were first published, and the copies must be submitted in a physical—rather than a digital—form.

When the Office established the group option for contributions to periodicals, the regulation stated that the applicant must submit “one copy of the entire issue of the periodical, or of the entire section in the case of a newspaper, in which each contribution was first published.” See 43 FR at 967. The **Federal Register** notice announcing this rule explained that the deposit requirements for this group option “essentially follow the conditions set forth in [section 408(c)(2) of] the statute.” *Id.* at 966. This imposed a hardship on applicants who did not have a copy of the entire issue or the entire section where the contribution was first published. To address this concern, the Office began granting special relief from the deposit requirements on a case-by-case basis and allowed applicants to submit their works in other formats. See 67 FR 10329 (Mar. 7, 2002).

Based on this experience, the Office amended the regulation in 2002 to allow applicants to submit their contributions in any of the following physical formats: (i) One copy of the entire issue of the periodical that contains the contribution; (ii) one copy of the entire section of a newspaper that contains the contribution; (iii) tear sheets or proof copies of the contribution; (iv) a photocopy of the contribution; (v) a

photocopy of the entire page from the periodical that contains the contribution; (vi) the entire page from the periodical that contains the contribution, either cut or torn from the periodical; (vii) the contribution cut or torn from the periodical; (viii) photographs or photographic slides of the contribution, provided that the content of the contribution is clear and legible; or (ix) photographs or photographic slides of the entire page from the periodical that contains the contribution, provided that the content of the contribution is clear and legible. See 37 CFR 202.3(b)(8)(i)(E); 67 FR at 10329. The Office explained that expanding the list of acceptable formats would be “broadly consistent” “with the spirit of administrative flexibility Congress indicated the Register had in order to ensure that the deposit requirement was reasonable and non-burdensome for the applicant.” 67 FR at 10329 (citing H.R. Rep. No. 94–1476, at 150–55 (1976)). It also explained that this would not diminish the quality of the public record, because applicants were expected to provide bibliographic information on Form GR/CP, which could be used to identify the periodicals where the contributions were first published (even if the applicant did not submit a copy of the actual publications). See *id.*

### III. The Proposed Rule

The Office is proposing to amend the regulation that governs the group registration option for contributions to periodicals (the “Proposed Rule”). As explained in greater detail below, the Proposed Rule will make several notable changes to the Office’s GRCP regulation. First, it will improve the efficiency of the GRCP option by requiring applicants to register their contributions through the Office’s electronic registration system (instead of submitting a paper application). Second, it will modify the eligibility criteria for the GRCP option by providing a more specific definition of the term “periodical,” and by specifically requiring the contributions to be owned by the same copyright claimant. Third, it will require applicants to register their contributions either in Class TX or Class VA (but not Class PA), and to identify the date of publication for each contribution and the periodical where each contribution was first published. Fourth, it will modify the deposit requirements for this option by requiring applicants to submit a digital copy of each contribution and to upload these copies through the electronic registration system (instead of submitting a physical copy of each contribution).

The Proposed Rule also memorializes the Office’s longstanding position regarding the scope of a registration for a group of contributions to periodicals. It also confirms that the Office may refuse to issue a group registration or may cancel a group registration if it determines that a party failed to comply with the requirements for that option.<sup>4</sup>

Each of these proposals is discussed below.

#### A. Application Requirements

##### 1. Online Registration

Once this rule is finalized, it will be possible to register groups of contributions to periodicals through the Office’s electronic registration system. The Office generally has allowed and encouraged applicants to register their works through this system since 2007. When the system was introduced, applicants could submit their works on an individual basis or as part of a collective work or an unpublished collection. See 72 FR 36883, 36884–85 (July 6, 2007). However, applicants could not submit a group registration covering contributions to periodicals, because the system was not designed to take in the information that is required for such a registration. Instead, applicants were required to file their claims with a paper application submitted on Form TX, Form VA, or Form PA, together with Form GR/CP.

In February 2015 the Office completed a comprehensive analysis of its electronic registration system with input from technical experts and stakeholders. This analysis will support the Office’s long-term goals of creating both a better interface and a better public record. See U.S. Copyright Office, Office of the Chief Information Officer, Report and Recommendations of the Technical Upgrades Special Project Team (February 2015), available at [http://copyright.gov/docs/technical\\_upgrades/usco-technicalupgrades.pdf](http://copyright.gov/docs/technical_upgrades/usco-technicalupgrades.pdf); see also 78 FR 17722 (Mar. 22, 2013). In December 2015 the Register issued a strategic plan that sets forth the Office’s performance objectives for the next five years. It provides a roadmap for re-envisioning almost all of the services that the Office provides, including how applicants register claims, submit deposits, record documents, share data, and access expert resources. With respect to information technology, the

<sup>3</sup> This same language appears in section 408(c)(2)(B) of the statute, as well as the legislative history for that provision. H.R. Rep. No. 94–1476, at 155 (1976); S. Rep. No. 94–473, at 137 (1975).

<sup>4</sup> As discussed in Sections III.F and G, this aspect of the Proposed Rule will apply to any group option that the Office creates under Section 408(c)—including the group options for serials, daily newspapers, daily newsletters, photographs, and databases. The Office is not proposing to make any other changes to those group options as part of this rulemaking.

plan calls for “a robust and flexible technology enterprise that is dedicated to the current and future needs of a modern copyright agency.” U.S. Copyright Office, Strategic Plan 2016–2020: Positioning the United States Copyright Office for the Future, at 35 (Dec. 1, 2014) (“Strategic Plan 2016–2020”), available at <http://copyright.gov/reports/strategic-plan/USCO-strategic.pdf>. At the direction of Congress,<sup>5</sup> the Office also developed a detailed IT plan, and obtained public comments on specific strategies, costs, and timelines for technology objectives. U.S. Copyright Office, Provisional Information Technology Modernization Plan and Cost Analysis (Feb. 29, 2016), available at <http://www.copyright.gov/reports/itplan/technology-report.pdf>.

In the meantime, the Office has made some enhancements to the current system to benefit authors, the Office, and the public at large. Under the Proposed Rule, applicants will be required to use an online application specifically designed for GRCP as a condition for using this group option. Once the Proposed Rule goes into effect, the Office will no longer accept groups of contributions that are submitted with a paper application on Form TX, Form VA, Form PA, or Form GR/CP. In such cases the Office will ask the applicant to resubmit the claim using the online application, which may change the effective date of registration that is assigned to the claim. The Office invites comment on this proposal, including whether the Office should eliminate the paper applications for GRCP, phase them out after a specified period of time, or continue to offer them for applicants who prefer to use the paper-based system.

When completing the online application, applicants will be asked to provide the same information that is currently requested in Form TX, Form VA, and Form GR/CP. Consistent with Section 408(c)(2) of the statute, applicants will be required to provide the title and date of first publication for each contribution in the group, as well as the title of the periodical where each contribution was first published. If an applicant fails to provide this information, the application will not be accepted by the electronic system. In addition, applicants will be given an opportunity to provide the International Standard Serial Number (“ISSN”) that has been assigned to the periodical (if any), as well as the volume, number, issue date, and relevant page numbers (if any) for the particular issue where the contribution was first published. If

the contributions were published as part of a continuing series of works by the same author, such as an advice column, an editorial column, a cartoon strip, or the like, the applicant will be given an opportunity to provide the title (if any) that may be used to identify the entire series of works.

The current regulation states that an applicant may register a group of contributions to periodicals in Class TX, VA, or PA by submitting the appropriate application for that class. 37 CFR 202.3(b)(8)(ii)(A) & n.3. The Proposed Rule, however, will allow applicants to register their claims only in Class TX or Class VA, and will eliminate the provision that allows a group of contributions to be registered in Class PA. The Office routinely registers contributions to periodicals in Class TX and Class VA, but has no institutional memory of having ever registered a claim in Class PA. Presumably, this is due to the fact that it would be extremely unusual for a musical work, a dramatic work, a choreographic work, a pantomime, a motion picture, or an audiovisual work to be first published as a contribution to a periodical.

The Proposed Rule states that applicants should register their claims in Class TX if a majority of the contributions predominantly consist of text, and should register their claims in Class VA if a majority of the contributions predominantly consist of photographs, illustrations, artwork, or other visual material. A similar provision appears in the current regulation; the Proposed Rule simply reiterates this requirement.

As discussed above, the current regulation also contains a limited exception to this rule, which is set forth in footnote 3 to the regulation. See 37 CFR 202.3(b)(8)(ii)(A) n.3. The Proposed Rule will eliminate this footnote, because it is obsolete.

When Congress enacted the Copyright Act of 1976 it contained a provision known as the “manufacturing clause,” which was set forth in Section 601 of the statute. Briefly stated, that provision prohibited the importation or distribution “of copies of a work consisting preponderantly of nondramatic literary material that is in the English language,” unless that material was “manufactured in the United States or Canada.” 17 U.S.C. 601 (1978) (repealed by Pub. L. 111–295, 4(a), 124 Stat. 3180 (2010)). Footnote 3 to the regulation that governs GRCP contains similar language. It states that “if any of the contributions consists preponderantly of nondramatic literary material that is in the English language, the basic application for the entire

group should be submitted on Form TX.” 37 CFR 202.3(b)(8)(ii)(A) n.3. The reason for this limitation is that when the Office adopted the regulation in 1978, Form TX contained a space that asked the applicant to identify the country where the copies were printed. The Office used this information to determine whether the work was subject to the manufacturing clause. (The Office did not include this space on Form VA or Form PA, because as mentioned above, the manufacturing clause only applied to nondramatic literary works.)

The manufacturing clause expired in 1986, Congress removed that provision from the statute in 2010, and as a result, the Office no longer asks for “country of origin” information on Form TX. Public Law 97–215, 96 Stat. 178, 178–79 (1982); Public Law 111–295, 4(a), 124 Stat. 3180, 3180 (2010). Thus, footnote 3 to the current regulation no longer serves any purpose.

## 2. Supplementary Registration

A supplementary registration is a special type of registration that may be used “to correct an error in a copyright registration or to amplify the information given in a registration,” including a registration for a group of related works. 17 U.S.C. 408(d). Specifically, it identifies an error or omission in an existing registration (referred to herein as a “basic registration”) and places the corrected information or additional information in the public record. The Office often refers to this type of registration as a “CA,” which stands for “correction and amplification.”

The Office is issuing a separate notice of proposed rulemaking (published elsewhere in this volume of the **Federal Register**, and referred to herein as the “CA Rulemaking”) that will modify the regulation that governs this procedure. Under the rule proposed in the CA Rulemaking, applicants will be required to file an online application in order to correct or amplify the information set forth in a basic registration for any work that is capable of being registered through the electronic system, rather than filing a paper application. This online-filing requirement will apply to supplementary registrations for groups of contributions to periodicals—even if those contributions were originally registered with a paper application submitted on Forms TX, VA, and GR/CP. When the rule proposed in the CA Rulemaking goes into effect, applicants will be required to file an online application in order to correct or amplify a basic registration for a GRCP claim. If an applicant attempts to use a paper application, the Office will ask

<sup>5</sup> H.R. Rep. No. 114–110, at 16–17 (2015).

the applicant to resubmit the claim using the online form.

The Office is inviting comment on this proposal, including whether the Office should eliminate the paper application for seeking a supplementary registration, phase out this option after a specified period of time, or continue to offer this option for applicants who prefer to use the paper-based system. Comments concerning this proposal should be submitted as part of the CA Rulemaking, and should not be submitted as part of this rulemaking on GRCP.

### 3. Policy Considerations Supporting Online-Only Registration

A substantial majority of the U.S. population has access to the internet,<sup>6</sup> and therefore, the Office expects that most authors will be able to use the electronic system.<sup>7</sup> That said, the Office recognizes that millions of Americans do not have broadband service, and recognizes that eliminating the paper application may impose a burden on authors who fall within that segment of the population.<sup>8</sup> Nevertheless, the Office believes that the benefits of requiring applicants to use the online application outweigh the potential burden on authors who do not have direct access to the internet.

Providing title and publication information with a paper application can be tedious and time consuming, especially when applicants submit dozens or even hundreds of contributions in a group registration. Examining these types of claims also imposes substantial burdens on the Office, because the cataloging information for each contribution must be copied from the application and typed into the Office's electronic system by hand. In some cases, examiners have

spent an entire day processing a single claim, which has resulted in corresponding delays in issuing certificates of registration. Moreover, the increasing demand on the Office's limited resources has had an adverse effect on the examination of other types of works within the Literary and Visual Arts Divisions.

If an author does not have broadband at home, at the home of a relative, a friend, or a neighbor, or at her place of employment, there are other options for registering a group of contributions to periodicals. If the copyright owner has a tablet or laptop, she could complete and submit the online application at a coffee shop, a bookstore, or any other place where wi-fi or cellular service is available.<sup>9</sup> She could log into the electronic system at a public library or other institution that provides computers with Internet access. Alternatively, the author could hire an attorney to submit the application on her behalf, either by paying for the attorney's services or by obtaining *pro bono* representation.<sup>10</sup> The Office also notes that a number of companies will prepare an application and file it with the Office for a fee. These companies typically provide this service for authors who wish to register a single work, but they could conceivably expand their offering to include groups of contributions to periodicals.

Congress gave the Office broad authority to establish the requirements for group registration options. 17 U.S.C. 408(c)(1). For the foregoing reasons, the Office believes that requiring applicants to submit an online application as a condition for seeking a registration for a group of contributions to periodicals is

a reasonable trade-off for improving the overall efficiency of the group registration process. Nonetheless, the Office invites comment on this aspect of the Proposed Rule.

### B. Eligibility Requirements

This section discusses the eligibility requirements for the group option for contributions to periodicals. Applicants that fail to satisfy these requirements will not be permitted to use this option.

#### 1. Restating the Existing Eligibility Requirements

The Proposed Rule improves the readability of the regulation by restating the eligibility requirements for this group option, including the requirements involving authorship, work made for hire, first publication, and notice. The changes in language are simply intended to clarify these requirements and do not represent a substantive change in policy.

#### 2. Definition of "Periodicals"

The Proposed Rule provides a definition for the term "periodicals." It states that a periodical is a collective work that is issued or intended to be issued on an established schedule in successive issues that are intended to be continued indefinitely. It recognizes that each issue of a periodical usually bears the same title, as well as numerical or chronological designations. It also provides examples of works that typically qualify as a periodical, such as newspapers, magazines, newsletters, journals, bulletins, annuals, the proceedings of societies, and other similar works. This definition has appeared in the *Compendium of U.S. Copyright Office Practices* since December 22, 2014, and is consistent with the Office's longstanding definition for the term "serial," which has been in effect since 1991. See U.S. Copyright Office, *Compendium of U.S. Copyright Office Practices*, section 1115.1 (3d ed. 2014) (hereinafter the "*Compendium*"); 37 CFR 202.3(b)(1)(v); 56 FR 7812, 7813 (Feb. 26, 1991).

An applicant may be permitted to register articles, blog entries, artwork, photographs, or other contributions that were first published in an electronically printed ("ePrint") publication if that publication fits within the regulatory definition of a "periodical." Specifically, an ePrint publication may be considered a periodical for purposes of registration if it is fixed and distributed online or via email as a self-contained work, such as a digital version of a tangible newspaper, magazine, newsletter, or similar

<sup>6</sup> The Pew Research Center found that 84% of adults use the internet, including 85% of the people in urban and suburban communities and 78% of the people in rural communities. Pew Research Center, *Americans' Internet Access: 2000–2015*, at 2, 10 (June 26, 2015), available at [http://www.pewinternet.org/files/2015/06/2015-06-26\\_internet-usage-across-demographics-discover\\_FINAL.pdf](http://www.pewinternet.org/files/2015/06/2015-06-26_internet-usage-across-demographics-discover_FINAL.pdf).

<sup>7</sup> Approximately 94% of the claims submitted in fiscal year 2015 were filed through the electronic system, while 6% of the claims were submitted on a paper application.

<sup>8</sup> The Federal Communications Commission reported that 17% of the population does not have access to a broadband service with connection speeds of twenty-five megabits per second ("mbps") for downloads and three mbps for uploads. This figure includes 8% of the people who live in urban areas, 53% of the people in rural areas, and 63% of the people in U.S. territories and Tribal lands. Federal Communications Commission, 2015 Broadband Progress Report 4 (Jan. 29, 2015), available at [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-15-10A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-10A1.pdf).

<sup>9</sup> When filing an application for a supplementary registration there is no need to upload a copy of the work that is covered by the basic registration. Thus, applicants will be able to submit these types of claims with a tablet or other wi-fi enabled device. In some cases, the registration specialist may need to compare the information provided in the application for supplementary registration with the copy of the work that was submitted with the application for the basic registration. For instance, this may be necessary if the supplementary registration changes the publication status of the work or adds additional authors to the registration record. If the Office does not have a copy of the work in its possession, the registration specialist may ask the applicant to submit a replacement copy. See *Compendium* section 1802.9(C). But in all cases, the replacement copy could be sent by first class mail, courier, or hand delivery; the copy does not need to be uploaded to the electronic system (though this would be an option if the applicant has broadband service).

<sup>10</sup> The Office does not require applications to be prepared or submitted by an attorney. In certain special cases the Office may suggest that the copyright owner consider seeking legal advice, but the Office does not furnish the names of copyright attorneys, publishers, agents, or other similar information. See 37 CFR 201.2(a)(2).

publication. For example, many companies publish electronic newsletters that contain articles on a particular subject, and distribute these publications to their subscribers either online or via email. An article published in an ePrint newsletter could be considered a contribution to a periodical under the Proposed Rule if each issue of the newsletter is fixed and distributed as a self-contained work and if the content of each issue does not change once it has been distributed.

By contrast, a Web site would not be considered a periodical under the Proposed Rule. Web sites are typically updated on a continual basis rather than an established schedule. The updates are not made in successive issues that can be recognized as discrete, self-contained collective works, and they do not contain numerical or chronological designations that distinguish one update from the next. For these reasons, an applicant could register a group of articles that were first published in the print or ePrint edition of a magazine. Likewise, an applicant could register a group of articles that were first published in a print or ePrint edition of a magazine and simultaneously published on the publisher's Web site. However, an applicant could not register a group of articles that were published solely on a Web site.

The Office is aware of the need for establishing new and updated practices for examining and registering complex or emerging areas of authorship. The Register's strategic plan calls for the Office to "[a]ssess special issues relating to registration and deposit protocols for emerging forms of digital dissemination of works across the spectrum of creative industries," and to "[i]dentify and make appropriate changes to Office policy and procedures in response to . . . emerging business standards." Strategic Plan 2016–2020 at 11. The rule proposed in this notice represents an interim improvement to the current electronic registration system, and is intended to provide a sound foundation for creating other registration options within the next five years.

### 3. Identifying the Contributions in the Group

The Proposed Rule confirms that the application must identify each contribution that is included in the group, including the date of publication for each contribution and the periodical in which it was first published. Although the statute expressly states that this requirement should be included in the regulation, it does not appear in the current rule. 17 U.S.C. 408(c)(2)(B). Instead, the regulation

states that the application "shall contain the information required by the form and its accompanying instructions," and in turn, the instructions for Form GR/CP state that this information should be included in the form. 37 CFR 202.3(b)(8)(ii)(A); *see also* United States Copyright Office, Adjunct Application Form GR/CP, available at [http://copyright.gov/forms/formgr\\_tx.pdf](http://copyright.gov/forms/formgr_tx.pdf). The Proposed Rule reconciles the regulation with the statute and the Office's current practices.

### 4. Ownership Requirements

The Proposed Rule confirms that the copyright claimant for each contribution in the group must be the same person or organization. This is in addition to the requirement that the contributions must be created by the same individual, although the author and claimant may be different persons. As noted in Section II, this requirement has appeared in the instructions for Form GR/CP for some time, but it does not appear in the current regulation. The change is simply intended to reconcile the regulation with the Office's longstanding practices. The Office will continue to register contributions authored by an individual who transferred his or her copyrights to the copyright claimant, provided that the claimant owns all of the exclusive rights in those contributions and provided that the application contains an appropriate transfer statement explaining how the claimant obtained those rights.

### 5. Number of Contributions in the Group

The statute directs the Office to establish a procedure for registering a group of works by the same individual, but it does not specify the total number of works that may be included within each group. Although the statute requires the Register to establish a group registration procedure for contributions to periodicals that are "all first published as contributions to periodicals, within a twelve-month period," 17 U.S.C. 408(c)(2) (emphasis added), that is not the same thing as saying that an author should be permitted to register "all" such contributions with one application and one filing fee. If that is what Congress intended, then presumably it would have directed the Register to establish a procedure for registering "all" works by the same individual author (rather than "a group of works"). *Id.*

Although the Office thus has the authority to limit the number of contributions that may be included within each group, it has decided not to impose any limits at this time. Once the

Proposed Rule has been implemented, the Office will monitor these group registrations to determine if any restrictions may be warranted in the future.

In the meantime, the Office encourages authors to submit their contributions on a quarterly basis (*i.e.*, every three months), instead of submitting them on an annual or semi-annual basis. As with any work of authorship, a contribution to a periodical must be registered in a timely manner to seek statutory damages and attorney's fees in an infringement action. Specifically, an author may seek statutory damages and attorney's fees if the contribution was registered (i) before the infringement commenced or (ii) within three months after the first publication of that work. 17 U.S.C. 412. To secure these benefits, the Office encourages authors to register their contributions within three months after they were published. By doing so, authors will preserve their ability to seek statutory damages and attorney's fees for any infringements that may occur after the effective date of registration, as well as any infringements that may occur within three months after the publication of each work. For example, if the first contribution in the group was published on June 1, 2016 and the last contribution was published on September 1, 2016, it would be advisable to file a complete application, deposit, and filing fee on or before September 1, 2016. By doing so, the author will preserve his or her ability to seek statutory damages and attorney's fees for any infringements that began after the effective date of registration (*i.e.*, after September 1, 2016), as well as any infringements that began within three months after the date of publication for each contribution in the group.

### C. Deposit Requirements

To register a group of contributions to periodicals under the Proposed Rule applicants must submit a complete copy of each contribution that is included in the group. This will ensure that the Office receives the entire content of each contribution for the purpose of examining, indexing, and documenting the claim.

Applicants may satisfy this requirement by submitting one copy of the entire issue of the periodical in which the contribution was first published. If the contribution was first published in a newspaper, applicants may satisfy this requirement by submitting one copy of the entire section of the newspaper in which the

contribution was first published. Both of these options appear in the existing rule and are required to be included by statute. 17 U.S.C. 408(c)(2)(A); 37 CFR 202.3(b)(8)(i)(E).

Alternatively, applicants may satisfy this requirement by submitting one copy of each contribution in the precise form in which it was first published in the periodical. Specifically, applicants may submit a copy of the particular pages within the periodical where the contribution was first published. This provision essentially mirrors regulations that have been in place since 2002 and, as discussed, is necessary to ensure that authors can readily take advantage of the GRCP option. *See generally* 67 FR 10329.

The Register may, consistently with the statutory scheme, accept deposits other than “one copy of the entire issue of the periodical” and “the entire section in the case of a newspaper” for the GRCP option. 17 U.S.C. 408(c)(2)(A). As mentioned above, section 408(c) gives the Register broad authority to establish group registration options, and to define the nature of the deposit materials for such registrations. *See* 17 U.S.C. 408(c)(1) (“The Register of Copyrights is authorized to specify by regulation the administrative classes into which works are to be placed for purposes of deposit and registration, and the nature of the copies or phonorecords to be deposited in the various classes specified. The regulations may require or permit . . . a single registration for a group of related works.”). Section 408(c)(2), in turn, requires the Register to establish a particular group registration option with the following conditions: “specifically permitting a single registration for a group of works by the same individual author, all first published as contributions to periodicals, including newspapers, within a twelve-month period . . . if the deposit consists of one copy of the entire issue of the periodical, or of the entire section in the case of a newspaper, in which each contribution was first published.”<sup>11</sup> 17 U.S.C. 408(c)(2)(A). The Proposed Rule provides that option. Section 408(c)(2) does not, however, limit the Register’s ability to expand the circumstances where group registration of contributions to periodicals would be accepted. Nor does it limit her ability to

provide authors of such contributions with additional accommodations to facilitate their use of this group registration option. To the contrary, section 408(c)(2) makes clear that its terms are “[w]ithout prejudice to the general authority provided under” section 408(c)(1) to create group registration options and define the deposit requirements for those options. *Id.* 408(c)(2). Indeed, to read section 408(c)(2) as *limiting* the Register’s authority in this regard would be contrary to the overall purpose of the statutory scheme, which was to reduce “administrative problems” and “unnecessary burdens and expenses on authors and other copyright owners” by permitting group registration. H.R. Rep. No. 94–1476, at 154 (1976). Thus, as an exercise of the Register’s general authority in section 408(c)(1), the Office has determined that it may accept formats other than those specifically listed in section 408(c)(2)(A) as deposits for the GRCP option.

In all cases applicants will be required to submit a digital copy of each contribution that is included in a group. Specifically, applicants will be required to submit electronic files in Portable Document Format (“PDF”) or other electronic format specifically approved by the Office. This requirement will apply regardless of whether an applicant submits a copy of an entire issue of a periodical, an entire section of a newspaper, or the specific pages from the periodicals where the contributions were first published.

Applicants will be required to upload the digital copies through the electronic registration system. When uploading the files, applicants will be strongly encouraged to save them in a .zip file and then upload the .zip file to the system. In all cases, the size of each uploaded file may not exceed 500 megabytes, although applicants may digitally compress the contributions to comply with this limitation.

Under the current regulation, applicants must submit a physical copy of each contribution, such as photographic prints, contact sheets, or slides; camera-ready proof copies; or pages or clippings cut or torn from a newspaper, magazine, or other publication. Under the Proposed Rule, the Office will no longer accept physical copies. Likewise, the Office will not accept digital copies that have been saved onto a disc, a flash drive, or other physical storage device that is delivered to the Office by mail, by courier, or by hand delivery. In all cases, applicants will be required to upload a digital copy of each contribution via the electronic registration system.

Requiring applicants to upload their digital copies to this system will increase the efficiency of the group registration process. Based on the Office’s experience, electronic submissions take less time to process, they are easier to track, and they are less burdensome to store than physical copies. From the applicant’s perspective, electronic submissions should be more convenient and less expensive than submitting digital copies on a physical storage device, and if the claim is approved, the applicant should receive a certificate of registration in a more timely manner.

Moving to electronic deposits may also provide copyright owners with certain legal benefits. When the Office registers a group of contributions to periodicals it assigns an effective date of registration to the claim. This determination is based on the date that the Office received the application, the filing fee, and the deposit. When an applicant uploads a digital copy to the electronic system, the Office typically receives the application, the filing fee, and the deposit on the same date. By contrast, when an applicant delivers a physical copy to the Office by mail, courier, or hand delivery, the deposit may not be received for days or even weeks after the date that the application and filing fee were submitted.

Requiring applicants to submit a scanned copy of their contributions in the precise form in which they were first published is consistent with the legislative history, which states that “[a]s a general rule the deposit of more than a tear sheet or similar fraction of a collective work is needed to identify the contribution properly and to show the form in which it was published.” H.R. Rep. No. 94–1476, at 153 (1976). It also serves an evidentiary purpose. It gives the examiner an opportunity to compare the deposit with the title, date of publication, issue number, page number, or other information that is set forth in the application (although in practice examiners do not conduct this type of analysis for every contribution in the group). If a particular contribution becomes involved in litigation, the deposit could be used to verify that the contribution was published in a particular periodical on a particular date.

Applicants who are unable to submit their contributions in the precise form in which they were first published may request special relief from the deposit requirements. 37 CFR 202.20(d). Likewise, applicants may request special relief if they are unable to submit a digital copy of their contributions or unable to upload them

<sup>11</sup> Similar language appears in the legislative history for this provision. *See* H.R. Rep. No. 94–1476, at 154 (1976) (“It is further required that the deposit consist of one copy of the entire issue of the periodical, or of the entire section in the case of a newspaper, in which each contribution is first published.”); S. Rep. No. 94–473, at 137 (1975) (same).



through the electronic system. For information concerning special relief, see section 1508.8 of the *Compendium*.

#### D. Filing Fee

Under the Proposed Rule, the applicant will be required to pay the same filing fee that is currently set forth in the Office's fee schedule, namely \$85 per claim.

In 2012 the Office conducted a study pursuant to Section 708 of the Copyright Act, which authorizes the Register to establish, adjust, and recover fees for certain services that the Office provides to the public. After reviewing its costs, the Office decided to increase the filing fee for GRCP from \$65 to \$85, noting that these types of claims are "labor-intensive."<sup>12</sup> U.S. Copyright Office, Proposed Schedule and Analysis of Copyright Fees To Go Into Effect On Or About April 1, 2014, at 17 (Nov. 14, 2013).

Section 708(b) authorizes the Register to adjust the fees that the Office charges for certain services (including the fee for seeking a group registration), but before doing so the Register must conduct a study of the costs incurred by the Office for registering claims, recording documents, and providing other services. In conducting this study, the Register must consider the timing of any fee adjustments and the Office's authority to use the fees consistent with its budget. 17 U.S.C. 708(b)(1). Section 708(b) provides that the Register may adjust these fees no "more than necessary to cover the reasonable costs incurred by the Copyright Office for . . . [such services], plus a reasonable inflation adjustment to account for any estimated increase in costs." 17 U.S.C. 708(b)(2). It also provides that the Office must submit the proposed fee schedule to Congress, and that the Office may implement the schedule 120 days thereafter unless Congress enacts a law stating that it does not approve the schedule. 17 U.S.C. 708(b)(5).

Once the Proposed Rule has been implemented, the Office will monitor the cost of processing GRCP claims to determine if future fee adjustments may be warranted. The Office will use this information in conducting its next fee study.

#### E. The Scope of a Group Registration

The Proposed Rule memorializes the Office's longstanding position regarding the scope of a registration for a group of contributions to periodicals.

When the Office issues a group registration it prepares one certificate of registration for the entire group and

assigns one registration number to that certificate. The Proposed Rule clarifies that a registration for a group of contributions to periodicals covers each contribution in the group, and each contribution is registered as a separate "work." This understanding is consistent with the statutory scheme. The legislative history makes clear that group registration was "a needed and important liberalization of the law [then] in effect," which to that point had required "separate registrations where related works or parts of a work are published separately." H.R. Rep. No. 94-1476, at 154 (1976). In particular, Congress noted that "the technical necessity for separate applications and fees has caused copyright owners to forego copyright altogether." *Id.* Given that context, it would be anomalous for works registered as part of a group registration application to be given lesser protection than if they had been registered through separate applications.

For similar reasons, the Proposed Rule also clarifies that when a group of works are registered under GRCP, the group as a whole is not considered a compilation or a collective work. Instead, the group is merely an administrative classification created solely for the purpose of registering multiple contributions with one application and one filing fee. See 17 U.S.C. 408(c)(1) ("Th[e] administrative classification of works has no significance with respect to the subject matter of copyright or the exclusive rights provided by this title."). Although an applicant may exercise some judgment in selecting the contributions that are included within a particular group, that decision does not necessarily constitute copyrightable authorship. The selection is based on the regulatory requirements for GRCP, and any coordination or arrangement of the contributions is merely an administrative formality that facilitates the examination of the works.

Likewise, the Proposed Rule clarifies that the group is not considered a derivative work. When a group of contributions are combined together for the purpose of facilitating registration those works are not "recast, transformed, or adapted" in any way, and the group as a whole is not "a work based upon one or more preexisting works" because there is no copyrightable authorship in simply following the administrative requirements for GRCP. 17 U.S.C. 101 (definition of "derivative work").

#### F. Refusals To Register

The Proposed Rule confirms that the Office may refuse to issue a group

registration if it determines that the applicant failed to satisfy the requirements set forth in the statute or regulations.<sup>13</sup> 17 U.S.C. 410(b) (stating that the Register "shall refuse registration and shall notify the applicant in writing of the reasons for such refusal" "[i]n any case in which [she] determines that . . . the material deposited does not constitute copyrightable subject matter or that the claim is invalid for any other reason").

#### G. Cancellation

The Proposed Rule confirms that the Office may cancel a group registration under § 201.7(c)(4) of the regulations if it determines, after the registration has issued, that the requirements for that option were not met. In such cases, the Office will send a written notice to the correspondent and claimant named in the registration at the addresses specified in the registration record. The Office will describe the defect in the registration and will inform the parties that the registration may be cancelled if they fail to resolve the defect in a timely manner.

In a related vein, the Proposed Rule makes some clarifying edits to the Office's cancellation regulation, section 201.7(c)(4). First, it makes clear, consistent with existing Copyright Office practice, that the regulation only provides representative examples of situations where the Office may cancel a registration (rather than an exhaustive list of situations where cancellation may be warranted). Second, the Proposed Rule also removes one of the examples from that list—namely section 201.7(c)(4)(ix), which states that the Office may cancel a registration for a work published after January 1, 1978 if it determines that "the only claimant given on the application was deceased on the date the application was certified." This is inconsistent with current practices of the Copyright Office.

The Office recently conducted a comprehensive review of its internal policies in conjunction with the revision of the *Compendium*. The *Compendium* explains that if the Office discovers that the named claimant died before the work was submitted or before it has been approved for registration, the Office may ask the applicant to provide the name of the current claimant. In

<sup>13</sup> A similar requirement has appeared in the regulation governing the group registration option for serials since 1990. See 55 FR 50556, 50556-57 (Dec. 7, 1990). That regulation states that the Office may revoke the privilege of registering a group of serials if a publisher fails to comply with the deposit requirement for that option. 37 CFR 203.3(b)(6)(iv).

<sup>12</sup> This increase went into effect on May 1, 2014.

such cases, the Office will accept an application filed by or on behalf of the person or organization that owns all of the exclusive rights that initially belonged to a deceased claimant, such as the claimant's estate, a devisee, or an heir. Likewise, the Office will accept an application that names a deceased author as the copyright claimant if that author is the only party who is eligible to be named as the claimant, as might be the case where no one owns all of the exclusive rights in the work because the author previously transferred those rights to multiple parties. *See Compendium* section 405.5.

#### H. Technical Amendments

The Proposed Rule will move the regulation that governs this group option from section 202.3(b)(8) to section 202.4(h).<sup>14</sup> In the future, the Office intends to move all regulations governing the various group options that it has created under section 408(c) of the Copyright Act to section 202.4. This change is intended to improve the readability of the existing regulations,

but it does not represent a substantive change in policy.

In addition, the Proposed Rule will incorporate the definitions of "Class TX," "Class VA," and "works of the visual arts" that are set forth in section 202.3, and it will confirm that the application may be submitted by any of the parties listed in section 202.3(c)(1), namely (i) the author or copyright claimant of those works, (ii) the owner of any of the exclusive rights in those works, or (iii) a duly authorized agent of any author, claimant, or owner of exclusive rights.

#### IV. Conclusion

The Proposed Rule will allow broader participation in the registration system, and increase the efficiency of the group registration process. The Office invites public comment on these proposed changes.

#### List of Subjects

##### 37 CFR Part 202

Copyright, General provisions.

##### 37 CFR Part 202

Copyright, Preregistration and registration of claims to copyright.

#### Proposed Regulation

For the reasons set forth in the preamble, the U.S. Copyright Office proposes amending 37 CFR parts 201 and 202, as follows:

#### PART 201—GENERAL PROVISIONS

- 1. Revise the authority citation for part 201 to read as follows:

Authority: 17 U.S.C. 702.

- 2. Amend § 201.3 by revising: paragraph (c)(2) to read as follows:

##### § 201.3 Fees for registration, recordation, and related services, special services, and services performed by the Licensing Division.

\* \* \* \* \*

(c) \* \* \*

(2) Registration of a claim in a group of contributions to periodicals or a group of database updates. ....

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\* \* \* \* \*

- 3. Amend § 201.7 by:

- a. In the last sentence in paragraph (c)(4), adding the phrase "examples of" after the phrase "The following are".
- b. In paragraph (c)(4)(i), removing the semi-colon and add a period in its place.
- c. In paragraph (c)(4)(ii), removing "1989," and add in its place "1989" and remove "notice;" and add in its place "notice."
- d. In paragraphs (c)(4)(iii) through (viii), removing the semi-colon and add a period in its place.
- e. Removing paragraph (c)(4)(ix) and redesignate paragraphs (c)(4)(x) and (xi) as paragraphs (c)(4)(ix) and (x), respectively.
- f. In newly redesignated paragraph (c)(4)(ix), removing the term "; and" and add a period in its place.
- g. Adding paragraph (c)(4)(xi).

The addition to read as follows:

##### § 201.7 Cancellation of completed registrations.

\* \* \* \* \*

(c) \* \* \*

(4) \* \* \*

(xi) The requirements for registering a group of related works under section 408(c) of title 17 of the United States Code have not been met.

\* \* \* \* \*

#### PART 202—PREREGISTRATION AND REGISTRATION OF CLAIMS TO COPYRIGHT

- 4. The authority citation for part 202 continues to read as follows:

Authority: 17 U.S.C. 408(f), 702.

- 5. Amend § 202.3 by:
  - a. Revising paragraph (b)(4)(ii).
  - b. Removing and reserving paragraph (b)(8).
  - c. In paragraph (b)(11)(ii), redesignating footnote 4 as footnote 2 (both in the text of paragraph (b)(11)(ii) and in the footnote itself).
  - d. In the text of paragraph (c)(2), removing the reference to footnote "6" and adding in its place a reference to footnote "3", redesignating footnote 5 as footnote 3, and revising newly redesignated footnote 3.

The revisions to read as follows:

##### § 202.3 Registration of copyright.

\* \* \* \* \*

(b) \* \* \*

(4) \* \* \*

(ii) In the case of an application for registration made under paragraphs (b)(4) through (10) of this section or under § 202.4, the "year of creation," "year of completion," or "year in which creation of this work was completed" means the latest year in which the

creation of any copyrightable element was completed.

\* \* \* \* \*

(c) \* \* \*

(2) \* \* \*

<sup>3</sup>In the case of an application to register a group of newspapers, newsletters, or contributions to periodicals under paragraphs (b)(7) or (9) of this section or under § 202.4(h), the deposit shall comply with the respective requirements specified in those paragraphs.

\* \* \* \* \*

- 7. Revise § 202.4 to read as follows:

##### § 202.4 Group Registration.

(a) This section prescribes conditions for issuing a registration for a group of related works under section 408(c) of title 17 of the United States Code.

(b) *Definitions.* For purposes of this section, the terms *collective work*, *copy*, and *work made for hire* have the meanings set forth in section 101 of title 17 of the United States Code, and the terms *claimant*, *Class TX*, *Class VA*, and *works of the visual arts* have the meanings set forth in § 202.3(a)(3), (b)(1)(i), and (b)(1)(iii).

(c) [Reserved]

(d) [Reserved]

(e) [Reserved]

(f) [Reserved]

(g) [Reserved]

<sup>14</sup> The Office recently issued a notice of proposed rulemaking that would remove the current text of

section 202.4 and reserve that section for later use. *See* 81 FR 67940, 67942 (Oct. 3, 2016).

(h) *Group registration of contributions to periodicals.* Pursuant to the authority granted by 17 U.S.C. 408(c)(2), the Register of Copyrights has determined that a group of contributions to periodicals may be registered in Class TX or Class VA with one application, one filing fee, and the required deposit, if the following conditions are met:

(1) All the contributions in the group must be created by the same individual.

(2) The copyright claimant must be the same person or organization for all the contributions.

(3) The contributions must not be works made for hire.

(4) Each work must be first published as a contribution to a periodical, and all the contributions must be first published within a twelve-month period (e.g., January 1, 2015 through December 31, 2015; February 1, 2015 through January 31, 2016). For purposes of this section, a periodical is a collective work that is issued or intended to be issued on an established schedule in successive issues that are intended to be continued indefinitely. In most cases, each issue will bear the same title, as well as numerical or chronological designations. Examples include newspapers, magazines, newsletters, journals, bulletins, annuals, the proceedings of societies, and other similar works.

(5) If any of the contributions were first published before March 1, 1989, those works must bear a separate copyright notice, the notice must contain the copyright owner's name (or an abbreviation by which the name can be recognized, or a generally known alternative designation for the owner), and the name that appears in each notice must be the same.

(6) The applicant must complete and submit the online application designated for a group of contributions to periodicals. The application must identify each contribution that is included in the group, including the date of publication for each contribution and the periodical in which it was first published. The application may be submitted by any of the parties listed in § 202.3(c)(1). The application should be filed in Class TX if a majority of the contributions predominantly consist of text, and the application should be filed in Class VA if a majority of the contributions predominantly consist of photographs, illustrations, artwork, or other works of the visual arts.

(7) The appropriate filing fee, as required by § 201.3(c) of this chapter, must be included with the application or charged to an active deposit account.

(8) The applicant must submit one copy of each contribution that is

included in the group, either by submitting the entire issue of the periodical where the contribution was first published, the entire section of the newspaper where it was first published, or the specific page(s) from the periodical where the contribution was first published. The contributions must be contained in separate electronic files that comply with § 202.20(b)(2)(iii). The files must be submitted in Portable Document Format (PDF) or other electronic format approved by the Office, and they must be uploaded to the electronic registration system, preferably in a .zip file containing all the files. The file size for each uploaded file must not exceed 500 megabytes; the files may be compressed to comply with this requirement.

(i) [Reserved]

(j) [Reserved]

(k) [Reserved]

(l) *Refusal to register.* The Copyright Office may refuse registration if the applicant fails to satisfy the requirements for registering a group of related works under this section or § 202.3(b)(5)–(7), (9), or (10).

(m) *Cancellation.* If the Copyright Office issues a registration for a group of related works and subsequently determines that the requirements for that group option have not been met, and if the claimant fails to cure the deficiency after being notified by the Office, the registration may be cancelled in accordance with § 201.7 of this chapter.

(n) *The scope of a group registration.* When the Office issues a group registration under paragraph (h) of this section, the registration covers each work in the group and each work is registered as a separate work. For purposes of registration, the group as a whole is not considered a compilation, a collective work, or a derivative work under sections 101, 103(b), or 504(c)(1) of title 17 of the United States Code.

Dated: November 22, 2016.

**Sarang V. Damle,**

*General Counsel and Associate Register of Copyrights.*

[FR Doc. 2016–28700 Filed 11–30–16; 8:45 am]

**BILLING CODE 1410–30–P**

## LIBRARY OF CONGRESS

### Copyright Office

### 37 CFR Parts 201, 202

[Docket No. 2016–10]

### Group Registration of Photographs

**AGENCY:** U.S. Copyright Office, Library of Congress.

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** The U.S. Copyright Office is proposing to update its regulations governing group registration options for photographers to encourage broader participation in the registration system, increase the efficiency of the registration process, and create a more robust record of the claim. First, the Office has created new online registration applications specifically designed for group registrations of published photographs and group registrations of unpublished photographs. The proposed rule would require applicants to use these online applications, in lieu of any existing paper application. Applicants will be allowed to include up to 750 photographs with each application. Second, the proposal would eliminate less-efficient forms of registering photographs that have been adopted over the years—namely, the pilot program permitting group registration of published photographs using the electronic application designed for registering a single work, and the option of registering a number of unpublished photographs as an “unpublished collection.” The pilot program for photographic databases will remain in effect. Third, the proposed rule will update the deposit requirement for group registrations of photographs and photographic databases by requiring applicants to submit their works in digital form.

**DATES:** Comments on the proposed rule must be made in writing and must be received in the U.S. Copyright Office no later than January 3, 2017.

**ADDRESSES:** For reasons of government efficiency, the Copyright Office is using the *regulations.gov* system for the submission and posting of public comments in this proceeding. All comments are therefore to be submitted electronically through *regulations.gov*. Specific instructions for submitting comments are available on the Copyright Office Web site at <http://www.copyright.gov/rulemaking/group-photographs/>. If electronic submission of comments is not feasible due to lack of access to a computer and/or the Internet, please contact the Office using the contact information below for special instructions.

**FOR FURTHER INFORMATION CONTACT:** Robert J. Kasunic, Associate Register of Copyrights and Director of Registration Policy and Practice, or Erik Bertin, Deputy Director of Registration Policy and Practice, at 202–707–8040.

**SUPPLEMENTARY INFORMATION:** The U.S. Copyright Office (the “Office”) is proposing to amend the regulation that

governs the group registration option for published photographs. In addition, the Office is proposing to create a new group registration option for unpublished photographs. Finally, the Office is proposing to amend the deposit requirements for groups of published photographs and photographic databases, and is proposing to establish similar deposit requirements for the new group option for unpublished photographs. These proposals are discussed in more detail below. The Office invites public comment on each proposal.

Last year the Office issued a notice of inquiry concerning the practical and legal challenges faced by photographers, graphic artists, and illustrators (referred to herein as the “Visual Works Inquiry”<sup>1</sup>). See 80 FR 23054 (Apr. 24, 2015). The Office recognized that photographers, graphic artists, and illustrators have a broad impact on U.S. culture, but they face significant challenges in the digital age. To better understand these challenges, the Office requested written comments on how photographs, graphic artworks, and illustrations are monetized, licensed, registered, and enforced under the Copyright Act of 1976 (“the Copyright Act”). The Office sought information concerning the current marketplace for these types of works, as well as observations regarding the real or potential obstacles that these creators and their licensees or other representatives face when navigating the digital landscape. With respect to registration, the Office asked the public to identify the most significant challenges for photographers and other visual artists. 80 FR at 23056.

The Office received 2,795 comments and 166 reply comments in response to the Visual Works Inquiry. The Office has not attempted to address these comments in this notice of proposed rulemaking.<sup>2</sup> The rule proposed in this notice focuses solely on photographs, and it represents an interim improvement to the current electronic registration system. In the future, the Office may consider other options as it assesses the broader concerns of visual artists generally.

## I. Background

When Congress enacted the Copyright Act, it authorized the Register of Copyrights (the “Register”) to specify by regulation the administrative classes of works for the purpose of seeking a registration and the nature of the deposit required for each such class. In addition, Congress gave the Register the discretion to allow groups of related works to be registered with one application and one filing fee, a procedure known as “group registration.” See 17 U.S.C. 408(c)(1). Pursuant to this authority, the Register issued regulations permitting the Office to issue group registrations for certain limited categories of works, provided that certain conditions have been met. See generally 37 CFR 202.3(b)(5)–(10).

As the legislative history explains, allowing “a number of related works to be registered together as a group represent[ed] a needed and important liberalization of the law.” H.R. Rep. No. 94–1476, at 154 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5770; S. Rep. No. 94–473, at 136 (1975). Congress recognized that requiring applicants to submit separate applications for certain types of works may be so burdensome and expensive that authors and copyright owners may forgo registration altogether, since copyright registration is not a prerequisite to copyright protection. *Id.* If copyright owners do not submit their works for registration under this permissive system, the public record will not contain any information concerning those works. This creates a void in the record that diminishes the value of the Office’s database.

Congress cited “a group of photographs by one photographer” as an example of a “group of related works” that would be suitable for registration under section 408(c)(1). *Id.* At the same time, when large numbers of works are bundled together in one application, information about the individual works may not be adequately captured. Therefore, group registration options require careful balancing of the need for an accurate public record and the need for an efficient method of facilitating the registration of multiple photographs.

## II. Existing Registration Accommodations for Photographers

Under the Copyright Office’s existing regulations and registration practice, photographers have several options for registering groups or collections of photographs with one application and one filing fee. These options are summarized below.

### A. Group Registration of Published Photographs

After conducting an extensive rulemaking, the Office issued a regulation in 2001 that allows applicants to register a group of published photographs with one application and one filing fee. See 66 FR 37142, 37149–50 (July 17, 2001). The Office refers to this procedure as the “group option for published photographs” or “GRPPH.”

An applicant may register a group of photographs under this procedure if all the photographs were taken by the same photographer and were published within the same calendar year, and if the copyright claimant for all the photographs is the same person or organization. 37 CFR 202.3(b)(10)(i)–(iii). If the photographs were created as works made for hire, the application must provide both the name of the photographer and the name of the photographer’s employer or the party who specially ordered or commissioned the photographs (*e.g.*, “ABC Corporation, employer for hire of John Doe”). *Id.* § 202.3(b)(10)(ix).

As a general rule, the applicant must provide a precise date of publication for each photograph in the group (*i.e.*, month, day, and year), either by providing the date on the application, on a continuation sheet submitted on Form GR/PPh/CON,<sup>3</sup> on a separate list submitted on paper or in a text file, or on the photographs themselves (*e.g.*, writing the date on the back of each print, including the date in the file name for each image, etc.). *Id.* § 202.3(b)(10)(iv)(A)–(D). Alternatively, the applicant may provide a range of dates (*e.g.*, February 25, 2015 through May 25, 2015), but only if the photographs were published within three months before the date that the application is received in the Office. *Id.* § 202.3(b)(10)(vi). If the applicant chooses to provide publication information on Form GR/PPh/CON, the applicant may include up to 750 photographs in the claim. *Id.* § 202.3(b)(10)(v). By contrast, if the applicant provides publication information using any other method, there is no limit on the number of photographs that may be submitted. *Id.* § 202.3(b)(10)(v), (viii).

Initially, all applicants were required to file their claims using a paper application submitted on Form VA. As discussed below in Section III.A.1, the Office has established a pilot program

<sup>1</sup> Information concerning the Visual Works Inquiry is available on the Office’s Web site at <http://copyright.gov/policy/visualworks/>.

<sup>2</sup> In preparing this notice of proposed rulemaking the Office did consider comments submitted in a prior rulemaking concerning the deposit requirements for photographic databases, which was completed in July 2012. Information concerning that rulemaking is available on the Office’s Web site at <http://copyright.gov/rulemaking/databases/>.

<sup>3</sup> Form GR/PPh/CON is a continuation sheet for Form VA specifically designed for providing information for a group registration of published photographs.

that allows applicants to submit their claims through the electronic registration system. *Id.* § 202.3(b)(10)(xi).

In all cases, the applicant must submit one copy of each photograph that is included in the group, and all the photographs must be submitted in the same format. *Id.* § 202.3(b)(10)(x). The applicant may submit the photographs in digital form by saving them on a CD-ROM or DVD-ROM in a JPEG, GIF, TIFF, or PCD format.<sup>4</sup> Alternatively, the applicant may submit the photographs in a physical form, such as prints, contact sheets, slides, photocopies, or even videotape. *Id.* § 202.20(c)(2)(xx)(B)–(H).

### B. Other Registration Options

In addition to the group option for published photographs, there are four other options for registering multiple photographs with the same application. These options are summarized below.

#### 1. Unpublished Collections

Since 1978 the Office has allowed applicants to register a number of unpublished works with one application and one filing fee if the works qualify as an “unpublished collection.” To qualify for this option, the works must be unpublished, the works must have at least one common author, the copyright claimant for each work and the collection as a whole must be the same person or organization, the works must be assembled in an orderly form, and the applicant must provide a single title identifying the collection as a whole. *Id.* § 203.3(b)(4)(i)(B). Photographers may use this option to register their photographs if they satisfy these requirements, and at the present time there is no limit on the number of photographs that may be included within each collection. Under this option, the applicant may register the works using the electronic registration system or a paper application submitted on Form VA. *Id.* § 202.3(b)(2).

In all cases, the applicant must submit one copy of each photograph that is included in the collection. The applicant may submit the photographs in digital form (e.g., uploading digital files to the electronic registration system or mailing them to the Office on a CD-ROM or DVD-ROM, etc.) or physical form (e.g., prints, slides, photocopies, etc.), but all of the photographs must be submitted in the same format. *Id.* § 202.20(c)(2)(xx)(A).

<sup>4</sup> The regulation that currently governs the deposit requirements for GRPPH does not mention other types of storage devices, such as flash drives. 37 CFR 202.20(c)(2)(xx)(A).

#### 2. Group Registration for Contributions to Periodicals

Without prejudice to the Register’s general authority to create group registration options under Section 408(c)(2) at the Register’s discretion, Congress also directed the Register to create a group option for works by the same individual author that were first published as a contribution to a periodical. 17 U.S.C. 408(c)(2). In response to this directive, the Office established a procedure known as the “group option for contributions to periodicals” or “GRCP.” See 43 FR 965, 966–67 (Jan. 5, 1978). Photographers may use this option to register their photographs if they satisfy the requirements set forth in the regulation. First, all the photographs must be taken by the same individual, and none of them can be a work made for hire. 37 CFR 202.3(b)(8)(i)(A)–(B). Second, all the photographs must be first published as a contribution to a periodical (e.g., a newspaper, a magazine, a journal, etc.) and they must be published within a twelve-month period (e.g., June 1, 2014 through May 31, 2015). *Id.* § 202.3(b)(8)(i)(C) & n.2. And, third, if the photographs were first published before March 1, 1989, each photograph must contain an appropriate copyright notice. *Id.* § 202.3(b)(8)(i)(D).

Under the current regulation, there is no limit on the number of photographs that may be registered under GRCP. The applicant must complete a paper application using Form VA and Form GR/CP.<sup>5</sup> *Id.* § 202.3(b)(8)(ii)(A)–(B). The applicant must submit the photographs in the precise form in which they were first published, and the copies must be submitted in physical—rather than digital—form. See *id.* § 202.3(b)(8)(i)(E). For example, the applicant may submit the entire issue of the periodical that contains the photograph, the entire section of the newspaper that contains the photograph, a photocopy of the entire page from the periodical that contains the photograph, among other formats.<sup>6</sup> See *id.*

#### 3. Group Registration for Photographic Databases

In 1989, the Office created a procedure that allows database owners

<sup>5</sup> Form GR/CP is an adjunct form specifically designed for providing information for a group registration of contributions to periodicals.

<sup>6</sup> The Office is issuing a separate notice of proposed rulemaking (published elsewhere in this volume of the *Federal Register*, and referred to herein as the “GRCP Rulemaking”) that invites comment on a proposed rule that will modify the group option for contributions to periodicals. To be clear, the Office is not proposing any changes to the GRCP regulation as part of this rulemaking on group registration of photographs.

to register the updates and revisions to a database with one application and one filing fee. 37 CFR 202.3(b)(5); 54 FR 13177 (Mar. 31, 1989). The Office refers to this procedure as the “group database option.” In the late 1990s, some stock photography companies began using this option to register databases that contain large numbers of photographs. After consulting with representatives from the industry, the Office concluded that the database option could potentially be used to register a photographic database if certain requirements have been met. The Office noted this understanding in an earlier notice of proposed rulemaking that is discussed in Section III.A.1 below. See 76 FR 4072, 4075–76 (Jan. 24, 2011).

The requirements for the database option are extremely complex.<sup>7</sup> Briefly stated, an applicant may register the updates or revisions that were made to a database over a period of three months if the updates and revisions are owned by the same claimant and if the general content and organization of the updates and revisions are similar. 37 CFR 202.3(b)(5). The applicant must submit a detailed statement that describes the content and organization of the database, and in the case of a photographic database, the applicant must submit one copy of each photograph that is included in the group. The applicant may submit an online application or a paper application. The applicant may submit the photographs in digital or physical form, but all the photographs must be submitted in the same format. 37 CFR 202.20(c)(2)(xx).

A registration for a photographic database covers the authorship involved in selecting, coordinating, and arranging the content of the database as a whole. It also may cover the individual photographs that are included within the database if the photographers transferred the exclusive rights in their respective works to the owner of the database, and if the selection, coordination, and/or arrangement of those photographs is sufficiently creative. See *Compendium* section 1117.2. That said, the Office has questioned whether this practice should be revised to limit the examination of a database to the authorship involved in creating the selection, coordination, and arrangement of the database as a whole and to exclude examination (and thus, the *prima facie* validity) of a claim in the component elements of the database.

<sup>7</sup> For a detailed summary of these requirements, see section 1117 of the *Compendium of U.S. Copyright Office Practices, Third Edition* (hereinafter the “*Compendium*”).

See 77 FR 40268, 40269 (July 9, 2012); see also 76 FR at 4073. The Office generally discourages photographers from registering their works as part of a photographic database and instead encourages them to use one of the other options discussed in this section, in part, because they provide a better registration record for claims in the individual component works within a database, as opposed to a claim in the database itself as a compilation of data. See 77 FR at 40269 n.1; 76 FR at 4073. Moreover, registering photographs as part of a photographic database may limit the copyright owner's ability to seek certain remedies in an infringement action. This issue is discussed in more detail in Section III.G.3 below.

#### 4. Collective Works

Applicants may register a number of photographs with one application and one filing fee if they are part of a collective work. The statute defines a collective work as “a work, such as a periodical issue, anthology, or encyclopedia, in which a number of contributions, constituting separate and independent works in themselves, are assembled into a collective whole.” 17 U.S.C. 101. A collective work may consist entirely of photographs, such as a book of photographs, an exhibition catalog, or a retrospective book that contains photographs taken by a particular photographer. A collective work also may combine photographs with other types of authorship, such as a calendar, textbook, coffee table book, or similar types of works.

Applicants may register a collective work with an online application or a paper application. The claim may include photographs taken by multiple photographers, but the applicant does not need to name each photographer in the application and there is no limit on the number of photographs that may be included within each claim. If the claim is approved, the registration will cover the authorship involved in selecting, coordinating, and arranging the content of the collective work as a whole. It also may cover the individual photographs that are included within the collective work if (i) the claimant owns the copyright in both the individual photographs and the collective work as a whole, and if (ii) the photographs have not previously been published or registered. Although a registration for a collective work may cover the individual photographs contained therein, this type of registration may limit the copyright owner's ability to seek certain remedies in an infringement action. This issue is

discussed in more detail in Section III.G.4 below.

### III. The Proposed Rule

The Proposed Rule does several things. First, the Office is proposing to amend the regulation that governs the group option for published photographs to reflect certain technical upgrades that will be made to the electronic registration system. Second, the Office is proposing to create, for the first time, an equivalent group registration option for unpublished photographs. This new procedure will be known as the “group option for unpublished photographs” or “GRUPH,” and it will replace the option that currently allows photographers to register their works as an unpublished collection. These first two amendments will increase the efficiency of the registration process for both published and unpublished photographs alike by requiring applicants to submit their claims through the electronic registration system. In addition, GRUPH will foster early registration, thereby eliminating complex questions that arise when published and unpublished photographs are commingled.

Third, the Office is proposing to update the deposit requirements for the group options for published photographs and photographic databases by requiring applicants to submit a digital copy of each photograph that is included in the group, and a separate document containing a sequentially numbered list that provides the title and file name for each photograph in the group. Applicants may submit these items by uploading them through the electronic system or by sending them on a physical storage device. This same requirement will apply to the new group option for unpublished photographs.

Finally, the Proposed Rule will memorialize the Office's longstanding position regarding the scope of a group registration for photographs.

Each of these proposals is discussed below.<sup>8</sup>

<sup>8</sup> As mentioned above in footnote 6, the Office is issuing a separate notice of proposed rulemaking involving the group option for contributions to periodicals. The rule proposed in the GRCP Rulemaking states that the Office may refuse to issue a group registration or may cancel a group registration if it determines that the applicant failed to comply with the relevant requirements for a particular group option. These requirements will apply to any group option that the Office creates under section 408 of the Copyright Act, including GRCP, GRPPH, GRUPH, and the group option for photographic databases.

#### A. Application Requirements for Groups of Published Photographs (GRPPH) and Groups of Unpublished Photographs (GRUPH)

##### 1. Online Registration

In February 2015 the Office completed a comprehensive analysis of its electronic registration system with input from technical experts and stakeholders. This analysis will support the Office's long-term goals of creating both a better interface and a better public record. See U.S. Copyright Office, Office of the Chief Information Officer, Report and Recommendations of the Technical Upgrades Special Project Team (February 2015), available at [http://copyright.gov/docs/technical\\_upgrades/usco-technicalupgrades.pdf](http://copyright.gov/docs/technical_upgrades/usco-technicalupgrades.pdf); see also Technological Upgrades to Registration and Recordation Functions, 78 FR 17722 (Mar. 22, 2013). In December 2015, the Register issued a strategic plan that sets forth the Office's performance objectives for the next five years. The plan provides a roadmap for re-envisioning almost all of the services that the Office provides, including how applicants register claims, submit deposits, record documents, share data, and access expert resources. With respect to information technology, the plan calls for “a robust and flexible technology enterprise that is dedicated to the current and future needs of a modern copyright agency.” U.S. Copyright Office, Strategic Plan 2016–2020: Positioning the United States Copyright Office for the Future, at 35 (Dec. 1, 2015), available at <http://copyright.gov/reports/strategic-plan/USCO-strategic.pdf>. At the direction of Congress,<sup>9</sup> the Office also developed a detailed IT plan, and obtained public comments on specific strategies, costs, and timelines for technology objectives. U.S. Copyright Office, Provisional Information Technology Modernization Plan and Cost Analysis (Feb. 29, 2016), available at <http://copyright.gov/reports/itplan/>.

In the meantime, the Office has made some enhancements to the current electronic registration system that will benefit photographers, the Office, and the public at large. When the electronic registration system was introduced in 2007, it contained a “standard” application (referred to herein as the “standard online application”). Applicants could use this application to register a single work; they also could use this application to register a number of works as an unpublished collection or as part of a collective work. See 72

<sup>9</sup> H.R. Rep. No. 114–110, at 16–17 (2015).

FR 36883, 36885 (July 6, 2007). But the standard online application was not meant to be used to register groups of published photographs, photographic databases, or contributions to periodicals, because the system was not designed to take in the information required for a group claim. Instead, photographers were required to submit these types of claims using a paper application submitted on Form VA (either alone or together with Form GR/PPh/CON or Form GR/CP).

Photographers soon expressed interest in using the electronic system, and beginning in 2010, some applicants began submitting large numbers of photographs with the standard online application. Although this application was not designed to handle group registrations, the Visual Arts Division processed some of these claims in cases where the application contained all the information required for a group claim. Based on this experience, the Office issued an interim regulation in 2011 that established a pilot program allowing applicants to register groups of published photographs and photographic databases with the standard online application.<sup>10</sup> 76 FR at 4074, 4075. Applicants that participate in the pilot program may submit their claims through the electronic system (rather than submitting a paper application), provided that they obtain prior authorization from the Visual Arts Division and follow the instructions from that Division concerning the information that should be included in the application and the proper method for submitting the deposit. 37 CFR 202.3(b)(5)(ii)(A), (b)(10)(xi).

The Office explained that, during the pilot, it would assess the desirability and feasibility of allowing applicants to submit groups of photographs through the electronic system on a permanent basis, and invited public comment on the issue. 76 FR 5106 (Jan. 28, 2011). The Professional Photographers of America (“PPA”) and other organizations that represent photographers supported the pilot program, predicting that the standard online application would require less time to complete than a paper application, and that applicants would receive their certificates in a more timely manner.<sup>11</sup>

<sup>10</sup> The pilot program does not apply to the group option for contributions to periodicals.

<sup>11</sup> PPA at 2, available at <http://copyright.gov/rulemaking/databases/comments/professional-photographers-of-america.pdf>. PPA jointly submitted its comments with Commercial Photographers International, the Society of Sport & Event Photographers, the Student Photographic

While the pilot program was well-intentioned, it has been extremely burdensome for both applicants and the Office. The standard online application was designed to handle claims involving one work or a limited number of works. Using the existing architecture to provide title and publication information for hundreds or even thousands of photographs is necessarily challenging for applicants who are unfamiliar with the system. Examining these types of claims also requires significantly more time. In some cases, registration specialists have spent an entire day processing a single claim, which has resulted in corresponding delays in issuing certificates of registration for such claims. Moreover, the increasing demand on the Office’s limited resources has had an adverse effect on the examination of other types of works within the Visual Arts Division.

To address these concerns, the Office has decided to eliminate the pilot program for published photographs, and replace it with an online application specifically designed for groups of published photographs. (The pilot program for photographic databases will remain in effect for the time being, though as discussed in Sections D.2 and G.3, the deposit requirements for photographic databases will be modified in some respects.) In addition, the Office has created a new online application specifically designed for groups of unpublished photographs.

Under the Proposed Rule, applicants will be required to use the online application designated for GRPPH or GRUPH as a condition for using either of these group options. To facilitate this transition, the Office will contact each applicant that has participated in the pilot program for published photographs and will notify them that the pilot program will be replaced with a new procedure. The Office will provide instructions on how to complete the new applications on its Web site and in chapter 1100 of the *Compendium*. In addition, the Office will make its staff available to groups or associations that are interested in producing webinars or other educational programs for their members.

Once the Proposed Rule goes into effect, the Office will no longer accept groups of published photographs or groups of unpublished photographs that are submitted with a paper application on Form VA (either with or without

Society, Evidence Photographers International Council, and the Stock Artists Alliance. *Id.* at 1.

Form GR/PPh/CON).<sup>12</sup> Likewise, the Office will no longer accept these types of claims if they are submitted with a standard online application, rather than the online application designated for GRPPH or GRUPH.<sup>13</sup> In such cases the Office will ask the applicant to resubmit the photographs using the appropriate application, which may affect the effective date of registration that is assigned to the claim. The Office invites comment on this proposal, including whether it should eliminate the paper application for these group options, phase them out after a specified period of time, or continue to offer them for photographers who prefer to use the paper-based system.

## 2. Relationship to Supplementary Registration Rulemaking

A supplementary registration is a special type of registration that may be used “to correct an error in a copyright registration or to amplify the information given in a registration,” including a registration for a group of related works. 17 U.S.C. 408(d). Specifically, it identifies an error or omission in an existing registration (referred to herein as a “basic registration”) and places the corrected information or additional information in the public record. The Office refers to this type of registration as a “CA,” which stands for “correction and amplification.”

The Office is issuing a separate notice of proposed rulemaking (published elsewhere in this volume of the **Federal Register**, and referred to herein as the “CA Rulemaking”) that will modify the regulation that governs this procedure. Under the rule proposed in the CA Rulemaking, applicants will be required to file an online application in order to correct or amplify the information set forth in a basic registration for any photograph that is capable of being registered through the electronic system—even if the work was originally registered with a paper application submitted on Form VA (either with or without Form GR/PPh/CON).

<sup>12</sup> By contrast, Applicants may continue to use Form VA to register a photographic database if they meet the eligibility requirements for that option. Similarly, photographers may continue to use Form VA to register an individual photograph or a collective work, although the Office strongly encourages applicants to use the online application rather than the paper form.

<sup>13</sup> By contrast, applicants may continue to use the standard online application to register a photographic database, as long as they comply with the requirements for the pilot program. Photographers may continue to use the standard application to register photographs as part of a collective work. Likewise, photographers may continue to use the standard online application to register an individual photograph.



If the rules proposed in the CA Rulemaking and in this proceeding both go into effect, applicants will be required to file an online application in order to correct or amplify a basic registration for works registered under the GRPPH and GRUPH options. If an applicant attempts to use a paper application, the Office will ask the applicant to resubmit the claim using the online form. As discussed in Section III.C.1 below, if the basic registration encompasses more than 750 photographs, multiple applications may need to be submitted to correct or amplify that registration. Applicants will not need to contact the Visual Arts Division in order to correct or amplify a basic registration for a group of photographs registered under GRPPH or GRUPH.

This online-filing requirement will also apply when correcting or amplifying a basic registration for works registered under the pilot program for group registration option for photographic databases.<sup>14</sup> Applicants will need to contact the Visual Arts Division before filing an application to correct or amplify a basic registration for a photographic database. This is due to the fact a supplementary registration for a photographic database will have to be submitted under the pilot program. As discussed in Section III.A.1, the Visual Arts Division closely monitors claims submitted under this program to ensure that applicants complete the online application in an appropriate manner.

Comments concerning this proposal should be submitted as part of the CA Rulemaking, and should not be submitted as part of this rulemaking on group registration of photographs.

### 3. Policy Considerations Supporting Online-Only Registration

A substantial majority of the U.S. population has access to the internet,<sup>15</sup> and the Office expects that most photographers will be able to use the electronic system.<sup>16</sup> That said, the

Office recognizes that millions of Americans do not have broadband service, and that the Proposed Rule may impose a burden on photographers who fall within this segment of the population.<sup>17</sup> Nevertheless, the Office believes that the benefits of requiring applicants to use the online application designated for GRPPH or GRUPH outweigh the potential burden on photographers who do not have direct access to the internet.

As discussed above, the PPA and other organizations that represent photographers expressed support for online registration in a prior rulemaking. They stated that “only a tiny fraction of photographers (1% according to PPA member surveys)” register their works with the Office, in part, because the paper application takes too much time to complete. PPA, *supra* note 11, at 1. Thus, requiring applicants to use the online application will encourage broader participation in the registration process.

If a photographer does not have broadband at home, at the home of a relative, friend, or neighbor, or at her place of employment, there are other options for registering large numbers of published or unpublished photographs. If the copyright owner has a tablet or laptop, she could complete and submit the online application at a coffee shop, a bookstore, or any other place where wi-fi or cellular service is available.<sup>18</sup> She could log onto the electronic system at a public library or other institution that provides computers with internet

<sup>17</sup> The Federal Communications Commission (“FCC”) reported that 17% of the population does not have access to a broadband service with connection speeds of twenty-five megabits per second (“mbps”) for downloads and three mbps for uploads. This figure includes 8% of the people who live in urban areas, 53% of the people in rural areas, and 63% of the people in U.S. territories and Tribal lands. Federal Communications Commission, 2015 Broadband Progress Report at 4 (Jan. 29, 2015), available at [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-15-10A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-10A1.pdf).

<sup>18</sup> When filing an application for a supplementary registration there is no need to upload a copy of the work that is covered by the basic registration. Thus, applicants will be able to submit these types of claims with a tablet or other wi-fi enabled device. In some cases, the registration specialist may need to compare the information provided in the application for supplementary registration with the copy of the work that was submitted with the application for the basic registration. For instance, this may be necessary if the supplementary registration changes the publication status of the work or adds additional authors to the registration record. If the Office does not have a copy of the work in its possession, the registration specialist may ask the applicant to submit a replacement copy. See *Compendium* section 1802.9(C). But in all cases, the replacement copy could be sent by first class mail, courier, or hand delivery; the copy does not need to be uploaded to the electronic system (though this would be an option if the applicant has broadband service).

access. Although the photographer would have to submit the application through the electronic system and pay the filing fee through a secure Web site ([www.pay.gov](http://www.pay.gov)), she would not necessarily have to submit her photographs over the internet. As discussed in Section III.D.1.c, the photographer could save her photographs onto a flash drive or other storage device and mail it to the Office with the required shipping slip that is generated by the electronic registration system.

In the alternative, the photographer could hire an attorney to submit the application on her behalf, either by paying for the attorney’s services or by obtaining *pro bono* representation.<sup>19</sup> The Office also notes that a number of companies will prepare an application and file it with the Office for a fee. These companies typically provide this service for copyright owners who wish to register a single work, but they could conceivably expand their offering to include groups of photographs.

The Office’s decision to offer a group option for photographers is entirely discretionary, and Congress gave the Office broad authority to set the requirements for these types of claims. 17 U.S.C. 408(c)(1). For the foregoing reasons, the Office believes that requiring applicants to submit an online application as a condition for seeking a group registration for a group of photographs is a reasonable trade-off for improving the overall efficiency of the group registration process. Nonetheless, the Office invites comment on this aspect of the Proposed Rule.

### B. Filing Fee for GRPPH and GRUPH

The filing fee for registering groups of published or unpublished photographs will be \$55, which is the amount the Office currently charges for a group of published photographs submitted with an online application under the pilot program.<sup>20</sup> 37 CFR 201.3(c)(3)(i).

In 2012 the Office conducted a study pursuant to section 708 of the Copyright Act, which authorizes the Register to establish, adjust, and recover fees for certain services that the Office provides

<sup>19</sup> The Office does not require applications to be prepared or submitted by an attorney. In certain special cases the Office may suggest that the copyright owner consider seeking legal advice, but the Office does not furnish the names of copyright attorneys, publishers, agents, or other similar information. See 37 CFR 201.2(a)(2).

<sup>20</sup> Likewise, the filing fee for registering a photographic database will remain unchanged. Applicants will continue to pay \$55 if the claim is submitted with an online application under the pilot program, and will continue to pay \$65 if the claim is submitted with a paper application on Form VA. 37 CFR 201.3(c)(3).

<sup>14</sup> Under the rule proposed in the CA Rulemaking, the online filing requirement for supplementary registrations will also apply to basic registrations for a single photograph, a collection of unpublished photographs, or a collective work that contains photographs.

<sup>15</sup> The Pew Research Center found that 84% of adults use the internet, including 85% of the people in urban and suburban communities and 78% of the people in rural communities. Pew Research Center, Americans’ Internet Access: 2000–2015, at 2, 10 (June 26, 2015), available at [http://www.pewinternet.org/files/2015/06/2015-06-26\\_internet-usage-across-demographics-discover\\_FINAL.pdf](http://www.pewinternet.org/files/2015/06/2015-06-26_internet-usage-across-demographics-discover_FINAL.pdf).

<sup>16</sup> Approximately 94% of the claims submitted in fiscal year 2015 were filed through the electronic system, while 6% of the claims were submitted on a paper application.

to the public. Initially, the Office proposed to increase the filing fee for a group of published photographs, but after weighing the concerns expressed by photographers the Office decided to keep the fee for submitting an online application under the pilot program at \$55 and the fee for submitting a paper application at \$65. The Office noted that photographers “expressed significant concern about the impact of fees on their ability to protect their works,” given “the number of works they produce and must register in order to receive the full range of judicial remedies for infringement.” U.S. Copyright Office, *Proposed Schedule and Analysis of Copyright Fees To Go Into Effect On Or About April 1, 2014*, at 15 (Nov. 14, 2013), available at <http://www.copyright.gov/docs/newfees/USCOFeeStudy-Nov13.pdf>.

Section 708(b) authorizes the Register to adjust the fees that the Office charges for certain services (including the fee for seeking a group registration), but before doing so the Register must conduct a study of the costs incurred by the Office for registering claims, recording documents, and providing other services. In conducting this study, the Register must consider the timing of any fee adjustments and the Office’s authority to use the fees consistent with its budget. 17 U.S.C. 708(b)(1). Section 708(b) provides that the Register may adjust these fees no “more than that necessary to cover the reasonable costs incurred by the Copyright Office for . . . [such services], plus a reasonable inflation adjustment to account for any estimated increase in costs.” 17 U.S.C. 708(b)(2). It also provides that the Office must submit a proposed fee schedule to Congress and that the Office may implement the schedule 120 days thereafter (unless Congress enacts a law stating that it does not approve the schedule). 17 U.S.C. 708(b)(5).

Once the Proposed Rule has been implemented, the Office will monitor the cost of processing groups of published and unpublished photographs to determine if future fee adjustments may be warranted. The Office will use this information in conducting its next fee study.

#### *C. Eligibility Requirements for GRPPH and GRUPH*

This section discusses the eligibility requirements for the group option for published photographs and the group option for unpublished photographs. Applicants that fail to satisfy these requirements will not be permitted to use these options.

#### **1. Photographs That May Be Included in the Group**

Among the key requirements of the Proposed Rule are that all the works in the group must be photographs, the group must contain no more than 750 photographs, and the applicant must specify the total number of photographs that are included in the group. These requirements must be satisfied, regardless of whether the applicant uses the group option for published or unpublished photographs.

This represents a change in policy. Under the current regulation, applicants may register a group of published photographs by submitting a paper application on Form VA and may use Form GR/PPh/CON to provide titles, publication dates, and other pertinent information for each photograph. Completing Form GR/PPh/CON is optional, although it does provide certain advantages. See *Compendium* section 1116.2. When using Form GR/PPh/CON, the applicant may only include up to 750 photographs in each group. By contrast, if the applicant uses any other method for submitting a group of published photographs—such as completing the standard online application under the pilot program or submitting a paper application on Form VA without completing Form GR/PPh/CON—there is no limit on the number of photographs that may be included in the group. Likewise, when an applicant submits a number of photographs as an unpublished collection under § 202.3(b)(4)(i)(B), there is no limit on the number of photographs that may be included in the claim (regardless of whether the applicant submits the claim through the electronic system or with a paper application).

The Office recognizes that photographers are prolific creators. A photographer may take dozens or even hundreds of copyrightable images in a single session and thousands of images over the course of a week, a month, or a year. The Office created a group option for photographs, in part, because it is unrealistic and cost-prohibitive to expect photographers to register all of their images on an individual basis. At the same time, the Office recognizes that an effective public record must provide sufficient information about each claim. Photographers who register their works in a timely manner may be entitled to claim statutory damages in an infringement action and the granularity of the public record is critical to that determination.

Given resource limitations and the modest filing fee for this group option, the Office must impose some limit on

the total number of photographs that may be submitted under the group option for published photographs and the new option for unpublished photographs. Based on its experience with Form GR/PPh/CON, the Office has determined that a limit of 750 photographs strikes an appropriate balance between the interests of photographers and the administrative capabilities of the Office.

To ensure that applicants do not attempt to circumvent the 750-photograph limit the Office proposes to eliminate the pilot program that allows applicants to submit groups of published photographs with the standard online application.<sup>21</sup> If an applicant submits more than 750 photographs or fails to use the online application designated for GRPPH, the Office will ask the applicant to resubmit the claim using the appropriate application and will ask the applicant to limit the claim to no more than 750 photographs.

For the same reason, the Office will no longer register a group of unpublished photographs as an unpublished collection. If an applicant submits more than 750 photographs or fails to use the online application designated for GRUPH, the Office will ask the applicant to resubmit the claim using the appropriate application and will ask the applicant to limit the number of photographs in the group.

The limit on the number of photographs, in turn, will affect the procedure for correcting or amplifying a basic registration for a group of published photographs. As noted in Section III.A.2, the rule proposed in the CA rulemaking will require applicants to file an online application in order to seek a supplementary registration for a group of photographs. If the basic registration covers 750 photographs or fewer, the applicant will be able to correct or amplify the registration record with a single supplementary registration submitted through the online system. But if the basic registration was issued before the Proposed Rule goes into effect, and if that registration covers more than 750 photographs, multiple supplementary registrations may be needed to correct or amplify the record for those works.

#### **2. Authorship and Ownership**

Another key requirement is that all the photographs in the group must be taken by the same photographer.

<sup>21</sup> The Proposed Rule only eliminates the pilot program for GRPPH. As discussed in Section III.A.1, the pilot program for photographic databases will remain in effect for the time being.

Applicants will not be allowed to submit groups of photographs taken by different photographers (e.g., 300 photographs by Raul Martinez, 300 photographs by Jose Rodriguez, and 150 photographs by Diego Hernandez). Likewise, the Office will not accept applications claiming that two or more individuals jointly created each photograph in the group as a joint work.<sup>22</sup> These requirements are consistent with the regulation that currently governs GRPPH. *See* 37 CFR 202.3(b)(10)(ii).

In all cases, the claim will be limited to “photographs” and that term will be added automatically to the application by the electronic system. The system will not accept claims in “digital editing,” “compilation,” or any other form of authorship other than “photographs.”<sup>23</sup> Likewise, the Office will not allow applicants to add other forms of authorship to the claim during the examination process or with a supplementary registration.

In all cases, the copyright claimant for each photograph must be the same person or organization.<sup>24</sup> Specifically, the claimant must be the author of all the photographs in the group, or the copyright owner that owns all the exclusive rights in those photographs.<sup>25</sup>

Applicants will be allowed to register a group of photographs if the claimant obtained all the exclusive rights in those works through a transfer of ownership. Likewise, applicants will be allowed to register a group of photographs as works made for hire (i) if all the photographs are identified in the application as works made for hire, (ii) if all the photographs were created by the same

individual for the same employer, and (iii) if the photographer and the employer are both listed in the name of author field (e.g., “Advertising Agency LLC, employer for hire of John Smith”).<sup>26</sup> However, the Office will not allow applicants to combine works made for hire with works obtained through a transfer of ownership. Similarly, the electronic system will not allow works created by one photographer to be combined with works created by a different photographer (even if those works are owned by the same claimant).

For example, if an advertising agency acquired a group of photographs from a particular photographer through an assignment of copyright and acquired another group of photographs taken by the same photographer through a work made for hire agreement, the agency could register those photographs under GRPPH or GRUPH only by separating the photographs into two groups and submit a separate application for each group (*i.e.*, one application with the work made for hire question answered “yes” and the other with the question answered “no”). Likewise, if the agency hired five freelancers to take photographs pursuant to a work made for hire agreement, the agency should separate the photographs into five separate groups (*i.e.*, one group for each photographer) and submit a separate application for each group.

### 3. Publication and Titles

The group options for published and unpublished photographs are designed to be mutually exclusive of each other. Under the Proposed Rule, an applicant will be allowed to register a group of unpublished photographs if all the photographs are unpublished, and will be allowed to register a group of published photographs if all the photographs are published. Applicants will not be allowed to combine published and unpublished photographs in the same claim. In addition, in the case of published photographs, all the works must be published within the same nation and within the same calendar year (e.g., January 1 through December 31, 2016).<sup>27</sup> When completing the online application, applicants will be asked to verify this information by providing the earliest date and the most recent date

that photographs were published during the year.

To register a group of published or unpublished photographs, applicants will be required to provide a title for the group as a whole, and will be required to include this information in the online application itself. For example, the applicant may provide a title that identifies the photographer and the month/year that the photographs were created, such as “Jack Jackson’s photos May through July 2016,” or one that identifies the subject matter of the photographs, such as “Tropical Images from Hawaii.”

In addition to this basic information about the group of photographs, applicants will be required to submit a separate document in Excel format (“xls”), Portable Document Format (“PDF”), or other electronic format that may be specifically approved by the Office that contains a sequentially numbered<sup>28</sup> list with a title, file name (matching the file name of the corresponding deposit copy), and in the case of GRPPH, the month and year of publication<sup>29</sup> (e.g., “January 2016,” “February 2016,” etc.) for each photograph in the group.<sup>30</sup> This list must be submitted together with the copies of the photographs, by uploading them through the electronic system or by sending them on a physical storage device. The specific requirements of this list are discussed below.

In addition, applicants will be encouraged—but not required—to provide title and publication information in the online application itself. The Office will provide instructions on its Web site that will explain how to copy this information from the numbered list into the appropriate fields in the online application.

Although applicants will not be required to provide title and publication information in the online application, there are certain advantages to doing so.

<sup>28</sup> Each entry on the list must be sequentially numbered (*i.e.*, 1, 2, 3, etc.); these numbers can be entered automatically with most spreadsheet programs. The Office will use this information to count the number of photographs that are included in the deposit, and to ensure that it matches the number of photographs claimed in the application.

<sup>29</sup> Applicants will not be required to provide a precise date of publication for each photograph in the group (*i.e.*, month, day, and year). This represents a change in the current policy for registering a group of published photographs. Under the current regulation for GRPPH, applicants generally are required to provide a month, day, and year of publication for each photograph, although they may provide a range of dates if the application is received within three months after the first date of publication specified in the application.

<sup>30</sup> The specific requirements for the numbered list are discussed below in Section III.D.1.b.

<sup>22</sup> Joint authors will not be able to use GRPPH or GRUPH. The Office is willing to entertain these types of claims if the applicant submits a separate application for each individual photograph (*i.e.*, not using the group option) and provides a sufficient basis for the claim of joint authorship.

<sup>23</sup> To assert a claim in “digital editing” applicants may submit a separate application and a separate filing fee for each photograph (rather than submitting a group of photographs under GRPPH or GRUPH). In appropriate cases, applicants may assert a claim in a “compilation” of photographs by registering them as part of a collective work, such as a book of photographs, an exhibition catalog, a calendar, or the like.

<sup>24</sup> This requirement appears in the current regulation governing groups of published photographs. 37 CFR 202.3(b)(10)(i).

<sup>25</sup> The term “claimant” is defined in § 202.3(a)(3)(iii) of the regulations. That provision contains a footnote stating that a person or organization that has obtained “the contractual right to claim legal title to the copyright” may be named as claimant. 37 CFR 202.3(a)(3)(ii) n.1. The Office proposed to eliminate this footnote in a prior rulemaking. *See* Registration of Copyright: Definition of Claimant, 77 FR 29257, 29259 (May 17, 2012). The Office expects to issue a final rule in that proceeding before the new regulations governing GRPPH and GRUPH go into effect.

<sup>26</sup> This requirement appears in the current regulation governing groups of published photographs. 37 CFR 202.3(b)(10)(ix).

<sup>27</sup> The current regulation governing GRPPH states that the photographs must be published within the same calendar year, but does not indicate whether the photographs must be published within the same nation. 37 CFR 202.3(b)(10)(iii).

If the applicant includes the titles in the online application, they will appear on the certificate of registration and in the Office's online database. This will improve the quality of the registration record by making the information more accessible to the public. If this information appears on the certificate, and if the certificate is issued within five years after the publication of a particular photograph, the certificate will create a legal presumption that the work was published in the month and year specified on the certificate. *See* 17 U.S.C. 410(c).

By contrast, if the applicant provides title and publication information in the numbered list, but does not include that information in the online application itself, the titles and publication dates will not appear on the certificate of registration or the Office's online database (although the Office will keep a copy of the numbered list in its files). In such cases, the Office will add an annotation to the record, such as "Regarding title: deposit contains complete list of titles that correspond to the individual photographs included in this group."

In comments regarding the Office's pilot program for electronic registration of photographs, the PPA and other organizations stated that photographers struggle with the definition of "publication" and "the public," and find it difficult to determine whether their works are published or unpublished, particularly when they are distributed in digital form. PPA, *supra* note 11, at 2–3. They explained that their members are reluctant to register their works, in part, because they worry about the possible consequences of classifying an unpublished photograph as a published work (or *vice versa*). They asked the Office to address this "barrier to registration" by providing clarification and guidance on these issues. *Id.* at 3.

The new group option for unpublished photographs will help mitigate this problem by encouraging early registration. The Office strongly encourages photographers to register their works before they are published (*i.e.*, before any distributions have occurred), because this avoids much of the confusion concerning publication and the treatment of published works. The new group option supports this objective by giving photographers a convenient and cost-effective means for registering their photographs before they are distributed to the public.

In addition, the Office released a comprehensive revision of the *Compendium* in 2014, which sets forth and explains key administrative duties

of the Copyright Office under title 17 of the United States Code. *See* 79 FR 78911, 78911–12 (Dec. 31, 2014). Among other improvements, the *Compendium* contains an entire chapter on publication. This chapter provides a detailed discussion of the definition of "publication" and "the public" and specific examples of how the Office applies these definitions to photographs and other types of works. *See generally Compendium*, chapter 1900. The *Compendium* provides guidance on how to determine whether a work is published or unpublished when it is posted on the internet or distributed online. *See id.* section 1008.3. It also explains how to correct an error in a registration if the applicant mistakenly claims that the work was published or unpublished. *See id.* sections 1802.6(I), 1802.7(C).

In the future, the Office intends to develop a portal on its Web site that will provide photographers with pertinent information on a wide range of copyright issues. In developing these resources it would be helpful to learn more about the specific methods that photographers use to distribute their works to their customers and the general public. The Office previously asked for written comments on this issue in the Visual Works Inquiry, and it welcomes additional input as part of this rulemaking.

#### D. The Deposit Requirement

The Proposed Rule will modify the deposit requirements for the group option for published photographs and the group option for photographic databases, and it will establish similar requirements for the new option for unpublished photographs. These requirements are summarized below.<sup>31</sup>

##### 1. Deposit Requirements for GRPPH and GRUPH

###### a. Digital Photographs

Under the Proposed Rule, applicants will be required to submit a digital copy of each photograph that is included in a group of published photographs

(GRPPH) or a group of unpublished photographs (GRUPH). Applicants will be required to submit each photograph in one of the following formats: JPEG, GIF, TIFF, or PCD. The Office will no longer accept physical copies, such as prints, contact sheets, slides, photocopies, videotapes, or clippings from a newspaper, magazine, or other publication. This should not impose a significant burden on photographers because it appears that the vast majority of them use digital cameras.

###### b. Numbered List of Photographs

In addition, as noted above, applicants will be required to submit a separate document containing a sequentially numbered list that identifies the title and file name—and in the case of published photographs, the month and year of publication—for each photograph in the group. The Office will provide a template on its Web site that may be used to prepare this list. The title and file name for a particular photograph may be the same, and may consist solely of numbers, letters, and spaces that were automatically assigned by the camera or a unique identifier that has been assigned to the image by a third party, such as the PLUS Registry. As noted above, the file names specified in the list must match the corresponding file names in the deposit copy. However, the file name should not contain slashes or any other form of punctuation. Including punctuation marks in the file name (other than spaces) may cause a system error that may prevent the Office from viewing the photographs. The Office also discourages applicants from stating "Untitled," "No Title," or the like, because interested parties typically search for works by title and it may be impossible to locate a particular photograph unless a meaningful title has been provided.

The Office will use the list to examine and document the claim, particularly in cases where the applicant does not provide title or publication information in the online application itself. In addition, the Office may use the list to locate and retrieve the deposit in the event it is needed for litigation or other legitimate purposes. For these reasons, the titles and file names specified in the list must correspond to the titles and files names for the actual photographs that are included in the deposit. In this respect, the Proposed Rule builds upon a suggestion that the Digital Media

<sup>31</sup> The rule proposed in the GRCP Rulemaking will modify the deposit requirements for registering a group of contributions to periodicals in some respects. By contrast, the Office is not proposing to make any changes to the deposit requirements for an individual photograph or a collective work, such as a calendar or a book of photographs. To register an individual photograph, the applicant should submit two complete copies of the best edition if the photograph has been published in the United States or one complete copy if the photograph is unpublished. To register a collective work, the applicant should submit one complete copy of the collective work (if it is unpublished) or two complete copies of the best edition (if the work has been published in the United States). *See generally Compendium*, chapter 1500.

Licensing Association (“DMLA”) offered in a prior rulemaking.<sup>32</sup>

The list must be contained in an electronic file in Excel format (“.xls”), Portable Document Format (“PDF”), or other electronic format that may be specifically approved by the Office. The file name for the list must include the title of the group as a whole and the eleven-digit case number that is automatically assigned to the application by the electronic system (e.g., “[Title of Group] Case Number 12345678910”). The Office will provide further guidance regarding the preferred format and naming conventions for these file names on its Web site and in Chapter 1100 of the *Compendium*. When completing the online application, applicants will be asked to provide the file name for this document in the application itself. This will help the Office connect the numbered list with the relevant application, and to distinguish it from the files that contain the digital photographs.

#### c. Procedure for Submitting the Digital Photographs and the Numbered List of Photographs

Applicants will be required to submit the files containing the digital photographs together with the file that contains the sequentially numbered list of photographs. Applicants may upload these files through the electronic system. Alternatively, they may save them onto a physical storage device, such as a flash drive or a CD-R or DVD-R, and send it to the Office by mail, by courier, or by hand delivery together with the required shipping slip.

When submitting files through the electronic system, applicants will be strongly encouraged to save them in a .zip file and then upload the .zip file to the system. In all cases, the size of each uploaded file must not exceed 500 megabytes, although the applicant may digitally compress the photographs to comply with this limitation.

When submitting files on a flash drive or other storage device, applicants must send that device in the same package with the shipping slip that is generated by the electronic system. If the applicant fails to include the required shipping slip, the Office may be unable to connect the storage device with the appropriate application. In such cases,

the applicant will be required to pay an additional fee to search for the deposit and connect it with the application. If the deposit cannot be located, the applicant will be required to resubmit the storage device, which may change the effective date of registration for the claim.

Packages that are delivered to the Office by mail or by courier will be irradiated to destroy possible contaminants, such as anthrax. This process may damage files stored on electronic media. To avoid this result, applicants will be strongly encouraged to send physical storage devices to the Office in boxes rather than envelopes. Additional information concerning the recommended procedure for delivering physical deposits by mail or by courier will be provided in the *Compendium*.

#### 2. Deposit Requirements for Photographic Databases

The Proposed Rule will impose the same deposit requirements on a database that consists predominantly of photographs. Specifically, database owners will be required to submit a digital copy of each photograph that is included in the claim, and a separate document containing a sequentially numbered list that identifies the title and file name—and in the case of published photographs, the month and year of publication—for each photograph.<sup>33</sup> Database owners will be required to submit digital copies, regardless of whether they intend to file an online application under the pilot program (in which case the photographs and the numbered list may be uploaded to the electronic system or submitted on a physical storage device with the required shipping slip) or a paper application (in which case the photographs and the numbered list may be submitted on a physical storage device together with Form VA).<sup>34</sup>

#### E. When should a group registration be filed?

An application for a group registration may be filed at any time. However, a photograph must be registered in a timely manner to seek statutory damages and attorney’s fees in an infringement action. Specifically, a copyright owner typically may seek these remedies if a photograph was registered (i) before the infringement

commenced or (ii) within three months after the first publication of that work. See 17 U.S.C. 412.

In the case of unpublished photographs, the Office strongly encourages photographers to register their works before sharing them with any other party. By doing so, photographers preserve the ability to seek statutory damages and attorney’s fees in subsequent infringement disputes involving those works.

In the case of published photographs, the Office encourages photographers to submit their claims every three months (instead of filing on an annual or semi-annual basis), and in each case, to file the claim within three months after the earliest date of publication specified in the application. For example, if a photographer first published his or her photographs on June 1, 2016, it would be advisable to submit a complete application, deposit, and filing fee on or before September 1, 2016. By doing so, the photographer would preserve his or her ability to seek statutory damages and attorney’s fees for any infringements that began after the effective date of registration (i.e., after September 1, 2016), as well as any infringements that occurred within three months after the date of publication (i.e., between June 1, 2016 and September 1, 2016).

#### F. The Scope of a Group Registration

The Proposed Rule memorializes the Office’s longstanding position regarding the scope of a registration for a group of published photographs, and it confirms that the Office will take the same position regarding the group option for unpublished photographs.

When the Office issues a group registration, it prepares one certificate of registration for the entire group and assigns one registration number to that certificate. The Proposed Rule clarifies that a registration for a group of published or unpublished photographs covers each photograph in the group, and that each photograph is registered as a separate “work.” This understanding is consistent with the statutory scheme. The legislative history makes clear that group registration was “a needed and important liberalization of the law [then] in effect,” which to that point had required “separate registrations where related works or parts of a work are published separately.” H.R. Rep. No. 94–1476, at 154 (1976). In particular, Congress noted that “the technical necessity for separate applications and fees has caused copyright owners to forego copyright altogether.” *Id.* Given that context, it would be anomalous for works

<sup>32</sup> DMLA was previously known as the Picture Archive Council of America (“PACA”). In a prior rulemaking, it stated that works deposited with the Office should be accessible upon request so that parties can easily determine whether a particular photograph is covered by a particular registration. PACA at 1, available at <http://copyright.gov/rulemaking/databases/comments/picture-archive-council-of-america.pdf>.

<sup>33</sup> As discussed in Section III.D.1.b, the Office will provide a standard template that may be used to prepare the numbered list of photographs.

<sup>34</sup> When submitting an online application the storage device must be accompanied by the shipping slip that is generated by the electronic system. When submitting a paper application, the device must be accompanied by Form VA.

registered as part of a group registration application to be given less protection than if they had been registered through separate applications.

For similar reasons, the Proposed Rule also clarifies that when a group of photographs is registered under GRPPH or GRUPH, the group as a whole is not considered a compilation or a collective work under sections 101, 103(b), or 504(c)(1) of the Copyright Act. The group is merely an administrative classification created solely for the purpose of registering multiple photographs with one application and one filing fee. See 17 U.S.C. 408(c)(1) (“Th[e] administrative classification of works has no significance with respect to the subject matter of copyright or the exclusive rights provided by this title.”). Although an applicant may exercise some judgment in selecting the photographs that are included within a particular group, that decision does not necessarily constitute copyrightable authorship. Instead, the selection is based on the regulatory requirements for these group options, and any coordination or arrangement of the photographs is merely an administrative formality that facilitates the examination of the works.

Likewise, the Proposed Rule clarifies that the group is not considered a derivative work under sections 101, 103(b), or 504(c)(1) of the Copyright Act. When a group of photographs is compiled for the purpose of facilitating registration, those works are not “recast, transformed, or adapted” in any way, and the group as a whole is not “a work based upon one or more preexisting works” because there is no copyrightable authorship in simply following the administrative requirements for GRPPH or GRUPH. 17 U.S.C. 101 (definition of “derivative work”).

#### *G. Group Registration of Published and Unpublished Photographs Distinguished From Other Registration Options*

This section discusses the key differences between the options for registering a group of published or unpublished photographs as compared to the options for registering an unpublished collection, a group of contributions to periodicals, a photographic database, or a collective work.

##### **1. Group Registration of Unpublished Photographs vs. Unpublished Collections**

The group option for unpublished photographs is intended to replace the option that currently allows an applicant to register a number of

photographs as an unpublished collection. Once the Proposed Rule goes into effect, the Office will no longer accept an application to register photographs under § 202.3(b)(4)(i)(B) of the regulations, regardless of whether the photographs are submitted with a standard application or a paper application (although the Office will continue to accept applications to register other types of works under this provision).

As explained, the GRUPH option provides a more efficient mechanism for capturing information about photographs, and incorporating that information into the public record. Requiring applicants to use this option may also provide photographers with certain legal benefits.

When an applicant submits photographs via the unpublished collection option, and asserts a claim in both the individual photographs as well as the selection and arrangement of the collection as whole, the Office will register the claim as an unpublished collective work, rather than an unpublished collection. A collective work is—by definition—a form of compilation. 17 U.S.C. 101 (“The term ‘compilation’ includes collective works.”). Section 504(c)(1) of the Copyright Act states that a copyright owner may be entitled to recover “an award of statutory damages for all infringements involved in [an infringement] action, with respect to any one work,” but “[f]or the purposes of this subsection, all the parts of a compilation . . . constitute one work.” 17 U.S.C. 504(c)(1). In other words, when a number of photographs are registered as an unpublished collective work, the copyright owner would be entitled to seek only one award of statutory damages in an infringement action, rather than a separate award for each photograph.

In contrast, as noted above in Section III.F, when a number of photographs are registered under the GRUPH option, each photograph is registered as a separate work. For purposes of registration, the group as a whole is not considered a collective work or compilation, and thus, the individual photographs within the group would not be subject to the limitation on statutory damages set forth in section 504(c)(1). Instead, a registration for a group of unpublished photographs is treated as a separate registration for each photograph that is included within the group.

##### **2. Group Registration of Published Photographs vs. Group Registration for Contributions to Periodicals**

The group option for published photographs is not intended to alter or replace the group option for contributions to periodicals. Photographers may continue to register their works as a group of published photographs or a group of contributions to periodicals, as long as they satisfy the relevant requirements for each option.

There are some notable differences between these registration options. While a group of published photographs may include no more than 750 images, there is no limit on the number of photographs that may be included within a group of contributions to periodicals. Moreover, a group of published photographs may include photographs that were published during the same calendar year, while a group of contributions to periodicals may include photographs that were published over a twelve-month period—even if that period extends from one calendar year to the next (*e.g.*, September 1, 2015 through August 31, 2016). In addition, to be eligible for GRPPH, the photographs may be published in any manner, but there is no need to specify the medium of publication and no need to submit the photographs in the specific form in which they were first published. To be eligible for GRCP, the photographs must be first published in a periodical (*e.g.*, a newspaper, a magazine, etc.), the applicant must provide pertinent information about each periodical (*e.g.*, title, issue number, publication date, etc.), and the applicant must submit a copy of the photographs as they appeared in each publication (*e.g.*, a copy of the entire periodical, a copy of an entire section from a newspaper, etc.).

The Office generally encourages applicants to use GRPPH, in part, because the deposit requirements for published photographs are more flexible than the deposit requirements for GRCP. Regardless of whether the applicant uses GRPPH or GRCP, the registration will cover all the photographs that are included within the group.

##### **3. Group Registration of Photographs vs. Group Registration for Photographic Databases**

As noted above, the Proposed Rule makes certain modifications to the deposit requirement for databases that predominantly consist of photographs. The Proposed Rule will not change any of the other requirements for these types

of claims. See 37 CFR 202.3(b)(5); 202.20(c)(2)(vii)(D)(8).

Although the Office will continue to accept these claims, the Office strongly encourages photographers, stock photography companies, database providers, and other interested parties to register their works with the group option for published or unpublished photographs—rather than the database option—for several reasons. Many photography Web sites and catalogs do not qualify as a database, and therefore, are not eligible for the group option for photographic databases. For purposes of registration, a database is defined “as a compilation of digital information comprised of data, information, abstracts, images, maps, music, sound recordings, video, other digitized material, or references to a particular subject or subjects. In all cases, the content of a database must be arranged in a systematic manner, and it must be accessed solely by means of an integrated information retrieval program or system with the following characteristics.” *Compendium* section 1117.1. First, “a query function must be used to access the content.” *Id.* Second, “[t]he information retrieval program or system must yield a subset of the content, or it must organize the content based on the parameters specified in each query.” *Id.*

Stock photography Web sites or catalogs that merely display photographs do not satisfy these requirements and therefore are not considered databases for the purpose of registration. In most cases, users may access all the content on a Web site or in a catalog by scrolling or browsing through the individual images or categories of related images. *Id.* section 1002.6. By contrast, users cannot access the content of a database in its entirety. *Id.* Instead, they must use a query function to identify specific content within the database, and they must use an information retrieval system to extract the content that matches the user’s search criteria. *Id.* While a user may view the entire content of a Web site or catalog, a user may view the content of a database only to the extent that it matches a particular query that the user entered into the information retrieval system. *Id.* While some Web sites may provide a search feature that may be used to locate particular images or categories of images, these types of features do not qualify as an information retrieval system nor do they transform an ordinary Web site into a database, because these features are not the sole means for accessing the images posted on the site. See *id.* If the Office determines that a particular Web site,

catalog, or other work does not qualify as a database, the Office will refuse to register the work as a database or as a group of updates or revisions to a photographic database.

Copyright owners also should consider the following issue before registering their photographs as part of a photographic database. As noted above in Section III.G.1, the Copyright Act states that a copyright owner may be entitled to recover “an award of statutory damages for all infringements involved in [an infringement] action, with respect to any one work,” but “[f]or the purposes of this subsection, all the parts of a compilation . . . constitute one work.” 17 U.S.C. 504(c)(1). A database is—by definition—a compilation. See *Alaska Stock, LLC v. Houghton Mifflin Harcourt Publishing Co.*, 747 F.3d 673, 676 (9th Cir. 2014) (concluding that a photographic database is a collective work); see also *Compendium* section 1117.1 (same). Consequently, when a group of photographs is registered as a database, the copyright owner may be entitled to seek only one award of statutory damages for the database as a whole—rather than a separate award for each photograph—even if the defendant infringed all the photographs that are covered by the registration.

By contrast, when a copyright owner registers a group of photographs under GRPPH or GRUPH, the registration covers each photograph in the group, but the group itself is not a compilation within the meaning of the Copyright Act. Therefore, any claim for infringement would not be subject to the limitation set forth in Section 504(c)(1) of the Copyright Act. For these reasons, the group options for published and unpublished photographs provide significant benefits, while avoiding the potential downside of registering a number of works as part of a photographic database.

#### 4. Group Registration of Photographs vs. Collective Works

The Proposed Rule will not change the requirements for registering a number of photographs as part of a collective work, such as a book of photographs, a travel guide, or the like. Applicants may continue to register these types of works with a standard application submitted through the electronic system or with a paper application submitted on Form VA.

Registration of photographs as part of a collective work differs in many respects from group registration of photographs. A registration for a collective work may include photographs taken by multiple

photographers (even if the photographers are not explicitly named in the application), and there is no limit on the number of photographs that may be included within each claim. If the claim is approved, the registration will cover the authorship involved in selecting, coordinating, and/or arranging the content of the collective work as a whole. It also may cover the individual photographs that appear in the collective work if the claimant owns the copyright in those images and the collective work as a whole, and if the photographs have not been previously published or registered.

There are some drawbacks to registering photographs as a collective work. As discussed in Section III.G.1, a collective work is—by definition—a compilation. As such, these types of works are subject to the limitation set forth in section 504(c)(1) of the Copyright Act. When a number of photographs are registered as part of a collective work, the copyright owner may be entitled to receive only one award of statutory damages in an infringement action, even if the defendant infringed all the photographs that appear in that work (regardless of whether the collective work is published or unpublished). By contrast, when a group of photographs are registered under GRPPH or GRUPH, the copyright owner would not be subject to the collective-work limitation in section 504(c)(1). For this reason, photographers may wish to register their photographs under GRPPH or GRUPH, even if those works also may be eligible for registration as part of a collective work.

#### H. Technical Amendments

The Proposed Rule will move the regulation governing published photographs from § 202.3 to § 202.4.<sup>35</sup> In the future, the Office intends to move all regulations governing the various group options that have been implemented under section 408(c) of the Copyright Act to § 202.4. This change is intended to improve the readability of the existing regulations, but it does not represent a substantive change in policy.

In addition, the Proposed Rule incorporates the definitions of “claimant” and “Class VA” that are set forth in § 202.3, and it confirms that an application for a group of photographs may be submitted by any of the parties listed in § 202.3(c)(1), namely (i) the author or copyright claimant of those

<sup>35</sup> The Office recently issued a notice of proposed rulemaking that would remove the current text of § 202.4 and reserve that section for later use. See Copyright Office Technical Amendments, 81 FR 67940, 67942 (Oct. 3, 2016).



works, (ii) the owner of any of the exclusive rights in those works, or (iii) a duly authorized agent of any author, claimant, or owner of exclusive rights.

#### IV. Conclusion

The Proposed Rule will allow broader participation in the registration system by expanding the class of works that may be registered as a group, increase the efficiency of the registration process, and create a more robust record of the claim. The Office invites public comment on these proposed changes.

#### List of Subjects

##### 37 CFR Part 201

Copyright, General provisions.

##### 37 CFR Part 202

Copyright, Preregistration and registration of claims to copyright.

#### Proposed Regulation

For the reasons set forth in the preamble, the U.S. Copyright Office proposes amending 37 CFR parts 201 and 202, as follows:

#### PART 201—GENERAL PROVISIONS

■ 1. The authority citation for part 201 is amended to read as follows:

**Authority:** 17 U.S.C. 702.

■ 2. Amend § 201.3 by:

■ a. Redesignating paragraphs (c)(3) through (18) as paragraphs (c)(4) through (19), respectively.

■ b. Adding new paragraph (c)(3).

■ c. Revising newly redesignated paragraph (c)(4).

The revisions and additions to read as follows:

##### § 201.3 Fees for registration, recordation, and related services, special services, and services performed by the Licensing Division.

(c) \* \* \*

(3) Registration of a claim in a group of published photographs or a claim in a group of unpublished photographs .....	55
(4) Registration for a database that predominantly consists of photographs and updates thereto:..	
(i) Electronic filing .....	55
(ii) Paper filing .....	65

\* \* \*

#### PART 202—PREREGISTRATION AND REGISTRATION OF CLAIMS TO COPYRIGHT

■ 3. The authority citation for part 202 continues to read as follows:

**Authority:** 17 U.S.C. 408(f), 702.

■ 4. Amend § 202.3 by:

■ a. In paragraph (b)(3) removing the phrase “, subject to the limitations in paragraph (b)(10)(v) of this section” .

■ b. Revising paragraph (b)(4)(ii).

■ c. Removing and reserving paragraph (b)(10).

■ d. In the text of paragraph (c)(2), removing the reference to footnote “6” and adding in its place a reference to footnote “5”.

■ e. In paragraph (c)(2), revising footnote 5.

The revisions to read as follows:

##### § 202.3 Registration of copyright.

\* \* \*

(b) \* \* \*

(4) \* \* \*

(ii) In the case of an application for registration made under paragraphs (b)(4) through (b)(10) of this section or under § 202.4, the “year of creation,” “year of completion,” or “year in which creation of this work was completed,” means the latest year in which the creation of any copyrightable element was completed.

\* \* \*

(c) \* \* \*

(2) \* \* \*

<sup>5</sup> In the case of an application to register a group of newspapers, newsletters, contributions to periodicals, or photographs under paragraphs (b)(7) or (9) of this section or under § 202.4, the deposit shall comply with the respective requirements specified in those paragraphs.

\* \* \*

■ 6. Revise § 202.4 to read as follows:

##### § 202.4 Group Registration.

(a) This section prescribes conditions for issuing a registration for a group of related works under section 408(c) of title 17 of the United States Code.

(b) *Definitions.* For purposes of this section, the terms *copy* and *work made for hire* have the meanings set forth in section 101 of title 17 of the United States Code, and the terms *claimant* and *Class VA* have the meanings set forth in § 202.3(a)(3) and (b)(1)(iii).

(c) [Reserved]

(d) [Reserved]

(e) [Reserved]

(f) [Reserved]

(g) [Reserved]

(h) [Reserved]

(i) *Group registration of unpublished photographs.* Pursuant to the authority granted by 17 U.S.C. 408(c)(1), the Register of Copyrights has determined that a group of unpublished photographs may be registered in Class VA with one application, one filing fee, and the required deposit, if the following conditions are met:

(1) All the works in the group must be photographs.

(2) The group must include no more than 750 photographs, and the application must specify the total number of photographs that are included in the group.

(3) All the photographs must be created by the same photographer.

(4) The copyright claimant for all the photographs must be the same person or organization.

(5) The photographs may be registered as works made for hire if all the photographs are identified in the application as such, if all the photographs were created by the same photographer for the same employer, and if the application identifies both the photographer and the employer in the name of author field (e.g., “ABC Corporation, employer for hire of John Doe”).

(6) All the photographs must be unpublished.

(7) The applicant must provide a title for the group as a whole.

(8) The applicant must complete and submit the online application designated for a group of unpublished photographs. (The Office will not register a group of unpublished photographs as an unpublished collection under § 202.3(b)(4)(i)(B).) The application may be submitted by any of the parties listed in § 202.3(c)(1).

(9) The appropriate filing fee, as required by § 201.3(c) of this chapter, must be included with the application or charged to an active deposit account.

(10) The applicant must submit one copy of each photograph in one of the following formats: JPEG, GIF, TIFF, or PCD. The file name for a particular photograph may consist of letters, numbers, and spaces, but the file name should not contain any other form of punctuation. The photographs may be uploaded to the electronic registration system together with the required numbered list, preferably in a .zip file containing all the photographs. The file size for each uploaded file must not exceed 500 megabytes; the photographs may be compressed to comply with this requirement. Alternatively, the photographs and the required numbered list may be saved on a physical storage device, such as a flash drive, CD-R, or DVD-R, and delivered to the Copyright Office together with the required shipping slip generated by the electronic registration system.

(11) The applicant must submit a sequentially numbered list containing a title and file name for each photograph in the group (matching the corresponding file names for each photograph specified in paragraph (i)(10)). The title and file name for a particular photograph may be the same.

The numbered list must be contained in an electronic file in Excel format (.xls), Portable Document Format (PDF), or other electronic format approved by the Office, and the file name for the list must contain the title of the group and the case number assigned to the application by the electronic registration system (e.g., "Title Of Group Case Number 16283927239.xls").

(j) *Group registration of published photographs.* Pursuant to the authority granted by 17 U.S.C. 408(c)(1), the Register of Copyrights has determined that a group of published photographs may be registered in Class VA with one application, one filing fee, and the required deposit, if the following conditions are met:

(1) All the works in the group must be photographs.

(2) The group must include no more than 750 photographs, and the application must specify the total number of photographs that are included in the group.

(3) All the photographs must be created by the same photographer.

(4) The copyright claimant for all the photographs must be the same person or organization.

(5) The photographs may be registered as works made for hire if all the photographs are identified in the application as such, if all the photographs were created by the same photographer for the same employer, and if the application identifies both the photographer and the employer in the name of author field (e.g., "XYZ Corporation, employer for hire of Jane Doe").

(6) All the photographs must be published within the same nation and within the same calendar year, and the applicant must specify the earliest and latest date that the photographs were published during the year.

(7) The applicant must provide a title for the group as a whole.

(8) The applicant must complete and submit the online application designated for a group of published photographs. The application may be submitted by any of the parties listed in § 202.3(c)(1).

(9) The appropriate filing fee, as required by § 201.3(c) of this chapter, must be included with the application or charged to an active deposit account.

(10) The applicant must submit one copy of each photograph in one of the following formats: JPEG, GIF, TIFF, or PCD. The file name for a particular photograph may consist of letters, numbers, and spaces, but the file name should not contain any other form of punctuation. The photographs may be uploaded to the electronic registration

system together with the required numbered list, preferably in a .zip file containing all the photographs. The file size for each uploaded file must not exceed 500 megabytes; the photographs may be compressed to comply with this requirement. Alternatively, the photographs and the required numbered list may be saved on a physical storage device, such as a flash drive, CD-R, or DVD-R, and delivered to the Copyright Office together with the required shipping slip generated by the electronic registration system.

(11) The applicant must submit a sequentially numbered list containing the title, file name, and month and year of publication for each photograph in the group (matching the corresponding file names for each photograph specified in paragraph (j)(10)). The title and file name for a particular photograph may be the same. The numbered list must be contained in an electronic file in Excel format (.xls), Portable Document Format (PDF), or other electronic format approved by the Office, and the file name for the list must contain the title of the group and the case number assigned to the application by the electronic registration system (e.g., "Title Of Group Case Number 16283927239.xls").

(k) [Reserved]

(l) [Reserved]

(m) [Reserved]

(n) *The scope of a group registration.*

When the Office issues a group registration under paragraphs (i) or (j) of this section, the registration covers each work in the group and each work is registered as a separate work. For purposes of registration, the group as a whole is not considered a compilation, a collective work, or a derivative work under sections 101, 103(b), or 504(c)(1) of title 17 of the United States Code.

■ 7. Amend § 202.20 by:

■ a. Revising paragraph (c)(2)(vii)(D)(8); and.

■ b. Removing paragraph (c)(2)(xx).

The revision to read as follows:

**§ 202.20 Deposit of copies and phonorecords for copyright registration.**

\* \* \* \* \*

(c) \* \* \*

(2) \* \* \*

(vii) \* \* \*

(D) \* \* \*

(8) In the case of an application for registration of a database that consists predominantly of photographs (including a group registration for revised or updated versions of such a database), "identifying portions" shall instead consist of all individual photographs included in the claim. Photographs must be submitted in

digital form in one of the following formats: JPEG, GIF, TIFF, or PCD. In addition, the applicant must submit a sequentially numbered list containing the title and file name—and if the photographs have been published, the month and year of publication—for each photograph in the group. The title and file name for a particular photograph may be the same and may consist of letters, numbers, and spaces, but the file name should not contain any other form of punctuation. The numbered list must be contained in an electronic file in Excel format (.xls), Portable Document Format (PDF), or other electronic format approved by the Office. The file name for the list must contain the title of the database, and the case number assigned to the application by the electronic registration system, if any (e.g., "Title Of Database Case Number 162883927239.xls"). The photographs and the numbered list may be uploaded to the electronic registration system with the permission and under the direction of the Visual Arts Division, preferably in a .zip file containing these materials. The file size for each uploaded file must not exceed 500 megabytes; the photographs may be compressed to comply with this requirement. Alternatively, the photographs and the numbered list may be saved on a physical storage device, such as a flash drive, CD-R, or DVD-R, and delivered to the Copyright Office together with the required shipping slip generated by the electronic registration system or with a paper application submitted on Form VA.

\* \* \* \* \*

Dated: November 22, 2016.

**Sarang V. Damle,**

*General Counsel and Associate Register of Copyrights.*

[FR Doc. 2016-28706 Filed 11-30-16; 8:45 am]

**BILLING CODE 1410-30-P**

**LIBRARY OF CONGRESS**

**Copyright Office**

**37 CFR Parts 201, 202**

[Docket No. 2016-9]

**Supplementary Registration**

**AGENCY:** U.S. Copyright Office, Library of Congress.

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** The U.S. Copyright Office is proposing to amend the regulation governing supplementary registration to reflect certain technical upgrades that will soon be made to the electronic

registration system. In most cases applicants will be required to submit an online application in order to correct or amplify the information set forth in a basic registration. This will increase the efficiency of the supplementary registration process for both applicants and the Office alike. In addition, the Office is amending the regulation to codify and update certain practices that are set forth in the *Compendium of U.S. Copyright Office Practices, Third Edition* and to improve the readability of the regulation.

**DATES:** Comments on the proposed rule must be made in writing and must be received in the U.S. Copyright Office no later than January 3, 2017.

**ADDRESSES:** For reasons of government efficiency, the Copyright Office is using the regulations.gov system for the submission and posting of public comments in this proceeding. All comments are therefore to be submitted electronically through regulations.gov. Specific instructions for submitting comments are available on the Copyright Office Web site at <http://copyright.gov/rulemaking/supplementary-registration/>. If electronic submission of comments is not feasible due to lack of access to a computer and/or the Internet, please contact the Office using the contact information below for special instructions.

**FOR FURTHER INFORMATION CONTACT:** Robert J. Kasunic, Associate Register and Director of Registration Policy and Practice, by telephone at (202) 707-8040; or Erik Bertin, Deputy Director of Registration Policy and Practice, by telephone at 202-707-8040.

#### **SUPPLEMENTARY INFORMATION:**

##### **I. Background**

Section 408(d) of the Copyright Act authorizes the Register of Copyrights (the “Register”) to establish “formal procedures for the filing of an application for supplementary registration.” 17 U.S.C. 408(d). A supplementary registration is a special type of registration that may be used “to correct an error in a copyright registration or to amplify the information given in a registration.” *Id.* Specifically, it identifies an error or omission in an existing registration (referred to herein as a “basic registration”) and places the corrected information or additional information in the public record.

When the U.S. Copyright Office (the “Office”) issues a supplementary registration, it does not cancel or replace the basic registration or the registration number for that registration. Likewise,

the Office does not change the information set forth in the basic registration or the public record for that registration. Instead, as specified by statute, the basic registration and the supplementary registration coexist with each other in the public record, and “the information contained in a supplementary registration augments but does not supersede that contained in the earlier registration.” *Id.*

##### **II. The Proposed Rule**

###### **A. Application for Supplementary Registration**

###### **1. Online Registration**

The Office is proposing to amend the regulation that governs the procedure for seeking a supplementary registration (the “Proposed Rule”). Under the Proposed Rule, in most cases, applicants will be required to file an online application in order to correct or amplify the information set forth in a basic registration.

The Office has allowed and encouraged applicants to register their works through the electronic registration system since 2007. *See* 72 FR 36883 (July 6, 2007). When the Office introduced this system, it could be used only to seek a basic registration. To seek a supplementary registration, applicants had to submit a paper application using Form CA. 37 CFR 201.5(c)(1), (c)(2). In February 2015 the Office completed a comprehensive analysis of its electronic registration system with input from technical experts and stakeholders. This analysis will support the Office’s long-term goals of creating both a better interface and a better public record. *See* U.S. Copyright Office, Office of the Chief Information Officer, Report and Recommendations of the Technical Upgrades Special Project Team (Feb. 2015), available at [http://copyright.gov/docs/technical\\_upgrades/usco-technicalupgrades.pdf](http://copyright.gov/docs/technical_upgrades/usco-technicalupgrades.pdf); *see also* 78 FR 17722 (Mar. 22, 2013). In December 2015 the Register issued a strategic plan that sets forth the Office’s performance objectives for the next five years. The plan provides a roadmap for re-envisioning almost all of the services that the Office provides, including how applicants register claims, submit deposits, record documents, share data, and access expert resources. With respect to information technology, the plan calls for “a robust and flexible technology enterprise that is dedicated to the current and future needs of a modern copyright agency.” U.S. Copyright Office, Strategic Plan 2016–2020: Positioning the United States Copyright Office for the Future, at 35

(Dec. 1, 2015), available at <http://www.copyright.gov/reports/strategic-plan/sp2016-2020.html>. At the direction of Congress,<sup>1</sup> the Office has also developed a detailed IT plan, and obtained public comments on specific strategies, costs, and timelines for technology objectives. U.S. Copyright Office, Provisional Information Technology Modernization Plan and Cost Analysis (Feb. 29, 2016), available at <http://copyright.gov/reports/itplan/>.

In the meantime, the Office has made some enhancements to the current system that will improve the versatility of the supplementary registration process. Under the Proposed Rule, applicants will be required to use the online registration system to file a supplementary registration for any types of works that are capable of being registered through the electronic system. This online filing requirement will thus apply to supplementary registrations for literary works (*e.g.*, fiction, nonfiction, poetry, etc.), single issues of a serial publication (*e.g.*, periodicals, magazines, newsletters, journals, etc.), works of the visual arts (*e.g.*, photographs, maps, technical drawings, etc.), works of the performing arts (*e.g.*, musical works, dramatic works, choreographic works, pantomimes, motion pictures and other audiovisual works, etc.), and sound recordings. *See* 37 CFR 202.3(b). The online filing requirement will also extend to supplementary registrations for collective works, works registered under the unit of publication option, and works registered as an unpublished collection. *See* 37 CFR 202.3(b)(4). It will also apply to supplementary registrations for groups of serials,<sup>2</sup> newspapers, or newsletters,<sup>3</sup> groups of published photographs,<sup>4</sup> or groups of

<sup>1</sup> H.R. Rep. No. 114–110, at 16–17 (2015).

<sup>2</sup> *See* 37 CFR 202.3(b)(6)(v).

<sup>3</sup> Although the current regulations state that an application for a group of newspaper or newsletter issues must be submitted with a paper application, the Office is able to process these types of claims through the electronic registration system, and has in fact been doing so since December 14, 2012. *See* 37 CFR 202.3(b)(7)(i)(B), (9)(viii). The Office intends to amend the regulations in a future rulemaking to reflect these recent upgrades.

<sup>4</sup> In 2012 the Office issued an interim regulation that established a pilot program for applicants that register large numbers of photographs using the group option for published photographs (referred to herein as “GRPPH”) and the group option for photographic databases. 76 FR 4072, 4074, 4075 (Jan. 24, 2011). Applicants that participate in the pilot program may submit their photographs through the electronic system, provided that they obtain prior authorization from the Visual Arts Division and follow the instructions from that Division concerning the information that should be included in the application. 37 CFR 202.3(b)(10)(xi). While the pilot program was well-

updates and revisions to a photographic database.<sup>5</sup> In the near future, the online filing requirement will apply to supplementary registrations for groups of unpublished photographs,<sup>6</sup> and groups of contributions to periodicals.<sup>7</sup> If the Office subsequently decides to move registrations for other classes of works into the electronic system, supplementary registrations for those works will also be subject to this same requirement. In short, use of the online supplementary registration application will be required for most works. Moreover, applicants will generally be required to use the online registration system to file a supplementary registration even if the work was originally registered using a paper application.<sup>8</sup> Instructions for completing the online application will be provided in the electronic system and in Chapter 1800 of the *Compendium of U.S. Copyright Office*

intentioned, it has been extremely burdensome for both applicants and the Office. Therefore, the Office is issuing a separate notice of proposed rulemaking (published elsewhere in this volume of the **Federal Register**, and referred to herein as the “Photo Rulemaking”) that will modify the regulation that governs GRPPH. Among other changes, the rule proposed in the Photo Rulemaking will require applicants to submit an online application specifically designed for GRPPH claims, instead of submitting their photographs through the pilot program. (By contrast, the pilot program for photographic databases will remain in effect—at least for the time being.)

<sup>5</sup> Applicants may register a photographic database through the electronic system by participating in the pilot program mentioned in footnote 4. 76 FR at 4074, 4075; 37 CFR 202.3(b)(5)(ii)(A).

<sup>6</sup> The rule proposed in the Photo Rulemaking will establish a new group registration option for unpublished photographs (referred to herein as “GRUPH”). In order to use this option, applicants will be required to submit an online application specifically designed for GRUPH claims, instead of submitting a paper application.

<sup>7</sup> The Office is issuing a separate notice of proposed rulemaking (published elsewhere in this volume of the **Federal Register**, and referred to herein as the “GRCP Rulemaking”) on a proposed rule that will modify the group option for contributions to periodicals (“GRCP”). Among other changes, the rule proposed in the GRCP Rulemaking will require applicants to submit an online application specifically designed for GRCP claims, instead of submitting a paper application.

<sup>8</sup> As discussed above in footnote 4, the rule proposed in the Photo Rulemaking will modify the requirements for registering a group of published photographs. Among other things, applicants will be allowed to submit no more than 750 photographs with each application. The limit on the number of photographs, in turn, will affect the procedure for correcting or amplifying an existing registration for a group of published photographs. If the basic registration covers 750 photographs or less, the applicant will be able to correct or amplify the registration record with a single supplementary registration. By contrast, multiple supplementary registrations may be needed in cases where the basic registration had been issued before the issuance of a final rule in the Photo Rulemaking and where the basic registration covers more than 750 photographs.

*Practices, Third Edition* (hereinafter “*Compendium*”).<sup>9</sup>

Once the Proposed Rule goes into effect, applicants will not be allowed to submit a paper application on Form CA to correct or amplify the basic registration for any types of works that are capable of being registered through the electronic system. If the Office receives such a paper application, it will ask the applicant to resubmit the claim using the online application.

To correct or amplify the registration record for works that cannot be registered through the electronic system, applicants will be required to submit a paper application using Form CA.<sup>10</sup> This includes group registrations issued under 37 CFR 202.3(b)(5) for a database that does not consist predominantly of photographs,<sup>11</sup> and GATT registrations issued under 37 CFR 202.12 for a foreign work restored to copyright protection under the Uruguay Round Agreements Act.<sup>12</sup> It also includes a renewal registration for a work registered or first published before January 1, 1978.<sup>13</sup> While instructions for completing Form CA are provided with Form CA and in section 1802.8 of the *Compendium*, the specific requirements for the paper application will no longer be listed in the regulation itself.

## 2. Policy Considerations Supporting Online-Only Registration

A substantial majority of the U.S. population has access to the internet,<sup>14</sup>

<sup>9</sup> Under the Proposed Rule, applicants will be required to obtain prior authorization and instructions from the Visual Arts Division if they intend to correct or amplify the information set forth in a basic registration for a photographic database. This is due to the fact that a supplementary registration for a photographic database will be processed under the pilot program mentioned in footnote 4. The Visual Arts Division will continue to monitor claims submitted under this program to ensure that applicants complete the online application in an appropriate manner.

<sup>10</sup> A supplementary registration cannot be used to correct or amplify the registration record for a vessel design or a mask work. The Office has no authority and no procedure for correcting substantive errors in these types of registrations. See 17 U.S.C. 1319; see also 71 FR 46402 (Aug. 14, 2006). However, if the applicant made a clerical or typographical error in an application for a vessel design, the owner of the registered design or its duly authorized agent may be able to correct the error by submitting an application for a certificate of correction using Form DC. See 37 CFR 212.8(a)(3), (c)(2).

<sup>11</sup> Currently, applicants must submit these types of claims using a paper application “that best reflects the subject matter of the material in the database.” 37 CFR 202.3(b)(5)(ii)(A).

<sup>12</sup> Currently, applicants must submit these types of claims using a paper application submitted on Form GATT. 37 CFR 202.12(c)(2).

<sup>13</sup> Currently, applicants must submit these types of claims using a paper application submitted on Form RE. 37 CFR 202.17(g)(1).

<sup>14</sup> The Pew Research Center found that 84% of adults use the internet, including 85% of the people

and the Office expects that most copyright owners will be able to use the electronic registration system.<sup>15</sup> However, the Office recognizes that millions of Americans do not have broadband service, and that the Proposed Rule may impose a burden on copyright owners who fall within this segment of the population.<sup>16</sup> Nevertheless, the Office believes that the benefits of phasing-out the paper application and replacing it with an online application outweigh the potential burden on copyright owners who do not have direct access to the internet.

Paper applications are extremely burdensome for both applicants and the Office. Describing an error or omission in a basic registration can be tedious and time consuming, especially when the applicant needs to make a significant number of changes to the registration record. The Office routinely receives applications that are hundreds of pages long, such as when a stock photography company wants to add thousands of titles to the record for a photographic database. Examining these applications imposes tremendous burdens on the Office, because each correction or amplification must be copied from Form CA and entered into the record by hand. In some cases, registration specialists have spent several days on a single application. This increasing demand on the Office’s limited resources causes delays in issuing supplementary registrations, and it prevents specialists from examining other types of claims thereby increasing the overall backlog within the Office.

If a copyright owner does not have broadband at home, at the home of a relative, friend, or neighbor, or at his place of employment, there are other options for submitting an application for supplementary registration. If the copyright owner has a tablet or laptop, he could complete and submit the online application at a coffee shop, a

in urban and suburban communities and 78% of the people in rural communities. Pew Research Center, *Americans’ Internet Access: 2000–2015* (June 26, 2015), available at <http://www.pewinternet.org/2015/06/26/americans-internet-access-2000-2015/c>.

<sup>15</sup> Approximately 94% of the claims filed in fiscal year 2015 were submitted through the electronic system, while 6% of the claims were submitted with a paper application.

<sup>16</sup> The Federal Communications Commission (“FCC”) reported that 17% of the population does not have access to a broadband service with connection speeds of twenty-five megabits per second (“Mbps”) for downloads and three Mbps for uploads. This figure includes 8% of the people who live in urban areas, 53% of the people in rural areas, and 63% of the people in U.S. territories and Tribal lands. Federal Communications Commission, *2015 Broadband Progress Report* at 4 (Jan. 29, 2015), available at <https://www.fcc.gov/reports/2015-broadband-progress-report>.

bookstore, or any other place where wi-fi or cellular service is available.<sup>17</sup> He also could log onto the electronic registration system by going to a public library that provides computers with internet access.

In the alternative, the copyright owner could hire an attorney to submit the application on his behalf, either by paying for the attorney's services or by obtaining *pro bono* representation.<sup>18</sup> The Office also notes that a number of companies will prepare and submit an application for a fee. These companies typically provide this service for copyright owners seeking a basic registration, but they could conceivably expand their offering to include supplementary registrations.

For the foregoing reasons, the Office believes that requiring applicants to use the online application is a reasonable trade-off for improving the overall efficiency of the supplementary registration process. The Office invites comment on this proposal, including whether the Office should eliminate the paper application for seeking a supplementary registration, phase out this option after a specified period of time, or continue to offer this option for applicants who prefer to use the paper-based system.

#### B. Fees

Under the Proposed Rule, the applicant will be required to pay the same filing fee, regardless of whether the application is submitted through the electronic registration system or on Form CA. In addition, the applicant may be required to pay a fee to locate and obtain a copy of the basic registration that is referenced in the application. Each of these fees is discussed below.

#### 1. Filing Fee

In 2012 the Office conducted a study pursuant to section 708 of the Copyright Act, which authorizes the Register to establish, adjust, and recover fees for certain services that the Office provides to the public. After reviewing its costs, the Office decided to increase the filing fee for a supplementary registration from \$100 to \$130.<sup>19</sup> The Office explained that paper applications “are considerably less efficient than electronic registration” and that the prior fee did not offset a sufficient percentage of the costs associated with these types of claims. U.S. Copyright Office, Proposed Schedule and Analysis of Copyright Fees To Go Into Effect On Or About April 1, 2014, at 18 (Nov. 14, 2013), available at <http://www.copyright.gov/docs/newfees/USCOFeeStudy-Nov13.pdf>. For example, in Fiscal Year 2011 the filing fee for a supplementary application was \$100, but the actual cost of processing these claims was \$184 per application. *Id.* Appendix B.

Section 708(b) authorizes the Register to adjust the fees that the Office charges for certain services (including the fee for seeking a supplementary registration), but before doing so the Register must conduct a study of the costs incurred by the Office for registering claims, recording documents, and providing other services. In conducting this study, the Register must consider the timing of any fee adjustments and the Office's authority to use the fees consistent with its budget. 17 U.S.C. 708(b)(1). Section 708(b) provides that the Register may adjust these fees no “more than necessary to cover the reasonable costs incurred by the Copyright Office for . . . [such services], plus a reasonable inflation adjustment to account for any estimated increase in costs.” 17 U.S.C. 708(b)(2). It also provides that the Office must submit a proposed fee schedule to Congress and that the Office may implement the schedule 120 days thereafter (unless Congress enacts a law stating that it does not approve the schedule). 17 U.S.C. 708(b)(5).

Once the Proposed Rule has been implemented, the Office will monitor the cost of processing supplementary claims to determine if future fee adjustments may be warranted or if the Office should charge a different fee for claims submitted through the electronic registration system and claims submitted on Form CA. The Office will use this information in conducting its next fee study.

<sup>19</sup> This increase went into effect on May 1, 2014.

#### 2. Fee for Additional Certificate of Registration

When the Office receives an application for a supplementary registration, the registration specialist will compare the information set forth in the application with the information set forth in the basic registration. If the Office has made a digital copy of the certificate of registration, the specialist may be able to conduct his or her review without obtaining a physical copy of the certificate.<sup>20</sup> If the certificate has not been digitized, the specialist will ask the applicant to submit a copy of the certificate. If the applicant is unable to do so, the Office will charge an additional fee to make a copy of the basic registration in order to conduct the requisite review.<sup>21</sup>

#### C. Examination Practices

The Proposed Rule also updates examination practices in several areas, including, among other things, to reflect changes to the *Compendium of Copyright Office Practices*, to update rules regarding when supplementary registration will be declined, and to update practices regarding cross-references in the Office's public record.

*Changes to Reflect Compendium.* The *Compendium* is the manual of the Register of Copyrights setting forth and explaining key administrative duties of the Copyright Office under title 17 of the United States Code. It serves as both a technical manual for the Office's staff, as well as a guidebook for authors, copyright licensees, practitioners, scholars, the courts, and members of the general public. In 2014 the Office released a comprehensive revision of the *Compendium* that makes the Office's practices more accessible and transparent to the public, and sets the stage for a number of long-term improvements in registration and recordation policy. See 79 FR 78911 (Dec. 31, 2014).

The Proposed Rule updates a number of practices that are reflected in the *Compendium*.<sup>22</sup> It clarifies that the Office may issue a supplementary registration to correct an error in a basic registration issued on or after January 1, 1978, or a renewal registration for a work that was registered or first

<sup>20</sup> The Office has digitized the certificates of registration for claims registered between 1994 and the present. Certificates issued before that year may be stored in electronic form, on microfilm, in bound volumes, or in other physical formats.

<sup>21</sup> The current fee for obtaining an additional copy of a certificate of registration is \$40 (<http://copyright.gov/docs/fees.html>).

<sup>22</sup> Corresponding changes will be made to the *Compendium* when the Proposed Rule goes into effect.

<sup>17</sup> When filing an application for a supplementary registration there is no need to upload a copy of the work that is covered by the basic registration. Thus, applicants will be able to submit these types of claims with a tablet or other wi-fi enabled device. In some cases, the registration specialist may need to compare the information provided in the application for supplementary registration with the copy of the work that was submitted with the application for the basic registration. For instance, this may be necessary if the supplementary registration changes the publication status of the work or adds additional authors to the registration record. If the Office does not have a copy of the work in its possession, the registration specialist may ask the applicant to submit a replacement copy. See *Compendium* section 1802.9(C). But in all cases, the replacement copy could be sent by first class mail, courier, or hand delivery; the copy does not need to be uploaded to the electronic system (though this would be an option if the applicant has broadband service).

<sup>18</sup> The Office does not require applications to be prepared or submitted by an attorney. In certain special cases the Office may suggest that the copyright owner consider seeking legal advice, but the Office does not furnish the names of copyright attorneys, publishers, agents, or other similar information. See 37 CFR 201.2(a)(2).

published on or before December 31, 1977. *See Compendium* section 1802.3.

*Updating Rules for When Supplementary Registration Will Be Denied.* The Proposed Rule also clarifies that the Office may decline to issue a supplementary registration for a basic registration that covered the first twenty-eight years of the copyright term, because any registration issued before January 1, 1978 has expired by now.<sup>23</sup> *See id.* section 1802.4. Allowing interested parties to correct or amplify the information in a registration after the initial term expired creates a potential for error, mistake, or even fraud. This could have significant consequences in a legal dispute, given that a certificate of registration may create an evidentiary presumption concerning the facts stated in the certificate.<sup>24</sup> 17 U.S.C. 410(c). Therefore, the Proposed Rule explains that the Office may issue a supplementary registration for a basic registration that covered the first twenty-eight years of the copyright term only in exceptional circumstances, if the proposed correction or amplification is supported by clear, convincing, and objective documentation. In this respect, the Proposed Rule tracks a similar provision in the current regulation that specifies when the Office may issue a supplementary registration for a basic renewal registration.<sup>25</sup>

*Cross-references to Basic Registration.* Under the current regulations, when the Office issues a supplementary registration, it will cross-reference the records for the supplementary registration and the basic registration only if the application for supplementary registration was submitted by or on behalf of the

copyright claimant named in the basic registration.<sup>26</sup> *See* 37 CFR 201.5(b)(1) n.1. If the application was submitted by or on behalf of any other party, the records will not be cross-referenced with each other. *See Compendium* section 1802.1.

After further consideration, the Office has concluded that these cross-references should be included regardless of who has submitted the application for supplementary registration. This amendment will improve the accuracy and usefulness of the public record by making it easier to find supplementary registrations that may contain additional information pertaining to the basic registration (regardless of who submitted the application for supplementary registration). If an interested party wishes to identify the person who made the correction or amplification, that information can be obtained by reviewing the records for the supplementary registration.<sup>27</sup>

*Clarifying Relationship Between Basic and Supplementary Registration.* An additional change is being made to clarify the nature of a supplementary registration. As a general rule, the Office will issue only one registration for each work—meaning that the Office will issue one basic registration for a particular work, but will not issue additional basic registrations once the first basic registration has been made. *See Compendium* section 510. There are several exceptions to this rule, which are set forth in 37 CFR 202.3(b)(11)(i)–(iv).

One of the exceptions relates to supplementary registrations, stating that “[s]upplementary registrations may be made . . . to correct or amplify the information in a registration made under this section.”<sup>28</sup> This erroneously suggests, however, that supplementary registrations are treated as basic registrations. The Proposed Rule will accordingly remove this exception; because a supplementary registration is not considered a basic registration, there is no limit on the number of

supplementary registrations that may be issued for a particular basic registration, and in any event, the Office does not view supplementary registration as an exception to the general rule against issuing one basic registration per work.

*Certification that Applicant Has Reviewed Basic Registration.* It has come to the Office’s attention that applicants often submit an application for supplementary registration without reviewing the information that is set forth in the basic registration. In some cases, applicants review the records that are posted in the Office’s online database, but those records do not contain all the information that is set forth in the certificate of registration for a particular work. This may create a discrepancy between the registration record and the changes proposed in the application for supplementary registration. This complicates the examination of the claim, which, in turn, delays the issuance of the supplementary registration.

The Proposed Rule addresses this issue by requiring applicants to sign a certification stating that they reviewed the certificate of registration for the basic registration before submitting the application for supplementary registration.<sup>29</sup> If the applicant does not have a copy of the certificate, he or she may obtain a copy from the Record Research and Certification Section by following the procedure set forth in section 2408 of the *Compendium*. If it appears that the applicant did not review the basic registration before seeking a supplementary registration, the Office may ask the applicant to resubmit the application or may refuse registration.

*Referral Procedure for Office Error.* Finally, the Proposed Rule clarifies that if an error in a basic registration was caused by the Office’s own action, it will correct that error on its own initiative through an internal procedure known as a “referral.” In such cases, there is no need to seek a supplementary registration, and there is no fee for referral. *See Compendium* section 1804. It also clarifies that the referral procedure does not apply if the error was caused by the applicant’s action—even if the examiner should have recognized that error when he or she examined the claim. In such cases, the Office will correct the error only if the applicant submits an application for

<sup>23</sup> Registrations issued under the 1909 Act expired at the end of the first twenty-eight years of the copyright term. If the copyright was renewed, the renewal registration expired at the end of the renewal term.

<sup>24</sup> For similar reasons, the Proposed Rule clarifies that the Copyright Office will not issue a supplementary registration for a registration that has been cancelled. Cancellation is an administrative procedure for invalidating a registration that has been issued by the Office. The Office has the authority to cancel a registration if “the material deposited does not constitute copyrightable subject matter” or if “the claim is invalid for any other reason.” 17 U.S.C. 410(b). It also has the authority to cancel a registration if the registration was made in error or if it was issued in the wrong class or series. *See generally* 37 CFR 201.7.

<sup>25</sup> 37 CFR 201.5(b)(2)(iv). In addition, the Proposed Rule removes a sentence from this provision which states that the Office may correct an error in a renewal registration if the Office received an application for supplementary registration in the last year of the first twenty-eight years of the copyright term. This sentence is no longer needed now that the deadline for submitting such claims has passed.

<sup>26</sup> Specifically, the Office will place a note in the record for the basic registration that identifies the registration number and the effective date of registration for the supplementary registration, and it will place a corresponding note in the record for the supplementary registration that identifies the registration number and the year of registration for the basic registration. *See Compendium* section 1802.1.

<sup>27</sup> The Proposed Rule retains the requirement that an application for a supplementary registration must be submitted by an author of the work, a claimant of the work, an owner of any of the exclusive rights in the work, or a duly authorized agent of any of the foregoing parties. 37 CFR 201.5(b)(1).

<sup>28</sup> 37 CFR 202.3(b)(11)(iv).

<sup>29</sup> If the applicant fails to sign the certification in the online application, the application will not be accepted by the electronic registration system. If the applicant fails to sign the certification on Form CA, the registration specialist will communicate with the applicant.

a supplementary registration together with the appropriate filing fee.

#### D. Technical Amendments

The Proposed Rule will improve the readability of the regulation by reorganizing or revising awkward provisions, and by adopting the appropriate format for providing cross-references within the Code of Federal Regulations (as recommended by the **Federal Register** Document Drafting Handbook).<sup>30</sup> In all cases, these technical amendments are intended to clarify the existing regulation, but they do not represent a substantive change in policy.

### III. Conclusion

The Proposed Rule will increase the efficiency of the supplementary registration process and create a more robust record of the claim. The Office invites public comment on these proposed changes.

#### List of Subjects in 37 CFR Part 201

Copyright, General provisions.

#### Proposed Regulations

For the reasons set forth in the preamble, the Copyright Office proposes amending 37 CFR parts 201 and 202 as follows:

#### PART 201—GENERAL PROVISIONS

- 1. Revise the authority citation for part 201 to read as follows:

**Authority:** 17 U.S.C. 702.

- 2. Amend § 201.3 by revising paragraph (c)(9) to read as follows:

**§ 201.3 Fees for registration, recordation, and related services, special services, and services performed by the Licensing Division.**

\* \* \* \* \*

(c) \* \* \*

(9) Registration of a correction or amplification to a claim:	
(i) Supplementary registration: electronic filing or paper filing .....	130
(ii) Correction of a design registration (Form DC) .....	100

\* \* \* \* \*

- 3. Revise § 201.5 to read as follows:

**§ 201.5 Supplementary registration.**

(a) *General.* This section prescribes conditions relating to the filing of an application for supplementary registration under section 408(d) of title

17 of the United States Code to correct an error in a copyright registration or to amplify the information given in a registration. No correction or amplification of the information in a basic registration will be made except pursuant to the provisions of this section. As an exception, where it is discovered that a basic registration contains an error caused by the Copyright Office's own action, the Office will take appropriate measures to rectify its mistake.

(b) *Definitions.* (1) A *basic registration* means any of the following:

(i) A copyright registration made under sections 408, 409, and 410 of title 17 of the United States Code;

(ii) A renewal registration made under section 304 of title 17 of the United States Code; or

(iii) A copyright registration or a renewal registration made under title 17 of the United States Code as it existed before January 1, 1978.

(2) A *supplementary registration* means a registration issued under section 408(d) of title 17 of the United States Code and the provisions of this section.

(c) *Persons entitled to file an application for supplementary registration.* Supplementary registration can be made only if a basic copyright registration for the same work has already been completed. After a basic registration has been completed, any author or other copyright claimant of the work, or the owner of any exclusive right in the work, or the duly authorized agent of any such author, other claimant, or owner, who wishes to correct or amplify the information given in the basic registration for the work may file an application for supplementary registration.

(d) *Basis for issuing a supplementary registration.* (1) Supplementary registration may be made either to correct or to amplify the information in a basic registration.

(2) A *correction* is appropriate if information in the basic registration was incorrect at the time that basic registration was made.

(3) An *amplification* is appropriate:

(i) To supplement or clarify the information that was required by the application for the basic registration and should have been provided, such as the identity of a co-author or co-claimant, but was omitted at the time the basic registration was made; or

(ii) To reflect changes in facts, other than those relating to transfer, license, or ownership of rights in the work, that occurred since the basic registration was made.

(4) Supplementary registration is not appropriate:

(i) To reflect a change in ownership that occurred on or after the effective date of the basic registration or to reflect the division, allocation, licensing or transfer of rights in a work;

(ii) To correct errors in statements or notices on the copies of phonorecords of a work, or to reflect changes in the content of a work; or

(iii) To correct or amplify the information set forth in a basic registration that has been cancelled under § 201.7.

(5) If an error or omission in a basic renewal registration is extremely minor, and does not involve the identity of the renewal claimant or the legal basis of the claim, supplementary registration may be made at any time. In an exceptional case, however, supplementary registration may be made to correct the name of the renewal claimant and the legal basis of the claim if clear, convincing, and objective documentation is submitted to the Copyright Office which proves that an inadvertent error was made in failing to designate the correct living statutory renewal claimant in the basic renewal registration.

(6) In general, the Copyright Office will not issue a supplementary registration for a basic registration made under title 17 of the United States Code as it existed before January 1, 1978. In an exceptional case, the Copyright Office may issue a supplementary registration for such a registration, if the correction or amplification is supported by clear, convincing, and objective documentation.

(e) *Application for supplementary registration.* (1) To seek a supplementary registration for a work registered in Class TX, PA, VA, SR, or SE, an unpublished collection or a unit of publication registered under § 202.3(b)(4)(i) of this chapter, or a group of related works registered under § 202.3(b)(6) through (10) or § 202.4 of this chapter, an applicant must complete and submit the online application designated for supplementary registration.

(2) To seek a supplementary registration for a database that consists predominantly of photographs registered under § 202.3(b)(5) of this chapter, an applicant must complete and submit the online application designated for supplementary registration after consultation with and under the direction of the Visual Arts Division.

(3) To seek a supplementary registration for a restored work registered under § 202.12 of this

<sup>30</sup> The regulation repeatedly states that title 17 of the United States Code was "amended by Pub. L. 94-553." The Office recently issued a notice of proposed rulemaking that would remove this phrase. See 81 FR 67940, 67944 (Oct. 3, 2016).



chapter, a database that does not consist predominantly of photographs registered under § 202.3(b)(5) of this chapter, or a renewal registration, an applicant must complete and submit a paper application using Form CA.

(4) Before submitting the application, the applicant must sign a certification stating that the applicant reviewed a copy of the certificate of registration for the basic registration that will be corrected or amplified by the supplementary registration. To obtain a copy of the certificate, the applicant may submit a written request to the Records Research and Certification Section using the procedure set forth in Chapter 2400 of the *Compendium of U.S. Copyright Office Practices, Third Edition*.

(5) The appropriate filing fee, as required by § 201.3(c), must be included with the application or charged to an active deposit account. At the Office's discretion, the applicant may be required to pay an additional fee to make a copy of the certificate of registration for the basic registration that will be corrected or amplified by the supplementary registration.

(6) Copies, phonorecords, or supporting documents cannot be made part of the record for a supplementary registration and should not be submitted with the application.

(f) *Effect of supplementary registration.* (1) When the Copyright Office completes a supplementary registration, it will issue a certificate of supplementary registration bearing a new registration number in the appropriate class. The Office will cross-reference the records for the basic registration and the supplementary registration by placing a note in each record that identifies the registration number and effective date of registration for the related registration.

(2) As provided in section 408(d) of title 17 of the United States Code, the information contained in a supplementary registration augments but does not supersede that contained in the basic registration. The basic registration will not be expunged or cancelled.

## PART 202—PREREGISTRATION AND REGISTRATION OF CLAIMS TO COPYRIGHT

■ 4. The authority citation for part 202 continues to read as follows:

**Authority:** 17 U.S.C. 408(f), 702.

### § 202.3 Registration of copyright.

■ 5. Amend § 202.3 as follows:

■ a. In paragraph (b)(11)(iii), remove the phrase “by that applicant; and” and add in its place “by that applicant.”

■ b. Remove paragraph (b)(11)(iv).

Dated: November 22, 2016.

**Sarang V. Damle,**

*General Counsel and Associate Register of Copyrights.*

[FR Doc. 2016–28701 Filed 11–30–16; 8:45 am]

**BILLING CODE 1410–30–P**

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 52

[EPA–R09–OAR–2016–0245; FRL–9955–60–Region 9]

### Approval of California Air Plan Revisions, Yolo-Solano Air Quality Management District

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing to approve a revision to the Yolo-Solano Air Quality Management District (YSAQMD) portion of the California State Implementation Plan (SIP). This revision concerns emissions of volatile organic compounds (VOCs) and particulate matter (PM) from confined animal facilities (CAFs). We are proposing to approve a local rule to regulate these emission sources under the Clean Air Act (CAA or the Act). We are taking comments on this proposal and plan to follow with a final action.

**DATES:** Any comments must arrive by January 3, 2017.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA–R09–OAR–2016–0245 at <http://www.regulations.gov>, or via email to Andrew Steckel, Rulemaking Office Chief at [Steckel.Andrew@epa.gov](mailto:Steckel.Andrew@epa.gov). For

comments submitted at [Regulations.gov](http://Regulations.gov), follow the online instructions for submitting comments. Once submitted, comments cannot be removed or edited from [Regulations.gov](http://Regulations.gov). For either manner of submission, the EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.* on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

**FOR FURTHER INFORMATION CONTACT:** Nancy Levin, EPA Region IX, (415) 972–3848, [levin.nancy@epa.gov](mailto:levin.nancy@epa.gov).

**SUPPLEMENTARY INFORMATION:** Throughout this document, “we,” “us” and “our” refer to the EPA.

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### I. The State's Submittal

#### A. What rule did the State submit?

Table 1 lists the rule addressed by this proposal with the dates that it was adopted by the local air agency and submitted by the California Air Resourced Board (CARB).

TABLE 1—SUBMITTED RULE

Local agency	Rule No.	Rule title	Adopted	Submitted
YSAQMD .....	11.2	Confined Animal Facilities Permit Program .....	06/14/06	10/05/2006

On October 24, 2006, the EPA determined that the submittal for YSAQMD Rule 11.2 met the completeness criteria in 40 CFR part 51 Appendix V, which must be met before formal EPA review.

*B. Are there other versions of this rule?*

There are no previous versions of Rule 11.2 in the SIP.

*C. What is the purpose of the submitted rule?*

VOCs help produce ground-level ozone, smog and PM, which harm human health and the environment. Section 110(a) of the CAA requires States to submit regulations that control VOC emissions. PM, including PM equal to or less than 2.5 microns in diameter (PM<sub>2.5</sub>) and PM equal to or less than 10 microns in diameter (PM<sub>10</sub>), contributes to effects that are harmful to human health and the environment, including premature mortality, aggravation of respiratory and cardiovascular disease, decreased lung function, visibility impairment and damage to vegetation and ecosystems. Section 110(a) of the CAA requires states to submit regulations that control PM emissions. This rule prohibits any person from operating a CAF without first obtaining a “CAF Permit” from the YSAQMD Air Pollution Control Officer (APCO). The rule defines a CAF as a “facility where animals are corralled, penned, or otherwise caused to remain in restricted areas for commercial purposes and primarily fed by means other than grazing.”<sup>1</sup> The rule exempts a CAF from permit requirements if it does not meet the definition of a large CAF (LCAF).<sup>2</sup> The rule defines a LCAF as a CAF that meets or exceeds a threshold of 1,000 milking cows per dairy, 3,500 beef cattle per beef feedlot, 7,500 “other cattle”<sup>3</sup> per facility, 100,000 turkeys per facility, 650,000 chickens per facility or 3,000 swine per facility.<sup>4</sup> The permit application must contain an emissions mitigation plan

that implements best available retrofit control technology (BARCT) for existing CAFs and best available control technology (BACT) for new facilities, as applicable. The rule does not include specific measures that the CAF may or must use to implement BARCT or BACT. The EPA’s technical support document (TSD) has more information about this rule.

## II. The EPA’s Evaluation and Action

### A. How is the EPA evaluating the rule?

SIP rules must be enforceable (see CAA section 110(a)(2)), must not interfere with applicable requirements concerning attainment and reasonable further progress or other CAA requirements (see CAA section 110(l)), and must not modify certain SIP control requirements in nonattainment areas without ensuring equivalent or greater emissions reductions (see CAA section 193).

Guidance and policy documents that we use to evaluate enforceability and revision/relaxation requirements for the applicable criteria pollutants include the following:

1. “Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations,” EPA, May 25, 1988 (the “Bluebook,” revised January 11, 1990).
2. “Guidance Document for Correcting Common VOC & Other Rule Deficiencies,” EPA Region 9, August 21, 2001 (the “Little Bluebook”).

### B. Does the rule meet the evaluation criteria?

We believe this rule is consistent with CAA requirements and relevant guidance regarding enforceability and SIP revisions. The submitted rule strengthens the SIP by establishing a permit program for CAFs and by prohibiting any person from operating a CAF without first obtaining a CAF permit from the APCO. The CAF permit application must include an emissions mitigation plan. The TSD has more information on our evaluation.

### C. EPA Recommendations To Further Improve the Rule

The TSD describes additional rule revisions that we recommend for the next time the local agency modifies the rule.

### D. Public Comment and Proposed Action

As authorized in section 110(k)(3) of the Act, the EPA proposes to fully approve the submitted rule because we believe it fulfills all relevant requirements. We will accept comments from the public on this proposal until January 3, 2017. Unless we receive

convincing new information during the comment period, we intend to publish a final approval action that will incorporate this rule into the federally-enforceable SIP.

## III. Incorporation by Reference

In this rule, the EPA is proposing to include in a final EPA rule regulatory text that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to incorporate by reference the YSAQMD rule as described in Table 1 of this preamble. The EPA has made, and will continue to make, these materials available through [www.regulations.gov](http://www.regulations.gov) and at the EPA Region IX Office (please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

## 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 proposed action merely proposes to approve State law as meeting federal requirements and does not impose additional requirements beyond those imposed by State law. For that reason, this proposed action:

- Is not a “significant regulatory action” subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- 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);

<sup>1</sup> See YSAQMD Rule 11.2, section 206 “Confined Animal Facility (CAF).”

<sup>2</sup> See YSAQMD Rule 11.2, sections 103 “Exemptions” and 211 “Large Confined Animal Facility.” All CAFs must comply with section 502 “Number of Animals—Exemption Demonstration,” which requires the owner or operator of any CAF that exceeds 50 percent of the large CAF (LCAF) threshold to maintain records demonstrating that the CAF meets the exemption criteria of the rule. Rule 11.2 also exempts a CAF if it is subject to YSAQMD Rule 3.8 “Federal Operating Permits.” See Rule 11.2 section 103.

<sup>3</sup> “Other Cattle” includes heifers and calves.

<sup>4</sup> See YSAQMD Rule 11.2, section 211. This section also includes LCAF thresholds for sheep, lamb or goat CAFs (15,000 head), horse CAFs (2,500 head), duck CAFs (650,000 head), and CAFs for any other type of livestock not listed (30,000 head).

- 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 disproportionate human health or environmental effects with practical, appropriate, 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 the 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).

#### List of Subjects in 40 CFR Part 52

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

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

Dated: November 14, 2016.

**Alexis Strauss,**

*Acting Regional Administrator, Region IX.*

[FR Doc. 2016-28741 Filed 11-30-16; 8:45 am]

**BILLING CODE 6560-50-P**

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Parts 52 and 81

[EPA-R04-OAR-2016-0361; FRL-9955-80-Region 4]

#### Air Plan Approval and Designation of Areas; KY; Redesignation of the Campbell County, 2010 1-Hour Sulfur Dioxide Nonattainment Area to Attainment

**AGENCY:** Environmental Protection Agency.

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing to approve two separate but related submissions (one of which includes multiple components) provided by the Commonwealth of Kentucky, through the Kentucky Division of Air Quality

(KDAQ), in relation to attainment of the 2010 Sulfur Dioxide (SO<sub>2</sub>) national ambient air quality standards (NAAQS) for the Kentucky portion of the Campbell-Clermont, Kentucky-Ohio 2010 1-hour SO<sub>2</sub> nonattainment area (hereafter referred to as the “Campbell-Clermont, KY-OH Area” or “Area”). On March 31, 2015, KDAQ submitted a request for EPA to determine that the Campbell-Clermont, KY-OH Area attained the 2010 1-hour SO<sub>2</sub> NAAQS per EPA’s “Clean Data Policy.” Subsequently, on February 22, 2016, KDAQ submitted a request for EPA to redesignate the Campbell County portion of Kentucky that is within the Campbell-Clermont, KY-OH Area to attainment for the 2010 1-hour SO<sub>2</sub> NAAQS, and to approve a State Implementation Plan (SIP) revision containing a maintenance plan, base year inventory, and reasonably available control measures (RACM) determination for the Kentucky portion of the Area. EPA is proposing to approve the Commonwealth’s RACM determination and incorporate it into the SIP; to approve the base year emissions inventory for the Kentucky portion of the Area and incorporate it into the SIP; to approve the Commonwealth’s request for a clean data determination; to approve the Commonwealth’s plan for maintaining attainment of the 2010 1-hour SO<sub>2</sub> NAAQS and incorporate it into the SIP; and to redesignate the Kentucky portion of the Area to attainment for the 2010 1-hour SO<sub>2</sub> NAAQS.

**DATES:** Comments must be received on or before January 3, 2017.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R04-OAR-2016-0361 at <http://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from *Regulations.gov*. EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia

submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

#### FOR FURTHER INFORMATION CONTACT:

Steven Scofield of the Air Regulatory Management Section, Air Planning and Implementation Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW., Atlanta, Georgia 30303-8960. Mr. Scofield may be reached by phone at (404) 562-9034 or via electronic mail at [scofield.steve@epa.gov](mailto:scofield.steve@epa.gov).

#### SUPPLEMENTARY INFORMATION:

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- I. What are the actions EPA is proposing to take?
- II. What is the background for EPA’s proposed actions?
- III. What are the criteria for redesignation?
- IV. Why is EPA proposing these actions?
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- VI. What is the effect of EPA’s proposed actions?
- VII. Proposed Actions
- VIII. Statutory and Executive Order Reviews

#### I. What are the actions EPA is proposing to take?

EPA is proposing to take the following five separate but related actions regarding Kentucky’s aforementioned requests and SIP submission: (1) To approve Kentucky’s RACM determination for the Kentucky portion of the Campbell-Clermont, KY-OH Area pursuant to Clean Air Act (CAA or Act) section 172(c)(1) and incorporate it into the SIP; (2) to approve the base year emissions inventory for the 2010 1-hour SO<sub>2</sub> NAAQS for the Kentucky portion of the Area pursuant to CAA section 172(c)(3) and incorporate it into the SIP; (3) to approve the Commonwealth’s March 31, 2015, request for EPA to determine that the Area attained the 2010 1-hour SO<sub>2</sub> NAAQS per EPA’s “Clean Data Policy;” (4) to approve Kentucky’s plan for maintaining the 2010 1-hour SO<sub>2</sub> NAAQS (maintenance plan) in the Area and incorporate it into the SIP; and (5) to redesignate the Kentucky portion of the Campbell-Clermont, KY-OH Area to attainment for the 2010 1-hour SO<sub>2</sub> NAAQS. The Campbell-Clermont, KY-OH Area consists of a portion of Campbell County in Kentucky and a portion of Clermont County in Ohio.<sup>1</sup> These proposed actions are summarized below

<sup>1</sup> The Kentucky portion of the Area emits less than nine tons of total SO<sub>2</sub> emissions per year, but it contains the SO<sub>2</sub> monitor that violated the SO<sub>2</sub> standard in 2011. The Ohio portion of the Area contains the Walter C. Beckjord power plant (Beckjord Facility) which shut down in 2014.

and described in greater detail throughout this notice of proposed rulemaking.

Based on the 1-hour SO<sub>2</sub> nonattainment designation for the Area, Kentucky was required to develop a nonattainment SIP revision addressing certain CAA requirements. Among other things, the Commonwealth was required to submit a SIP revision addressing RACM and base year inventory requirements pursuant to CAA section 172(c)(1) and section 172(c)(3), respectively, for its portion of the Area. Although EPA does not believe that section 172(c)(1) RACM must be approved into a SIP prior to redesignation of an area to attainment once that area is attaining the NAAQS, EPA is proposing to approve Kentucky's RACM determination into its SIP pursuant to a recent decision by the United States Court of Appeals for the Sixth Circuit (Sixth Circuit), as discussed in Section V.A, below. EPA is also proposing to approve Kentucky's 2011 base year inventory as satisfying section 172(c)(3) requirements.

On November 21, 2016, EPA published its final approval of the redesignation request and maintenance plan for the Ohio portion of the Area. See 81 FR 83158. As part of that final action, EPA determined that the entire Area has attained the 2010 1-hour SO<sub>2</sub> NAAQS. Based on EPA's final determination of attainment, EPA is proposing to approve Kentucky's March 31, 2015, request for EPA to determine that the Campbell-Clermont, KY-OH Area has attained the 2010 1-hour SO<sub>2</sub> NAAQS per EPA's "Clean Data Policy." Under the Clean Data Policy, a determination that an area is attaining the NAAQS suspends the obligations to submit an attainment demonstration and associated RACM, RFP plans, contingency measures, and certain other planning-related requirements until EPA redesignates the Area to attainment (at which time the requirements no longer apply) or EPA determines that the Area violates the standard.<sup>2</sup>

<sup>2</sup> Following enactment of the CAA Amendments of 1990, EPA promulgated its interpretation of the requirements for implementing the NAAQS in the general preamble for the Implementation of Title I of the CAA Amendments of 1990 (General Preamble) 57 FR 13498, 13564 (April 16, 1992). In 1995, based on the interpretation of CAA sections 171 and 172, and section 182 in the General Preamble, EPA set forth what has become known as its "Clean Data Policy" for the 1-hour ozone NAAQS. See Memorandum from John S. Seitz, Director, Office of Air Quality Planning and Standards, "RFP, Attainment Demonstration, and Related Requirements for Ozone Nonattainment Areas Meeting the Ozone National Ambient Air Quality Standard" (May 10, 1995). Since 1995, EPA has applied its interpretation under the Clean Data Policy in many rulemakings, suspending certain

EPA is also proposing to approve Kentucky's maintenance plan for its portion of the Campbell-Clermont, KY-OH Area as meeting the requirements of section 175A (such approval being one of the CAA criteria for redesignation to attainment status) and incorporate it into the SIP. The maintenance plan is designed to keep the Area in attainment of the 2010 1-hour SO<sub>2</sub> NAAQS through 2027.

EPA also proposes to determine that the Kentucky portion of the Campbell-Clermont, KY-OH Area has met the requirements for redesignation under section 107(d)(3)(E) of the CAA. Accordingly, in this action, EPA is proposing to approve a request to change the legal designation of the portion of Campbell County, Kentucky, within the Campbell-Clermont, KY-OH Area, as found at 40 CFR part 81, from nonattainment to attainment for the 2010 1-hour SO<sub>2</sub> NAAQS.

In summary, this proposed rulemaking is in response to Kentucky's March 31, 2015, submittal requesting a clean data determination and to Kentucky's February 22, 2016, redesignation request and associated SIP submission that address the necessary elements described in section 107(d)(3)(E) of the CAA for redesignation of the Kentucky portion of the Campbell-Clermont, KY-OH Area to attainment for the 2010 1-hour SO<sub>2</sub> NAAQS.

## II. What is the background for EPA's proposed actions?

On June 2, 2010, EPA revised the primary SO<sub>2</sub> NAAQS, establishing a new 1-hour SO<sub>2</sub> standard of 75 parts per billion (ppb). See 75 FR 35520 (June 22, 2010). Under EPA's regulations at 40 CFR part 50, the 2010 1-hour SO<sub>2</sub> NAAQS is met at a monitoring site when the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations is less than or equal to 75 ppb (based on the rounding convention in 40 CFR part 50, appendix T). See 40 CFR 50.17. Ambient air quality monitoring data for the 3-year period must meet a data completeness requirement. A year meets data completeness requirements when all four quarters are complete, and a quarter is complete when at least 75 percent of the sampling days for each quarter have complete data. A sampling day has complete data if 75 percent of the hourly concentration values, including state-flagged data affected by

attainment-related planning requirements for individual areas, based on a determination of attainment and that interpretation has been upheld by federal courts.

exceptional events which have been approved for exclusion by the Administrator, are reported.<sup>3</sup>

Upon promulgation of a new or revised NAAQS, the CAA requires EPA to designate as nonattainment any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the NAAQS. At the time EPA conducted the initial round of designations for the 2010 1-hour SO<sub>2</sub> primary NAAQS, Campbell County contained an SO<sub>2</sub> monitor which registered violations of the standard based on the three most recent years of complete, quality assured, and certified ambient air quality data. Using 2009–2011 ambient air quality data, EPA designated the Area as nonattainment for the 2010 1-hour SO<sub>2</sub> NAAQS on August 5, 2013 (78 FR 47191), which became effective on October 4, 2013. This nonattainment designation established an attainment date five years after the October 4, 2013, effective date for areas designated as nonattainment for the 2010 1-hour SO<sub>2</sub> NAAQS. Therefore, the Campbell-Clermont, KY-OH Area's attainment date is October 4, 2018. KDAQ was also required to submit a SIP to EPA that meets the requirements of CAA sections 172(c) and 191–192 within 18 months following the October 4, 2013, effective date of designation (*i.e.*, April 4, 2015).

As mentioned above, on March 31, 2015, KDAQ submitted a request for EPA to determine that the Campbell-Clermont, KY-OH Area has attained the 2010 1-hour SO<sub>2</sub> NAAQS per EPA's "Clean Data Policy." Subsequently, on February 22, 2016, KDAQ submitted to EPA a request for redesignation of the Campbell-Clermont, KY-OH Area to attainment and a SIP revision containing a maintenance plan for the Kentucky portion of the Area.

## III. What are the criteria for redesignation?

The CAA provides the requirements for redesignating a nonattainment area to attainment. Specifically, section 107(d)(3)(E) of the CAA allows for redesignation provided that the following criteria are met: (1) The Administrator determines that the area has attained the applicable NAAQS; (2) the Administrator has fully approved the applicable implementation plan for the area under section 110(k); (3) the Administrator determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable SIP and applicable federal air pollutant

<sup>3</sup> 40 CFR part 50, appendix T, section 3(b).

control regulations, and other permanent and enforceable reductions; (4) the Administrator has fully approved a maintenance plan for the area as meeting the requirements of section 175A; and (5) the state containing such area has met all requirements applicable to the area for purposes of redesignation under section 110 and part D of the CAA.

On April 16, 1992 (57 FR 13498), EPA provided guidance on redesignation in the General Preamble for the Implementation of title I of the CAA Amendments of 1990 and supplemented this guidance on April 28, 1992 (57 FR 18070). EPA has provided further guidance on processing redesignation requests in several guidance documents. For the purposes of this proposed action, EPA will be referencing three of these documents: (1) The September 4, 1992, memorandum from John Calcagni titled “Procedures for Processing Requests to Redesignate Areas to Attainment” (hereinafter referred to as the “Calcagni Memo”); (2) the October 14, 1994, memorandum from Mary D. Nichols titled “Part D New Source Review (Part D NSR) Requirements for Areas Requesting Redesignation to Attainment” (hereinafter referred to as the “Nichols Memo”); and (3) the April 23, 2014 memorandum from Stephen D. Page titled “Guidance for 1-Hour SO<sub>2</sub> Nonattainment Area SIP Submissions” (hereinafter referred to as “2010 SO<sub>2</sub> Nonattainment Area Guidance”).

#### IV. Why is EPA proposing these actions?

On March 31, 2015, KDAQ submitted a request for EPA to determine that the Campbell-Clermont, KY-OH Area has attained the 2010 1-hour SO<sub>2</sub> NAAQS per EPA’s “Clean Data Policy.” Subsequently, on February 22, 2016, KDAQ requested that EPA redesignate the Kentucky portion of the Campbell-Clermont, KY-OH Area to attainment for the 2010 1-hour SO<sub>2</sub> NAAQS. On November 21, 2016, EPA determined that the entire Area has attained the 2010 1-hour SO<sub>2</sub> NAAQS as part of its final action redesignating the Ohio portion of the Area. EPA’s evaluation indicates that the Kentucky portion of the Campbell-Clermont, KY-OH Area meets the requirements for redesignation as set forth in section 107(d)(3)(E), including the maintenance plan requirements under section 175A of the CAA. As a result, EPA is proposing to take the five related actions summarized in section I of this notice.

#### V. What is EPA’s analysis of the redesignation request and SIP revisions?

As stated above, in accordance with the CAA, EPA proposes to: (1) Approve Kentucky’s Subpart 1 RACM determination for the Kentucky portion of the Campbell-Clermont, KY-OH Area and incorporate it into the SIP; (2) approve the base year emissions inventory for the 2010 SO<sub>2</sub> NAAQS for the Kentucky portion of the Area and incorporate it into the SIP; (3) approve Kentucky’s March 31, 2015, request for a clean data determination; (4) approve the 2010 1-hour SO<sub>2</sub> NAAQS maintenance plan for the Kentucky portion of the Area and incorporate it into the SIP; and (5) redesignate the Kentucky portion of the Area to attainment for the 2010 1-hour SO<sub>2</sub> NAAQS.

##### A. RACM Determination

##### 1. Relationship Between Subpart 1 RACM and the Redesignation Criteria

EPA does not believe that Subpart 1 nonattainment planning requirements designed to provide for attainment, including RACM, are “applicable” for purposes of CAA section 107(d)(3)(E)(ii) once an area is attaining the NAAQS and, therefore, does not believe that these planning requirements must be approved into the SIP before EPA can redesignate an area to attainment. See, e.g., 57 FR 13498, 13564 (April 16, 1992); Calcagni Memo. However, the Sixth Circuit issued an opinion in *Sierra Club v. EPA*, 793 F.3d 656 (6th Cir. 2015), that is inconsistent with this longstanding interpretation regarding section 107(d)(3)(E)(ii). In its decision, the Court vacated EPA’s redesignation of the Indiana and Ohio portions of the Cincinnati-Hamilton nonattainment area to attainment for the 1997 Fine Particulate Matter (PM<sub>2.5</sub>) NAAQS because EPA had not yet approved Subpart 1 RACM for the Cincinnati Area into the Indiana and Ohio SIPs. The Court concluded that “a State seeking redesignation ‘shall provide for the implementation’ of RACM/RACT [reasonably available control technology], even if those measures are not strictly necessary to demonstrate attainment with the PM<sub>2.5</sub> NAAQS. If the State has not done so, EPA cannot ‘fully approve’ the area’s SIP, and redesignation to attainment status is improper.” *Sierra Club*, 793 F.3d at 670.

EPA is bound by the Sixth Circuit’s decision in *Sierra Club v. EPA* within

the Court’s jurisdiction.<sup>4</sup> Although EPA continues to believe that Subpart 1 RACM is not an applicable requirement under section 107(d)(3)(E) for an area that has already attained the 2010 1-hour SO<sub>2</sub> NAAQS, EPA is proposing to approve Kentucky’s RACM determination into the SIP pursuant to the Court’s decision.<sup>5</sup>

##### 2. Subpart 1 RACM Requirements

Subpart 1 requires that each attainment plan “provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from the existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology), and shall provide for attainment of the national primary ambient air quality standards.” See CAA section 172(c)(1). EPA has consistently interpreted this provision to require only implementation of potential RACM measures that could advance attainment.<sup>6</sup> Thus, when an area is already attaining the standard, no additional RACM measures are required. EPA’s interpretation that Subpart 1 requires only the implementation of RACM measures that would advance attainment was upheld by the United States Court of Appeals for the Fifth Circuit<sup>7</sup> and by the United States Court of Appeals for the D.C. Circuit.<sup>8</sup>

##### 3. Proposed Action on RACM Based on Attainment of the NAAQS

In its February 22, 2016, SIP revision, Kentucky determined that no additional control measures are necessary in the Area to satisfy the section 172(c)(1)

<sup>4</sup> The states of Kentucky, Michigan, Ohio, and Tennessee are located within the Sixth Circuit’s jurisdiction.

<sup>5</sup> The EPA Region 4 Regional Administrator signed a memorandum on July 20, 2015, seeking concurrence from the Director of EPA’s Air Quality Policy Division (AQPD) in the Office of Air Quality Planning and Standards to act inconsistent with EPA’s interpretation of CAA sections 107(d)(3)(E) and 172(c)(1) when taking action on pending and future redesignation requests in Kentucky and Tennessee because the Region is bound by the Sixth Circuit’s decision in *Sierra Club v. EPA*. The AQPD Director issued her concurrence on July 22, 2015. This memorandum is not required to satisfy EPA’s regional consistency regulations. See 40 CFR 56.5(b)(1); 81 FR 51102 (August 3, 2016).

<sup>6</sup> This interpretation was adopted in the General Preamble, see 57 FR 13498 (April 16, 1992), and has been upheld as applied to the Clean Data Policy, as well as to nonattainment SIP submissions. See *NRDC v. EPA*, 571 F.3d 1245 (D.C. Cir. 2009); *Sierra Club v. EPA*, 294 F.3d 155 (D.C. Cir. 2002).

<sup>7</sup> *Sierra Club v. EPA*, 314 F.3d 735, 743–745 (5th Cir. 2002).

<sup>8</sup> *Sierra Club v. EPA*, 294 F.3d 155, 162–163 (D.C. Cir. 2002); *NRDC v. EPA*, 571 F.3d 1245, 1252 (D.C. Cir. 2009).

RACM requirement. EPA is proposing to approve this determination on the basis that the Area has attained the 2010 1-hour SO<sub>2</sub> NAAQS and, therefore, no emission reduction measures are necessary to satisfy Subpart 1 RACM. As noted above, EPA has determined that the Area has attained the 2010 1-hour SO<sub>2</sub> NAAQS and is proposing to determine that the Area continues to attain the standard. *See* 81 FR 47144. Because the Area is attaining the standard, there are no emissions controls that could advance the attainment date; thus, no emissions controls are necessary to satisfy Subpart 1 RACM.

#### 4. Proposed Action on RACM Based on the Commonwealth's Analysis

Additionally, Kentucky's Subpart 1 RACM determination is approvable on the basis that the SIP revision demonstrates that no additional reasonably available controls would have advanced the attainment date. In Kentucky's RACM analysis, the Commonwealth notes that the only large point source of SO<sub>2</sub> emissions in the Area—the Walter C. Beckjord power plant—was permanently shut down and removed from service in 2014. The Beckjord Facility has been demonstrated to be the primary SO<sub>2</sub> source that caused the monitored exceedances, and since the closure of the Beckjord Facility, there has been a significant monitored improvement in SO<sub>2</sub> air quality (see Table 2 in section V.C, below). The closure results in a reduction of 90,835 tons per year (tpy) based on the Facility's 2011 emissions (representing emissions from the time period for which the design value for the Area was above the NAAQS) and a reduction of 32,602 tpy based on the Facility's 2014 emissions (representing emissions from a time period for which the design value was below the NAAQS) (see Tables 3–5 in section V.C, below). Because the only large point source of

SO<sub>2</sub> emissions in the Area is permanently shut down and because total point source SO<sub>2</sub> emissions in the Kentucky portion of the Area were only approximately 0.8 tons per year in 2011, the Commonwealth concludes that there are no potential emission reduction measures that would advance attainment by one year or more. EPA has reviewed the RACM portion of Kentucky's February 22, 2016, SIP revision and preliminarily agrees with the Commonwealth's determination that it was not necessary to adopt or implement additional SO<sub>2</sub> control measures in the Area to satisfy section 172(c)(1).

#### B. Emission Inventory

Section 172(c)(3) of the CAA requires states to submit a comprehensive, accurate, and current inventory of actual emissions from all sources of the relevant pollutant or pollutants in each nonattainment area. This inventory can be submitted for a year that contributed to the three-year design value used for the original nonattainment designation and should be consistent with the emissions inventory data requirements in 40 CFR part 51, subpart A.

Kentucky submitted a base year emissions inventory for 2011 to satisfy section 172(c)(3). This base year is one of the three years of ambient data used to designate the Area as a nonattainment area and therefore represents emissions associated with nonattainment conditions. The emissions inventory is based on data developed and submitted by Kentucky to EPA's 2011 National Emissions Inventory (NEI), and it contains data elements consistent with the detail required by 40 CFR part 51, subpart A. Kentucky's base year emissions inventory for its portion of the Area provides 2011 emissions data for SO<sub>2</sub> for the following general source categories: electric generating unit (EGU) point, non-EGU point, area, non-road mobile, and on-road mobile. All

base year emissions data are taken from the NEI with the exception of point source emissions which were obtained from Kentucky's Emission Inventory database and mobile emissions which were generated by the Ohio-Kentucky-Indiana Regional Council of Governments (OKI). Projections were developed for each sector as follows:

- Area source emissions were compiled from the 2011 NEI and projections were developed by Kentucky. Kentucky developed its inventory according to the current EPA emissions inventory guidance for area sources.
- Mobile source emissions were calculated from MOVES2014b-produced emission factors. As performed by OKI, mobile source emission projections are based on the EPA MOVES model. The analysis is described in more detail in Appendix E of Kentucky's February 22, 2016, SIP submission. Kentucky developed its inventory according to the current EPA emissions inventory guidance for on-road mobile sources using MOVES version 2014.
- Non-EGU point source information was compiled from Kentucky's 2011 Emissions Inventory Database, while Ohio's EGU point source information was compiled from the 2011 data in the CAMD database. Projections were developed by Kentucky as described in Appendix C of Kentucky's February 22, 2016, SIP submission.
- Non-road emissions were compiled from the 2011 NEI and projections were developed by Kentucky.
- Biogenic emissions are negligible and are not included in these summaries.

A detailed discussion of the inventory development is located in Appendices C and E to Kentucky's February 22, 2016, SIP submittal which is provided in the docket for this proposed action. Table 1, below, provides a summary of the base year emissions inventory.

TABLE 1—2011 EMISSIONS INVENTORY FOR THE KENTUCKY PORTION OF THE CAMPBELL-CLERMONT, KY-OH AREA (TPY)

County	EGU point	Non-EGU point	Non-road mobile	Area	On-road mobile	Total
Campbell County .....	0	0.78	0.20	6.03	1.55	8.56

For the reasons discussed above, EPA has preliminarily determined that Kentucky's 2011 base year emissions inventory meets the requirements under CAA section 172(c)(3). Approval of Kentucky's redesignation request is contingent upon EPA's final approval of the base year emissions inventory for the 2010 1-hour SO<sub>2</sub> NAAQS.

#### C. Redesignation Request and Maintenance Demonstration

The five redesignation criteria provided under CAA section 107(d)(3)(E) are discussed in greater detail for the Area in the following paragraphs.

Criteria (1)—The Campbell-Clermont, KY-OH Area Has Attained the 2010 1-Hour SO<sub>2</sub> NAAQS

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the area has attained the applicable NAAQS (CAA section 107(d)(3)(E)(i)). The two primary methods for evaluating ambient air

quality impacted by SO<sub>2</sub> emissions are through dispersion modeling and air quality monitoring. For SO<sub>2</sub>, an area may in some circumstances be considered to be attaining the 2010 1-hour SO<sub>2</sub> NAAQS if it meets the NAAQS as determined in accordance with 40 CFR 50.17 and Appendix T of part 50, based on three complete, consecutive calendar years of quality-assured air quality monitoring data. To attain the NAAQS based on monitoring, the 3-year average of the annual 99th percentile (fourth highest value) of 1-hour daily maximum concentrations measured at each monitor within an area must be less than or equal to 75 parts per billion (ppb). The data must be collected and quality-assured in

accordance with 40 CFR part 58 and recorded in the EPA Air Quality System (AQS).

As discussed in EPA's 2010 SO<sub>2</sub> Nonattainment Area Guidance, two components are needed to support an attainment determination: (1) A review of representative air quality monitoring data, and (2) a further analysis, generally requiring air quality modeling, to demonstrate that the entire area is attaining the standard, based on current actual emissions or the fully implemented control strategy. In EPA's action redesignating the Ohio portion of the Area, EPA determined that the Area has attained the 1-hour SO<sub>2</sub> NAAQS based on these two components. For EPA's full analysis underlying its final

attainment determination, see 81 FR 47144, 47145–47 (July 20, 2016). As part of that analysis, EPA reviewed 2012–2015 SO<sub>2</sub> monitoring data from the monitoring station in the Campbell-Clermont, KY-OH Area for the 2010 1-hour SO<sub>2</sub> NAAQS and preliminary data for 2016. The 2012–2015 data have been quality-assured, are recorded in Aerometric Information Retrieval System (AIRS–AQS), and the 3-year design values for 2012–2014 and 2013–2015 are below the NAAQS. The fourth-highest 1-hour SO<sub>2</sub> values at each monitor for 2012–2015, and the 3-year averages of these values (*i.e.*, design values), are summarized in Table 2, below.

TABLE 2—DESIGN VALUE CONCENTRATIONS FOR THE CAMPBELL-CLERMONT, KY-OH AREA

Location	Site	4th Highest 1-hour sulfur dioxide value (ppb)				3-Year design values (ppb)	
		2012	2013	2014	2015	2012–2014	2013–2015
Campbell County, KY ..	21–037–3002	85	71	61	18	72	50

Preliminary monitoring data for the Area for 2016 does not indicate a violation of the NAAQS.<sup>9</sup> EPA will not take final action to approve the redesignation if the 3-year design value exceeds the NAAQS prior to EPA finalizing the redesignation. As discussed in more detail below, the Commonwealth has committed to continue monitoring in this Area in accordance with 40 CFR part 58.

Criteria (2)—Kentucky Has a Fully Approved SIP Under Section 110(k) for the Kentucky Portion of the Campbell-Clermont, KY-OH Area; and Criteria (5)—Kentucky Has Met All Applicable Requirements Under Section 110 and Part D of Title I of the CAA

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the state has met all applicable requirements under section 110 and part D of title I of the CAA (CAA section 107(d)(3)(E)(v)) and that the state has a fully approved SIP under section 110(k) for the area (CAA section 107(d)(3)(E)(ii)). EPA proposes to find that Kentucky has met all applicable SIP requirements for the Kentucky portion of the Area under section 110 of the CAA (general SIP requirements) for purposes of redesignation. Additionally, EPA proposes to find that the Kentucky SIP satisfies the criterion that it meets

applicable SIP requirements for purposes of redesignation under part D of title I of the CAA in accordance with section 107(d)(3)(E)(v). Further, EPA proposes to determine that the SIP is fully approved with respect to all requirements applicable for purposes of redesignation in accordance with section 107(d)(3)(E)(ii). In making these determinations, EPA ascertained which requirements are applicable to the Area and, if applicable, that they are fully approved under section 110(k). SIPs must be fully approved only with respect to requirements that were applicable prior to submittal of the complete redesignation request.

a. The Kentucky Portion of the Campbell-Clermont, KY-OH Area Has Met All Applicable Requirements Under Section 110 and Part D of the CAA

*General SIP requirements.* General SIP elements and requirements are delineated in section 110(a)(2) of title I, part A of the CAA. These requirements include, but are not limited to, the following: Submittal of a SIP that has been adopted by the state after reasonable public notice and hearing; provisions for establishment and operation of appropriate procedures needed to monitor ambient air quality; implementation of a source permit program; provisions for the implementation of part C requirements (Prevention of Significant Deterioration (PSD)) and provisions for the implementation of part D requirements

(NSR permit programs); provisions for air pollution modeling; and provisions for public and local agency participation in planning and emission control rule development.

Section 110(a)(2)(D) requires that SIPs contain certain measures to prevent sources in a state from significantly contributing to air quality problems in another state. To implement this provision, EPA has required certain states to establish programs to address the interstate transport of air pollutants. The section 110(a)(2)(D) requirements for a state are not linked with a particular nonattainment area's designation and classification in that state. EPA believes that the requirements linked with a particular nonattainment area's designation and classifications are the relevant measures to evaluate in reviewing a redesignation request. The transport SIP submittal requirements, where applicable, continue to apply to a state regardless of the designation of any one particular area in the state. Thus, EPA does not believe that the CAA's interstate transport requirements should be construed to be applicable requirements for purposes of redesignation.

In addition, EPA believes that other section 110(a)(2) elements that are neither connected with nonattainment plan submissions nor linked with an area's attainment status are not applicable requirements for purposes of redesignation. The area will still be subject to these requirements after the

<sup>9</sup>This preliminary data is available at EPA's air data Web site: [http://aqsdr1.epa.gov/aqsweb/aqstmp/airdata/download\\_files.html#Daily](http://aqsdr1.epa.gov/aqsweb/aqstmp/airdata/download_files.html#Daily).



area is redesignated. The section 110(a)(2) and part D requirements which are linked with a particular area's designation and classification are the relevant measures to evaluate in reviewing a redesignation request. This approach is consistent with EPA's existing policy on applicability (*i.e.*, for redesignations) of conformity and oxygenated fuels requirements, as well as with section 184 ozone transport requirements. *See* Reading, Pennsylvania, proposed and final rulemakings (61 FR 53174–53176, October 10, 1996), (62 FR 24826, May 7, 2008); Cleveland-Akron-Loraine, Ohio, final rulemaking (61 FR 20458, May 7, 1996); and Tampa, Florida, final rulemaking at (60 FR 62748, December 7, 1995). *See also* the discussion on this issue in the Cincinnati, Ohio, redesignation (65 FR 37890, June 19, 2000), and in the Pittsburgh, Pennsylvania, redesignation (66 FR 50399, October 19, 2001).

EPA has reviewed Kentucky's SIP and has concluded that it meets the general SIP requirements under section 110(a)(2) of the CAA to the extent they are applicable for purposes of redesignation. These requirements are statewide requirements that are not linked to the SO<sub>2</sub> nonattainment status of the Area. Therefore, EPA believes that these SIP elements are not applicable requirements for purposes of review of Kentucky's SO<sub>2</sub> redesignation request.

*Title I, Part D, applicable SIP requirements.* Subpart 1 of part D, comprised of CAA sections 171–179B, sets forth the basic nonattainment requirements applicable to all nonattainment areas, and subpart 5 of part D, which includes section 191 and 192 of the CAA, establishes additional plan deadline and attainment date requirements for SO<sub>2</sub>, nitrogen dioxide, and lead nonattainment areas. A thorough discussion of the requirements contained in sections 172(c) can be found in the General Preamble for Implementation of Title I (57 FR 13498).

*Subpart 1 Section 172 Requirements.* Under section 172, states with nonattainment areas must submit plans providing for timely attainment and meeting a variety of other requirements. As discussed in section V.A. above, EPA's longstanding interpretation of the attainment-related nonattainment planning requirements of section 172 is that once an area is attaining the NAAQS, those requirements are not "applicable" for purposes of CAA section 107(d)(3)(E)(ii) and therefore need not be approved into the SIP before EPA can redesignate the area. In the 1992 General Preamble for Implementation of Title I, EPA set forth

its interpretation of applicable requirements for purposes of evaluating redesignation requests when an area is attaining a standard. *See* 57 FR 13498, 13564 (April 16, 1992). EPA noted that the requirements for RFP and other measures designed to provide for attainment do not apply in evaluating redesignation requests because those nonattainment planning requirements "have no meaning" for an area that has already attained the standard. *Id.* This interpretation was also set forth in the Calcagni Memo. EPA's understanding of section 172 also forms the basis of its Clean Data Policy, articulated with regard to the 2010 1-hour SO<sub>2</sub> NAAQS in the 2010 SO<sub>2</sub> NAA Guidance, which suspends a state's obligation to submit most of the attainment planning requirements that would otherwise apply, including an attainment demonstration and planning SIPs to provide for RFP, RACM, and contingency measures under section 172(c)(9). However, as discussed above, EPA is proposing to approve Kentucky's RACM determination into the SIP in response to the Sixth Circuit's decision that section 172(c)(1) RACM is an applicable requirement under 107(d)(3)(E)(ii) and must be approved into the SIP before EPA can redesignate an area that is subject to section 172(c)(1) requirements.

Because attainment has been reached in the Area, the section 172(c)(2) requirement that nonattainment plans contain provisions promoting reasonable further progress toward attainment is not relevant for purposes of redesignation. In addition, because the Area has attained the standard and is no longer subject to a RFP requirement, the requirement to submit the section 172(c)(9) contingency measures is not applicable for purposes of redesignation. Section 172(c)(6) requires the SIP to contain control measures necessary to provide for attainment of the NAAQS. Because attainment has been reached, no additional measures are needed to provide for attainment.

Section 172(c)(3) requires submission and approval of a comprehensive, accurate, and current inventory of actual emissions. As noted above, Kentucky submitted a 2011 base year emissions inventory for the Kentucky portion of the Area, and EPA is proposing to approve that inventory as satisfying the requirements of section 172(c)(3). Kentucky's section 172(c)(3) inventory must be approved before EPA can take final action to approve the Commonwealth's redesignation request for the Kentucky portion of the Area.

Section 172(c)(4) requires the identification and quantification of allowable emissions for major new and modified stationary sources to be allowed in an area, and section 172(c)(5) requires source permits for the construction and operation of new and modified major stationary sources anywhere in the nonattainment area. EPA has determined that, since PSD requirements will apply after redesignation, areas being redesignated need not comply with the requirement that a NSR program be approved prior to redesignation, provided that the area demonstrates maintenance of the NAAQS without part D NSR. A more detailed rationale for this view is described in the Nichols Memo. Kentucky has demonstrated that the Area will be able to maintain the NAAQS without part D NSR in effect, and therefore Kentucky need not have fully approved part D NSR programs prior to approval of the redesignation request. Kentucky's PSD program will become effective in Campbell County upon redesignation to attainment.

Section 172(c)(7) requires the SIP to meet the applicable provisions of section 110(a)(2). As noted above, EPA believes the Kentucky SIP meets the requirements of section 110(a)(2) applicable for purposes of redesignation.

*Section 176 Conformity Requirements.* Section 176(c) of the CAA requires states to establish criteria and procedures to ensure that federally supported or funded projects conform to the air quality planning goals in the applicable SIP. The requirement to determine conformity applies to transportation plans, programs, and projects that are developed, funded, or approved under title 23 of the United States Code (U.S.C.) and the Federal Transit Act (transportation conformity) as well as to all other federally supported or funded projects (general conformity). State transportation conformity SIP revisions must be consistent with federal conformity regulations relating to consultation, enforcement, and enforceability that EPA promulgated pursuant to its authority under the CAA.

EPA believes that it is reasonable to interpret the conformity SIP requirements<sup>10</sup> as not applying for purposes of evaluating the redesignation request under section 107(d) because

<sup>10</sup> CAA Section 176(c)(4)(E) requires states to submit revisions to their SIPs to reflect certain federal criteria and procedures for determining transportation conformity. Transportation conformity SIPs are different from the motor vehicle emission budgets that are established in control strategy SIPs and maintenance plans.

state conformity rules are still required after redesignation and federal conformity rules apply where state rules have not been approved. *See Wall v. EPA*, 265 F.3d 426 (upholding this interpretation) (6th Cir. 2001); *See* 60 FR 62748 (December 7, 1995). Furthermore, due to the relatively small, and decreasing, amounts of sulfur in gasoline and on-road diesel fuel, the EPA's transportation conformity rules provide that they do not apply to SO<sub>2</sub> unless either the EPA Regional Administrator or the director of the state air agency has found that transportation-related emissions of SO<sub>2</sub> as a precursor are a significant contributor to a fine particulate matter (PM<sub>2.5</sub>) nonattainment problem, or if the SIP has established an approved or adequate budget for such emissions as part of the RFP, attainment, or maintenance strategy. *See* 40 CFR 93.102(b)(1), (2)(v); 2010 SO<sub>2</sub> Nonattainment Area Guidance. Neither of these conditions have been met; therefore, the EPA's transportation conformity rules do not apply to SO<sub>2</sub> for the Area.

For these reasons, EPA proposes to find that Kentucky has satisfied all applicable requirements for purposes of redesignation of the Campbell-Clermont, KY-OH Area under section 110 and part D of title I of the CAA.

**b. The Kentucky Portion of the Campbell-Clermont, KY-OH Area Has a Fully Approved Applicable SIP Under Section 110(k) of the CAA**

EPA has fully approved the Commonwealth's SIP for the Kentucky portion of the Campbell-Clermont, KY-OH Area under section 110(k) of the CAA for all requirements applicable for purposes of this proposed redesignation with the exception of the Subpart 1 RACM and emissions inventory requirements. In today's proposed action, EPA is proposing to approve the Commonwealth's Subpart 1 RACM determination and the Subpart 1 emissions inventory for the Kentucky portion of the Area into the Kentucky SIP.

As indicated above, EPA believes that the section 110 elements that are neither connected with nonattainment plan submissions nor linked to an area's nonattainment status are not applicable requirements for purposes of redesignation. If EPA finalizes approval of the Commonwealth's Subpart 1 RACM determination and Subpart 1 emissions inventory, EPA has approved all part D requirements applicable under the 2010 1-hour SO<sub>2</sub> NAAQS, as identified above, for purposes of this proposed redesignation pursuant to the Sixth Circuit's decision.

**Criteria (3)—The Air Quality Improvement in the Campbell-Clermont, KY-OH Area Is Due to Permanent and Enforceable Reductions in Emissions Resulting From Implementation of the SIP and Applicable Federal Air Pollution Control Regulations and Other Permanent and Enforceable Reductions**

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the air quality improvement in the area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP, applicable Federal air pollution control regulations, and other permanent and enforceable reductions (CAA section 107(d)(3)(E)(iii)). EPA has preliminarily determined that Kentucky has demonstrated that the observed air quality improvement in the Area is due to permanent and enforceable reductions in emissions primarily resulting from the permanent shutdown of the Beckjord Facility.

When EPA designated the Campbell-Clermont, KY-OH Area as a nonattainment area for the 2010 1-hour SO<sub>2</sub> NAAQS, EPA determined that operations at the Beckjord Facility were the primary cause of the 2010 1-hour SO<sub>2</sub> NAAQS violations in the Area. *See* 78 FR 47191.<sup>11</sup> As mentioned above, operations at the Beckjord Facility ceased in 2014. Specifically, its six coal-fired EGUs were permanently shut down and removed from service by October 1, 2014, and its four oil-fired EGUs were permanently shut down and removed from service by the end of 2014.<sup>12</sup> These units are no longer authorized to operate by the state of Ohio and cannot restart without new air permits. The shutdown reduced SO<sub>2</sub> emissions in the Area by approximately 90,835 tpy (based on 2011 emissions) and resulted in a significant improvement in SO<sub>2</sub> air quality. There are no other large point sources of SO<sub>2</sub> emissions located in the Campbell-Clermont, KY-OH Area.

Because the Beckjord Facility which was the primary SO<sub>2</sub> emissions source that caused the monitored exceedances is permanently shut down, and cannot reopen without applying for a new operating permit, EPA proposes to find that the improvement in air quality in the Campbell-Clermont, KY-OH Area is

due to permanent and enforceable reductions in SO<sub>2</sub> emissions.

**Criteria (4)—The Kentucky Portion of the Campbell-Clermont, KY-OH Area Has a Fully Approved Maintenance Plan Pursuant to Section 175A of the CAA**

For redesignating a nonattainment area to attainment, the CAA requires EPA to determine that the area has a fully approved maintenance plan pursuant to section 175A of the CAA. *See* CAA section 107(d)(3)(E)(iv). In conjunction with its request to redesignate the Kentucky portion of the Campbell-Clermont, KY-OH Area to attainment for the 2010 1-hour SO<sub>2</sub> NAAQS, KDAQ submitted a SIP revision to provide for the maintenance of the 2010 1-hour SO<sub>2</sub> NAAQS for at least 10 years after the effective date of redesignation to attainment. EPA is proposing to determine that this maintenance plan meets the requirements for approval under section 175A of the CAA.

**a. What is required in a maintenance plan?**

Section 175A of the CAA sets forth the elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. Under section 175A, the plan must demonstrate continued attainment of the applicable NAAQS for at least 10 years after the Administrator approves a redesignation to attainment. Eight years after the redesignation, the state must submit a revised maintenance plan demonstrating that attainment will continue to be maintained for the 10 years following the initial 10-year period. To address the possibility of future NAAQS violations, the maintenance plan must contain contingency measures as EPA deems necessary to assure prompt correction of any future 2010 1-hour SO<sub>2</sub> violations. The Calcagni Memorandum provides further guidance on the content of a maintenance plan, explaining that a maintenance plan should address five requirements: the attainment emissions inventory, maintenance demonstration, monitoring, verification of continued attainment, and a contingency plan. As is discussed more fully below, EPA is proposing to determine that Kentucky's maintenance plan includes all the necessary components and is thus proposing to approve it as a revision to the Kentucky SIP.

**b. Attainment Emissions Inventory**

On November 21, 2016, EPA determined that the Campbell-Clermont, KY-OH Area has attained the 2010 1-hour SO<sub>2</sub> NAAQS based on quality-

<sup>11</sup> *See* Final Technical Support Document, July 2013, Kentucky First Round of Nonattainment Area Designations for the 2010 SO<sub>2</sub> Primary NAAQS, Prepared by EPA Region 4. Available in Docket EPA-HQ-OAR-2012-0233.

<sup>12</sup> The letters from Duke Energy notifying Ohio of the shutdowns are located in the appendices to Kentucky's February 22, 2016 redesignation request and SIP submittal.

assured monitoring data for the 3-year period from 2013–2015. Kentucky began development of the attainment inventory by first generating a baseline emissions inventory for the Commonwealth's portion of the Campbell-Clermont, KY-OH Area. The Commonwealth selected 2011 as the base year and 2014 as the attainment emissions inventory year for developing a comprehensive emissions inventory for SO<sub>2</sub>. To evaluate maintenance through 2027 and satisfy the 10-year interval required in CAA section 175A, Kentucky prepared projected emissions inventories for 2017–2027. The emissions inventories are composed of the following general source categories: EGU point, non-EGU point, area, non-

road mobile, and on-road mobile. The emissions inventories were developed consistent with EPA guidance and are summarized in Tables 3 through 5 of the following subsection discussing the maintenance demonstration. For additional information regarding inventory development, please see section V.B., above, and Appendices C and E to Kentucky's February 22, 2016, SIP submittal.

#### c. Maintenance Demonstration

Maintenance of the SO<sub>2</sub> standard is demonstrated either by showing that future emissions will not exceed the level of the attainment emissions inventory year or by modeling to show that the future mix of sources and

emission rates will not cause a violation of the NAAQS. KDAQ determined that a modeling analysis of maximum concentration location was not warranted given the unique circumstances of this specific redesignation request. Therefore, Kentucky compared the final year of the maintenance plan (2027) to the attainment emissions inventory year (2014) and compared interim years to the attainment emissions inventory year to demonstrate continued maintenance of the 2010 1-hour SO<sub>2</sub> standard. See Tables 3 through 6, below. After the shutdown of the Beckjord Facility in 2014, there are no significant point sources of SO<sub>2</sub> emissions located in the Area.

TABLE 3—KENTUCKY PORTION SO<sub>2</sub> EMISSION INVENTORY TOTALS FOR BASE YEAR 2011, ATTAINMENT 2014, PROJECTED 2017 & 2022, 2020 INTERIM, AND 2027 MAINTENANCE (TPY)

Sector	2011 Base	2014 Attainment	2017 Projected	2020 Interim	2022 Projected	2027 Maintenance
EGU Point .....	0	0	0	0	0	0
Non-EGU .....	0.78	0.78	0.79	0.79	0.78	0.78
Non-road .....	0.20	0.20	0.20	0.20	0.20	0.20
Area .....	6.03	6.04	6.06	6.08	6.03	6.02
On-road .....	1.55	1.51	1.44	1.40	1.37	1.26
Total .....	8.56	8.53	8.49	8.47	8.38	8.26

TABLE 4—OHIO PORTION SO<sub>2</sub> EMISSION INVENTORY TOTALS FOR BASE YEAR 2011, ATTAINMENT 2014, PROJECTED 2017 & 2022, INTERIM 2020, AND 2027 MAINTENANCE (TPY)

Sector	2011 Base	2014 Attainment	2017 Projected	2020 Interim	2022 Projected	2027 Maintenance
EGU Point .....	90,834.50	32,602.44	0	0	0	0
Non-EGU .....	0	0	0	0	0	0
Non-road .....	0.17	0.18	0.18	0.18	0.18	0.19
Area .....	7.51	7.63	7.75	7.88	7.86	8.00
On-road .....	0.34	0.33	0.32	0.31	0.30	0.28
Total .....	90,842.52	32,610.58	8.25	8.37	8.34	8.47

TABLE 5—COMBINED CAMPBELL-CLERMONT, KY-OH AREA SO<sub>2</sub> EMISSION INVENTORY TOTALS FOR BASE YEAR 2011, ATTAINMENT 2014, PROJECTED 2017 & 2022, INTERIM 2020, AND 2027 MAINTENANCE (TPY)

SO <sub>2</sub>	2011 Base	2014 Attainment	2017 Projected	2020 Interim	2022 Projected	2027 Maintenance
Ohio Portion .....	90,842.52	32,610.58	8.25	8.37	8.34	8.47
Kentucky Portion .....	8.56	8.53	8.49	8.47	8.38	8.26
Combined SO <sub>2</sub> Total .....	90,851.08	32,619.11	16.74	16.84	16.72	16.73

TABLE 6—CAMPBELL-CLERMONT, KY-OH AREA COMPARISON OF 2014 ATTAINMENT YEAR AND 2020 AND 2027 PROJECTED EMISSION ESTIMATES (TPY)

	2014 Attainment	2020 Interim	2020 Projected decrease	2027 Maintenance	2027 Projected decrease
SO <sub>2</sub> .....	32,619.11	16.84	– 32,602.27	16.73	– 32,602.38

As shown in the tables above, the closure of the Beckjord Facility in 2014 resulted in a reduction of 90,835 tpy based on the Facility's 2011 emissions and a reduction of 32,602 tpy based on the Facility's 2014 emissions. After the shutdown, total SO<sub>2</sub> emissions in the Area remain relatively constant through 2027. Therefore, EPA is proposing to determine that the maintenance plan demonstrates continued maintenance through 2027.

#### d. Monitoring Network

There is one SO<sub>2</sub> monitor located within the Kentucky portion of the Campbell-Clermont, KY-OH Area, and the 2010 1-hour SO<sub>2</sub> nonattainment designation was based on data collected from 2009–2011 at this monitor. There are no SO<sub>2</sub> monitors located in Clermont County, Ohio. The Kentucky monitor is operated by the KDAQ's, Florence Regional office. In its maintenance plan, Kentucky has committed to continue operation of the monitor in the Kentucky portion of the Campbell-Clermont, KY-OH Area in compliance with 40 CFR part 58 and has thus addressed the requirement for monitoring. KDAQ's monitoring network plan was submitted on July 1, 2015, and approved by EPA on October 28, 2015.<sup>13</sup>

#### e. Verification of Continued Attainment

The Commonwealth of Kentucky, through KDAQ, has the legal authority to enforce and implement the maintenance plan for the Kentucky portion of the Area. This includes the authority to adopt, implement, and enforce any subsequent emissions control contingency measures determined to be necessary to correct future SO<sub>2</sub> attainment problems. The Commonwealth has committed to track the progress of the maintenance plan by updating its emissions inventory at least once every three years and comparing these updated inventories to the 2011 base year and the 2027 projected maintenance year inventories to assess emission trends, as necessary, and to assure continued compliance with the standard.

Additionally, monitoring, recordkeeping, and reporting requirements are incorporated into permits to ensure ongoing compliance. Kentucky has an active enforcement program to address violations discovered by the field office. For all of the reasons discussed above, EPA is proposing to find that Kentucky's

maintenance plan meets the "Verification of Continued Attainment" requirement.

#### f. Contingency Measures in the Maintenance Plan

Section 175A of the CAA requires that a maintenance plan include such contingency measures as EPA deems necessary to assure that the state will promptly correct a violation of the NAAQS that occurs after redesignation. The maintenance plan should identify the contingency measures to be adopted, a schedule and procedure for adoption and implementation, and a time limit for action by the state.<sup>14</sup> A state should also identify specific indicators to be used to determine when the contingency measures need to be implemented. The maintenance plan must include a requirement that a state will implement all measures with respect to control of the pollutant that were contained in the SIP before redesignation of the area to attainment in accordance with section 175A(d).

Kentucky will rely on enforcing the applicable requirements in source permits. All measures in the permits and the SIP are being implemented prior to redesignation of the Area to attainment. In the event that a monitored exceedance of the SO<sub>2</sub> NAAQS occurs in the future, the Commonwealth will expeditiously investigate and perform culpability analyses to determine the source that caused the exceedance and/or violation, and enforce any SIP or permit limit that is violated. Enforcement and compliance programs exist in the Commonwealth to identify sources of violations of the NAAQS and to follow-up for compliance and enforcement.

Further, if all sources are found to be in compliance with applicable SIP and permit emission limits, the Commonwealth will perform the necessary analysis to determine the cause of the exceedance, and determine what additional control measures are necessary to impose on the Area's stationary sources to continue to maintain attainment of the 2010 1-hour SO<sub>2</sub> NAAQS.

The Commonwealth will inform any affected stationary sources of SO<sub>2</sub> of the

potential need for additional control measures. If there is an exceedance of the NAAQS for SO<sub>2</sub>, it will notify the stationary source(s) that the potential exists for a NAAQS violation.

Within six months, the source(s) must submit a detailed plan of action specifying additional control measures to be implemented no later than 18 months after the notification. The additional control measures will be submitted to EPA for approval and incorporation into the SIP. Kentucky noted that, since the only source in the nonattainment area has shut down, it is not possible at this time to develop specific contingency measures until the cause of the elevated concentrations is known. EPA is proposing to find that Kentucky's maintenance plan meets the requirement for contingency measures.

EPA preliminarily concludes that the maintenance plan adequately addresses the five basic components of a maintenance plan: The attainment emissions inventory, maintenance demonstration, monitoring, verification of continued attainment, and a contingency plan. Therefore, EPA proposes that the maintenance plan SIP revision submitted by Kentucky for the Commonwealth's portion of the Area meets the requirements of section 175A of the CAA and is approvable.

#### VI. What is the effect of EPA's proposed actions?

EPA's proposed actions establish the basis upon which EPA may take final action on the issues being proposed for approval today. Approval of Kentucky's redesignation request would change the legal designation of the portion of Campbell County that is within the Campbell-Clermont, KY-OH Area, as found at 40 CFR part 81, from nonattainment to attainment for the 2010 1-hour SO<sub>2</sub> NAAQS. Approval of Kentucky's associated SIP revision would also incorporate a plan for maintaining the 2010 1-hour SO<sub>2</sub> NAAQS in the Campbell-Clermont, KY-OH Area through 2027 into the SIP as well as the State's section 172(c)(1) RACM determination. This maintenance plan includes an emissions inventory that satisfies the requirements of section 172(c)(3) and contingency measures to remedy any future violations of the 2010 1-hour SO<sub>2</sub> NAAQS.

#### VII. Proposed Actions

EPA is taking five separate but related actions regarding Kentucky's request for a clean data determination, the redesignation request, and the SIP revision associated with the redesignation request for the Kentucky

<sup>13</sup> Kentucky's approved monitoring network plan can be accessed at [www.regulations.gov](http://www.regulations.gov) using Docket ID No. EPA-R04-OAR-2014-0426.

<sup>14</sup> In cases where attainment revolves around compliance of a single source or a small set of sources with emissions limits shown to provide for attainment, the EPA interprets "contingency measures" to mean that the state agency has a comprehensive program to identify sources of violations of the SO<sub>2</sub> NAAQS and to undertake aggressive follow-up for compliance and enforcement, including expedited procedures for establishing enforceable consent agreement pending the adoption of revised SIPs. See 2010 SO<sub>2</sub> Nonattainment Area Guidance.

portion of the Campbell-Clermont, KY-OH Area.

First, EPA is proposing to determine that the Commonwealth's Subpart 1 RACM determination for the Area meets the requirements of CAA section 172(c)(1) and to incorporate this RACM determination into the SIP.

Second, EPA is proposing to approve Kentucky's 2011 base year emissions inventory for the Kentucky portion of the Campbell-Clermont, KY-OH Area as meeting the requirements of 172(c)(3) and to incorporate this inventory into the SIP.

Third, EPA is proposing to approve Kentucky's March 31, 2015, request for the EPA to make a clean data determination for the Area.

Fourth, EPA is proposing to approve the maintenance plan for the Kentucky portion of the Area into the SIP. The maintenance plan demonstrates that the Area will continue to maintain the 2010 1-hour SO<sub>2</sub> NAAQS through 2027.

Finally, contingent upon EPA's final approval for Kentucky's RACM analysis pursuant to section 172(c)(1) and the Commonwealth's base year inventory pursuant to section 172(c)(3), EPA is proposing to determine that the Kentucky portion of the Campbell-Clermont, KY-OH Area has met the criteria under CAA section 107(d)(3)(E) for redesignation from nonattainment to attainment for the 2010 1-hour SO<sub>2</sub> NAAQS. On this basis, EPA is proposing to approve Kentucky's redesignation request for the Kentucky portion of the Area.

If finalized, approval of the redesignation request would change the official designation of the portion of Campbell County that is within the Campbell-Clermont, KY-OH Area, as found at 40 CFR part 81, from nonattainment to attainment for the 2010 1-hour SO<sub>2</sub> NAAQS.

### VIII. Statutory and Executive Order Reviews

Under the CAA, redesignation of an area to attainment and the accompanying approval of a maintenance plan under section 107(d)(3)(E) are actions that affect the status of a geographical area and do not impose any additional regulatory requirements on sources beyond those imposed by state law. A redesignation to attainment does not in and of itself create any new requirements, but rather results in the applicability of requirements contained in the CAA for areas that have been redesignated to attainment. Moreover, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations.

See 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 CAA. Accordingly, these proposed actions merely propose to approve state law as meeting Federal requirements and do not impose additional requirements beyond those imposed by state law. For this reason, these proposed actions:

- Are not significant regulatory actions 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);

- Do not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);

- Are 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.*);

- Do 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);

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

- Are not economically significant regulatory actions based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);

- Are not significant regulatory actions subject to Executive Order 13211 (66 FR 28355, May 22, 2001);

- Are 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 CAA; and

- Will not have disproportionate human health or environmental effects under Executive Order 12898 (59 FR 7629, February 16, 1994).

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 as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), nor will it impose substantial direct costs on tribal governments or preempt tribal law.

### List of Subjects

#### 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by

reference, Intergovernmental relations, Sulfur dioxide, Reporting and recordkeeping requirements.

#### 40 CFR Part 81

Environmental protection, Air pollution control.

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

Dated: November 21, 2016.

**Heather McTeer Toney,**

*Regional Administrator, Region 4.*

[FR Doc. 2016-28821 Filed 11-30-16; 8:45 am]

**BILLING CODE 6560-50-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Motor Carrier Safety Administration

#### 49 CFR Parts 390 and 391

[Docket No. FMCSA-2016-0333]

RIN 2126-AB97

### Process for Department of Veterans Affairs (VA) Physicians To Be Added to the National Registry of Certified Medical Examiners

**AGENCY:** Federal Motor Carrier Safety Administration (FMCSA), DOT.

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** FMCSA proposes amendments to the Federal Motor Carrier Safety Regulations (FMCSRs) to establish an alternate process for qualified physicians employed in the Department of Veterans Affairs (VA) (qualified VA physicians) to be listed on the Agency's National Registry of Certified Medical Examiners (National Registry). After training and testing, they become certified VA medical examiners that can perform medical examinations of commercial motor vehicle (CMV) operators who are military veterans, and issue Medical Examiner's Certificates (MECs) to those same operators as required by the Fixing America's Surface Transportation (FAST) Act.

**DATES:** Comments on this notice must be received on or before January 3, 2017.

**ADDRESSES:** You may submit comments identified by Docket Number FMCSA-2016-0333 using any of the following methods:

- *Federal eRulemaking Portal:* <http://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 or Courier:* West Building, Ground Floor, Room W12-

140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- Fax: 202-493-2251.

To avoid duplication, please use only one of these four methods. See the “Public Participation and Request for Comments” portion of the **SUPPLEMENTARY INFORMATION** section for instructions on submitting comments, including collection of information comments for the Office of Information and Regulatory Affairs of the Office of Management and Budget.

**FOR FURTHER INFORMATION CONTACT:** Ms. Christine A. Hydock, Medical Programs Division, MC-PSP, Federal Motor Carrier Safety Administration, 1200 New Jersey Avenue SE., Washington, DC 20590-0001 by telephone at 202-366-4001 or by email, [fmcsamedical@dot.gov](mailto:fmcsamedical@dot.gov). If you have questions on viewing or submitting material to the docket, contact Docket Services, telephone (202) 366-9826.

#### **SUPPLEMENTARY INFORMATION:**

### **I. Public Participation and Request for Comments**

#### *A. Submitting Comments*

If you submit a comment, please include the docket number for this NPRM (Docket No. FMCSA-2016-0333), indicate the specific section of this document to which each comment applies, and provide a reason for each suggestion or recommendation. You may submit your comments and material online or by fax, mail, or hand delivery, but please use only one of these means. FMCSA recommends that you include your name and a mailing address, an email address, or a phone number in the body of your document so that FMCSA can contact you if there are questions regarding your submission.

To submit your comment online, go to <http://www.regulations.gov>, put the docket number, FMCSA-2016-0333, in the keyword box, and click “Search.” When the new screen appears, click on the “Comment Now!” button and type your comment into the text box on the following screen. Choose whether you are submitting your comment as an individual or on behalf of a third party and then submit.

If you submit your comments by mail or hand delivery, submit them in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. If you submit comments by mail and would like to know that they reached the facility, please enclose a stamped, self-addressed postcard or envelope.

FMCSA will consider all comments and material received during the comment period and may change this proposed rule based on your comments. FMCSA may issue a final rule at any time after the close of the comment period.

#### *B. Viewing Comments and Documents*

To view comments, as well as any documents mentioned in this preamble as being available in the docket, go to <http://www.regulations.gov>. Insert the docket number, FMCSA-2016-0333, 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.

#### *C. 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](http://www.regulations.gov), as described in the system of records notice (DOT/ALL-14 FDMS), which can be reviewed at [www.dottransportation.gov/privacy](http://www.dottransportation.gov/privacy).

#### *D. Advance Notice of Proposed Rulemaking Not Required*

Under the provisions of 49 U.S.C. 31136(f) and (g) (added by section 5202 of the FAST Act), FMCSA is required to publish an advance notice of proposed rulemaking when a rulemaking is likely to lead to the promulgation of a major rule, unless the Agency finds good cause that an ANPRM is impracticable, unnecessary, or contrary to the public interest. This NPRM is not subject to these provisions, because it is not likely to lead to the promulgation of a major rule.

### **II. Executive Summary**

#### *A. Purpose of the Proposed Rule*

The purpose of this proposed rule is to amend the Federal Motor Carrier Safety Regulations (FMCSRs) to establish a process for qualified physicians employed in the Department of Veterans Affairs (VA) (qualified VA physicians) to be listed on the Agency’s National Registry of Certified Medical Examiners (National Registry). After training and testing they become certified VA medical examiners that can perform medical examinations of

commercial motor vehicle (CMV) operators who are military veterans, and issue Medical Examiner’s Certificates (MECs) to those same operators as required by the Fixing America’s Surface Transportation Act (FAST Act), Public Law 114-94, div. A, title V, § 5403, Dec. 4, 2015, 129 Stat. 1548 (set out as a note to 49 U.S.C. 31149).

As stated in the FAST Act, qualified VA physicians must (a) be employed in the Department of Veterans Affairs; (b) be familiar with FMCSA’s standards for, and physical requirements of, a CMV operator requiring medical certification; and (c) have never “acted fraudulently” with respect to such certification. Qualified VA physicians would be listed on the National Registry after completing training and testing provided by FMCSA and delivered through a web-based training system operated by the VA, and, upon successful completion, be allowed to conduct medical examinations of and issue MECs only to CMV drivers who are veterans enrolled in the health care system established under 38 U.S.C. 1705(a) that operate a CMV (veteran operator).

#### *B. Summary of Major Provisions*

Through this rulemaking, FMCSA would establish an alternate process for qualified VA physicians to complete comparable training and testing developed by FMCSA and delivered through the VA’s Web-based training system prior to being listed on the National Registry. This is an alternative to VA physicians obtaining training and testing through the private sector.

Qualified VA physicians are subject to the same provisions of 49 CFR 390 subpart D, except for the differences in the eligibility, training, and testing requirements for any other healthcare professional seeking Medical Examiner (ME) certification. Qualified VA physicians must be either a doctor of medicine or doctor of osteopathy currently employed in the VA; be licensed, certified, or registered in accordance with applicable State laws and regulations to perform physical examinations; be familiar with FMCSA’s standards for, and physical requirements of, a CMV operator requiring medical certification by completing training provided by FMCSA and delivered through a web-based training system operated by the VA; pass the medical examiner certification test provided by FMCSA and administered through a web-based training system operated by the VA; and have never “acted fraudulently” with respect to such certification of a CMV operator, including by fraudulently

awarding a medical certificate. Qualified VA physicians register on the National Registry System, complete the training and testing provided by FMCSA and delivered through a web-based training system operated by the VA, and after fulfilling the requirements would be listed on the National Registry. Once certified and listed on the National Registry, qualified VA physicians become certified VA MEs.<sup>1</sup> This will allow such physicians to conduct medical examinations of and issue MECs only to veteran operators enrolled in the VA health care system.

If a certified VA medical examiner is no longer employed in the VA, but would like to remain listed on the National Registry, the physician must update his or her registration information within 30 days or submit such a change in registration information prior to conducting any physical examination of a CMV driver or issuing any medical examiner's certificates. Therefore, after the registration is updated the certified VA medical examiner becomes a certified medical examiner who may perform physical examinations and issue certificates to any CMV driver.

### C. Benefits and Costs

The Agency estimates that costs of the proposed rule would be minimal, with an annualized value of \$101,739 at a 7% discount rate. The costs would consist of Federal government information technology (IT)-related expenses, Help Desk operating costs, and curriculum and testing development. Insufficient data are available to quantify the benefits of the proposed rule, as FMCSA does not know how many qualified VA physicians will complete the certification process. FMCSA estimates the per-physician savings (for certifying qualified VA physicians seeking to become certified VA MEs listed on the National Registry) at \$614, resulting from the use of online-only training and testing that eliminates travel costs. Non-quantifiable benefits may result from the increased availability for veteran operators to receive their DOT physical.

### III. Abbreviations and Acronyms

CDL Commercial Driver's License  
CLP Commercial Learner's Permit  
CMV Commercial Motor Vehicle  
DOT Department of Transportation  
FMCSA Federal Motor Carrier Safety Administration

FMCSR Federal Motor Carrier Safety Regulations  
FAST Act Fixing America's Surface Transportation Act  
FR Federal Register  
IRFA Initial Regulatory Flexibility Analysis  
IT Information Technology  
ME Medical Examiners  
MEC Medical Examiner's Certificates  
MER Medical Examination Report  
National Registry National Registry of Certified Medical Examiners  
RFA Regulatory Flexibility Act  
§ Section symbol  
SDLA State Driver Licensing Agency  
U.S.C. United States Code  
VA Department of Veterans Affairs

### IV. Legal Basis for the Rulemaking

The legal authority for this proposed rule is derived from 49 U.S.C. 31136 and 31149, as supplemented by section 5403 of the FAST Act. Section 31136(a)(3) requires that operators of CMVs be physically qualified to operate safely, as determined and certified by an ME listed on the National Registry. Section 31149(d) requires FMCSA to ensure that MEs listed on the National Registry are qualified to perform the physical examinations of CMV operators, and to certify that such operators meet the physical qualification standards. In order to ensure that MEs are qualified for listing on the National Registry, 49 U.S.C. 31149(c)(1)(D) requires them to receive training based on core curriculum requirements developed by FMCSA in consultation with the Medical Review Board (established under 49 U.S.C. 31149(a)), to pass a certification examination, and to demonstrate an ability to comply with reporting requirements established by FMCSA.

Section 5403 of the FAST Act supplements the general provisions of section 31149 by providing for physicians employed in the VA to be listed on the National Registry and to perform the physical examination of veterans who require a physical examination and a medical certificate to operate a CMV. In order to be qualified for listing on the National Registry, such physicians must be familiar with the physical standards and requirements for operators of CMVs. They must also have never been found to have acted fraudulently with respect to a medical examiner's certificate for a CMV operator. Certified VA MEs on the National Registry may perform examinations on, and issue medical examiner's certificates to, only veterans enrolled in the health care system operated by the VA.

There is general authority to adopt regulations to implement these provisions from both 49 U.S.C. 31136(a)

and 49 U.S.C. 31149(e). Such authority has been delegated to the Administrator of FMCSA by 49 CFR 1.87.

### V. Background

#### A. National Registry of Certified MEs

Prior to the National Registry, there was no required training program for the medical professionals who conduct driver physical examinations, although the FMCSRs required MEs to be knowledgeable about the regulations (49 CFR 391.43(c)(1)). No specific knowledge of the Agency's physical qualification standards was required or verified by testing. As a result, some of the medical professionals who conducted these examinations were unfamiliar with FMCSA's physical qualification standards and how to apply them. These medical professionals may have also been unaware of the mental and physical rigors that accompany the occupation of CMV drivers, and how various medical conditions (and the therapies used to treat them) can affect the ability of drivers to safely operate CMVs.

In 2012, FMCSA issued a final rule establishing the National Registry (77 FR 24104, April 20, 2012) to improve highway safety and driver health by requiring that MEs be trained and certified so they can effectively determine whether a CMV driver's medical fitness for duty meets FMCSA's standards. The program implements the requirements of 49 U.S.C. 31149 and requires MEs who conduct physical examinations for CMV drivers to meet the following criteria: (1) Complete certain training concerning FMCSA's physical qualification standards; (2) pass a test to verify an understanding of those standards; and (3) maintain and demonstrate competence through periodic training and testing. Following the establishment of the National Registry, the FMCSRs were amended to require drivers to be examined and certified by only those MEs listed on the Agency's National Registry, and only MECs issued by MEs listed on the National Registry will be acceptable as valid proof of medical certification.

To be listed on the National Registry, MEs are required to attend an accredited training program and pass a certification test to assess their knowledge of FMCSA's physical qualifications standards and how to apply them to drivers. To maintain their certification and listing on the National Registry, MEs are required to complete training at five-year intervals and to complete training and pass a recertification test every 10 years.

<sup>1</sup> For clarification, FMCSA is using the term qualified VA physician to define VA physician prior to becoming certified and listed on the National Registry while the term certified VA medical examiner refers to the individual who has been certified and listed on the National Registry.



Certified MEs listed on the National Registry who conduct medical examinations of CMV drivers are required to submit on a monthly basis via their individual password-protected National Registry account a CMV Driver Medical Examination Results Form, MCSA-5850, to FMCSA for each physical examination conducted. Certified MEs also are required to retain a copy of the Medical Examination Report (MER) Form, MCSA-5875, and MEC, MCSA-5876, for all drivers they examine and certify, for at least three years from the examination date. The MER Form, MCSA-5875, lists the driver's health history and specific results of the various medical tests and assessments used to determine if a driver meets the physical qualification standards set forth in 49 CFR part 391, subpart E. In addition, certified MEs are required to issue a MEC, Form MCSA-5876, to those drivers who they determine meet FMCSA's physical qualification standards.

#### *B. Medical Examiner's Certification Integration*

On April 23, 2015, FMCSA published the Medical Examiner's Certification Integration final rule (80 FR 22790), a follow-on rule to the National Registry, which requires MEs performing physical examinations of CMV drivers to use a newly developed MER Form, MCSA-5875, in place of the former MER Form and to use Form MCSA-5876 for the MEC. In addition, beginning June 22, 2018, this rule will require certified MEs to report results of all CMV drivers' physical examinations performed (including the results of examinations where the driver was found not to be qualified) to FMCSA by midnight (local time) of the next calendar day following the examination. For commercial learner's permit (CLP) and commercial driver's license (CDL) applicants/holders, FMCSA will electronically transmit driver identification, examination results, and restriction information from the National Registry to the State Driver's Licensing Agencies (SDLAs). The Agency will also electronically transmit medical variance information for all CMV drivers to the SDLAs. MEs will still be required to provide drivers of CMVs that do not require a CDL/CLP with an MEC, Form MCSA-5876.

### **VI. Discussion of Proposed Rule**

#### *A. Overview*

As required by 5403 of FAST Act, FMCSA consulted with the Secretary of Veterans Affairs and is now proposing to establish a process for qualified VA

physicians employed in the VA to be included on FMCSA's National Registry, perform medical examinations of CMV drivers who are veteran operators, and issue MECs to qualified drivers. Qualified VA physicians would be listed on the National Registry after registering on the National Registry System, and completing training and testing provided by FMCSA and delivered through a web-based training system operated by the VA. Upon successful completion, certified VA MEs will be allowed to conduct medical examinations of, and issue MECs only to, veteran operators enrolled in the VA health care system. In addition to the requirements proposed, certified VA MEs will be subject to some of the other provisions of 49 CFR 390 subpart D as are all other certified MEs listed on the National Registry.

#### *B. Eligibility*

National Registry eligibility requirements for medical examiner certification require that the person be an advanced practice nurse, doctor of chiropractic, doctor of medicine, doctor of osteopathy, physician assistant, or other medical professional authorized by applicable State laws and regulations to perform physical examinations. As required by the statute, this proposed rule limits eligibility of qualified VA physicians to only those who are either doctors of medicine or doctors of osteopathy and employed in the VA.

Consistent with the FAST Act, this proposed rule adds the requirement that qualified VA physicians must never have "acted fraudulently" with respect to such certification of a CMV operator, including fraudulently awarding a MEC.

This proposed rule has different licensure requirements in that qualified VA physicians may be able to practice in additional States without being licensed, certified, or registered in each State. In accordance with the provisions of 38 U.S.C. 7402(a) and (b)(1), the VA Handbook 5005/85,<sup>2</sup> Staffing (Qualification Standard for the Appointment of Physicians, GS-0602, in VA), that provides the physician qualification standards, states that physicians must possess a current, full and unrestricted license to practice medicine or surgery in a State, Territory, or Commonwealth of the United States, or in the District of Columbia, and must maintain current registration in the State of licensure if it is a requirement for continuing active, current licensure. The VA Handbook does not specify that physicians must be licensed in each

State where they practice medicine. Assuming they meet licensure requirements prescribed by statute and VA policy, they may practice at any VA facility, regardless of its location or the practitioner's State of licensure. Therefore, this proposed rule would require qualified VA physicians who become certified to continue to be licensed, certified, or registered in a State to perform physical examinations. Similarly, this proposed rule would require qualified VA physicians who become certified to maintain documentation of State licensure, registration, or certification to perform physical examinations.

#### *C. Training Requirements*

Instead of completing a training program conducted by a private training organization that meets the requirements of 49 CFR 390.105, including providing training based on the core curriculum specifications developed by FMCSA, qualified VA physicians must become familiar with FMCSA's standards for, and physical requirements of, a CMV operator requiring medical certification. This would be accomplished by completing training provided by FMCSA and delivered through a Web-based training system operated by the VA. Since the training is being provided by FMCSA, it will be comparable to the core curriculum guidelines provided to private training organizations.<sup>3</sup> The training would be an interactive, online training course and would include at least the following: (1) An overview of all FMCSA medical standards; (2) an overview of how the Federal medical exemption programs factor into the qualification decision; (3) an administrative component that includes an overview of the driver examination forms; and (4) information regarding the use of the National Registry and the National Registry System.

#### *D. Testing Requirements*

Instead of completing the testing requirements of 49 CFR 390.107 by using a testing organization that has been approved by FMCSA to deliver the test, qualified VA physicians must pass a comparable certification test provided by FMCSA and administered through a Web-based training system operated by the VA. After completing the training described above, qualified VA physicians would be required to take a test and receive a passing grade. The grade received by each qualified VA

<sup>2</sup> [http://www1.va.gov/vapubs/search\\_action.cfm?dType=2](http://www1.va.gov/vapubs/search_action.cfm?dType=2), accessed September 20, 2016.

<sup>3</sup> See 78 FR 28403 (May 17, 2011) and <https://www.regulations.gov/document?D=FMCSA-2008-0363-0096>.

physician would be electronically transmitted from the Web-based training system to the National Registry System for posting to the physician's National Registry account.

#### *E. Maintaining Certification*

One of the requirements for maintaining certification and continued listing on the National Registry is that certified MEs must continue to be licensed, certified, or registered, and authorized to perform physical examinations, in accordance with applicable State laws and regulations of each State in which the ME performs examinations. This proposed rule would require qualified VA physicians who become certified to continue to be licensed, certified, or registered in a State to perform physical examinations.

Another requirement for maintaining certification and continued listing on the National Registry is that certified MEs must maintain documentation of State licensure, registration, or certification to perform physical examinations for each State in which the ME performs examinations. Because certified VA medical examiners may be able to practice in additional States without being licensed, certified, or registered in each State, this proposed rule would only require certified VA medical examiners to maintain documentation of State licensure, registration, or certification to perform physical examinations, again without reference to each State in which the physician performs examinations.

If a certified VA medical examiner is no longer employed in the VA, but would like to remain listed on the National Registry, the physician must update his or her registration information within 30 days or submit such a change in registration information prior to conducting any physical examination of a CMV driver or issuing any medical examiner's certificates. Pursuant to its broad authority under 49 U.S.C. 31149(c)(1)(D), FMCSA proposes to recognize the comparable training received by qualified VA physicians to be suitable for such physicians to continue to be listed on the National Registry. But physicians wishing to continue such listing must be licensed to perform physical examinations in any State where examinations of CMV drivers will be conducted. Therefore, after the registration is updated the previously certified VA medical examiner becomes a certified medical examiner who may perform physical examinations and issue certificates to any CMV driver.

#### *F. Performing DOT Medical Examinations*

The National Registry regulations allow for certified MEs to perform examinations of all drivers requesting a DOT medical examination. This proposed rule would limit certified VA medical examiners, to conducting examinations of only veteran operators, while they are employed in the VA. This process would provide veteran operators with the option of utilizing their enrollment in the VA healthcare system to obtain their MECs.

#### *G. Proposed Changes to Certification Requirements for All MEs*

After several years of evaluating the operation of the National Registry System, FMCSA proposes changes to the existing requirements for becoming a certified ME. FMCSA proposes to add a requirement that to receive ME certification from FMCSA, prior to taking the training and testing, a person must register on the National Registry System and receive a unique identifier. This has always been how the National Registry System has operated and is the first step in becoming a certified ME but was not specifically included in the regulation.

Additionally, FMCSA proposes to remove the prohibition against an applicant taking the test more than once every 30 days. Since the regulation does not specify any actions that must be taken within the 30-day waiting period (such as additional training), the Agency proposes to remove the provision.

### **VII. Section-by-Section Analysis**

#### *Part 390*

##### **Section 390.5 Definitions**

The Agency proposes adding new definitions for the terms "certified VA medical examiner," "qualified VA physician" and "veteran operator."

##### **Section 390.103 Eligibility Requirements for Medical Examiner Certification**

As a whole, FMCSA has reorganized and restructured the paragraphs of this section to introduce separate eligibility requirements for a qualified VA physician. Specifically, the Agency adds the word "either" after "must" in paragraph (a). Additionally, it adds a new paragraph (a)(1)(ii). Third, FMCSA adds a new paragraph (a)(2) and deletes from (a)(3) the sentence stating "An applicant must not take the test more than once every 30 days." Finally, the Agency adds the citation "or (a)(2)" to paragraph (b).

##### **Section 390.105 Medical Examiner Training Programs**

The Agency adds a new paragraph (c) setting out the training requirements for qualified VA physicians.

##### **Section 390.107 Medical Examiner Certification Testing**

FMCSA adds a new paragraph (e) setting out the testing requirements for qualified VA physicians.

##### **Section 390.111 Requirements for Continued Listing on the National Registry of Certified Medical Examiners**

In paragraph (a)(2), FMCSA creates new paragraphs (i) and (ii). In new (a)(2)(i), the Agency deletes the word "application" and replaces it with "registration." Additionally, in this paragraph, the cross-reference is changed to "\$ 390.103(a)(1)(ii)." Finally, the Agency adds a new paragraph (a)(2)(ii) that states what happens when a certified VA medical examiner is no longer employed by the VA.

FMCSA divides both paragraphs (a)(3) and (a)(4) into two separate paragraphs: paragraph (i) with the existing requirements and new paragraph (ii) with the new requirements for certified VA MEs. In the new paragraph (a)(4)(i), FMCSA adds "and (b)" after § 390.105(a). In paragraph (a)(5)(ii)(B), the cross-reference is updated to read "\$ 390.103(a)(1)(iv) or (a)(2)(ii)."

Finally, in paragraph (b), FMCSA changes the reference from "(4)" to "(5)."

##### **Section 390.115 Procedures for Removal From the National Registry of Certified Medical Examiners**

In paragraph (d)(2)(ii), the Agency changed the cross-reference to read "\$ 390.103(a)(1)(ii)." Additionally, paragraph (d)(2)(v) is redesignated as (d)(2)(vi) and the Agency inserts new language for (d)(2)(v).

In paragraph (f)(2), the cross-reference is changed to read "\$ 390.103(a)(1)(ii)." Paragraph (f)(4) is divided into two separate paragraphs: (i) With the existing requirements and new paragraph (ii) with the new requirements for certified VA MEs.

#### *Part 391*

##### **Section 391.43**

Paragraph (b) is revised by adding "Exceptions. (1)" before "A licensed optometrist" and dividing the paragraph into two separate paragraphs: Paragraph (1) relating to an optometrist and new paragraph (2) relating to veteran operators.

## VIII. Regulatory Analyses

*A. E.O. 12866 (Regulatory Planning and Review and DOT Regulatory Policies and Procedures as Supplemented by E.O. 13563)*

This proposed rule is not a significant regulatory action under section 3(f) of Executive Order 12866, Regulatory Planning and Review, as supplemented by E.O. 13563 (76 FR 3821, January 21, 2011). It is also not significant within the meaning of DOT regulatory policies and procedures (DOT Order 2100.5 dated May 22, 1980; 44 FR 11034, February 26, 1979) and does not require an assessment of potential costs and benefits under section 6(a)(3) of that Order. Therefore, the Office of Management and Budget has not reviewed the proposed rule under that Order. However, as required by 49 U.S.C. 31136(c)(2)(A), the Agency will consider the cost and benefits of this proposed rule. The Agency estimates the economic benefits and costs of the proposed rule would be less than \$100 million annually.

The objective of the proposed rule is to develop a direct process to allow qualified VA physicians employed in the VA to perform physical examinations for veteran operators and to list such physicians on the National Registry. Absent this proposed rule, qualified VA physicians may choose to become certified MEs listed on the National Registry; however, the resource and qualification burden to do so is greater than under the proposed rule. There are just 10 VA physicians certified and listed as MEs on the National Registry under the current process, a small fraction of the 49,943 listed MEs.<sup>4</sup> The Agency lacks data to estimate whether the proposed rule would impact the number of qualified VA physicians who would obtain certification as certified VA MEs; however, as this proposed rule reduces the cost to do so, the Agency assumes that this number would increase or, at minimum, remain constant relative to the baseline.

A detailed list of requirements to become a certified ME is in § 390.103. The three requirements are:

- Must be licensed, certified, or registered according to State laws and regulations to perform physical examinations;

- Must complete required training from a training organization;
- Must pass the medical examiner certification test at an FMCSA-approved testing center.

The requirements are modified by the proposed rule in order to make training and testing readily accessible to qualified VA physicians. In summary, the quantifiable benefits and costs of the proposed rule are: (1) Benefits in the form of cost savings for qualified VA physicians seeking to become certified VA MEs on the National Registry, through reductions in time and travel expenses; (2) costs associated with the development of an online training and testing module, and (3) information technology (IT) tasks required to construct an interface between the National Registry System and VA's web-based training system. The interface will provide a seamless transfer of completed training and testing information for each registered qualified VA physician to be listed on the National Registry.

To estimate the benefits resulting from cost savings of the proposed rule, the Agency utilized estimated health care professionals' ME training and testing-related travel costs from the December 2011 regulatory evaluation of the National Registry final rule.<sup>5</sup> For the evaluation of the proposed rule, those costs are adjusted to 2015 dollars in order to subsequently estimate the reduction in those costs attributable to the proposed rule. In the aforementioned 2011 regulatory evaluation, the Agency estimated that 50 percent of health care professionals seeking to become certified MEs will complete the required training and testing online, while the remaining 50 percent will participate in classroom-based training. At present, there are no testing providers offering online testing. Adjusting for a 50/50 online vs. classroom split for training and the current absence of online testing, FMCSA estimates that in the baseline, a qualified VA physician seeking to become a certified VA ME would, on average, incur 4.5 hours of travel time costs and 105 miles of vehicle mileage expenses.<sup>6</sup> Under the proposed rule,

training and testing for qualified VA physicians will be online-only, using the VA's web-based training system. This eliminates the travel time costs and the vehicle mileage costs that would otherwise be incurred in the absence of the proposed rule. Four and a half hours of travel time per participating qualified VA physician would be saved. The Bureau of Labor Statistics (BLS) Occupational Employment Statistics, May 2015, data indicate the weighted average hourly wage for general practitioners, internists, physicians, and surgeons is \$93.96.<sup>7</sup> Adjusting this value for fringe benefits using data from the BLS Employer Costs for Employee Compensation database, a fringe benefit markup of 31 percent is applied, resulting in an hourly valuation of \$123.09, rounded to \$123 for purposes of this analysis.<sup>8</sup> At an average of 4.5 hours of travel time saved per participating qualified VA physician, the proposed rule would provide a per-physician savings of \$554 ( $\$553.50 = 4.5 \times \$123$ , rounded to the nearest whole number).

FMCSA separately estimates the cost savings resulting from the average reduction of 105 miles of travel per physician subsequent to the proposed rule. Consistent with the approach of the 2011 regulatory evaluation for the National Registry final rule, the Agency monetizes this benefit using the standard Internal Revenue Service (IRS) mileage rate. The 2015 standard IRS mileage rate is 57.5 cents per mile.<sup>9</sup> By this measure, the per-physician travel expense savings is \$60 ( $\$60 = 57.5 \text{ cents per mile} \times 105 \text{ miles}$ , rounded to the nearest whole number).

The total quantifiable benefit of the proposed rule (per qualified VA physician seeking to become a certified VA ME) is estimated to be \$614. This estimate is the sum of the projected savings of \$554 in travel time costs and \$60 in travel expenses.

Participation of qualified VA physicians in the National Registry is voluntary. It is important to note that the cost savings to the Federal government are specific to the elimination of time and travel expenses

(physicians).  $105 = (70 \times 0.50 + 70 \times 1.0)$ . Distance and time inputs are consistent with those in the 2011 regulatory evaluation of the National Registry final rule.

<sup>7</sup> See [http://www.bls.gov/oes/current/oes\\_nat.htm](http://www.bls.gov/oes/current/oes_nat.htm) (Accessed September 6, 2016).

<sup>8</sup> The 31 percent fringe benefit markup is obtained from BLS series "All Civilian Total benefits for Professional and related occupations; Percent of total compensation" and corresponds to the Q1 2016 value.

<sup>9</sup> See <https://www.irs.gov/tax-professionals/standard-mileage-rates/> (Accessed September 21, 2016).

<sup>4</sup> A total of 25 medical professionals employed in the VA are listed on the National Registry as of September 16, 2016; of these, 10 are physicians. Nationwide, a total of 49,943 medical professionals are listed on the National Registry as of September 12, 2016. See <https://nationalregistry.fmcsa.dot.gov/NRPublicUI/home.seam> (Accessed September 16, 2016).

<sup>5</sup> The 2011 regulatory evaluation can be accessed at <https://www.regulations.gov/document?D=FMCSA-2008-0363-0115> (Accessed September, 6, 2016).

<sup>6</sup> 4.5 hours assumes 3 hours roundtrip travel for training (incurred by 50% of qualified VA physicians) and 3 hours of roundtrip travel for testing (for 100% of qualified VA physicians).  $4.5 \text{ hours} = (3 \times 0.50 + 3 \times 1.0)$ . 105 miles of travel by vehicle assumes a 70-mile roundtrip distance for training (incurred by 50% of qualified VA physicians) and a 70-mile roundtrip distance for testing (incurred by 100% of qualified VA

associated with initial ME certification training and testing requirements, and not to subsequent refresher training and recertification testing.<sup>10</sup>

There may also be non-quantifiable benefits of the proposed rule to veteran operators if qualified VA physicians' participation in the National Registry increases the availability of and access to certified VA MEs. This may reduce waiting periods for appointments for veteran operators enrolled in the VA health care system. Shorter waiting periods may expedite a veteran operator's ability to begin driving for personal income. Also, the potential addition of qualified VA physicians to the list of certified MEs in closer proximity to a veteran operator's residence may reduce the cost of travel time and the use of a personal vehicle for those veteran operators seeking to be examined by a certified VA ME.<sup>11</sup> The Agency lacks data on the number of veterans enrolled in the VA healthcare system now, or in the future, who might take advantage of this benefit, or their proximity to a VA ME who might be added to the National Registry under this proposed rule. Therefore, FMCSA is

unable to quantify this benefit of the proposed rule.

The costs of the proposed rule are strictly IT systems-related and will be borne by the Federal government. These costs consist of: (1) Development of an online medical examiner certification training and testing module for qualified VA physicians; (2) development and maintenance of an interface between the VA's web-based training system and the National Registry System so that qualified VA physicians' certification training and test results can be transmitted to the National Registry; and (3) operation of the National Registry Help Desk to assist qualified VA physicians with registration for, and completion of, the online training and testing. The VA and FMCSA are responsible for developing the interface between their respective IT systems.

FMCSA has executed a contract with consultants who will develop the online curriculum. The training module will include a test at the end to ensure that qualified VA physicians seeking to become certified VA MEs complete and fully understand the standards for, and physical requirements of, a CMV operator. The results of the test will be

posted to his or her National Registry account. The estimated cost of this contract is \$84,138.

The IT system developer will be responsible for modifying the National Registry System so it will be able to accept VA physicians' training and test results from the VA's web-based training system and post results to each qualified VA physician's National Registry account. The contract is for \$128,675. Presently, FMCSA assumes that the VA's costs of interface development are the same.

The National Registry Help Desk contractor will staff the National Registry Help Desk to provide technical support to qualified VA physicians going through the National Registry registration and certification process and respond to telephone, written, and email inquiries regarding National Registry certification from qualified VA physicians, veterans, motor carriers, and other interested parties. FMCSA estimates costs for the first year of the contract are \$46,200 and \$57,750 for the second year. Help Desk costs are assumed to be constant at \$57,750 for the remaining eight years of the forecast period.

TABLE 1—ESTIMATED INFORMATION TECHNOLOGY AND HELP DESK COSTS  
[in 2015\$]

Year	Curriculum development	FMCSA interface development	Help desk support	DVA interface development	Total (undiscounted)	Total (3% discount rate)	Total (7% discount rate)
2018 .....	\$84,138	\$129,000	\$46,200	\$129,000	\$388,338	\$388,338	\$388,338
2019 .....	0	0	57,750	0	57,750	56,068	53,972
2020 .....	0	0	57,750	0	57,750	54,435	50,441
2021 .....	0	0	57,750	0	57,750	52,849	47,141
2022 .....	0	0	57,750	0	57,750	51,310	44,057
2023 .....	0	0	57,750	0	57,750	49,816	41,175
2024 .....	0	0	57,750	0	57,750	48,365	38,481
2025 .....	0	0	57,750	0	57,750	46,956	35,964
2026 .....	0	0	57,750	0	57,750	45,588	33,611
2027 .....	0	0	57,750	0	57,750	44,261	31,412
10-Year Total .....	84,138	129,000	565,950	129,000	908,088	837,986	764,593
Annualized .....	.....	.....	.....	.....	.....	95,376	101,739

The IT, interface development, Help Desk, and training and testing development costs incurred by FMCSA over the 10-year forecast period are summarized in Table 1. Total costs over the 10 year period are estimated at \$908,088 on an undiscounted basis. The estimated costs at a 3 percent discount rate are \$837,986, and \$764,593 at a 7 percent discount rate. The annualized

cost over the 10 year period is \$95,376 at a 3 percent discount rate and \$101,739 at a 7 percent discount rate.

#### B. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) of 1980 (5 U.S.C. 601 *et seq.*) as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121, 110 Stat. 857)

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

<sup>10</sup> 49 CFR 390.111(a)(5)(i) and (ii) require MEs to complete periodic training every 5 years after the date of issuance of their credential, and complete training and testing no later than 10 years after the date of issuance of their credential.

<sup>11</sup> The geographic diversity of VA medical professionals listed on the National Registry is limited in scope and number. The 25 VA practitioners listed on the National Registry are located in 16 states. Of these VA practitioners, a

total of 13 are located in California (2), Colorado (4), North Dakota (3) and Wisconsin (4). See <https://nationalregistry.fmcsa.dot.gov/NRPublicUI/home.seam> (Accessed September 16, 2016).

populations of less than 50,000. Accordingly, DOT policy requires an analysis of the impact of all regulations on small entities, and mandates that agencies strive to lessen any adverse effects on these businesses. Section 603(b) of the RFA requires the Agency to prepare an Initial Regulatory Flexibility Analysis (IRFA) that assesses the impact of the proposed rule on small entities. The information that satisfies the requirements for an IRFA is provided below.

#### 1. A Description of the Reasons Why the Action by the Agency Is Being Considered

The proposed rule is being issued to fulfill the requirement of section 5403 of the FAST Act that requires the Secretary of Transportation, in consultation with the Secretary of Veterans Affairs, to develop a process for qualified VA physicians to be certified and listed on the Agency's National Registry. By doing so, veteran operators enrolled in the VA health care system will be able to obtain their medical examinations and MECs using their VA health care benefits. Currently, veteran operators enrolled in the VA health care system, more likely than not, would go outside the VA health care system because there are only 25 VA medical professionals in the nation who are certified MEs, 10 of whom are physicians.

#### 2. A Succinct Statement of the Objectives of, and the Legal Basis for, the Proposed Rule

The objective of the proposed rule is to develop a process to allow qualified VA physicians employed in the VA to be listed on the National Registry, perform medical examinations of veteran operators, and issue MECs to those that are qualified. Upon the proposed rule's compliance date, qualified VA physicians will be able to complete ME certification training and testing requirements using a web-based training system operated by the VA to become a certified VA ME. As noted above, at present, there are only 25 VA medical professionals across the nation listed on the National Registry, 10 of whom are physicians. If more qualified VA physicians are listed on the National Registry, veteran operators enrolled in the VA health care system will have a greater likelihood of being able to obtain their medical examinations using their VA health care benefits.

The legal authority for this proposed rule is provided by 49 U.S.C. 31136 and 31149 and section 5403 of the FAST Act. Pursuant to 49 U.S.C. 31136(a), FMCSA is authorized to require CMV operators to obtain periodic medical

examinations performed by MEs who have received training on DOT physical standards. FMCSA created and administers the National Registry, in accordance with 49 U.S.C. 31149(d). In order to ensure that MEs are qualified for listing on the National Registry, 49 U.S.C. 31149(c)(1)(D) requires them to receive training in core curriculum requirements developed by FMCSA in consultation with the Medical Review Board (established under 49 U.S.C. 31149(a)), to pass a certification examination, and to demonstrate an ability to comply with reporting requirements established by FMCSA.

Section 5403 of the FAST Act directs the Secretary of Transportation, in consultation with the Secretary of Veterans Affairs, to develop a process for qualified VA physicians employed in the VA to be listed on the National Registry. In order to be qualified for ME certification and listing on the National Registry, the FAST Act requires that such physicians must be familiar with the physical standards and requirements for CMV operators. Qualified VA physicians listed on the National Registry may perform examinations of, and issue MECs to, only veterans enrolled in the VA health care system.

#### 3. A Description and, Where Feasible, an Estimate of the Number of Small Entities to Which the Proposed Rule Will Apply

FMCSA believes there are no small entities affected by this proposed rule.

#### 4. A Description of the Proposed Reporting, Recordkeeping, and Other Compliance Requirements of the Proposed Rule, Including an Estimate of the Classes of Entities That Will Be Subject to the Requirement and Training Types of Professional Skills Necessary for Preparation of the Report or Record and, Where Feasible, an Estimate of the Number of Small Entities to Which the Proposed Rule Will Apply

The proposed rule requires no new recording, recordkeeping, or other compliance requirements.

#### 5. An Identification, to the Extent Practicable, of Relevant Federal Rules That May Duplicate, Overlap or Conflict With the Proposed Rule

The Agency did not identify any Federal rules that duplicate, overlap, or conflict with the rule.

#### 6. A Description of Any Significant Alternatives to the Proposed Rule That Minimize Any Significant Impacts on Small Entities

FMCSA has considered whether the proposed rule is expected to have a

significant economic impact on a substantial number of small entities. FMCSA believes there are no small entities affected by this proposed rule. Consequently, I certify that the proposed action would not have a significant economic impact on a substantial number of small entities.

#### C. Assistance for Small Entities

In accordance with section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996, FMCSA wants to assist small entities in understanding this proposed rule so that they can better evaluate its effects on themselves and participate in the rulemaking initiative. If the proposed rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance; please consult the FMCSA point of contact, Christine A. Hydock, listed in the **FOR FURTHER INFORMATION CONTACT** section of this proposed rule.

Small businesses may send comments on the actions of Federal employees who enforce or otherwise determine compliance with Federal regulations to the Small Business Administration's Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency's responsiveness to small business. If you wish to comment on actions by employees of FMCSA, call 1-888-REG-FAIR (1-888-734-3247). DOT has a policy regarding the rights of small entities to regulatory enforcement fairness and an explicit policy against retaliation for exercising these rights.

#### D. Unfunded Mandates Reform Act of 1995

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531-1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$156 million (which is the value equivalent of \$100,000,000 in 1995, adjusted for inflation to 2015 levels) or more in any one year. Though this proposed rule would not result in any such expenditure, the Agency discusses the effects of this rule elsewhere in this preamble.

#### E. Paperwork Reduction Act

This proposed rule would call for no new collection of information under the

Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520).

*F. E.O. 13132 (Federalism)*

A rule has implications for Federalism under Section 1(a) of Executive Order 13132 if it has “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.”

FMCSA determined that this proposal would not have substantial direct costs on or for States, nor would it limit the policymaking discretion of States. Nothing in this document preempts any State law or regulation. Therefore, this rule does not have sufficient Federalism implications to warrant the preparation of a Federalism Impact Statement.

*G. E.O. 12988 (Civil Justice Reform)*

This proposed rule 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.

*H. E.O. 13045 (Protection of Children)*

E.O. 13045, Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997), requires agencies issuing “economically significant” rules, if the regulation also concerns an environmental health or safety risk that an agency has reason to believe may disproportionately affect children, to include an evaluation of the regulation’s environmental health and safety effects on children. The Agency determined this proposed rule is not economically significant. Therefore, no analysis of the impacts on children is required. In any event, the Agency does not anticipate that this regulatory action could in any respect present an environmental or safety risk that could disproportionately affect children.

*I. E.O. 12630 (Taking of Private Property)*

FMCSA reviewed this proposed rule in accordance with E.O. 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights, and has determined it will not effect a taking of private property or otherwise have taking implications.

*J. Privacy*

Section 522 of title I of division H of the Consolidated Appropriations Act, 2005, (Pub. L. 108–447, 118 Stat. 2809, 3268, 5 U.S.C. 552a note), requires the Agency to conduct a privacy impact assessment (PIA) of a regulation that

will affect the privacy of individuals. This rule would not require the collection of any new personally identifiable information (PII) by the National Registry of Certified Medical Examiners system, but will establish a new process of collection for a specific group of individuals. In accordance with this Act, a privacy impact analysis is warranted to address the new process for collection of personally identifiable information contemplated in the proposed rulemaking. The Agency submitted a Privacy Threshold Assessment analyzing the proposed process for collection of personal information to the Department of Transportation, Office of the Secretary’s Privacy Office for adjudication. The final adjudication from the DOT Privacy Officer will be incorporated into the Final Rule.

The Privacy Act (5 U.S.C. 552a) applies only to Federal agencies and any non-Federal agency which receives records contained in a system of records from a Federal agency for use in a matching program. The E-Government Act of 2002, Public Law 107–347, 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.

Pending the adjudication from the DOT Privacy Officer, the FMCSA Privacy Officer has evaluated the risks and effects that this rulemaking might have on collecting, storing, and sharing Personally Identifying Information and has examined protections and alternative information handling processes in developing the proposal in order to mitigate potential privacy risks. The privacy risks and effects associated with the doctor’s registration records resulting from this rule are not unique and have previously been addressed by the doctor registration requirements in the National Registry of Certified Medical Examiners (National Registry) and the Medical Examiner’s Certification Integration PIA published on April 27, 2015 and the DOT/FMCSA 009—National Registry of Certified Medical Examiners (National Registry) System of Records Notice (77 FR 24247) published in the **Federal Register** on April 23, 2012. The PIA will be reviewed and revised as appropriate to reflect the Final Rule and will be published not later than the date on which the Department initiates any of the activities contemplated in the Final Rule determined to have an impact on individuals’ privacy and not later than the date on which the system

supporting implementation of the Final Rule is updated.

Per the Privacy Act the Department is required to publish in the **Federal Register** for not less than 30 days a system of records notice (SORN) before it is authorized to collect or use PII retrieved by unique identifier. Following best practice, the SORN will be reviewed and revised as appropriate to reflect the Final Rule and would be published concurrently with the Final Rule publication; however an additional SORN for this rulemaking is not required by DOT policy at this time.

The supporting National Registry PIA, available for review in the docket, gives a full and complete explanation of FMCSA practices for protecting PII in general and specifically in relation to the system addressed in the proposed rule.

*K. E.O. 12372 (Intergovernmental Review)*

The regulations implementing E.O. 12372 regarding intergovernmental consultation on Federal programs and activities do not apply to this program.

*L. E.O. 13211 (Energy Supply, Distribution, or Use)*

FMCSA has analyzed this proposed rule under E.O. 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use. The Agency has determined that it is not a “significant energy action” under that order because it is not a “significant regulatory action” likely to have a significant adverse effect on the supply, distribution, or use of energy. Therefore, it does not require a Statement of Energy Effects under E.O. 13211.

*M. E.O. 13175 (Indian Tribal Governments)*

This rule does not have tribal implications under E.O. 13175, Consultation and Coordination with Indian Tribal Governments, because it does not have a substantial direct effect 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.

*N. National Technology Transfer and Advancement Act (Technical Standards)*

The National Technology Transfer and Advancement Act (NTTAA) (15 U.S.C. 272 note) directs agencies to use voluntary consensus standards in their regulatory activities unless the agency provides Congress, through OMB, with

an explanation of why using these standards would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards (*e.g.*, specifications of materials, performance, design, or operation; test methods; sampling procedures; and related management systems practices) are standards that are developed or adopted by voluntary consensus standards bodies. This rule does not use technical standards. Therefore, FMCSA did not consider the use of voluntary consensus standards.

*O. Environment (NEPA, CAA, Environmental Justice)*

FMCSA analyzed this NPRM for the purpose of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*) and determined this action is categorically excluded from further analysis and documentation in an environmental assessment or environmental impact statement under FMCSA Order 5610.1 (69 FR 9680, March 1, 2004), Appendix 2, paragraphs 6.d. The Categorical Exclusion (CE) in paragraph 6.d covers regulations concerning the training, qualifying, licensing, certifying, and managing of personnel. The proposed requirements in this rule are covered by this CE and the proposed action does not have any effect on the quality of the environment. The CE determination is available for inspection or copying in the Federal eRulemaking Portal: <http://www.regulations.gov>.

FMCSA also analyzed this rule under the Clean Air Act, as amended (CAA), section 176(c) (42 U.S.C. 7401 *et seq.*), and implementing regulations promulgated by the Environmental Protection Agency. Approval of this action is exempt from the CAA's general conformity requirement since it does not affect direct or indirect emissions of criteria pollutants.

Under E.O. 12898, each Federal agency must identify and address, as appropriate, "disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations" in the United States, its possessions, and territories. FMCSA evaluated the environmental justice effects of this proposed rule in accordance with the E.O., and has determined that no environmental justice issue is associated with this proposed rule, nor is there any collective environmental impact that would result from its promulgation.

## List of Subjects

### 49 CFR 390

Highway safety, Intermodal transportation, Motor carriers, Motor vehicle safety, Reporting and recordkeeping requirements.

### 49 CFR 391

Alcohol abuse, Drug abuse, Drug testing, Highway safety, Motor carriers, Reporting and recordkeeping requirements, Safety, Transportation.

In consideration of the foregoing, FMCSA proposes to amend 49 CFR chapter 3, part 390 and 391 to read as follows:

## PART 390—FEDERAL MOTOR CARRIER SAFETY REGULATIONS; GENERAL

■ 1. 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, 31149, 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. 4114 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; sec. 32101(d) and 32934, Pub. L. 112–141, 126 Stat. 405, 778, 830; sec. 2, Pub. L. 113–125, 128 Stat. 1388; sec. 5403, 5518, 5524, Pub. L. 114–94, 129 Stat. 1312, 1548, 1558, 1560; and 49 CFR 1.81, 1.81a and 1.87.

■ 2. In § 390.5, add the terms "Certified VA medical examiner," "Qualified VA physician" and "Veteran operator" in alphabetical order to read as follows:

### § 390.5 Definitions.

\* \* \* \* \*

*Certified VA medical examiner* means a qualified VA physician who has fulfilled the requirements and is listed on the National Registry of Certified Medical Examiners.

\* \* \* \* \*

*Qualified VA physician* means a doctor of medicine or a doctor of osteopathy who is employed in the Department of Veterans Affairs; is familiar with the standards for, and physical requirements of, an operator certified pursuant to 49 U.S.C. 31149; and has never, with respect to such section, been found to have acted fraudulently, including by fraudulently awarding a medical certificate.

\* \* \* \* \*

*Veteran operator* means an operator of a commercial motor vehicle who is a veteran enrolled in the health care system established under section of 38 U.S.C. 1705(a).

■ 3. Revise § 390.103 to read as follows:

### § 390.103 Eligibility requirements for medical examiner certification.

(a) To receive medical examiner certification from FMCSA a person must either:

(1) Be an advanced practice nurse, doctor of chiropractic, doctor of medicine, doctor of osteopathy, physician assistant, or other medical professional authorized by applicable State laws and regulations to perform physical examinations, and

(i) Be licensed, certified, or registered in accordance with applicable State laws and regulations to perform physical examinations;

(ii) Before taking the training provided below, register on the National Registry System and receive a unique identifier.

(iii) Complete a training program that meets the requirements of § 390.105(a) and (b); and

(iv) Pass the medical examiner certification test provided by FMCSA and administered by a testing organization that meets the requirements of § 390.107 and that has electronically forwarded to FMCSA the applicant's completed test information no more than three years after completion of the training program required by paragraph (a)(1)(iii) of this section; or

(2) Be a doctor of medicine or a doctor of osteopathy employed in the Department of Veterans Affairs, and

(i) Be licensed, certified, or registered in a State to perform physical examinations,

(ii) Before taking the training provided below, register on the National Registry system and receive a unique identifier.

(iii) Be familiar with FMCSA's standards for, and physical requirements of, a commercial motor vehicle (CMV) operator requiring medical certification, by completing the training program in § 390.105(c);

(iv) Pass the medical examiner certification test provided by FMCSA, administered in accordance with § 390.107(e) and has had his or her results electronically forwarded to FMCSA; and

(v) Have never been found to have acted fraudulently with respect to any certification of a CMV operator, including by fraudulently awarding a medical certificate.

(b) If a person has medical examiner certification from FMCSA, then to renew such certification the medical examiner must remain qualified under paragraph (a)(1) or (a)(2) of this section and complete additional testing and training as required by § 390.111(a)(5).



■ 4. In § 390.105, add paragraph (c) to read as follows:

**§ 390.105 Medical examiner training programs.**

\* \* \* \* \*

(c) Instead of complying with paragraph (a) and (b) of this section, a qualified VA physician must complete training developed and provided by FMCSA and delivered through a Web-based training system operated by the Department of Veterans Affairs.

■ 5. In § 390.107, add paragraph (e) to read as follows:

**§ 390.107 Medical examiner certification testing.**

\* \* \* \* \*

(e) Instead of complying with paragraphs (a)–(d) of this section, to receive medical examiner certification from FMCSA, a qualified VA physician must pass the medical examiner certification test developed and provided by FMCSA and administered through a Web-based training system operated by the Department of Veterans Affairs.

■ 6. In § 390.111, revise paragraphs (a)(2), (3), (4), (a)(5) introductory text, (a)(5)(ii)(B), and paragraph (b).

**§ 390.111 Requirements for continued listing on the National Registry of Certified Medical Examiners.**

(a) \* \* \*

(1) \* \* \*

(2) *Registration information.* (i) Report to FMCSA any changes in the registration information submitted under § 390.103(a)(1)(ii) within 30 days of the change.

(ii) A certified VA medical examiner who is no longer employed in the VA, but would like to remain listed on the National Registry, must either meet the requirements of paragraph (i) or submit this change in registration information prior to conducting any physical examination of a CMV driver or issuing any medical examiner's certificates.

(3) *Licensure.* (i) Continue to be licensed, certified, or registered, and authorized to perform physical examinations, in accordance with the applicable laws and regulations of each State in which the medical examiner performs examinations.

(ii) Instead of complying with paragraph (3)(i) of this section, a certified VA medical examiner must continue to be licensed, certified, or registered, and authorized to perform physical examinations, in accordance with the laws and regulations of a State. If a certified VA medical examiner is no longer employed in the Department of Veterans Affairs, such physician must

meet the requirements of paragraph (3)(i) of this section.

(4) *Documentation.* (i) Maintain documentation of State licensure, registration, or certification to perform physical examinations for each State in which the examiner performs examinations, and maintain documentation of, and completion of, all training required by this section and §§ 390.105 (a) and (b). The medical examiner must make this documentation available to an authorized representative of FMCSA or an authorized representative of Federal, State, or local government. The medical examiner must provide this documentation within 48 hours of the request for investigations and within 10 days of the request for regular audits of eligibility.

(ii) Instead of complying with paragraph (4)(i) of this section, a certified VA medical examiner must maintain documentation of licensure, registration, or certification in a State to perform physical examinations and maintain documentation of and completion of all training required by this section and § 390.105(c). The certified VA medical examiner must make this documentation available to an authorized representative of FMCSA or an authorized representative of Federal, State, or local government. The certified VA medical examiner must provide this documentation within 48 hours of the request for investigations and within 10 days of the request for regular audits of eligibility.

(5) Maintain medical examiner certification by completing training and testing according to the following schedule:

(ii) \* \* \*

(A) \* \* \*

(B) Pass the test required by either § 390.103(a)(1)(iv) or (a)(2)(iii).

(b) FMCSA will issue a new medical examiner certification credential valid for 10 years to a medical examiner who complies with paragraphs (a)(1) through (5) of this section and who successfully completes the training and testing as required by paragraphs (a)(5)(i) or (ii) of this section.

■ 7. In § 390.115, revise paragraphs (b), (d)(2)(ii), (d)(2)(v), (d)(2)(vi), (f)(2) and (f)(4).

**§ 390.115 Procedures for removal from the National Registry of Certified Medical Examiners.**

\* \* \* \* \*

(b) Notice of proposed removal. Except as provided paragraphs (a) and (e) of this section, FMCSA initiates the process for removal of a medical examiner from the National Registry of

Certified Medical Examiners by issuing a written notice of proposed removal to the medical examiner, stating the reasons that removal is proposed under § 390.113 and any corrective actions necessary for the medical examiner to remain listed on the National Registry of Certified Medical Examiners.

(d) \* \* \*

(2) \* \* \*

(ii) Report to FMCSA any changes in the registration information submitted under § 390.103(a)(1)(ii) within 30 days of the reinstatement.

\* \* \* \* \*

(v) Instead of complying with paragraph (2)(iv) of this section, a certified VA medical examiner must maintain documentation of licensure, registration, or certification in a State to perform physical examinations and maintain documentation of and completion of all training required by this section and §§ 390.105(c) and 390.111(a)(iv) of this part. The certified VA medical examiner must make this documentation available to an authorized representative of FMCSA or an authorized representative of Federal, State, or local government. The certified VA medical examiner must provide this documentation within 48 hours of the request for investigations and within 10 days of the request for regular audits of eligibility.

(vi) Complete periodic training as required by the Director, Office of Carrier, Driver and Vehicle Safety Standards.

\* \* \* \* \*

(f) \* \* \*

(1) \* \* \*

(2) Report to FMCSA any changes in the registration information submitted under § 390.103(a)(1)(ii).

(3) \* \* \*

(4) *Documentation.* (i) Maintain documentation of State licensure, registration, or certification to perform physical examinations for each State in which the person performs examinations and maintains documentation of completion of all training required by §§ 390.105(a) and (b) and 390.111(a)(4)(i). The medical examiner must also make this documentation available to an authorized representative of FMCSA or an authorized representative of Federal, State, or local government. The person must provide this documentation within 48 hours of the request for investigations and within 10 days of the request for regular audits of eligibility.

(ii) Instead of complying with paragraph (4)(i) of this section, a certified VA medical examiner must maintain documentation of licensure,

registration, or certification in a State to perform physical examinations and maintain documentation of and completion of all training required by this section and § 390.105(c) and 390.111(a)(iv). The certified VA medical examiner must make this documentation available to an authorized representative of FMCSA or an authorized representative of Federal, State, or local government. The certified VA medical examiner must provide this documentation within 48 hours of the request for investigations and within 10 days of the request for regular audits of eligibility.

\* \* \* \* \*

## PART 391—QUALIFICATIONS OF DRIVERS AND LONGER COMBINATION VEHICLES (LCV) DRIVER INSTRUCTORS

■ 8. The authority citation for part 391 is revised to read as follows:

**Authority:** 49 U.S.C. 504, 508, 31133, 31136, 31149, and 31502; sec. 4007(b) of Pub. L. 102–240, 105 Stat. 1914, 2152; sec. 114 of Pub. L. 103–311, 108 Stat. 1673, 1677; sec. 215 of Pub. L. 106–159, 113 Stat. 1748, 1767; sec. 32934 of Pub. L. 112–141, 126 Stat. 405, 830; sec. 5403 and 5524 of Pub. L. 114–94, 129 Stat. 1312, 1548, 1560; and 49 CFR 1.87.

■ 9. In 391.43, revise paragraph (b) to read as follows:

### § 391.43 Medical examination; certificate of physical examination.

\* \* \* \* \*

(b) *Exceptions.* (1) A licensed optometrist may perform so much of the medical examination as pertains to visual acuity, field of vision, and the ability to recognize colors as specified in paragraph (10) of § 391.41(b).

(2) A certified VA medical examiner must only perform medical examinations of veteran operators.

\* \* \* \* \*

Issued under authority delegated in 49 CFR 1.87 on: November 23, 2016.

**T.F. Scott Darling, III,**  
Administrator.

[FR Doc. 2016–28746 Filed 11–30–16; 8:45 am]

**BILLING CODE 4910–EX–P**

## DEPARTMENT OF TRANSPORTATION

### National Highway Traffic Safety Administration

#### 49 CFR Part 571

[Docket No. NHTSA–2016–0054]

### Federal Motor Vehicle Safety Standards

**AGENCY:** National Highway Traffic Safety Administration (NHTSA), DOT.

**ACTION:** Denial of petition for rulemaking.

**SUMMARY:** This document denies a petition for rulemaking, submitted by Ms. Scheryn Bennett, requesting that the National Traffic Safety Administration (NHTSA) require every vehicle to be equipped with an emergency glass breaking tool. The data available to the agency shows there is a great deal of uncertainty surrounding the actual number of occupants that may have died due solely to drowning while trapped in an immersed vehicle. The potential effectiveness of such a tool to successfully aid an occupant's safe exit from an immersed vehicle is also not known. In the absence of a requirement that each vehicle have a glass breaking tool, nothing prevents vehicle manufacturers from providing a tool or other means to allow vehicle evacuation during immersion. Additionally, consumers can purchase their own tool and locate it in the vehicle where they would be likely to access it in an emergency.

**DATES:** This denial is effective as of December 1, 2016.

**ADDRESSES:** Office of Crashworthiness Standards, National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE., Washington, DC 20590.

#### FOR FURTHER INFORMATION CONTACT:

*For Non-Legal Issues:* Mr. James Myers, Office of Crashworthiness Standards, National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE., Washington, DC 20590, Telephone: (202) 493–0031, Facsimile: (202) 493–2739.

*For Legal Issues:* Ms. Rebecca Yoon, Office of Chief Counsel, National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE., Washington, DC 20590, Telephone: (202) 366–2992.

#### SUPPLEMENTAL INFORMATION:

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- B. Potential Effectiveness of Tool
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- IV. Conclusion

## I. Background

The National Traffic and Motor Vehicle Safety Act (“Safety Act,” 49 U.S.C. 30101 *et seq.*) authorizes NHTSA to issue safety standards for new motor vehicles and new items of motor vehicle equipment. The prescribed motor vehicle safety standards must be practicable, meet the need for motor vehicle safety, and be stated in objective terms. NHTSA does not endorse any vehicles or items of equipment. Further, NHTSA does not approve or certify vehicles or equipment. Instead, the Safety Act establishes a “self-certification” process under which each manufacturer is responsible for certifying that its products meet all applicable safety standards. NHTSA has not established any standards pertaining to an emergency glass breaking tool, nor has the agency ever established a requirement that they must be provided with any vehicle.

## II. Petition

On January 22, 2014, Ms. Scheryn Bennett, (henceforth referred to as Ms. Bennett), requested that NHTSA require every vehicle to be equipped with an “emergency window breaker.” Ms. Bennett cited the drowning deaths of a mother and her two minor children during an August 2011 flash flood in Pittsburgh, PA, and wrote that “evidence showed they [the victims] attempted to kick out the windows in their minivan.” Ms. Bennett expressed a concern for vehicle occupants to exit a passenger vehicle via a window after the vehicle has become trapped in water such that the water interrupts the vehicle electrical system, rendering the power windows inoperable. Additionally, Ms. Bennett contended that “[j]ust as a spare tire and jack are standard in all vehicles so should an emergency window breaker.”

## III. Analysis of Petition

As a general matter, any proposed safety standard issued by NHTSA must meet the need for motor vehicle safety. Typically, we assess whether a standard would meet the need for motor vehicle safety by analyzing the real-world safety problem (which is the “safety need”), and then analyzing how well the safety problem can be addressed by the standard we are proposing (whether the safety need is met by the standard). It is challenging for the agency to justify a new regulation based only on an

assumption that a particular vehicle safety feature or piece of equipment has potential for reducing injury or death in some crash scenarios.

#### A. Preliminary Analysis of Real World Data

Ms. Bennett provided a newspaper article reporting on the death of a mother and her two children that drowned in their minivan during a severe flash flood event. We searched for additional data that could support the existence of a safety need which could be addressed by an emergency window breaking tool. NHTSA's data review for this petition examined the information available in the agency's Fatality Analysis Reporting System (FARS) and Not-in-Traffic Surveillance (NiTS) databases. We also examined vehicle related cataclysmic drowning incident information available from the National Oceanic and Atmospheric Administration (NOAA) Web site.

NHTSA's FARS database is a nationwide census of yearly data regarding fatal injuries suffered in motor vehicle traffic crashes. However, it does not capture fatalities that occur directly as a result of a cataclysm, such as flooding. An example of this would be a motor vehicle swept away *while* a bridge the vehicle was crossing is washed out during a hurricane or flood. Accidents related to a cataclysm, but occurring after the cataclysm has ended, would be traffic crashes and would be in FARS. Such an example could be where a motor vehicle is driven into water *after* a hurricane or flood where a bridge was washed out.

In the 2011 technical paper *Drowning Deaths in Motor Vehicle Traffic Accidents*,<sup>1</sup> NHTSA reviewed data available in FARS and linked it to Multiple Cause of Death (MCoD) data from the Centers for Disease Control and Prevention (CDC). The information indicated that drowning was involved in approximately 1 percent of the average annual motor vehicle occupant traffic fatalities for the time period reviewed for the paper (or 384 motor vehicle occupant traffic fatalities annually). NHTSA further analyzed the data for indications of possible occupant trauma that would indicate the fatally injured occupant(s) could have been unable to self-evacuate from their vehicle because of their physical condition at the time of the vehicle

immersion. These included potentially incapacitating crash scenarios such as vehicle rollovers, impacts with fixed objects, alcohol levels at or above the legal limit, and occupant ejection cases. Removing incidents involving vehicle rollovers and alcohol/drug usage from the above 384 fatalities yielded an annual average of 81 crash fatalities involving accidental drowning. We further excluded events in which the vehicle struck a fixed object prior to entering the water. Based upon this analysis, there were 28 drowning fatalities that were caused by crashes where vehicle immersion or unknown factors were the first harmful event.<sup>2</sup> These 28 individuals are the group most likely to have been in a position to self-evacuate from their immersed vehicle. However, the database details are insufficient to conclusively determine which of these fatalities occurred solely due to drowning and not factors such as physical trauma, seat belt issues, confusion, or other unknown issues, and thus may have survived if an emergency glass breaking tool had been available in the vehicle.

NHTSA also examined the information available in our NiTS database. The NiTS database tracks nontraffic crashes which occur off of public roads in locations such as private roads, driveways, parking lots, and undeveloped areas. Unfortunately, the system does not have any linked mortality data, which prevents a similar analysis to the one for traffic fatalities using FARS. Furthermore, while the database can list a most harmful event of immersion when applicable, the results previously presented above from the technical paper *Drowning Deaths in Motor Vehicle Traffic Accidents*<sup>3</sup> indicate that this variable does not provide a good proxy for counting drowning deaths. Additionally, the event details available are insufficient to determine if the individuals died inside or outside of their vehicles. Thus, this database could not provide data supporting a safety need for this petition.

NHTSA also researched flood related fatality information available on the NOAA Web site. The NOAA Web site uses data obtained from the CDC. Reviewing the listed event circumstances for only fatalities in

which the persons died inside<sup>4</sup> a motor vehicle, there were on average 34 people annually that died inside their vehicles for the years 2010–2014.<sup>5</sup> The information available on the NOAA Web site does not permit an evaluation into possible escape methods that may have benefitted these individuals, which makes it difficult to use this information to establish a safety need. It is further not possible to determine the extent to which there is an overlap in the fatality count between the 28 FARS fatalities and the 34 NOAA fatalities of people dying each year inside their vehicles during motor vehicle water immersion incidents. Neither is it possible to determine whether these people had compromised physical conditions due to event induced trauma or whether unknown physical barriers such as event damaged vehicle systems prevented them from escaping their vehicle interiors prior to drowning. NHTSA's review of the available information did not provide data to support the safety need listed in Ms. Bennett's petition. The information does not reveal whether the people died in these accidents due solely to drowning or from some other cause. Because it cannot be determined exactly how these people died, it is challenging to develop specific safety recommendations that could prevent this type of fatality.

#### B. Potential Effectiveness of Tool

Multiple types of glass breaking tools are commercially available for consumers to purchase. The tools can be attached to a key chain, attached to a seat belt, mounted in the vehicle interior, or stored in a convenient location within the vehicle interior. These tools are intended to quickly and efficiently break the tempered glass<sup>6</sup> material of a passenger vehicle's side window in order to create a vehicle emergency egress location. Currently-available glass breaking tools may be

<sup>4</sup> The NOAA data lists fatalities for people that escaped their trapped vehicle as a vehicle related fatality. The NOAA data also lists ATV and horse and buggy in the vehicle related category. These fatalities were excluded from our analysis since an emergency glass breaking tool would likely not have helped these people.

<sup>5</sup> The NOAA information lists the following in-vehicle fatalities for vehicles trapped in floodwaters: 2010 44 fatalities; 2011 60 fatalities; 2012 9 fatalities; 2013 31 fatalities; and 2014 24 fatalities.

<sup>6</sup> Per ANSI/SAE Z26.1–1996 the term “tempered glass” means a single piece of specially treated sheet, plate, or float glass possessing mechanical strength substantially higher than annealed glass. When broken at any point the entire piece breaks into small pieces that have relatively dull edges as compared to those of broken pieces of annealed glass.

<sup>1</sup> “Drowning Deaths In Motor Vehicle Traffic Accidents”; Rory Austin; National Highway Traffic Safety Administration; 22nd Experimental Safety of Vehicles Conference, Washington, DC, Paper Number 11–0170, 2011. (<http://www-esv.nhtsa.dot.gov/Proceedings/22/files/22ESV-000170.pdf>)

<sup>2</sup> Ibid. Table 7 records an annual average of 106 fatalities for immersion events with no rollover. Per FARS database inquiry, 25 of these fatalities had BAC .08 or higher (105 minus 25 equals 81). Of the remaining fatalities, 53 were from incidents where the vehicle collided with a fixed object prior to entering the water. This leaves 28 average annual crash fatalities possibly due solely to drowning.

<sup>3</sup> Ibid., page 7.

quite capable of vacating tempered glass from a window opening.

However, the glass breaking tools will not quickly and efficiently break those passenger vehicle side windows constructed with laminated glass<sup>7</sup> material.<sup>8</sup> The capability of glass breaking tools to break plastic glazing materials permitted for use in motor vehicles by FMVSS No. 205 is also unknown. Information on the percentage of passenger vehicles with side or rear windows constructed of laminated glass or plastic glazing materials is not collected by the agency. An examination of information available from the Enhanced Protective Glass Automotive Association indicates at least four dozen passenger vehicle models may have laminated glass material at vehicle locations other than the front windshield.<sup>9</sup> These vehicles tend to be lower volume, luxury models. Even in vehicles with laminated glass in side windows, there may be other windows with tempered glass, such as the rear window or potentially a sunroof. Drivers and occupants would need to not only know which windows are breakable by the emergency glass breaking tool and which are not, but would also need to be prepared to respond accordingly as their vehicle is filling with water.

There are other concerns related to the potential effectiveness of a requirement for such a tool beyond knowing which vehicle windows can or cannot be broken with the tool. First, it is not clear to the agency that a vehicle driver or passenger would be aware of the existence of such a device, its location, or how and when it should be used without additional information being provided. It is unclear whether information in the owner's manual would be sufficient to properly educate the vehicle occupants as to the existence of the device and its use. It is reasonable to assume the device would need to be located within the occupant compartment. However, the agency

questions how likely it would be for the tool to be used if the tool was hidden away in the glove compartment or other non-visible location, or whether the tool would need to always be visible and within reach for it to be used when needed. The answer to that question may be tied to the success of the educational information referred to above.

There are many situationally dependent, time critical decisions that conscious occupants may face if their vehicle becomes immersed in water, particularly if it is caught in a flash flood. Do the occupants need to leave the vehicle interior to avoid drowning and how quickly should that happen? What is the best way to safely exit the vehicle? What is the fastest, most survivable path to exit the flood waters? What special considerations are needed to help children get out of the vehicle if only one adult is present? All of these decisions and many more must be made within a few seconds once such a life threatening event begins. Once a vehicle becomes completely submerged, the occupants will face a reduced chance of survival.<sup>10</sup>

All of the above issues are open questions that will affect the real world effectiveness of a requirement to provide an emergency glass breaking tool. Based on the information available to NHTSA about the apparent size of the safety problem (*i.e.*, the number of people who die each year from drowning in their vehicle because they could not open the window and were not otherwise incapacitated) and the lack of information available about how well emergency glass breaking tools might address that safety problem, the agency is unable to say with confidence that a requirements for an emergency window breaking tool would meet the need for safety, as required by the Safety Act.

### C. Cost Effectiveness

Anecdotal market research on commercially available tempered glass breaking tools shows that there are a variety of tools marketed as emergency window glass breaking tools. They are generally either a type of hammer or a spring loaded punch. Some of the available tools are intended solely for breaking glass. Other tools provide additional functionality such as seat belt cutters, flashlights, or even tire pressure gauges. Purchase costs for these tools

range from approximately \$3.50 to \$20.00 each.

In addition to the preliminary nature of the above cost estimates, there are several other barriers to making a reasonable estimate of the cost effectiveness of a potential requirement for this tool. First, as previously discussed, the available motor vehicle crash information suggests that the number of people that might be expected to require a means of escaping an immersed vehicle through a window opening may be on the order of 28 persons annually. However, as also outlined above, there is a great deal of uncertainty surrounding any estimate, as the data does not permit a conclusive determination on the number of fatalities due solely to drowning, even when immersion is the first harmful event. Second, the potential effectiveness of the tool measured by an occupant's ability to safely exit a vehicle is not known. Although the glass breaking tool is expected to easily shatter tempered glass when used, there are other factors that are very likely to reduce the effectiveness of the tool. High among these would be a lack of knowledge of the existence of the tool and finding it as a vehicle becomes immersed. Thus, the uncertainty in the population of vehicle occupants that require the tool and in its potential effectiveness results in a highly uncertain assessment of potential benefits. Any resulting cost effectiveness estimate would be tenuous.

### D. Response to Standard Equipment Statement

Ms. Bennett wrote that spare tires and jacks are "standard" on all vehicles. This is not correct; NHTSA has issued no standard or regulation which requires vehicles to be provisioned with a spare tire and tools for changing tires. Many vehicles do not have a spare tire and jack, but rather other means of facilitating the temporary driving of a vehicle after a tire becomes flat, such as an inflator and sealant kit or run-flat tires.<sup>11</sup>

The vehicle original equipment manufacturers (OEMs) may offer consumers the option to purchase motor vehicle equipment that provides safety benefits beyond the minimum requirements of the various FMVSS. Just as several OEMs sell optional first aid and road side assistance kits for their vehicles, they could sell an appropriate

<sup>7</sup> Per ANSI/SAE Z26.1-1996 the term "laminated glass" means two or more pieces of sheet, plate, or float glass bonded together by an intervening layer or layers of plastic material. It will crack or break under sufficient impact, but the pieces of glass tend to adhere to the plastic. If a hole is produced, the edges are likely to be less jagged than would be the case with ordinary annealed glass.

<sup>8</sup> "Type of Glass in Your Car's Windows Could Change Escape Plan"; Deanna Dewberry, News 5 NBCDFW.com; May 6, 2013 (2014 NBC Universal Media, LLC.) <http://www.nbcdfw.com/investigations/Type-of-Glass-in-Your-Cars-Windows-Could-Change-Escape-Plan-206353031.html>; last accessed May 15, 2015.

<sup>9</sup> "Enhanced Protective Glass Applications"; Enhanced Protective Glass Automotive Association; [http://www.epgaa.com/?page\\_id=1673](http://www.epgaa.com/?page_id=1673); last accessed May 15, 2015.

<sup>10</sup> Gordon G. Giesbrecht, "My Car Is Sinking: Automobile Submersion, Lessons in Vehicle Escape," *Aviation, Space, and Environmental Medicine*, Volume 81, Issue 8, August 2010.

<sup>11</sup> *Your next car may not have a spare tire*; Jim Travers; Consumer Reports.Org article; Published August 16, 2014; last accessed May 15, 2015; <http://www.consumerreports.org/cro/news/2014/08/your-next-car-may-not-have-a-spare-tire/index.htm>.

glass breaking tool with recommended procedures for usage during an emergency.

Consumers also have the option to equip their vehicles with emergency safety equipment. Items such as fire extinguishers, automotive tool kits, aftermarket vehicle jacks and lug wrenches, battery jumper cables, first aid kits, winter emergency survival kits, survival kits for desert travel, and vehicle break down kits are items available for consumers to purchase for emergency preparedness. Consumers who do purchase safety items for their vehicles may be more likely to know where these items are stored in their vehicles and how to use the equipment. All vehicle operators are strongly encouraged to understand their vehicle's capabilities and safety features, their expected driving environment, and to be prepared for possible emergency situations.

#### IV. Conclusion

NHTSA shares Ms. Bennett's desire to prevent deaths in motor vehicles. However, at this time there are several substantial obstacles to proposing an objective motor vehicle safety standard to assist vehicle occupants in evacuating a passenger vehicle that has become immersed in water.

First, as previously explained, the data available to the agency shows there is a great deal of uncertainty surrounding any estimate of occupants requiring the use of the glass breaking tool. Second, the potential effectiveness of the tool to provide drivers and occupants with a method to safely exit a vehicle during an immersion event is not known. Due to the uncertainty surrounding whether the glass breaking tool would successfully aid all occupants in all vehicles during a vehicle immersion situation, NHTSA cannot justify a mandate for such a tool.

Even without a requirement that each vehicle have a glass breaking tool, there is nothing to keep vehicle manufacturers from providing it or other means to allow vehicle evacuation during immersion. In addition, consumers can purchase their own tool and locate it in the vehicle where they would be likely to access it in an emergency. Those consumers who do this may be more aware of the existence of the tool when the need to use it arises than would occupants of a vehicle where the tool has been provided as standard equipment.

In accordance with 49 CFR part 552, NHTSA hereby denies Ms. Scheryn Bennett's January 22, 2014, petition to require every vehicle to be equipped with "an emergency window breaker."

**Authority:** 49 U.S.C. 322, 30111, 30115, 30117, and 30162; delegation of authority at 49 CFR 1.95.

Issued in Washington, DC, under authority delegated in 49 CFR 1.95.

**Raymond R. Posten,**

*Associate Administrator for Rulemaking.*

[FR Doc. 2016-28126 Filed 11-30-16; 8:45 am]

**BILLING CODE 4910-59-P**

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

#### 50 CFR Part 648

[Doc. No. 160920861-6861-01]

RIN 0648-XE900

#### Fisheries of the Northeastern United States; Atlantic Deep-Sea Red Crab Fishery; 2017-2019 Atlantic Deep-Sea Red Crab Specifications

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Proposed specifications; request for comments.

**SUMMARY:** We are proposing specifications for the 2017 Atlantic deep-sea red crab fishery, including an annual catch limit and total allowable landings limit. We are also proposing projected quotas for 2018-2019. This action is necessary to establish allowable red crab harvest levels that will prevent overfishing and allow harvesting of optimum yield. The proposed action is intended to establish the allowable 2017 harvest levels, consistent with the Atlantic Deep-Sea Red Crab Fishery Management Plan.

**DATES:** Comments must be received on or before January 3, 2017.

**ADDRESSES:** You may submit comments, identified by NOAA-NMFS-2016-0132, by any one of the following methods:

- **Electronic Submissions:** Submit all electronic public comments via the Federal e-Rulemaking portal. Go to [www.regulations.gov/](http://www.regulations.gov/) #!docketDetail;D=NOAA-NMFS-2016-0132, click the "Comment Now!" icon, complete the required fields, and enter or attach your comments.

- **Mail:** Submit written comments to John Bullard, Regional Administrator, NMFS, Greater Atlantic Regional Fisheries Office, 55 Great Republic Drive, Gloucester, MA 01930.

**Instructions:** Comments sent by any other method, to any other address or individual, or received after the end of

the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on [www.regulations.gov](http://www.regulations.gov) without change. All personal identifying information (e.g., name, address, etc.), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publically accessible. NMFS will accept anonymous comments (enter "N/A" in the required fields if you wish to remain anonymous). Attachments to electronic comments will be accepted in Microsoft Word, Excel, or Adobe PDF file formats only.

Copies of the specifications document, including the Regulatory Flexibility Act Analysis and other supporting documents for the specifications, are available from Thomas A. Nies, Executive Director, New England Fishery Management Council, 50 Water Street, Mill 2, Newburyport, MA 01950. The specifications document is also accessible via the Internet at: <https://www.greateratlantic.fisheries.noaa.gov/>.

#### FOR FURTHER INFORMATION CONTACT:

Allison Murphy, Fishery Policy Analyst, (978) 281-9122.

#### SUPPLEMENTARY INFORMATION:

##### Background

The Atlantic deep-sea red crab fishery is managed by the New England Fishery Management Council. The Atlantic Deep-Sea Red Crab Fishery Management Plan (FMP) includes a specification process that requires the Council to recommend, on a triennial basis, an acceptable biological catch (ABC), an annual catch limit (ACL), and total allowable landings (TAL). The Council's Scientific and Statistical Committee (SSC) provides a recommendation to the Council for these catch limits. The Council makes a recommendation to NMFS that cannot exceed the recommendation of its SSC.

The Council's recommendations must include supporting documentation concerning the environmental, economic, and social impacts of the recommendations. We are responsible for reviewing these recommendations to ensure that they achieve the FMP objectives and are consistent with all applicable laws, and may modify them if they do not. Following this review, we then publish proposed specifications in the **Federal Register**. After considering public comment, we will publish final specifications in the **Federal Register**.

The FMP was implemented in 2002 and was originally managed under a target total allowable catch (TAC) and

days-at-sea (DAS) system that allocated DAS equally across the small fleet of limited access permitted vessels. Amendment 3 to the FMP removed the trip limit restriction, and replaced the target TAC and DAS allocation with a catch limit structure consistent with the ACL and accountability measure requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Under Amendment 3 (76 FR 60379; September 29, 2011), the 2011–2013 red crab specifications were set with an ABC equal to the long-term average landings of the directed red crab fishery (1,775 metric tons (mt)). These specifications were continued for fishing years 2014–2016 (79 FR 24356; April 30, 2014).

### Proposed Specifications

The biological and management reference points currently in the FMP are used to determine whether overfishing is occurring or if the stock is overfished. However, these reference points for red crab do not currently meet Magnuson-Stevens Act National Standard 1 criteria. As a result, there is insufficient information on the species to establish the maximum sustainable yield (MSY), optimum yield (OY), or overfishing limit (OFL). ABC is defined in terms of landings instead of total catch because there is insufficient information to estimate dead discards of red crab.

The Council's recommendation for the 2017–2019 red crab specifications are based on the results of the most recent peer-reviewed assessment of the red crab fishery carried out by the Data Poor Stocks Working Group in 2009 and the recommendations of the Council's SSC. The recommended specifications include a status quo TAL for all three years. While an OFL has not been determined for the stock, the Council and its SSC believe continuing the current TAL will not result in overfishing and adequately accounts for scientific uncertainty.

Recent landings, landing per unit of effort, port samples, discard information, and economic data suggest there has been no change in the size of the red crab stock since Amendment 3 was implemented in 2011. On August 10, 2016, the SSC recommended the status quo ABC for fishing years 2017–2019 of 1,775 mt for the directed fishery. The Council approved the specifications on September 21, 2016, summarized in Table 1. We are proposing the Council-recommended

specifications for fishing year 2017. By providing projected quotas for 2018 and 2019, we hope to assist fishery participants in planning ahead.

TABLE 1—COUNCIL-RECOMMENDED 2017–2019 RED CRAB SPECIFICATIONS

	mt	Million lb
MSY .....	undetermined	
OFL .....	undetermined	
OY .....	undetermined	
ABC .....	1,775	3.91
ACL .....	1,775	3.91
TAL .....	1,775	3.91

At the end of each fishing year, we evaluate catch information and determine if the quota has been exceeded. If a quota is exceeded, the regulations at 50 CFR 262(b) require a pound-for-pound reduction in a subsequent fishing year, through notification consistent with the Administrative Procedure Act. We would publish a notice in the **Federal Register** of any revisions to these proposed specifications if an overage occurs. We expect, based on the performance of the red crab fishery over time, that such adjustments would be unlikely. However, we will provide notice of the 2018 and 2019 quotas prior to the start of each respective fishing year.

### Classification

Pursuant to section 304(b)(1)(A) of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), the NMFS Assistant Administrator has determined that this proposed rule is consistent with the Atlantic Deep-Sea Red Crab FMP, other provisions of the Magnuson-Stevens Act, and other applicable law, subject to further consideration after public comment.

These proposed specifications are exempt from review under Executive Order 12866.

The Chief Counsel for Regulation, Department of Commerce, certified to the Chief Counsel for Advocacy of the Small Business Administration (SBA) that this proposed rule, if adopted, would not have a significant economic impact on a substantial number of small entities. The Council prepared an analysis of the potential economic impacts of this action, which is included in the Council's document for

this action (see **ADDRESSES** to obtain a copy of the supplemental information report) and supplemented by information contained in the preamble of this proposed rule. For RFA purposes only, NMFS has established a small business size standard for businesses, including their affiliates, whose primary industry in commercial fishing (see 50 CFR 200.0). A business primarily engaged in commercial fishing (NAICS code 11411) is classified as a small business if it is independently owned and operated, is not dominant in its field of operation (including its affiliates), and has combined annual receipts not in excess of \$11 million for all its affiliated operations worldwide. Using this definition, there are two distinct ownership entities and four fishing vessels based on available permit data that are directly regulated by this action. As there are only two business entities, the degree of ownership is not known. A review of revenue data from 2013–2015 indicates that the total value of landings of red crab and other species over the last three years averaged \$3.69 million, so it is safe to assume that all business entities in the harvesting sector can be categorized as small businesses for purpose of the RFA.

There is no reason to believe small entities would be substantially affected by the proposed action. The proposed action would affect all business entities and the four vessels that participate in the directed red crab fishery, but it is not expected to have any impact on the gross or average revenues for the fishery because it does not change the quota. In addition, this quota is substantially higher than landings in recent years (fishing years 2013 through 2015 landings averaged 2.692 million lb). As a result, the proposed action is not expected to constrain landings markets for red crab substantially and is not expected to have a significant economic impact on a substantial number of small entities.

As a result, an initial regulatory flexibility analysis is not required and none has been prepared.

**Authority:** 16 U.S.C. 1801 *et seq.*

Dated: November 28, 2016.

**Samuel D. Rauch III,**  
Deputy Assistant Administrator for  
Regulatory Programs, National Marine  
Fisheries Service.

[FR Doc. 2016–28854 Filed 11–30–16; 8:45 am]

**BILLING CODE 3510–22–P**

# Notices

Federal Register

Vol. 81, No. 231

Thursday, December 1, 2016

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.

## DEPARTMENT OF AGRICULTURE

### Forest Service

#### Helena-Lewis and Clark National Forest, Montana; Helena-Lewis and Clark National Forest Plan Revision

**AGENCY:** Forest Service, USDA.

**ACTION:** Notice of intent to prepare an environmental impact statement.

**SUMMARY:** As directed by the National Forest Management Act, the U. S. Department of Agriculture, Forest Service, is preparing the Helena-Lewis and Clark National Forest's revised land management plan (forest plan). The Forest Service will prepare an environmental impact statement (EIS) for its revised forest plan.

This notice briefly describes the proposed action based on the need to change the existing plans, the nature of the decision to be made, and information concerning public participation. This notice also provides estimated dates for filing the EIS, the name and address of the responsible agency officials, and the individuals who can provide additional information. Finally, this notice identifies the applicable planning rule that will be used for completing the plan revision.

The revised Helena-Lewis and Clark Forest Plan will supersede the existing Helena National Forest and Lewis and Clark National Forest plans that were approved by the Regional Forester in 1986. The existing forest plans will remain in effect until the revised forest plan takes effect.

In response to this notice, we are asking for comments on the proposed action so we may refine it and identify possible alternatives.

**DATES:** Comments concerning the scope of the analysis must be received by March 30, 2017. The draft environmental impact statement is expected November 2017 and the final

environmental impact statement is expected August 2018.

**ADDRESSES:** Comments may be sent via email to <https://cara.ecosystem-management.org/Public/CommentInput?Project=44589>, or via facsimile to 406-449-5436. Written comments may be mailed or delivered to the Helena-Lewis and Clark National Forest Supervisor's Office, Attn: Forest Plan Revision, 2880 Skyway Dr., Helena, Montana 59602.

**FOR FURTHER INFORMATION CONTACT:** Deb Entwistle, Acting Revision Team Leader, Helena-Lewis and Clark National Forest, 2880 Skyway Dr., Helena, Montana 59602, (406) 449-5201.

Individuals who use telecommunication devices for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 between 8 a.m. and 8 p.m., Eastern Time, Monday through Friday.

#### SUPPLEMENTARY INFORMATION:

##### Purpose and Need for Action

The purpose of the Helena-Lewis and Clark National Forest Plan Revision is to have an integrated set of plan direction to provide for social, economic, and ecological sustainability and multiple uses of the Helena-Lewis and Clark lands and resources. The plan sets forth the overall context for informed decision making by evaluating and integrating social, economic, and ecological considerations relevant to management of the forest.

The need for the proposed action is due to the significant changes that have occurred in conditions and demands since the Helena National Forest and the Lewis and Clark National Forest plans were signed in 1986. In addition, the Helena National Forest and the Lewis and Clark National Forest were recently administratively combined. The consolidation of the two forests was approved by the Under Secretary for Natural Resources and the Environment on December 11, 2015.

Several areas where changes are needed in the Helena-Lewis and Clark National Forest Plan were brought to the forefront by the requirements of the 2012 Planning Rule for the National Forest System; findings from the development of the Assessment of the Helena-Lewis and Clark National Forest (a precursor document in the planning process that identified and evaluated

the existing condition across the forest landscape); changes in conditions and demands since the 1986 forest plans; and public concerns to date.

The 2012 Planning Rule, which became effective May 9, 2012, requires inclusion of plan components, including standards or guidelines, that address social and economic sustainability, ecosystem services, and multiple uses integrated with the plan components for ecological sustainability and species diversity. Social and economic management direction is needed to provide people and communities with a range of social and economic benefits for present and future generations. As an example, since approval of the Helena National Forest Plan in 1986 and the Lewis and Clark National Forest Plan in 1986, the role of timber harvest in meeting ecosystem management and social and economic objectives has changed. The 2012 Planning Rule requires forests to undertake a process to identify lands within the plan area for timber production suitability, and from this process, the Helena-Lewis and Clark National Forest will develop plan components for lands suitable for timber production and for lands where timber harvest is appropriate for purposes other than timber production. To meet the Planning Rule's requirement to provide for ecological sustainability, management direction is needed that addresses ecosystem diversity (including key ecosystem characteristics and their integrity), in light of changes in climate, fuels, vegetation management strategies, and future environmental conditions. Revised plan components are needed that focus on maintaining or restoring vegetation and ecosystems to provide for species diversity including threatened and endangered species, species of conservation concern, and species of public interest. Additionally, comprehensive management direction is needed to address suitability of certain areas for particular uses, address access and sustainable recreation, provide for the management of existing and anticipated uses, as well as protect resources. During the plan revision process, the 2012 Planning Rule requires the Forest Service to undertake processes to identify and evaluate lands that may be suitable for inclusion in the National Wilderness Preservation



System and identify eligible rivers for inclusion into the National Wild and Scenic Rivers System.

Under the Endangered Species Act of 1973, federal agencies are directed to use their authorities to seek to conserve endangered and threatened species. The Canada lynx was listed as a threatened species in 2000. Since that time, the Helena and the Lewis and Clark National Forest plans have been amended with the Northern Rockies Lynx Management Direction (USDA FS 2007), the USFWS designated and updated Canada lynx critical habitat (USDI FWS 2009, 2014), and the Lynx Conservation and Assessment Strategy has been updated (Lynx Biology Team 2013). Thus, the Forest Plan needs to integrate recent and relevant information for Canada lynx to its plan.

In 2013, the U.S. Fish and Wildlife Service announced the availability of a draft Grizzly Bear Conservation Strategy for the Northern Continental Divide Ecosystem population for public review and input. When finalized, the Grizzly Bear Conservation Strategy will become the post-delisting management plan for the Northern Continental Divide Ecosystem grizzly bear population and its habitat. By providing relevant direction from the Northern Continental Divide Ecosystem Grizzly Bear Conservation Strategy into the forest plans, the Forest Service will be able to demonstrate to the U.S. Fish and Wildlife Service that adequate regulatory mechanisms exist on national forests within the Northern Continental Divide Ecosystem to support a delisted grizzly bear population.

Finally, public participation through scoping may identify other issues or concerns that will be considered during the plan revision.

### Proposed Action

The Forest Service is preparing the Helena-Lewis and Clark National Forest revised land management plan (forest plan). The full proposed action for the revised forest plan includes forestwide and geographic area desired conditions, goals, objectives, standards, guidelines, and the suitability of lands for specific multiple uses, and includes lands that could be recommended to Congress for inclusion into the National Wilderness Preservation System and the identification of rivers eligible for inclusion into the National Wild and Scenic Rivers System. The proposed action includes a description of the plan area's distinctive roles and contributions within the broader landscape, the identification of priority restoration watersheds, and suitability of national forest lands to support a

variety of proposed and possible actions that may occur on the plan area over the life of the plan. The proposed action also identifies a monitoring program. The proposed action and appendices can be found on the Helena-Lewis and Clark National Forest Revision Web site ([www.fs.usda.gov/goto/hlc/forestplanrevision](http://www.fs.usda.gov/goto/hlc/forestplanrevision)).

### Responsible Official

The responsible official who will approve the Record of Decision for the Helena-Lewis and Clark National Forest revised forest plan is William Avey, Forest Supervisor for the Helena-Lewis and Clark National Forest, 2880 Skyway Dr., Helena, MT 59602, (406) 449-5201.

### Nature of Decision To Be Made

For the Helena-Lewis and Clark National Forest plan revision, the responsible official will decide whether the required plan components (desired conditions, goals, objectives, standards, guidelines) are sufficient to promote the ecological integrity and sustainability of the Helena-Lewis and Clark National Forest's ecosystems, watersheds, and diverse plant and animal communities. In addition, the responsible official will decide if the plan provides sufficient management guidance to contribute to social and economic sustainability, to provide people and communities with ecosystem services and multiple uses including a range of social, economic, and ecological benefits for the present and into the future. Standards, guidelines, and other direction related to conservation of threatened and endangered species will be evaluated for the Helena-Lewis and Clark National Forest in the EIS.

This proposed action is programmatic in nature and guides future implementation of site-specific projects. Additional NEPA compliance would be required for site-specific projects as part of a two-stage decision making process (Council of Environmental Quality regulations for implementing NEPA; 40 CFR 1508.23, 42 U.S.C. 4322(2)(C)), 36 CFR 219.7(f)).

### Scoping Process

This notice of intent initiates the scoping process, which guides the development of the environmental impact statement. We are seeking your input to continue to develop the Helena-Lewis and Clark National Forest revised plan.

Community meetings will be held to provide additional information and address questions related to the revision proposed action. Dates and locations are as follows:

- January 23, Lincoln Community Center, 5-7 p.m.
- January 24, Helena Radisson Colonial Hotel, 4-7 p.m.
- January 25, Townsend Library, 5-7 p.m.
- January 26, White Sulphur Springs High School Library, 5-7 p.m.
- January 30, Harlowton Library, 11 a.m.-1 p.m.
- January 30, Stanford City Hall, 5-7 p.m.
- January 31, Great Falls Civic Center, 4-7 p.m.
- February 1, Browning Holiday Inn, 5-7 p.m.
- February 2, Choteau Stage Stop Inn, 5-7 p.m.

Any changes to the meeting schedule will be communicated on the Helena-Lewis and Clark National Forest Plan revision Web page at [www.fs.usda.gov/goto/hlc/forestplanrevision](http://www.fs.usda.gov/goto/hlc/forestplanrevision).

It is important that reviewers provide their comments at such times and in such manner that they are useful to the agency's preparation of the environmental impact statement. Therefore, comments should be provided prior to the close of the comment period and should clearly articulate the reviewer's concerns and contentions. Further instructions for providing comments that will assist the planning team in reviewing comments can be found at [www.fs.usda.gov/goto/hlc/forestplanrevision](http://www.fs.usda.gov/goto/hlc/forestplanrevision).

Only those individuals and entities who have submitted substantive formal comments related to the Helena-Lewis and Clark NF plan revision during the opportunities provided for public comment during the planning process will be eligible to file an objection (36 Code of Federal Regulations (CFR) 219.53(a)). The decision to approve the revised forest plan for the Helena-Lewis and Clark National Forest will be subject to the objection process identified in 36 CFR part 219 Subpart B (219.50 to 219.62).

Comments received in response to this solicitation, including names and addresses of those who comment, will be part of the public record for this proposed action. Comments submitted anonymously will be accepted and considered, however, anonymous comments will not provide the Agency with the ability to provide the respondent with subsequent environmental documents.

Dated: November 23, 2016.

**William Avey,**  
Forest Supervisor, Helena-Lewis and Clark National Forest.

[FR Doc. 2016-28838 Filed 11-30-16; 8:45 am]

**BILLING CODE 3411-15-P**

**COMMISSION ON CIVIL RIGHTS****Notice of Public Meeting of the Wisconsin Advisory Committee for a Meeting To Begin Discussion of a Draft Report Resulting From the Committee's Study of Hate Crime in the State**

**AGENCY:** U.S. Commission on Civil Rights.

**ACTION:** Announcement of meeting.

**SUMMARY:** Notice is hereby given, pursuant to the provisions of the rules and regulations of the U.S. Commission on Civil Rights (Commission) and the Federal Advisory Committee Act that the Wisconsin Advisory Committee (Committee) will hold a meeting on Friday, January 13, 2017, at 2:00 p.m. CST for the purpose of discussing testimony received regarding hate crime in the state, in preparation to issue a civil rights report to the Commission on the topic.

**DATES:** The meeting will be held on Friday, January 13, 2017, at 2:00 p.m. CST.

**ADDRESSES:** Public Call Information: Dial: 888-778-8913, Conference ID: 2637349.

**FOR FURTHER INFORMATION CONTACT:** Melissa Wojnaroski, DFO, at [mwojnaroski@usccr.gov](mailto:mwojnaroski@usccr.gov) or 312-353-8311.

**SUPPLEMENTARY INFORMATION:** Members of the public can listen to the discussion. This meeting is available to the public through the following toll-free call-in number: 888-778-8913, conference ID: 2637349. Any interested member of the public may call this number and listen to the meeting. An open comment period will be provided to allow members of the public to make a statement as time allows. The conference call operator will ask callers to identify themselves, the organization they are affiliated with (if any), and an email address prior to placing callers into the conference room. Callers can expect to incur regular charges for calls they initiate over wireless lines, according to their wireless plan. The Commission will not refund any incurred charges. Callers will incur no charge for calls they initiate over land-line connections to the toll-free telephone number. Persons with hearing impairments may also follow the proceedings by first calling the Federal Relay Service at 1-800-977-8339 and providing the Service with the conference call number and conference ID number.

Members of the public are also entitled to submit written comments;

the comments must be received in the regional office within 30 days following the meeting. Written comments may be mailed to the Midwestern Regional Office, U.S. Commission on Civil Rights, 55 W. Monroe St., Suite 410, Chicago, IL 60615. They may also be faxed to the Commission at (312) 353-8324, or emailed to Carolyn Allen at [callen@usccr.gov](mailto:callen@usccr.gov). Persons who desire additional information may contact the Midwestern Regional Office at (312) 353-8311.

Records generated from this meeting may be inspected and reproduced at the Midwestern Regional Office, as they become available, both before and after the meeting. Records of the meeting will be available via [www.facadatabase.gov](http://www.facadatabase.gov) under the Commission on Civil Rights, Wisconsin Advisory Committee link (<http://www.facadatabase.gov/committee/meetings.aspx?cid=282>). Persons interested in the work of this Committee are directed to the Commission's Web site, <http://www.usccr.gov>, or may contact the Midwestern Regional Office at the above email or street address.

**Agenda**

Welcome and Introductions  
Discussion of civil rights report: Hate Crime in Wisconsin  
Public Comment  
Future Plans and Actions  
Adjournment

Dated: November 28, 2016.

**David Mussatt,**  
*Supervisory Chief, Regional Programs Unit.*  
[FR Doc. 2016-28862 Filed 11-30-16; 8:45 am]

**BILLING CODE P****COMMISSION ON CIVIL RIGHTS****Notice of Public Meeting of the Illinois Advisory Committee for a Meeting To Discuss Preparations for a Public Hearing on Civil Rights and Voter Participation in the State**

**AGENCY:** U.S. Commission on Civil Rights.

**ACTION:** Announcement of meeting.

**SUMMARY:** Notice is hereby given, pursuant to the provisions of the rules and regulations of the U.S. Commission on Civil Rights (Commission) and the Federal Advisory Committee Act that the Illinois Advisory Committee (Committee) will hold a meeting on Tuesday, December 13, 2016, at 12:00pm CST for the purpose of discussing preparations to host a public hearing on civil rights and voter participation in the state.

**DATES:** The meeting will be held on Tuesday, December 13, 2016, at 12:00 p.m. CST. Public Call Information: Dial: 888-352-6798, Conference ID: 9169077.

**FOR FURTHER INFORMATION CONTACT:** Melissa Wojnaroski, DFO, at [mwojnaroski@usccr.gov](mailto:mwojnaroski@usccr.gov) or 312-353-8311.

**SUPPLEMENTARY INFORMATION:** Members of the public can listen to the discussion. This meeting is available to the public through the following toll-free call-in number: 888-352-6798, conference ID: 9169077. Any interested member of the public may call this number and listen to the meeting. An open comment period will be provided to allow members of the public to make a statement as time allows. The conference call operator will ask callers to identify themselves, the organization they are affiliated with (if any), and an email address prior to placing callers into the conference room. Callers can expect to incur regular charges for calls they initiate over wireless lines, according to their wireless plan. The Commission will not refund any incurred charges. Callers will incur no charge for calls they initiate over land-line connections to the toll-free telephone number. Persons with hearing impairments may also follow the proceedings by first calling the Federal Relay Service at 1-800-977-8339 and providing the Service with the conference call number and conference ID number.

Members of the public are also entitled to submit written comments; the comments must be received in the regional office within 30 days following the meeting. Written comments may be mailed to the Midwestern Regional Office, U.S. Commission on Civil Rights, 55 W. Monroe St., Suite 410, Chicago, IL 60615. They may also be faxed to the Commission at (312) 353-8324, or emailed to Carolyn Allen at [callen@usccr.gov](mailto:callen@usccr.gov). Persons who desire additional information may contact the Midwestern Regional Office at (312) 353-8311.

Records generated from this meeting may be inspected and reproduced at the Midwestern Regional Office, as they become available, both before and after the meeting. Records of the meeting will be available via [www.facadatabase.gov](http://www.facadatabase.gov) under the Commission on Civil Rights, Illinois Advisory Committee link (<http://www.facadatabase.gov/committee/meetings.aspx?cid=246>). Select "meeting details" and then "documents" to download. Persons interested in the work of this Committee are directed to the Commission's Web site, <http://www.usccr.gov>, or may

contact the Midwestern Regional Office at the above email or street address.

### Agenda

Welcome and Introductions  
Discussion of Project Preparation:  
Voting Rights in Illinois  
Public Comment  
Future Plans and Actions  
Adjournment

Dated: November 28, 2016.

**David Mussatt,**

*Supervisory Chief, Regional Programs Unit.*

[FR Doc. 2016-28861 Filed 11-30-16; 8:45 am]

**BILLING CODE 6335-01-P**

## DEPARTMENT OF COMMERCE

### Census Bureau

#### 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:* U.S. Census Bureau.

*Title:* 2017 Census Test.

*OMB Control Number:* 0607-XXXX.

*Form Number(s):*

#### Questionnaire

DG-1D

DG-1D(E/S)

#### Questionnaire Cover Letters

DG-16(L1)

DG-16(L1) (E/S)

DG-16(L2)

DG-16(L2) (E/S)

DG-16(L3)

DG-16(L3) (E/S)

DG-16(L4)

DG-16(L4) (E/S)

DG-17(L1)

DG-17(L1) (E/S)

### Postcards

DG-9C

DG-9C(E/S)

DG-9P

DG-9P(E/S)

DG-9

DG-9(E/S)

### Information Insert

DG-17I(E/S)

DG-17(CQA)

### Envelopes

DG-5(E/S)

DG-6A (1) (IN)(E/S)

DG-6A(IN)(E/S)

DG-6B(IN)(E/S)

DG-8A(E/S)

*Type of Request:* New Collection.

*Number of Respondents:* 43,500.

*Average Hours per Response:* 9.5 minutes.

*Burden Hours:* 6,875 hours.

### ESTIMATED BURDEN HOURS

Type of respondent/operation	Estimated number of responding housing units	Estimated time per response	Estimated total annual burden hours
Self-Response .....	36,000	10 minutes .....	6,000
Content Reinterview .....	7,500	7 minutes .....	875
Totals .....	43,500	.....	6,875

#### Needs and Uses:

During the years preceding the 2020 Census, the Census Bureau is pursuing its commitment to reducing the cost of conducting the census while maintaining the quality of the results. Testing of the feasibility of collecting tribal enrollment information is the primary objective of this test. A sample of 80,000 households will be drawn for a self-response-only operation, oversampled in areas with relatively higher concentrations of people identifying as American Indian or Alaska Native, as indicated through American Community Survey data.

These households will be mailed census questionnaires and other materials that provide details about the available modes of response, including Internet. Census Questionnaire Assistance (CQA) will offer the option for completing the questionnaire on the telephone, as well as language assistance with completing the questionnaire and Interactive Voice Recognition to answer respondent questions and route calls appropriately.

Self-response to the test can occur through Internet, paper questionnaire or

telephone modes. There will be no follow-up field operation to obtain response. However, there will be a sample of 15,000 housing units selected for reinterview to check the quality of responses to the tribal enrollment question. Responses received to both the self-enumeration and the reinterview will be used for the test results and evaluation.

A second objective is continued testing of the systems designed for Internet self-response and the integration of the systems associated with self-response. With the development of these systems, the Census Bureau has made the transition from in-house test systems created in prior years to the full systems designed under the Census Enterprise Data Collection and Processing (CEDCaP) contract. It is crucial to test and prove in the new systems in pre-decennial tests, starting with this 2017 Census Test. Internet Self-Response has been prioritized as the system to complete in time for the 2017 Census Test. The Internet Self-Response application will have a Spanish language option. Other key systems that will be tested are the

CQA and the Operational Control System that is integrated with these two response modes. We will also test the ability to provision and run in a Cloud environment.

This test was described in the 60-day **Federal Register** Notice (FRN) published August 8, 2016, 81 FR 52398. Based on the proposed funding levels for FY 2017, the Census Bureau subsequently reprioritized the test activities for 2017 to include only one of the two components described in the August FRN. The current test scope includes only that which is necessary to answer our most immediate design questions. The scope also includes enabling our new Ceca systems to test systems integration for key systems. Further systems will be developed and tested through the integration stages in the planned 2018 End-to-End Census Test, in particular for the Nonresponse Followup and Update Enumerate operations. The 2018 End-to-End Census Test will be the last opportunity to test all systems in an integrated environment before full implementation in the 2020 Census.

*Affected Public:* Individuals or Households.

*Frequency:* One time.

*Respondent's Obligation:* Mandatory.

*Legal Authority:* Title 13, United States Code, Sections 141 and 193.

*This information collection request may be viewed at [www.reginfo.gov](http://www.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.

**Sheleen Dumas,**

*PRA Departmental Lead, Office of the Chief Information Officer.*

[FR Doc. 2016-28853 Filed 11-30-16; 8:45 am]

**BILLING CODE 3510-07-P**

## DEPARTMENT OF COMMERCE

### 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:* U.S. Census Bureau.

*Title:* 2017 Census Test.

*OMB Control Number:* 0607-XXXX.

*Form Number(s):*

### Questionnaire

DG-1D

DG-1D(E/S)

### Questionnaire Cover Letters

DG-16(L1)

DG-16(L1) (E/S)

DG-16(L2)

DG-16(L2) (E/S)

DG-16(L3)

DG-16(L3) (E/S)

DG-16(L4)

DG-16(L4) (E/S)

DG-17(L1)

DG-17(L1) (E/S)

### Postcards

DG-9C

DG-9C(E/S)

DG-9P

DG-9P(E/S)

DG-9

DG-9(E/S)

### Information Insert

DG-17I(E/S)

DG-17(CQA)

### Envelopes

DG-5(E/S)

DG-6A (1) (IN)(E/S)

DG-6A(IN)(E/S)

DG-6B(IN)(E/S)

DG-8A(E/S)

*Type of Request:* New Collection.

*Number of Respondents:* 43,500.

*Average Hours per Response:* 9.5 minutes.

*Burden Hours:* 6,875 hours

### ESTIMATED BURDEN HOURS

Type of respondent/operation	Estimated number of responding housing units	Estimated time per response	Estimated total annual burden hours
Self-Response .....	36,000	10 minutes .....	6,000
Content Reinterview .....	7,500	7 minutes .....	875
Totals .....	43,500	.....	6,875

### Needs and Uses:

During the years preceding the 2020 Census, the Census Bureau is pursuing its commitment to reducing the cost of conducting the census while maintaining the quality of the results. Testing of the feasibility of collecting tribal enrollment information is the primary objective of this test. A sample of 80,000 households will be drawn for a self-response-only operation, oversampled in areas with relatively higher concentrations of people identifying as American Indian or Alaska Native, as indicated through American Community Survey data.

These households will be mailed census questionnaires and other materials that provide details about the available modes of response, including Internet. Census Questionnaire Assistance (CQA) will offer the option for completing the questionnaire on the telephone, as well as language assistance with completing the questionnaire and Interactive Voice Recognition to answer respondent questions and route calls appropriately.

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time for the 2017 Census Test. The Internet Self-Response application will have a Spanish language option. Other key systems that will be tested are the CQA and the Operational Control System that is integrated with these two response modes. We will also test the ability to provision and run in a Cloud environment.

This test was described in the 60-day **Federal Register** Notice (FRN) published August 8, 2016, 81 FR 52398. Based on the proposed funding levels for FY 2017, the Census Bureau subsequently reprioritized the test activities for 2017 to include only one of the two components described in the August FRN. The current test scope includes only that which is necessary to answer our most immediate design questions. The scope also includes enabling our new Ceca systems to test systems integration for key systems. Further systems will be developed and tested through the integration stages in the planned 2018 End-to-End Census Test, in particular for the Nonresponse Followup and Update Enumerate

operations. The 2018 End-to-End Census Test will be the last opportunity to test all systems in an integrated environment before full implementation in the 2020 Census.

*Affected Public:* Individuals or Households.

*Frequency:* One time.

*Respondent's Obligation:* Mandatory.

*Legal Authority:* Title 13, United States Code, Sections 141 and 193.

*This information collection request may be viewed at [www.reginfo.gov](http://www.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.

**Sheleen Dumas,**

*PRA Departmental Lead, Office of the Chief Information Officer.*

[FR Doc. 2016-28860 Filed 11-30-16; 8:45 am]

BILLING CODE 3510-07-P

## DEPARTMENT OF COMMERCE

### Foreign-Trade Zones Board

[B-49-2016]

#### **Foreign-Trade Zone (FTZ) 279—Terrebonne Parish, Louisiana; Authorization of Production Activity; Thoma-Sea Marine Constructors, L.L.C. (Shipbuilding); Houma and Lockport, Louisiana**

On July 27, 2016, the Houma-Terrebonne Airport Commission, grantee of FTZ 279, submitted a notification of proposed production activity to the FTZ Board on behalf of Thoma-Sea Marine Constructors, L.L.C., within Subzone 279A, in Houma and Lockport, Louisiana

The notification was processed in accordance with the regulations of the FTZ Board (15 CFR part 400), including notice in the **Federal Register** inviting public comment (81 FR 50683, August 2, 2016). The FTZ Board has determined that no further review of the activity is warranted at this time. The production activity described in the notification is authorized, subject to the FTZ Act and the Board's regulations, including Section 400.14, and subject to the following conditions:

(1) Any foreign steel mill products admitted to the zone for the Thoma-Sea Marine Constructors, L.L.C., activity, including plate, angles, shapes, channels, rolled steel stock, bars, pipes and tubes, not incorporated into

merchandise otherwise classified, and which is used in manufacturing, shall be subject to full customs duties in accordance with applicable law, unless the Executive Secretary determines that the same item is not then being produced by a domestic steel mill.

(2) Thoma-Sea Marine Constructors, L.L.C., shall meet its obligation under 15 CFR 400.13(b) by annually advising the FTZ Board's Executive Secretary as to significant new contracts with appropriate information concerning foreign purchases otherwise dutiable, so that the FTZ Board may consider whether any foreign dutiable items are being imported for manufacturing in the zone primarily because of FTZ procedures and whether the FTZ Board should consider requiring customs duties to be paid on such items.

Dated: November 25, 2016.

**Elizabeth Whiteman,**

*Acting Executive Secretary.*

[FR Doc. 2016-28881 Filed 11-30-16; 8:45 am]

BILLING CODE 3510-DS-P

## DEPARTMENT OF COMMERCE

### International Trade Administration

#### **Antidumping or Countervailing Duty Order, Finding, or Suspended Investigation; Opportunity To Request Administrative Review**

**AGENCY:** Enforcement and Compliance, International Trade Administration, Department of Commerce.

**FOR FURTHER INFORMATION CONTACT:** Brenda E. Waters, Office of AD/CVD Operations, Customs Liaison Unit, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230, telephone: (202) 482-4735.

#### **Background**

Each year during the anniversary month of the publication of an antidumping or countervailing duty order, finding, or suspended investigation, an interested party, as defined in section 771(9) of the Tariff Act of 1930, as amended ("the Act"), may request, in accordance with 19 CFR 351.213, that the Department of Commerce ("the Department") conduct an administrative review of that antidumping or countervailing duty order, finding, or suspended investigation.

All deadlines for the submission of comments or actions by the Department discussed below refer to the number of

calendar days from the applicable starting date.

#### **Respondent Selection**

In the event the Department limits the number of respondents for individual examination for administrative reviews initiated pursuant to requests made for the orders identified below, the Department intends to select respondents based on U.S. Customs and Border Protection ("CBP") data for U.S. imports during the period of review. We intend to release the CBP data under Administrative Protective Order ("APO") to all parties having an APO within five days of publication of the initiation notice and to make our decision regarding respondent selection within 21 days of publication of the initiation **Federal Register** notice. Therefore, we encourage all parties interested in commenting on respondent selection to submit their APO applications on the date of publication of the initiation notice, or as soon thereafter as possible. The Department invites comments regarding the CBP data and respondent selection within five days of placement of the CBP data on the record of the review.

In the event the Department decides it is necessary to limit individual examination of respondents and conduct respondent selection under section 777A(c)(2) of the Act:

In general, the Department finds that determinations concerning whether particular companies should be "collapsed" (*i.e.*, treated as a single entity for purposes of calculating antidumping duty rates) require a substantial amount of detailed information and analysis, which often require follow-up questions and analysis. Accordingly, the Department will not conduct collapsing analyses at the respondent selection phase of this review and will not collapse companies at the respondent selection phase unless there has been a determination to collapse certain companies in a previous segment of this antidumping proceeding (*i.e.*, investigation, administrative review, new shipper review or changed circumstances review). For any company subject to this review, if the Department determined, or continued to treat, that company as collapsed with others, the Department will assume that such companies continue to operate in the same manner and will collapse them for respondent selection purposes. Otherwise, the Department will not collapse companies for purposes of respondent selection. Parties are requested to (a) identify which companies subject to review previously were collapsed, and (b)

provide a citation to the proceeding in which they were collapsed. Further, if companies are requested to complete the Quantity and Value Questionnaire for purposes of respondent selection, in general each company must report volume and value data separately for itself. Parties should not include data for any other party, even if they believe they should be treated as a single entity with that other party. If a company was collapsed with another company or companies in the most recently completed segment of this proceeding where the Department considered collapsing that entity, complete quantity and value data for that collapsed entity must be submitted.

#### Deadline for Withdrawal of Request for Administrative Review

Pursuant to 19 CFR 351.213(d)(1), a party that requests a review may withdraw that request within 90 days of the date of publication of the notice of initiation of the requested review. The regulation provides that the Department may extend this time if it is reasonable to do so. In order to provide parties additional certainty with respect to when the Department will exercise its discretion to extend this 90-day deadline, interested parties are advised that, with regard to reviews requested on the basis of anniversary months on or after December 2016, the Department does not intend to extend the 90-day deadline unless the requestor

demonstrates that an extraordinary circumstance prevented it from submitting a timely withdrawal request. Determinations by the Department to extend the 90-day deadline will be made on a case-by-case basis.

The Department is providing this notice on its Web site, as well as in its “Opportunity to Request Administrative Review” notices, so that interested parties will be aware of the manner in which the Department intends to exercise its discretion in the future.

*Opportunity To Request a Review:* Not later than the last day of December 2016,<sup>1</sup> interested parties may request administrative review of the following orders, findings, or suspended investigations, with anniversary dates in December for the following periods:

	Period of review
<b>Antidumping Duty Proceedings</b>	
Brazil: Carbon Steel Butt-Weld Pipe Fittings A-351-602 .....	12/1/15–11/30/16
Chile: Certain Preserved Mushrooms A-337-804 .....	12/1/15–11/30/16
Germany: Non-Oriented Electrical Steel A-428-843 .....	12/1/15–11/30/16
India:	
Carbazole Violet Pigment 23 A-533-838 .....	12/1/15–11/30/16
Certain Hot-Rolled Carbon Steel Flat Products A-533-820 .....	12/1/15–11/30/16
Commodity Matchbooks A-533-848 .....	12/1/15–11/30/16
Stainless Steel Wire Rod A-533-808 .....	12/1/15–11/30/16
Indonesia: Certain Hot-Rolled Carbon Steel Flat Products A-560-812 .....	12/1/15–11/30/16
Japan:	
Prestressed Concrete Steel Wire Strand A-588-068 .....	12/1/15–11/30/16
Non-Oriented Electrical Steel A-588-872 .....	12/1/15–11/30/16
Welded Large Diameter Line Pipe A-588-857 .....	12/1/15–11/30/16
Republic of Korea:	
Non-Oriented Electrical Steel A-580-872 .....	12/1/15–11/30/16
Welded Astm A-312 Stainless Steel Pipe A-580-810 .....	12/1/15–11/30/16
Welded Line Pipe A-580-876 .....	5/22/15–11/30/16
Russia: Certain Hot-Rolled Carbon Steel Flat Products A-821-809 .....	12/1/15–11/30/16
Socialist Republic of Vietnam: Uncovered Innerspring Units A-552-803 .....	12/1/15–11/30/16
South Africa: Uncovered Innerspring Units A-791-821 .....	12/1/15–11/30/16
Sweden: Non-Oriented Electrical Steel A-401-809 .....	12/1/15–11/30/16
Taiwan:	
Carbon Steel Butt-Weld Pipe Fittings A-583-605 .....	12/1/15–11/30/16
Non-Oriented Electrical Steel A-583-851 .....	12/1/15–11/30/16
Steel Wire Garment Hangers A-583-849 .....	12/1/15–11/30/16
Welded Astm A-312 Stainless Steel Pipe A-583-815 .....	12/1/15–11/30/16
The People's Republic of China:	
Carbazole Violet Pigment 23 A-570-892 .....	12/1/15–11/30/16
Cased Pencils A-570-827 .....	12/1/15–11/30/16
Crystalline Silicon Photovoltaic Cells, Whether or Not Assembled Into Modules A-570-979 .....	12/1/15–11/30/16
Hand Trucks A-570-891 .....	12/1/15–11/30/16
Honey A-570-863 .....	12/1/15–11/30/16
Malleable Cast Iron Pipe Fittings A-570-881 .....	12/1/15–11/30/16
Melamine A-570-020 .....	6/18/15–11/30/16
Multilayered Wood Flooring A-570-970 .....	12/1/15–11/30/16
Non-Oriented Electric Steel A-570-996 .....	12/1/15–11/30/16
Porcelain-on-Steel Cooking Ware A-570-506 .....	12/1/15–11/30/16
Silicomanganese A-570-828 .....	12/1/15–11/30/16
Turkey: Welded Line Pipe A-489-822 .....	5/22/15–11/30/16
<b>Countervailing Duty Proceedings</b>	
Canada: Supercalendered Paper C-122-854 .....	8/3/15–12/31/15
India:	
Carbazole Violet Pigment 23 C-533-839 .....	1/1/15–12/31/15
Certain Hot-Rolled Carbon Steel Flat Products C-533-821 .....	1/1/15–12/31/15
Commodity Matchbooks C-533-849 .....	1/1/15–12/31/15

<sup>1</sup> Or the next business day, if the deadline falls on a weekend, federal holiday or any other day when the Department is closed.

	Period of review
Indonesia: Certain Hot-Rolled Carbon Steel Flat Products C-560-813 .....	1/1/15-12/31/15
Taiwan: Non-Oriented Electrical Steel C-583-852 .....	1/1/15-12/31/15
Thailand: Certain Hot-Rolled Carbon Steel Flat Products C-549-818 .....	1/1/15-12/31/15
The People's Republic of China:	
Crystalline Silicon Photovoltaic Cells, Whether or Not Assembled Into Modules C-570-980 .....	1/1/15-12/31/15
Melamine C-570-021 .....	4/20/15-12/31/15
Multilayered Wood Flooring C-570-971 .....	1/1/15-12/31/15
Non-Oriented Electrical Steel C-570-997 .....	1/1/15-12/31/15
Seamless Carbon and Alloy Steel Standard, Line, and Pressure Pipe C-570-957 .....	1/1/15-12/31/15
Turkey: Welded Line Pipe C-489-823 .....	3/20/15-12/31/15
<b>Suspension Agreements</b>	
Mexico:	
Sugar A-201-845 .....	12/1/15-11/30/16
Sugar <sup>2</sup> C-201-846 .....	1/1/16-12/31/16

In accordance with 19 CFR 351.213(b), an interested party as defined by section 771(9) of the Act may request in writing that the Secretary conduct an administrative review. For both antidumping and countervailing duty reviews, the interested party must specify the individual producers or exporters covered by an antidumping finding or an antidumping or countervailing duty order or suspension agreement for which it is requesting a review. In addition, a domestic interested party or an interested party described in section 771(9)(B) of the Act must state why it desires the Secretary to review those particular producers or exporters. If the interested party intends for the Secretary to review sales of merchandise by an exporter (or a producer if that producer also exports merchandise from other suppliers) which was produced in more than one country of origin and each country of origin is subject to a separate order, then the interested party must state specifically, on an order-by-order basis, which exporter(s) the request is intended to cover.

Note that, for any party the Department was unable to locate in prior segments, the Department will not accept a request for an administrative review of that party absent new information as to the party's location. Moreover, if the interested party who files a request for review is unable to locate the producer or exporter for

which it requested the review, the interested party must provide an explanation of the attempts it made to locate the producer or exporter at the same time it files its request for review, in order for the Secretary to determine if the interested party's attempts were reasonable, pursuant to 19 CFR 351.303(f)(3)(ii).

As explained in *Antidumping and Countervailing Duty Proceedings: Assessment of Antidumping Duties*, 68 FR 23954 (May 6, 2003), and *Non-Market Economy Antidumping Proceedings: Assessment of Antidumping Duties*, 76 FR 65694 (October 24, 2011) the Department clarified its practice with respect to the collection of final antidumping duties on imports of merchandise where intermediate firms are involved. The public should be aware of this clarification in determining whether to request an administrative review of merchandise subject to antidumping findings and orders.<sup>3</sup>

Further, as explained in *Antidumping Proceedings: Announcement of Change in Department Practice for Respondent Selection in Antidumping Duty Proceedings and Conditional Review of the Nonmarket Economy Entity in NME Antidumping Duty Proceedings*, 78 FR 65963 (November 4, 2013), the Department clarified its practice with regard to the conditional review of the non-market economy (NME) entity in administrative reviews of antidumping duty orders. The Department will no longer consider the NME entity as an exporter conditionally subject to administrative reviews. Accordingly, the NME entity will not be under review unless the Department specifically receives a request for, or self-initiates, a review of the NME entity.<sup>4</sup> In

administrative reviews of antidumping duty orders on merchandise from NME countries where a review of the NME entity has not been initiated, but where an individual exporter for which a review was initiated does not qualify for a separate rate, the Department will issue a final decision indicating that the company in question is part of the NME entity. However, in that situation, because no review of the NME entity was conducted, the NME entity's entries were not subject to the review and the rate for the NME entity is not subject to change as a result of that review (although the rate for the individual exporter may change as a function of the finding that the exporter is part of the NME entity).

Following initiation of an antidumping administrative review when there is no review requested of the NME entity, the Department will instruct CBP to liquidate entries for all exporters not named in the initiation notice, including those that were suspended at the NME entity rate.

All requests must be filed electronically in Enforcement and Compliance's Antidumping and Countervailing Duty Centralized Electronic Service System ("ACCESS") on Enforcement and Compliance's ACCESS Web site at <http://access.trade.gov>.<sup>5</sup> Further, in accordance with 19 CFR 351.303(f)(1)(i), a copy of each request must be served on the petitioner and each exporter or producer specified in the request.

The Department will publish in the **Federal Register** a notice of "Initiation of Administrative Review of Antidumping or Countervailing Duty Order, Finding, or Suspended Investigation" for requests received by

the extent possible, include the names of such exporters in their request.

<sup>5</sup> See *Antidumping and Countervailing Duty Proceedings: Electronic Filing Procedures; Administrative Protective Order Procedures*, 76 FR 39263 (July 6, 2011).

<sup>2</sup> In the ongoing administrative review of this suspension agreement, the Department exercised its discretion to expand the 12/19/14-12/31/14 period of review to include calendar year 2015. Accordingly, the next period of review is calendar year 2016. The Department is extending the opportunity to request a review for this CVD suspension agreement from December 31, 2016 to January 31, 2017, in order to offer the opportunity to request a review of entries that otherwise will not have occurred until the final day for the review to be requested. The period of review will remain 01/01/16-12/31/16.

<sup>3</sup> See also the Enforcement and Compliance Web site at <http://trade.gov/enforcement/>.

<sup>4</sup> In accordance with 19 CFR 351.213(b)(1), parties should specify that they are requesting a review of entries from exporters comprising the entity, and to



the last day of December 2016. If the Department does not receive, by the last day of December 2016, a request for review of entries covered by an order, finding, or suspended investigation listed in this notice and for the period identified above, the Department will instruct CBP to assess antidumping or countervailing duties on those entries at a rate equal to the cash deposit of (or bond for) estimated antidumping or countervailing duties required on those entries at the time of entry, or withdrawal from warehouse, for consumption and to continue to collect the cash deposit previously ordered.

For the first administrative review of any order, there will be no assessment of antidumping or countervailing duties on entries of subject merchandise entered, or withdrawn from warehouse, for consumption during the relevant provisional-measures “gap” period of the order, if such a gap period is applicable to the period of review.

This notice is not required by statute but is published as a service to the international trading community.

Dated: November 28, 2016.

**Gary Taverman,**

*Associate Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations.*

[FR Doc. 2016-28857 Filed 11-30-16; 8:45 am]

**BILLING CODE 3510-DS-P**

## DEPARTMENT OF COMMERCE

### International Trade Administration

#### Initiation of Five-Year (“Sunset”) Reviews

**AGENCY:** Enforcement and Compliance, International Trade Administration, Department of Commerce.

**SUMMARY:** In accordance with section 751(c) of the Tariff Act of 1930, as amended (“the Act”), the Department of Commerce (“the Department”) is automatically initiating the five-year reviews (“Sunset Reviews”) of the antidumping and countervailing duty (“AD/CVD”) order(s) listed below. The International Trade Commission (“the Commission”) is publishing concurrently with this notice its notice of *Institution of Five-Year Review* which covers the same order(s).

**DATES:** *Effective Date:* December 1, 2016.

**FOR FURTHER INFORMATION CONTACT:** The Department official identified in the *Initiation of Review* section below at AD/CVD Operations, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230. For information from the Commission contact Mary Messer, Office of

Investigations, U.S. International Trade Commission at (202) 205-3193.

#### SUPPLEMENTARY INFORMATION:

##### Background

The Department’s procedures for the conduct of Sunset Reviews are set forth in its *Procedures for Conducting Five-Year (“Sunset”) Reviews of Antidumping and Countervailing Duty Orders*, 63 FR 13516 (March 20, 1998) and 70 FR 62061 (October 28, 2005). Guidance on methodological or analytical issues relevant to the Department’s conduct of Sunset Reviews is set forth in *Antidumping Proceedings: Calculation of the Weighted-Average Dumping Margin and Assessment Rate in Certain Antidumping Duty Proceedings; Final Modification*, 77 FR 8101 (February 14, 2012).

##### Initiation of Review

In accordance with 19 CFR 351.218(c), we are initiating Sunset Reviews of the following antidumping and countervailing duty order(s):

<u>DOC Case No.</u>	<u>ITC Case No.</u>	<u>Country</u>	<u>Product</u>	<u>Department Contact</u>
A-533-817	731-TA-817	India	Certain Cut-To-Length Carbon-Quality Steel Plate (3 <sup>rd</sup> Review)	David Goldberger (202) 482-4136
C-533-818	701-TA-391	India	Certain Cut-To-Length Carbon-Quality Steel Plate (3 <sup>rd</sup> Review)	David Goldberger (202) 482-4136
A-533-808	731-TA-638	India	Stainless Steel Wire Rod (4 <sup>th</sup> Review)	David Goldberger (202) 482-4136
A-560-805	731-TA-818	Indonesia	Certain Cut-To-Length Carbon-Quality Steel Plate (3 <sup>rd</sup> Review)	David Goldberger (202) 482-4136
C-560-806	701-TA-389	Indonesia	Certain Cut-To-Length Carbon-Quality Steel Plate (3 <sup>rd</sup> Review)	David Goldberger (202) 482-4136
A-580-836	731-TA-821	Republic of Korea	Certain Cut-To-Length Carbon-Quality Steel Plate (3 <sup>rd</sup> Review)	David Goldberger (202) 482-4136
C-580-837	701-TA-391	Republic of Korea	Certain Cut-To-Length Carbon-Quality Steel Plate (3 <sup>rd</sup> Review)	David Goldberger (202) 482-4136

### Filing Information

As a courtesy, we are making information related to sunset proceedings, including copies of the pertinent statute and Department's regulations, the Department's schedule for Sunset Reviews, a listing of past revocations and continuations, and current service lists, available to the public on the Department's Web site at the following address: "<http://enforcement.trade.gov/sunset/>." All submissions in these Sunset Reviews must be filed in accordance with the Department's regulations regarding format, translation, and service of documents. These rules, including electronic filing requirements via Enforcement and Compliance's Antidumping and Countervailing Duty Centralized Electronic Service System ("ACCESS"), can be found at 19 CFR 351.303.<sup>1</sup>

This notice serves as a reminder that any party submitting factual information in an AD/CVD proceeding must certify to the accuracy and completeness of that information.<sup>2</sup> Parties are hereby reminded that revised certification requirements are in effect for company/government officials as well as their representatives in these segments.<sup>3</sup> The formats for the revised certifications are provided at the end of the *Final Rule*. The Department intends to reject factual submissions if the submitting party does not comply with the revised certification requirements.

On April 10, 2013, the Department modified two regulations related to AD/CVD proceedings: The definition of factual information (19 CFR

351.102(b)(21)), and the time limits for the submission of factual information (19 CFR 351.301).<sup>4</sup> Parties are advised to review the final rule, available at <http://enforcement.trade.gov/frn/2013/1304frn/2013-08227.txt>, prior to submitting factual information in these segments. To the extent that other regulations govern the submission of factual information in a segment (such as 19 CFR 351.218), these time limits will continue to be applied. Parties are also advised to review the final rule concerning the extension of time limits for submissions in AD/CVD proceedings, available at <http://enforcement.trade.gov/frn/2013/1309frn/2013-22853.txt>, prior to submitting factual information in these segments.<sup>5</sup>

*Administrative Protective Order Procedures*, 76 FR 39263 (July 6, 2011).

<sup>2</sup> See section 782(b) of the Act.

<sup>3</sup> See *Certification of Factual Information To Import Administration During Antidumping and Countervailing Duty Proceedings*, 78 FR 42678 (July 17, 2013) ("Final Rule.") (amending 19 CFR 351.303(g)).

<sup>4</sup> See *Definition of Factual Information and Time Limits for Submission of Factual Information: Final Rule*, 78 FR 21246 (April 10, 2013).

<sup>5</sup> See *Extension of Time Limits*, 78 FR 57790 (September 20, 2013).

<sup>1</sup> See also *Antidumping and Countervailing Duty Proceedings: Electronic Filing Procedures*;

## Letters of Appearance and Administrative Protective Orders

Pursuant to 19 CFR 351.103(d), the Department will maintain and make available a public service list for these proceedings. Parties wishing to participate in any of these five-year reviews must file letters of appearance as discussed at 19 CFR 351.103(d)). To facilitate the timely preparation of the public service list, it is requested that those seeking recognition as interested parties to a proceeding submit an entry of appearance within 10 days of the publication of the Notice of Initiation.

Because deadlines in Sunset Reviews can be very short, we urge interested parties who want access to proprietary information under administrative protective order (“APO”) to file an APO application immediately following publication in the **Federal Register** of this notice of initiation. The Department’s regulations on submission of proprietary information and eligibility to receive access to business proprietary information under APO can be found at 19 CFR 351.304–351.306.

## Information Required From Interested Parties

Domestic interested parties, as defined in section 771(9)(C), (D), (E), (F), and (G) of the Act and 19 CFR 351.102(b), wishing to participate in a Sunset Review must respond not later than 15 days after the date of publication in the **Federal Register** of this notice of initiation by filing a notice of intent to participate. The required contents of the notice of intent to participate are set forth at 19 CFR 351.218(d)(1)(ii). In accordance with the Department’s regulations, if we do not receive a notice of intent to participate from at least one domestic interested party by the 15-day deadline, the Department will automatically revoke the order without further review.<sup>6</sup>

If we receive an order-specific notice of intent to participate from a domestic interested party, the Department’s regulations provide that *all parties* wishing to participate in a Sunset Review must file complete substantive responses not later than 30 days after the date of publication in the **Federal Register** of this notice of initiation. The required contents of a substantive response, on an order-specific basis, are set forth at 19 CFR 351.218(d)(3). Note that certain information requirements differ for respondent and domestic parties. Also, note that the Department’s information requirements are distinct from the Commission’s information

requirements. Consult the Department’s regulations for information regarding the Department’s conduct of Sunset Reviews. Consult the Department’s regulations at 19 CFR part 351 for definitions of terms and for other general information concerning antidumping and countervailing duty proceedings at the Department.

This notice of initiation is being published in accordance with section 751(c) of the Act and 19 CFR 351.218(c).

Dated: November 28, 2016.

**Erin Begnal,**

*Director, Office III, Antidumping and Countervailing Duty Operations.*

[FR Doc. 2016–28994 Filed 11–30–16; 8:45 am]

**BILLING CODE 3510–DS–P**

## DEPARTMENT OF COMMERCE

### International Trade Administration

[A–570–044]

### 1,1,1,2-Tetrafluoroethane (R-134a) From the People’s Republic of China; Amended Preliminary Affirmative Determination of Sales at Less-Than-Fair Value

**AGENCY:** Enforcement and Compliance, International Trade Administration, Commerce.

**SUMMARY:** The Department of Commerce (“the Department”) is amending the preliminary determination of the less-than-fair-value (“LTFV”) investigation of 1,1,1,2-Tetrafluoroethane (“R-134a”) from the People’s Republic of China (“PRC”) to correct significant ministerial errors with respect to our preliminary determination.

**DATES:** Effective December 1, 2016.

**FOR FURTHER INFORMATION CONTACT:** Keith Haynes or Paul Stolz, AD/CVD Operations, Office III, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482–5139 or, (202) 482–4474, respectively.

### SUPPLEMENTARY INFORMATION:

#### Background

On October 7, 2016, the Department published its *Preliminary Determination*.<sup>1</sup> On October 14, 2016, the Department disclosed to interested parties its calculations for the

<sup>1</sup> See 1,1,1,2-Tetrafluoroethane (R-134a) From the People’s Republic of China: Preliminary Determination of Sales at Less-Than-Fair Value and Affirmative Determination of Critical Circumstances, in Part, and Postponement of Final Determination, 81 FR 69786 (October 7, 2016) (“*Preliminary Determination*”).

*Preliminary Determination*. On October 19, 2016, the Department received timely filed allegations of ministerial errors in the *Preliminary Determination*.<sup>2</sup> On October 20, and October 24, 2016, the Department received timely filed reply comments.<sup>3</sup>

### Period of Investigation

The period of investigation is July 1, 2015, through December 31, 2015.

### Scope of the Investigation

The product subject to this investigation is 1,1,1,2-Tetrafluoroethane, R-134a, or its chemical equivalent, regardless of form, type, or purity level. The chemical formula for 1,1,1,2-tetrafluoroethane is CF<sub>3</sub>-CH<sub>2</sub>F, and the Chemical Abstracts Service (“CAS”) registry number is CAS 811–97–2.<sup>4</sup>

Merchandise covered by the scope of this investigation is currently classified in the Harmonized Tariff Schedule of the United States (“HTSUS”) at subheading 2903.39.2020. Although the HTSUS subheading and CAS registry number are provided for convenience and customs purposes, the written description of the scope is dispositive.

### Analysis of Significant Ministerial Error Allegation

The Department will analyze any comments received and, if appropriate, correct any significant ministerial error by amending the preliminary determination according to 19 CFR 351.224(e). A ministerial error is defined in 19 CFR 351.224(f) as “an error in addition, subtraction, or other arithmetic function, clerical error resulting from inaccurate copying, duplication, or the like, and any other similar type of unintentional error which the Secretary considers ministerial.”<sup>5</sup> A significant ministerial error is defined as an error, the correction of which, singly or in combination with other errors, would result in: (1) A change of at least five

<sup>2</sup> See the ministerial error allegations from Petitioners and Sanmei Chemical Industry Co., Ltd. (“Sanmei”), dated October 19, 2016.

<sup>3</sup> See the reply comments from Petitioners and Sanmei, dated October 20, 2016, and October 24, 2016, respectively. However, pursuant to 19 CFR 351.224(c)(3), the Department has not considered the rebuttal comments in its analysis.

<sup>4</sup> 1,1,1,2-Tetrafluoroethane is sold under a number of trade names including Klea 134a and Zephex 134a (Mexichem Fluor); Genetron 134a (Honeywell); Freon™ 134a, Suva 134a, Dymel 134a, and Dymel P134a (Chemours); Solkane 134a (Solvay); and Forane 134a (Arkema). Generically, 1,1,1,2-Tetrafluoroethane has been sold as Fluorocarbon 134a, R-134a, HFC-134a, HF A-134a, Refrigerant 134a, and UN3159.

<sup>5</sup> See Section 735(e) of the Tariff Act of 1930, as amended (the “Act”).

<sup>6</sup> See 19 CFR 351.218(d)(1)(iii).

absolute percentage points in, but not less than 25 percent of, the antidumping duty rate calculated in the original (erroneous) preliminary determination; or (2) a difference between an antidumping duty rate of zero (or *de minimis*) and an antidumping duty rate of greater than *de minimis* or vice versa.<sup>6</sup>

Pursuant to 19 CFR 351.224(e) and (g)(1), the Department is amending the *Preliminary Determination* to reflect the correction of six ministerial errors it made in the calculation of the estimated weighted-average dumping margin for Sanmei, a mandatory respondent.<sup>7</sup> These errors are significant ministerial errors within the meaning of 19 CFR 351.224(g) because Sanmei's margin increases from 137.23 percent to 232.30 percent as a result of correcting these ministerial errors, exceeding the significant threshold with a change of at least five absolute percentage points and more than 25 percent of the estimated weighted-average dumping margin.

Because Sanmei is the only mandatory respondent eligible for a separate rate, Sanmei is the only respondent for which we individually calculated an estimated weighted-

average dumping margin. For this reason, we assigned Sanmei's calculated rate to all non-examined separate rate respondents. With this amended preliminary determination, the estimated weighted-average dumping margin for each non-examined separate rate respondent is also amended to 232.30 percent.

In the *Preliminary Determination*, in order to determine the probative value of the dumping margin alleged in the petition for assigning an adverse facts available ("AFA") rate, we examined the information on the record. When we compared the highest petition dumping margin of 220.90 percent to the transaction-specific dumping margins calculated for Sanmei, we found that the highest petition dumping margin was higher than each of the transaction-specific dumping margins calculated for Sanmei. Therefore, we were unable to corroborate the highest dumping margin contained in the petition for use as AFA, which was applied to the PRC-wide entity.<sup>8</sup> Because Sanmei's amended preliminary estimated weighted-average dumping margin is now higher than the highest dumping

margin alleged in the petition, the AFA rate applied to the PRC-wide entity is also 232.30 percent.

Because we are relying on information obtained in the course of this investigation on which to base this rate, not on secondary information, it is not necessary to corroborate this calculated rate as AFA.<sup>9</sup>

#### Amended Cash Deposits and Suspension of Liquidation

The collection of cash deposits and suspension of liquidation will be revised accordingly, in accordance with section 733(d) and (g)(1) of the Act and 19 CFR 351.224. Because it is an increase from the *Preliminary Determination*, the amended cash deposit rate will be effective on the date of publication of this notice in the **Federal Register**. This suspension of liquidation will remain in effect until further notice.

#### Amended Preliminary Determination

The Department preliminarily determines that the following estimated weighted-average antidumping duty margins exist:

Exporter	Producer	Weighted-average margin (percent)
Zhejiang Sanmei Chemical Industry Co., Ltd .....	Zhejiang Sanmei Chemical Industry Co., Ltd. and Jiangsu Sanmei Chemicals Co., Ltd.	232.30
Jiangsu Bluestar Green Technology Co., Ltd .....	Jiangsu Bluestar Green Technology Co., Ltd .....	232.30
T.T. International Co., Ltd .....	Electrochemical Factory of Zhejiang Juhua Co., Ltd .....	232.30
T.T. International Co., Ltd .....	Sinochem Environmental Protection Chemicals (Taicang) Co., Ltd.	232.30
T.T. International Co., Ltd .....	Zhejiang Quzhou Lianzhou Refrigerants Co., Ltd .....	232.30
T.T. International Co., Ltd .....	Zhejiang Sanmei Chemical Ind. Co., Ltd .....	232.30
T.T. International Co., Ltd .....	Zhejiang Zhonglan Refrigeration Technology Co., Ltd .....	232.30
Weitron International Refrigeration Equipment Co., Ltd .....	Sinochem Environmental Protection Chemicals (Taicang) Co., Ltd.	232.30
Weitron International Refrigeration Equipment Co., Ltd .....	Weitron International Refrigeration Equipment Co., Ltd .....	232.30
Weitron International Refrigeration Equipment Co., Ltd .....	Zhejiang Organic Fluor-Chemistry Plant, Zhejiang Juhua Co., Ltd.	232.30
Weitron International Refrigeration Equipment Co., Ltd .....	Zhejiang Quhua Fluor-Chemistry Co., Ltd .....	232.30
Weitron International Refrigeration Equipment Co., Ltd .....	Zhejiang Quhua Juxin Fluorochemical Industry Co., Ltd .....	232.30
Weitron International Refrigeration Equipment Co., Ltd .....	Zhejiang Sanmei Chemical Industry Co., Ltd .....	232.30
PRC-Wide Entity .....	.....	232.30

#### Disclosure

We intend to disclose the calculations performed to parties in this proceeding within five days after publication of the notice of amended preliminary

determination in the **Federal Register** in accordance with 19 CFR 351.224(b).

#### International Trade Commission Notification

In accordance with section 733(f) of the Act, we will notify the International

<sup>6</sup> See 19 CFR 351.224(g).

<sup>7</sup> See Memorandum to Christian Marsh, Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations, from Erin Begnal, Director, Office III, "Antidumping Duty Investigation of 1,1,1,2-Tetrafluoroethane (R134a) from the People's Republic of China: Allegation of Ministerial Errors in the Preliminary Determination," dated concurrently with this notice

for the analysis performed ("Ministerial Error Memorandum"). The Department is also correcting an additional error made by Sanmei, as the error is related to one of the ministerial errors that the Department made and has corrected.

<sup>8</sup> See *Preliminary Determination* and accompanying Preliminary Decision Memorandum at 20–21.

<sup>9</sup> See, e.g., *1,1,1,2-Tetrafluoroethane From the People's Republic of China: Final Determination of Sales at Less Than Fair Value*, 79 FR 62597 (October 20, 2014), and accompanying Issues and Decision Memorandum at 3. See also section 776(c) of the Act and 19 CFR 351.308(c) and (d).

Trade Commission of our determination.

This determination is issued and published pursuant to sections 733(f) and 777(i)(1) of the Act and 19 CFR 351.224(e).

Dated: November 25, 2016.

**Ronald K. Lorentzen,**

*Acting Assistant Secretary for Enforcement and Compliance.*

[FR Doc. 2016–28823 Filed 11–30–16; 8:45 am]

**BILLING CODE 3510–DS–P**

## DEPARTMENT OF COMMERCE

### International Trade Administration

[A–588–815]

#### Correction to Notice of Initiation of Five-Year Sunset Review

**AGENCY:** Enforcement and Compliance, International Trade Administration, Department of Commerce.

**FOR FURTHER INFORMATION CONTACT:** Brenda E. Waters, AD/CVD Operations, Customs Unit, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482–4735.

**SUPPLEMENTARY INFORMATION:** On November 1, 2016, the Department of Commerce (“Department”) published *Initiation of Five-Year (“Sunset”) Review*, 81 FR 75808 (November 1, 2016) in which the Department inadvertently listed the incorrect case number for Gray Portland Cement Clinker from Japan. The correct case number is A–588–815. This notice serves as a correction notice.

Dated: November 23, 2016.

**Gary Taverman,**

*Associate Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations.*

[FR Doc. 2016–28859 Filed 11–30–16; 8:45 am]

**BILLING CODE 3510–DS–P**

## DEPARTMENT OF COMMERCE

### International Trade Administration

[C–489–830]

#### Steel Concrete Reinforcing Bar From the Republic of Turkey: Postponement of Preliminary Determination in Countervailing Duty Investigation

**AGENCY:** Enforcement and Compliance, International Trade Administration, Department of Commerce.

**DATES:** Effective December 1, 2016.

#### FOR FURTHER INFORMATION CONTACT:

Kaitlin Wojnar, AD/CVD Operations, Office VII, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482–3857.

#### SUPPLEMENTARY INFORMATION:

##### Background

On October 11, 2016, the Department of Commerce (the Department) initiated the countervailing duty (CVD) investigation of steel concrete reinforcing bar from the Republic of Turkey.<sup>1</sup> Currently, the preliminary determination is due no later than December 15, 2016.

#### Postponement of the Preliminary Determination

Section 703(b)(1) of the Tariff Act of 1930, as amended (the Act), requires the Department to issue the preliminary determination in a CVD investigation within 65 days of the date on which the Department initiated the investigation. However, if the Department concludes that the parties concerned are cooperating and that the case is extraordinarily complicated, such that additional time is necessary to make the preliminary determination, section 703(c)(1)(B) of the Act allows the Department to postpone making the preliminary determination until no later than 130 days after the date on which the administering authority initiated the investigation.

The Department determines that the parties concerned are currently cooperating and that the investigation is extraordinarily complicated, such that it will need more time to make the preliminary determination. Specifically, in addition to evaluating the financial contribution and specificity of numerous national and regional programs, the Department will analyze the provision of several inputs for less than adequate remuneration and will consider a more-than-adequate-remuneration program for the first time in a proceeding involving the Republic of Turkey.

For the reasons stated above, the Department, in accordance with section 703(c)(1)(B) of the Act, is postponing the deadline for the preliminary determination to no later than 130 days after the day on which the Department initiated this investigation. Therefore, the new deadline for the preliminary

<sup>1</sup> See *Steel Concrete Reinforcing Bar from the Republic of Turkey: Initiation of Countervailing Duty Investigation*, 81 FR 71705 (October 18, 2016).

determination is February 21, 2017.<sup>2</sup> Pursuant to section 705(a)(1) of the Act and 19 CFR 351.210(b)(1), the deadline for the final determination will continue to be 75 days after the date of the preliminary determination, unless postponed.

This notice is issued and published in accordance with section 703(c)(2) of the Act and 19 CFR 351.205(f)(1).

Dated: November 28, 2016.

**Ronald K. Lorentzen,**

*Acting Assistant Secretary for Enforcement and Compliance.*

[FR Doc. 2016–28855 Filed 11–30–16; 8:45 am]

**BILLING CODE 3510–DS–P**

## DEPARTMENT OF COMMERCE

### International Trade Administration

[A–489–805]

#### Certain Pasta From Turkey: Final Rescission of Antidumping Duty New Shipper Review; 2014–2015

**AGENCY:** Enforcement and Compliance, International Trade Administration, Department of Commerce.

**SUMMARY:** The Department of Commerce (Department) published its *Preliminary Rescission* for the new shipper review (NSR) of the antidumping duty order on certain pasta from the Republic of Turkey (Turkey) on July 15, 2016. The period of review (POR) is July 1, 2014, through June 30, 2015. As discussed below, we preliminarily found that the sale made by Durum Gida Sanayi ve Ticaret A.S. (Durum) is not *bona fide*, and announced our preliminary intent to rescind the NSR. For the final results of this review, we have determined that Durum does not qualify for a NSR. Therefore, we are rescinding this NSR.

**DATES:** Effective December 1, 2016.

**FOR FURTHER INFORMATION CONTACT:** Fred Baker, AD/CVD Operations, Office VI, Enforcement and Compliance, International Trade Administration, Department of Commerce, 1401 Constitution Avenue NW., Washington, DC 20230; telephone: (202) 482–2924.

#### SUPPLEMENTARY INFORMATION:

<sup>2</sup> Department practice dictates that, when a deadline falls on a weekend or a federal holiday, the appropriate deadline is the next business day. See *Notice of Clarification: Application of the “Next Business Day” Rule for Administrative Determination Deadlines Pursuant to the Tariff Act of 1930, as Amended*, 70 FR 24533, 24533 (May 10, 2005). Because February 18, 2017, falls on a Saturday and February 20, 2017, is a federal holiday, the appropriate deadline for the preliminary determination in this investigation is February 21, 2017.

## Background

On July 15, 2016, the Department of Commerce (Department) published its *Preliminary Rescission* for the NSR of the antidumping duty order on certain pasta from Turkey.<sup>1</sup> For a complete description of the events that followed the publication of the *Preliminary Rescission*, see the Issues and Decision Memorandum.<sup>2</sup> The Issues and Decision Memorandum is a public document and is on file electronically via Enforcement and Compliance's Antidumping and Countervailing Duty Centralized Electronic Service System (ACCESS). ACCESS is available to registered users at <https://access.trade.gov> and in the Central Records Unit, room B8024 of the main Department of Commerce building. In addition, a complete version of the Issues and Decision Memorandum can be accessed directly at <http://enforcement.trade.gov/frn/index.html>. The signed Issues and Decision Memorandum and the electronic version of the Issues and Decision Memorandum are identical in content.

## Scope of the Order

The merchandise covered by this order is certain non-egg dry pasta in packages of five pounds (2.27 kilograms) or less, whether or not enriched or fortified or containing milk or other optional ingredients such as chopped vegetables, vegetable purees, milk, gluten, diastases, vitamins, coloring and flavorings, and up to two percent egg white. The pasta covered by this scope is typically sold in the retail market, in fiberboard or cardboard cartons, or polyethylene or polypropylene bags of varying dimensions. Excluded from the scope of this review are refrigerated, frozen, or canned pastas, as well as all forms of egg pasta, with the exception of non-egg dry pasta containing up to two percent egg white. The merchandise subject to review is currently classifiable under item 1902.19.20 of the Harmonized Tariff Schedule of the United States (HTSUS). Although the HTSUS subheading is provided for convenience and customs purposes, the written description of the merchandise subject to the order is dispositive.

<sup>1</sup> See *Certain Pasta From Turkey: Preliminary Rescission of Antidumping Duty New Shipper Review*, 81 FR 46050 (July 15, 2016) (*Preliminary Rescission*).

<sup>2</sup> See Memorandum from Erin Begnal, Director, Office III, Antidumping and Countervailing Operations, to Ronald Lorentzen, Acting Assistant Secretary for Enforcement and Compliance, entitled "Certain Pasta from the Republic of Turkey: Issues and Decision Memorandum for the Final Rescission," issued concurrently with and hereby adopted by, this notice (Issues and Decision Memorandum).

## Analysis of Comments Received

All issues raised in the case briefs by parties are addressed in the Issues and Decision Memorandum<sup>3</sup> and the Final Rescission Memorandum.<sup>4</sup> A list of the issues which parties raised is attached to this notice as an Appendix.

## Rescission of New Shipper Review

For the *Preliminary Rescission*, the Department analyzed the *bona fides* of Durum's single sale, and preliminarily found it was not a *bona fide* sale.<sup>5</sup> In Durum's case brief, Durum submitted comments on the Department's *bona fides* analysis.<sup>6</sup> Petitioners<sup>7</sup> submitted a rebuttal brief on September 14, 2016, also addressing the Department's *bona fides* analysis.<sup>8</sup> Additionally, on September 20, 2016, and October 3, 2016, Durum and Petitioners submitted affirmative<sup>9</sup> and rebuttal comments,<sup>10</sup> respectively, regarding Durum's eligibility for a NSR. In this final rescission we have not analyzed parties' comments on the *bona fides* of Durum's sale because we have determined that Durum did not qualify for a NSR. For a complete discussion see the Issues and Decision Memorandum.

Because we have determined that Durum does not qualify for a NSR, we are rescinding this NSR.

## Assessment

As the Department is rescinding this NSR, we have not calculated a

<sup>3</sup> *Id.*

<sup>4</sup> See Memorandum to Scot Fullerton, Re: Certain Pasta from the Republic of Turkey: Final Rescission of New Shipper Review, dated November 25, 2016 (Final Rescission Memorandum).

<sup>5</sup> See Memorandum from Fred Baker to Scot Fullerton, Re: 2014–2015 Antidumping Duty New Shipper Review of Certain Pasta from Turkey: Preliminary *Bona Fide* Sales Analysis for Durum Gida Sanayi ve Ticaret A.S., dated June 28, 2016.

<sup>6</sup> See Case Brief of Durum Gida Sanayi ve Ticaret A.S., dated August 29, 2016.

<sup>7</sup> Petitioners are the American Italian Pasta Company, New World Pasta Company, and Dakota Growers Pasta Company.

<sup>8</sup> See Petitioners' Rebuttal Brief for Durum Gida Sanayi ve Ticaret A.S., dated September 14, 2016.

<sup>9</sup> See Letter from Petitioners to Secretary of Commerce, Re: New Shipper Review of Certain Pasta from Turkey—Petitioners' Comments on New Factual Information for Durum Gida Sanayi ve Ticaret A.S., dated September 20, 2016 (Petitioners' Comments on New Factual Information); Letter from Durum to the Honorable Penny Pritzker, Re: Pasta from Turkey (New Shipper Review): Comments on Factual Information, dated September 20, 2016 (Durum's Comments on New Factual Information).

<sup>10</sup> See Letter from Petitioners to the Secretary of Commerce, Re: New Shipper Review of Certain Pasta from Turkey—Petitioners' Rebuttal Comments on New Factual Information for Durum Gida Sanayi ve Ticaret A.S., dated October 3, 2016; Letter from Durum to the Honorable Penny Pritzker, Pasta from Turkey (New Shipper Review): Rebuttal Comments on Factual Information, dated October 3, 2016 (Durum's Rebuttal Comments on New Factual Information).

company-specific dumping margin for Durum. Durum's entries will be liquidated at the "all-others" rate applicable to Turkish exporters who do not have their own company-specific rate. That rate is 51.49 percent.

## Cash Deposit Requirements

Effective upon publication of this notice of final rescission of the NSR of Durum, the Department will instruct U.S. Customs and Border Protection to discontinue the option of posting a bond or security in lieu of a cash deposit for entries of subject merchandise from Durum. Because we did not calculate a dumping margin for Durum, Durum continues to be subject to the "all-others" rate. The all-others cash deposit rate is 51.49 percent. These cash deposit requirements shall remain in effect until further notice.

## Administrative Protective Order

This notice also serves as a reminder to parties subject to Administrative Protective Order (APO) of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305, which continues to govern business proprietary information in these segments of the proceeding. Timely written notification of the return or destruction of APO materials, or conversion to judicial protective order, is hereby requested. Failure to comply with the regulations and terms of an APO is a violation which is subject to sanction.

We are issuing and publishing this notice in accordance with sections 751(a)(2)(B) and 777(i) of the Tariff Act of 1930, as amended, and 19 CFR 351.214.

Dated: November 25, 2016.

**Ronald Lorentzen,**

*Acting Assistant Secretary for Enforcement and Compliance.*

## Appendix—Issues and Decision Memorandum

### I. Summary

### II. Background

### III. Discussion of the Issues

Comment 1: Whether Durum Qualifies for a New Shipper Review

Comment 2: Whether Durum Had a *Bona Fide* Sale During the Period of Review

### IV. Recommendation

[FR Doc. 2016–28856 Filed 11–30–16; 8:45 am]

**BILLING CODE 3510–DS–P**

**DEPARTMENT OF COMMERCE****International Trade Administration****Antidumping or Countervailing Duty Order, Finding, or Suspended Investigation; Advance Notification of Sunset Reviews**

**AGENCY:** Enforcement and Compliance, International Trade Administration, Department of Commerce.

**Background**

Every five years, pursuant to section 751(c) of the Tariff Act of 1930, as amended (“the Act”), the Department of Commerce (“the Department”) and the International Trade Commission automatically initiate and conduct a review to determine whether revocation of a countervailing or antidumping duty order or termination of an investigation suspended under section 704 or 734 of

the Act would be likely to lead to continuation or recurrence of dumping or a countervailable subsidy (as the case may be) and of material injury.

**Upcoming Sunset Reviews for January 2017**

The following Sunset Reviews are scheduled for initiation in January 2017 and will appear in that month’s Notice of Initiation of Five-Year Sunset Reviews (“Sunset Reviews”).

Antidumping duty proceedings	Department contact
Light-Walled Rectangular Welded Carbon Steel Pipe, Pipe and Tube from Taiwan (A–583–803) (4th Review).	David Goldberger, (202) 482–4136.
Furfuryl Alcohol from China (A–570–835) (4th Review) .....	David Goldberger (202) 482–4136.

**Countervailing Duty Proceedings**

No Sunset Review of countervailing duty orders is scheduled for initiation in January 2017.

**Suspended Investigations**

No Sunset Review of suspended investigations is scheduled for initiation in January 2017.

The Department’s procedures for the conduct of Sunset Reviews are set forth in 19 CFR 351.218. The Notice of Initiation of Five-Year (“Sunset”) Reviews provides further information regarding what is required of all parties to participate in Sunset Reviews.

Pursuant to 19 CFR 351.103(c), the Department will maintain and make available a service list for these proceedings. To facilitate the timely preparation of the service list(s), it is requested that those seeking recognition as interested parties to a proceeding contact the Department in writing within 10 days of the publication of the Notice of Initiation.

Please note that if the Department receives a Notice of Intent to Participate from a member of the domestic industry within 15 days of the date of initiation, the review will continue. Thereafter, any interested party wishing to participate in the Sunset Review must provide substantive comments in response to the notice of initiation no later than 30 days after the date of initiation.

This notice is not required by statute but is published as a service to the international trading community.

Dated: November 28, 2016.

**Gary Taverman,**

*Associate Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations.*

[FR Doc. 2016–28858 Filed 11–30–16; 8:45 am]

**BILLING CODE 3510–DS–P**

**DEPARTMENT OF COMMERCE****Submission for OMB Review; Proposed Information Collection; Comment Request; Limited Access Death Master File Systems Safeguards Attestation Forms**

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 Technical Information Service (NTIS), Commerce.

*Title:* (A) “Limited Access Death Master File (LADMF) Accredited Conformity Assessment Body Systems Safeguards Attestation Form” (ACAB Systems Safeguards Attestation Form).  
(B) “Limited Access Death Master File (LADMF) State or Local Government Auditor General (AG) or Inspector General (IG) Systems Safeguards Attestation Form” (AG or IG Systems Safeguards Attestation Form).

*OMB Control Number:* 0692–XXXX.

*Form Number(s):* NTIS FM100A and NTIS FM100B.

*Type of Request:* Emergency request (new information collection).

*Number of Respondents:*

ACAB Systems Safeguards Attestation Form: NTIS expects to receive approximately 500 ACAB Systems Safeguards Attestation Forms from Persons and Certified Persons annually.

AG or IG Systems Safeguards Attestation Form: NTIS expects to receive approximately 60 AG or IG Systems Safeguards Attestation Forms from Persons and Certified Persons annually.

*Average Hours Per Response:*

ACAB Systems Safeguards Attestation Form: 3 hours.

AG or IG Systems Safeguards Attestation Form: 3 hours.

*Burden Hours:*

ACAB Systems Safeguards Attestation Form: 1500 (500 × 3 hours = 1500 hours).

AG or IG Systems Safeguards Attestation Form: 180 (60 × 3 hours = 180 hours).

*Needs and Uses:* NTIS issued a final rule establishing a program through which persons may become eligible to obtain access to Death Master File (DMF) information about an individual within three years of that individual’s death. The final rule was promulgated under Section 203 of the Bipartisan Budget Act of 2013, Public Law 113–67 (Act). The Act prohibits the Secretary of Commerce (Secretary) from disclosing DMF information during the three-year period following an individual’s death (Limited Access DMF), unless the person requesting the information has been certified to access the Limited Access DMF pursuant to certain criteria in a program that the Secretary establishes. The Secretary delegated the authority to carry out Section 203 to the Director of NTIS.

On December 30, 2014, NTIS initially described a “Limited Access Death Master File Systems Safeguards Attestation Form” in the notice of proposed rulemaking (79 FR 78314 at 78321). To accommodate the requirements of the final rule, NTIS is using both the ACAB Systems Safeguards Attestation Form and the AG or IG Systems Safeguards Attestation Form.

The ACAB Systems Safeguards Attestation Form requires an “Accredited Conformity Assessment Body” (ACAB), as defined in the final rule, to attest that a Person seeking certification or a Certified Person seeking renewal of certification has information security systems, facilities and procedures in place to protect the security of the Limited Access DMF, as



required under Section 1110.102(a)(2) of the final rule. The ACAB Systems Safeguards Attestation Form collects information based on an assessment by the ACAB conducted within three years prior to the date of the Person or Certified Person's submission of a completed certification statement under Section 1110.101(a) of the final rule. This collection includes specific requirements of the final rule, which the ACAB must certify are satisfied, and the provision of specific information by the ACAB, such as the date of the assessment and the auditing standard(s) used for the assessment.

Section 1110.501(a)(2) of the final rule provides that a state or local government office of AG or IG and a Person or Certified Person that is a department or agency of the same state or local government, respectively, are not considered to be owned by a common "parent" entity under Section 1110.501(a)(1)(ii) for the purpose of determining independence, and attestation by the AG or IG is possible. The AG or IG Systems Safeguards Attestation Form is for the use of a state or local government AG or IG to attest on behalf of a state or local government department or agency Person or Certified Person. The AG or IG Systems Safeguards Attestation Form requires the state or local government AG or IG to attest that a Person seeking certification or a Certified Person seeking renewal of certification has information security systems, facilities and procedures in place to protect the security of the Limited Access DMF, as required under Section 1110.102(a)(2) of the final rule. The AG or IG Systems Safeguards Attestation Form collects information based on an assessment by the state or local government AG or IG conducted within three years prior to the date of the Person or Certified Person's submission of a completed certification statement under Section 1110.101(a) of the final rule. This collection includes specific requirements of the final rule, which the state or local government AG or IG must certify are satisfied, and the provision of specific information by the state or local government AG or IG, such as the date of the assessment.

NTIS requires emergency clearance under the Paperwork Reduction Act in time to be able to implement the certification program on November 28, 2016.

**Affected Public:** Accredited Conformity Assessment Bodies and state or local government Auditors General or Inspectors General attesting that a Person seeking certification or a Certified Person seeking renewal of

certification under the final rule for the "Certification Program for Access to the Death Master File" has information security systems, facilities and procedures in place to protect the security of the Limited Access DMF, as required by the final rule.

**Frequency:** Once every three years.

**Respondent's Obligation:** Mandatory for a Person seeking certification or renewal of certification for access to the Limited Access DMF to have an Accredited Conformity Assessment Body or state or local government Auditor General or Inspector General submit this attestation.

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.

**Sheleen Dumas,**

*PRA Departmental Lead, Office of the Chief Information Officer.*

[FR Doc. 2016-28846 Filed 11-30-16; 8:45 am]

**BILLING CODE 3510-13-P**

## DEPARTMENT OF DEFENSE

### Department of the Army, Corps of Engineers

#### Record of Decision for the Trinity Parkway From IH-35/SH-183 to US-175/SH-310 Environmental Impact Statement, Dallas County, TX

**AGENCY:** Department of the Army, U.S. Army Corps of Engineers, DoD.

**ACTION:** Record of Decision.

**SUMMARY:** The U.S. Army Corps of Engineers (USACE), Fort Worth District, is issuing this notice to advise Federal, state, and local governmental agencies and the public that USACE has signed a Record of Decision (ROD) for the Trinity Parkway from Interstate Highway (IH) 35/State Highway (SH) 183 to United States (US) 175/SH 310 *Environmental Impact Statement*, Dallas County, TX. This ROD was rendered to declare that a USACE action, a Section 408 Permission of the City of Dallas to alter the Dallas Floodway, is in the public interest.

**DATES:** The USACE Fort Worth District Commander, Colonel Calvin C. Hudson II, signed the ROD and Section 408 Permission on October 21, 2016.

**ADDRESSES:** U.S. Army Corps of Engineers, Regional Planning and

Environmental Center, CESWF-PEC-CI (Attn: Ms. Marcia Hackett), 819 Taylor Street, Room 3A12, Fort Worth, TX 76102.

#### FOR FURTHER INFORMATION CONTACT:

Marcia Hackett, Senior Environmental Planner, Regional Planning and Environmental Center. Email address: *marcia.r.hackett@usace.army.mil*.

**SUPPLEMENTARY INFORMATION:** The City of Dallas has requested permission to construct the Trinity Parkway in Dallas County, Texas. The Parkway will constitute an alternation of the existing Dallas Floodway, a USACE federally authorized civil works project that requires Title 33 United States Code, Section 408 (Section 408) compliance. The proposed Parkway consists of a multi-lane transportation project constructed on earthen embankments generally aligned along the East Levee within the Dallas Floodway. The alterations were analyzed and disclosed in the *Final Impact Statement* dated March 2014, which was prepared by the Federal Highway Administration, as the lead agency; the Texas Department of Transportation (TxDOT); and the North Texas Tollway Authority (NTTA). Those agencies in addition to the City of Dallas are the project's sponsors. This ROD addresses the USACE Section 408 Permission.

**Douglas C. Sims,**

*RPA Chief, Environmental Compliance Branch, Regional Planning and Environmental Center.*

[FR Doc. 2016-28844 Filed 11-30-16; 8:45 am]

**BILLING CODE 3720-58-P**

## DEPARTMENT OF EDUCATION

[Docket No.: ED-2016-ICCD-0135]

#### Agency Information Collection Activities; Submission to the Office of Management and Budget for Review and Approval; Comment Request; Grants to Charter Management Organizations for Replication and Expansion of High-Quality Charter Schools Program

**AGENCY:** Office of Innovation and Improvement (OII), 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 3, 2017.

**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–2016–ICCD–0135. 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 2E–349, Washington, DC 20202–4537.

**FOR FURTHER INFORMATION CONTACT:** For specific questions related to collection activities, please contact Soumya Sathya, 202–260–0819.

**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:** Grants to Charter Management Organizations for Replication and Expansion of High-Quality Charter Schools Program.

**OMB Control Number:** 1855—New.

**Type of Review:** A new information collection.

**Respondents/Affected Public:** Private Sector.

**Total Estimated Number of Annual Responses:** 50.

**Total Estimated Number of Annual Burden Hours:** 2,000.

**Abstract:** The major purposes of the CSP are to expand opportunities for all students, particularly traditionally underserved students, to attend charter schools and meet challenging State academic standards; provide financial assistance for the planning, program design, and initial implementation of public charter schools; increase the number of high-quality charter schools available to students across the United States; evaluate the impact of charter schools on student achievement, families, and communities; share best practices between charter schools and other public schools; encourage States to provide facilities support to charter schools; and support efforts to strengthen the charter school authorizing process. Through the CSP Grants to Charter Management Organizations for Replication and Expansion of High-Quality Charter Schools (Charter Management Organization (or CMO)) competition (CFDA number 84.282M), the Department awards grants to charter management organizations (CMOs) to enable them to replicate or expand one or more high-quality charter schools. Grant funds may be used to expand the enrollment of one or more existing high-quality charter schools, or to replicate one or more new charter schools that are based on an existing, high-quality charter school model.

The application package requests programmatic and budgetary information needed to evaluate new applications and make funding decisions based on the authorizing statute, program regulations, and EDGAR. Respondents are non-profit Charter Management Organizations interested in applying for funding under the CMO program.

Dated: November 28, 2016.

**Tomakie Washington,**

*Acting Director, Information Collection Clearance Division, Office of the Chief Privacy Officer, Office of Management.*

[FR Doc. 2016–28847 Filed 11–30–16; 8:45 am]

**BILLING CODE 4000–01–P**

## DEPARTMENT OF ENERGY

### Advanced Scientific Computing Advisory Committee

**AGENCY:** Office of Science, Department of Energy.

**ACTION:** Notice of open meeting.

**SUMMARY:** This notice announces a meeting of the Advanced Scientific Computing Advisory Committee (ASCAC). The Federal Advisory Committee Act requires that public notice of these meetings be announced in the **Federal Register**.

#### DATES:

Tuesday, December 20, 2016

8:30 a.m.–5:30 p.m.

Wednesday, December 21, 2016

8:30 a.m.–12:00 p.m.

**ADDRESSES:** American Geophysical Union, (AGU), 2000 Florida Avenue NW., Washington, DC 20009.

#### FOR FURTHER INFORMATION CONTACT:

Christine Chalk, Office of Advanced Scientific Computing Research; SC–21/ Germantown Building; U.S. Department of Energy; 1000 Independence Avenue SW; Washington, DC 20585; Telephone (301) 903–7486

#### SUPPLEMENTARY INFORMATION:

**Purpose of the Committee:** The purpose of the committee is to provide advice and guidance on a continuing basis to the Office of Science and to the Department of Energy on scientific priorities within the field of advanced scientific computing research.

**Purpose of the Meeting:** This meeting is the semi-annual meeting of the Committee.

#### Tentative Agenda Topics

- View from Germantown
- Economic Models for Return on Investment in High Performance Computing
- Update on Exascale project activities
- Update from Subcommittee on Laboratory Directed Research and Development
- New Charge for Committee of Visitors for Research programs
- Technical presentations
- Public Comment (10-minute rule)

The meeting agenda includes an update on the budget, accomplishments and planned activities of the Advanced Scientific Computing Research program; an update on exascale computing project activities; a briefing from IDC on progress in developing their economic models for estimating the Return on Investment in High Performance Computing; a new charge to form a Committee of Visitors to review the Advanced Scientific Computing

Research efforts; a technical for presentation from an exascale researcher; and there will be an opportunity comments from the public. The meeting will conclude at noon on December 21, 2016. Agenda updates and presentations will be posted on the ASCAC Web site prior to the meeting: <http://science.energy.gov/ascr/ascac/>.

**Public Participation:** The meeting is open to the public. Individuals and representatives of organizations who would like to offer comments and suggestions may do so during the meeting. Approximately 30 minutes will be reserved for public comments. Time allotted per speaker will depend on the number who wish to speak but will not exceed 10 minutes. The Designated Federal Officer is empowered to conduct the meeting in a fashion that will facilitate the orderly conduct of business.

Those wishing to speak should submit your request at least five days before the meeting. Those not able to attend the meeting or who have insufficient time to address the committee are invited to send a written statement to Christine Chalk, U.S. Department of Energy, 1000 Independence Avenue SW., Washington DC 20585, email to [Christine.Chalk@science.doe.gov](mailto:Christine.Chalk@science.doe.gov).

**Minutes:** The minutes of this meeting will be available within 90 days on the Advanced Scientific Computing Web site at <http://science.energy.gov/ascr/ascac/>.

Issued at Washington, DC on November 23, 2016.

**LaTanya R. Butler,**

*Deputy Committee Management Officer.*

[FR Doc. 2016-28877 Filed 11-30-16; 8:45 am]

**BILLING CODE 6450-01-P**

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

[Docket No. RD16-9-000]

#### Commission Information Collection Activities (FERC-725V); Comment Request; Extension

**AGENCY:** Federal Energy Regulatory Commission.

**ACTION:** Notice of information collection and request for comments.

**SUMMARY:** In compliance with the requirements of the Paperwork Reduction Act of 1995, 44 U.S.C. 3506(c)(2)(A), the Federal Energy Regulatory Commission (Commission or FERC) is soliciting public comment on the information collection, [FERC-725V (Mandatory Reliability Standards: COM

Reliability Standards)] which will be submitted to the Office of Management and Budget (OMB) for a review of the information collection requirements.

**DATES:** Comments on the collection of information are due January 30, 2017.

**ADDRESSES:** You may submit comments (identified by Docket No. RD16-9-000) by either of the following methods:

- eFiling at Commission's Web site:

<http://www.ferc.gov/docs-filing/efiling.asp>.

- Mail/Hand Delivery/Courier:

Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street NE., Washington, DC 20426.

**Instructions:** All submissions must be formatted and filed in accordance with submission guidelines at: <http://www.ferc.gov/help/submission-guide.asp>. For user assistance contact FERC Online Support by email at [ferconlinesupport@ferc.gov](mailto:ferconlinesupport@ferc.gov), or by phone at: (866) 208-3676 (toll-free), or (202) 502-8659 for TTY.

**Docket:** Users interested in receiving automatic notification of activity in this docket or in viewing/downloading comments and issuances in this docket may do so at <http://www.ferc.gov/docs-filing/docs-filing.asp>.

#### FOR FURTHER INFORMATION CONTACT:

Ellen Brown may be reached by email at [DataClearance@FERC.gov](mailto:DataClearance@FERC.gov), telephone at (202) 502-8663, and fax at (202) 273-0873.

#### SUPPLEMENTARY INFORMATION:

**Title:** FERC-725V, Mandatory Reliability Standards: COM Reliability Standards.

**OMB Control No.:** 1902-0277.

**Type of Request:** Three-year approval of the FERC-725V information collection requirements, as modified.

**Abstract:** On August 15, 2016, the North American Electric Reliability Corporation (NERC) filed a petition for Commission approval, pursuant to section 215(d)(1) of the Federal Power Act ("FPA")<sup>1</sup> and Section 39.5<sup>2</sup> of the Federal Energy Regulatory Commission's regulations, for approval of proposed Reliability Standard COM-001-3 (Communications), the associated Implementation Plan, retirement of currently-effective Reliability Standard COM-001-2.1, and Violation Risk Factors ("VRFs") and Violation Severity Levels ("VSLs") associated with new Requirements R12 and R13 proposed in Reliability Standard COM-001-3. Proposed Reliability Standard COM-001-3 reflects revisions developed under Project 2015-07 Internal Communications Capabilities, in

compliance with the Commission's directive in Order No. 888 that NERC "develop modifications to COM-001-2, or develop a new standard, to address [the Commission's] concerns regarding ensuring the adequacy of internal communications capability whenever internal communications could directly affect the reliability operations of the Bulk-Power System."

**Type of Respondents:** Public utilities.

**Estimate of Annual Burden:**<sup>3</sup> With respect to the proposed revisions to Reliability Standard COM-001-3 and the retirement of the currently-effective Reliability Standard COM-001-2.1, the Commission estimates that there will be no material change in industry information collection obligations because the Requirements R12 and R13 (which are additions to COM-001-3) do not impact the paperwork burden of impacted registered entities.

**Comments:** Comments are invited on: (1) Whether the collection of information is necessary for the proper performance of the functions of the Commission, including whether the information will have practical utility; (2) the accuracy of the agency's estimate of the burden and cost of the collection of information, including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility and clarity of the information collection; and (4) ways to minimize the burden of the collection of information on those who are to respond, including the use of automated collection techniques or other forms of information technology.

Dated: November 23, 2016.

**Kimberly D. Bose,**  
*Secretary.*

[FR Doc. 2016-28851 Filed 11-30-16; 8:45 am]

**BILLING CODE 6717-01-P**

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

[3320-004]

#### William B. Ruger, Jr., 169 Sunapee Street, LLC; Notice of Transfer of Exemption

1. By letter filed November 16, 2016, 169 Sunapee Street, LLC informed the Commission that the exemption from licensing for the Sugar River I Project No. 3320, originally issued April 4,

<sup>3</sup> The Commission defines burden as the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. For further explanation of what is included in the information collection burden, reference 5 Code of Federal Regulations 1320.3.

<sup>1</sup> 16 U.S.C. 824o (2012).

<sup>2</sup> 18 CFR 39.5 (2015).

1983<sup>1</sup> has been transferred to 169 Sunapee Street, LLC. The project is located on the Sugar River in Sullivan County, New Hampshire. The transfer of an exemption does not require Commission approval.

2. 169 Sunapee Street, LLC is now the exemptee of the Sugar River 1 Project No. 3320. All correspondence should be forwarded to: Mr. Ronald K. DeCola, Manager, 169 Sunapee Street, LLC, 300 River Road, Suite 110, Manchester, NH 03104, Phone: 603-289-2738, Email: [rkd01@aol.com](mailto:rkd01@aol.com).

Dated: November 23, 2016.

**Kimberly D. Bose,**  
Secretary.

[FR Doc. 2016-28848 Filed 11-30-16; 8:45 am]

BILLING CODE 6717-01-P

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

[Docket No. PF16-10-000]

#### **WBI Energy Transmission, Inc.; Notice of Intent To Prepare an Environmental Assessment for the Planned Valley Expansion Project and Request for Comments on Environmental Issues**

The staff of the Federal Energy Regulatory Commission (FERC or Commission) will prepare an environmental assessment (EA) that will discuss the environmental impacts of the Valley Expansion Project involving construction and operation of facilities by WBI Energy Transmission, Inc. (WBI Energy) between Mapleton, North Dakota and Felton, Minnesota. The Commission will use this EA in its decision-making process to determine whether the project is in the public convenience and necessity.

This notice announces the opening of the scoping process the Commission will use to gather input from the public and interested agencies on the project. You can make a difference by providing us with your specific comments or concerns about the project. Your comments should focus on the potential environmental effects, reasonable alternatives, and measures to avoid or lessen environmental impacts. Your input will help the Commission staff determine what issues they need to evaluate in the EA. To ensure that your comments are timely and properly recorded, please send your comments so that the Commission receives them in Washington, DC on or before December 23, 2016.

If you sent comments on this project to the Commission before the opening of this docket on October 17, 2016, you will need to file those comments in Docket No. PF16-10-000 to ensure they are considered as part of this proceeding.

This notice is being sent to the Commission's current environmental mailing list for this project. State and local government representatives should notify their constituents of this planned project and encourage them to comment on their areas of concern.

If you are a landowner receiving this notice, a pipeline company representative may contact you about the acquisition of an easement to construct, operate, and maintain the planned facilities. The company would seek to negotiate a mutually acceptable agreement. However, if the Commission approves the project, that approval conveys with it the right of eminent domain. Therefore, if easement negotiations fail to produce an agreement, the pipeline company could initiate condemnation proceedings where compensation would be determined in accordance with state law.

A fact sheet prepared by the FERC entitled "An Interstate Natural Gas Facility On My Land? What Do I Need To Know?" is available for viewing on the FERC Web site ([www.ferc.gov](http://www.ferc.gov)). This fact sheet addresses a number of typically asked questions, including the use of eminent domain and how to participate in the Commission's proceedings.

#### **Public Participation**

For your convenience, there are three methods you can use to submit your comments to the Commission. The Commission encourages electronic filing of comments and has expert staff available to assist you at (202) 502-8258 or [efiling@ferc.gov](mailto:efiling@ferc.gov). Please carefully follow these instructions so that your comments are properly recorded.

(1) You can file your comments electronically using the *eComment* feature on the Commission's Web site ([www.ferc.gov](http://www.ferc.gov)) under the link to *Documents and Filings*. This is an easy method for submitting brief, text-only comments on a project;

(2) You can file your comments electronically by using the *eFiling* feature on the Commission's Web site ([www.ferc.gov](http://www.ferc.gov)) under the link to *Documents and Filings*. With eFiling, you can provide comments in a variety of formats by attaching them as a file with your submission. New eFiling users must first create an account by clicking on "*eRegister*." If you are filing

a comment on a particular project, please select "Comment on a Filing" as the filing type; or

(3) You can file a paper copy of your comments by mailing them to the following address. Be sure to reference the project docket number (PF16-10-000) with your submission: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street NE., Room 1A, Washington, DC 20426.

#### **Summary of the Planned Project**

WBI Energy plans to construct 38 miles of new bidirectional 16-inch-diameter pipeline between Mapleton, North Dakota and Felton, Minnesota. Additionally, WBI Energy would construct a new 2,600-horsepower electric-driven compressor station in Clay County, Minnesota, a metering station, farm taps, valve settings, and ancillary facilities. Finally, WBI Energy would increase the maximum allowable operating pressure on a portion of its Line Section 24. According to WBI Energy, the project would provide an additional 40 million cubic feet per day of firm transportation on its system.

The general location of the project facilities is shown in appendix 1.<sup>1</sup>

#### **Land Requirements for Construction**

Construction of the project would affect a total of about 530 acres of land, including the pipeline construction right-of-way, additional temporary workspace, staging areas, temporary and permanent access roads, and aboveground facilities. The total acreage required for operation of the project is approximately 235 acres, including the new permanent pipeline easement, permanent access roads, and permanent aboveground facilities' footprint.

#### **The EA Process**

The National Environmental Policy Act (NEPA) requires the Commission to take into account the environmental impacts that could result from an action whenever it considers the issuance of a Certificate of Public Convenience and Necessity. NEPA also requires us<sup>2</sup> to discover and address concerns the public may have about proposals. This process is referred to as scoping. The main goal of the scoping process is to

<sup>1</sup> The appendices referenced in this notice will not appear in the **Federal Register**. Copies of the appendices were sent to all those receiving this notice in the mail and are available at [www.ferc.gov](http://www.ferc.gov) using the link called "eLibrary" or from the Commission's Public Reference Room, 888 First Street NE., Washington, DC 20426, or call (202) 502-8371. For instructions on connecting to eLibrary, refer to the last page of this notice.

<sup>2</sup> "We," "us," and "our" refer to the environmental staff of the Commission's Office of Energy Projects.

<sup>1</sup> 23 FERC ¶ 62,008, Notice of Exemption from Licensing (1983).

focus the analysis in the EA on the important environmental issues. By this notice, the Commission requests public comments on the scope of the issues to address in the EA. We will consider all filed comments during the preparation of the EA.

In the EA, we will discuss impacts that could occur as a result of the construction and operation of the planned project under these general headings:

- Geology and soils;
- water resources, fisheries, and wetlands;
- vegetation and wildlife;
- endangered and threatened species;
- cultural resources;
- socioeconomics;
- land use;
- air quality and noise;
- public safety; and
- cumulative impacts.

We will also evaluate possible alternatives to the planned project or portions of the project, and make recommendations on how to lessen or avoid impacts on the various resource areas.

Although no formal application has been filed, we have already initiated our NEPA review under the Commission's pre-filing process. The purpose of the pre-filing process is to encourage early involvement of interested stakeholders and to identify and resolve issues before the FERC receives an application. As part of our pre-filing review, we have begun to contact some federal and state agencies to discuss their involvement in the scoping process and the preparation of the EA.

The EA will present our independent analysis of the issues. The EA will be available in the public record through eLibrary. Depending on the comments received during the scoping process, we may also publish and distribute the EA to the public for an allotted comment period. We will consider all comments on the EA before we make our recommendations to the Commission. To ensure we have the opportunity to consider and address your comments, please carefully follow the instructions in the Public Participation section, beginning on page 2.

With this notice, we are asking agencies with jurisdiction by law and/or special expertise with respect to the environmental issues related to this project to formally cooperate with us in the preparation of the EA.<sup>3</sup> Agencies that would like to request cooperating

agency status should follow the instructions for filing comments provided under the Public Participation section of this notice.

### Consultations Under Section 106 of the National Historic Preservation Act

In accordance with the Advisory Council on Historic Preservation's implementing regulations for section 106 of the National Historic Preservation Act, we are using this notice to initiate consultation with the applicable State Historic Preservation Offices (SHPO), and to solicit their views and those of other government agencies, interested Indian tribes, and the public on the project's potential effects on historic properties.<sup>4</sup> We will define the project-specific Area of Potential Effects (APE) in consultation with the SHPOs as the project develops. On natural gas facility projects, the APE at a minimum encompasses all areas subject to ground disturbance (examples include construction right-of-way, contractor/pipeline storage yards, compressor stations, and access roads). Our EA for this project will document our findings on the impacts on historic properties and summarize the status of consultations under section 106.

### Currently Identified Environmental Issues

We have already identified several issues that we think deserve attention based on a preliminary review of the planned facilities and the environmental information provided by WBI Energy. This preliminary list of issues may change based on your comments and our analysis, but currently includes:

- Drain tiles;
- deep topsoil and poor quality subsoils (salinity/sodium or lime);
- prime farm land;
- federally listed species, including the whooping crane, gray wolf, Dakota skipper, northern long-eared bat, western prairie fringed orchid, and the powershiek skipperling;
- cultural resources; and
- crossing methods of the Rush River, Red River of the North, and the Buffalo River.

### Environmental Mailing List

The environmental mailing list includes federal, state, and local government representatives and

agencies; elected officials; Native American Tribes; other interested parties; and local libraries and newspapers. This list also includes all affected landowners (as defined in the Commission's regulations) who are potential right-of-way grantors, whose property may be used temporarily for project purposes, or who own homes within certain distances of aboveground facilities, and anyone who submits comments on the project. We will update the environmental mailing list as the analysis proceeds to ensure that we send the information related to this environmental review to all individuals, organizations, and government entities interested in and/or potentially affected by the planned project.

If we publish and distribute the EA, copies will be sent to the environmental mailing list for public review and comment. If you would prefer to receive a paper copy of the document instead of the CD version or would like to remove your name from the mailing list, please return the attached Information Request (appendix 2).

### Becoming an Intervenor

Once WBI Energy files its application with the Commission, you may want to become an "intervenor" which is an official party to the Commission's proceeding. Intervenor play a more formal role in the process and are able to file briefs, appear at hearings, and be heard by the courts if they choose to appeal the Commission's final ruling. An intervenor formally participates in the proceeding by filing a request to intervene. Motions to intervene are more fully described at <http://www.ferc.gov/resources/guides/how-to/intervene.asp>. Instructions for becoming an intervenor are in the "Document-less Intervention Guide" under the "e-filing" link on the Commission's Web site. Please note that the Commission will not accept requests for intervenor status at this time. You must wait until the Commission receives a formal application for the project.

### Additional Information

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](http://www.ferc.gov)) using the eLibrary link. Click on the eLibrary link, click on "General Search" and enter the docket number, excluding the last three digits in the Docket Number field (i.e., PF16-10). Be sure you have selected an appropriate date range. For assistance, please contact FERC Online Support at [FercOnlineSupport@ferc.gov](mailto:FercOnlineSupport@ferc.gov) or toll free at (866) 208-3676, or for TTY, contact

<sup>3</sup> The Council on Environmental Quality regulations addressing cooperating agency responsibilities are at Title 40, Code of Federal Regulations, Part 1501.6.

<sup>4</sup> The Advisory Council on Historic Preservation regulations are at Title 36, Code of Federal Regulations, Part 800. Those regulations define historic properties as any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places.

(202) 502-8659. The eLibrary link also provides access to the texts of formal documents issued by the Commission, such as orders, notices, and rulemakings.

In addition, the Commission offers a free service called eSubscription, which allows you to keep track of all formal issuances and submittals in specific dockets. 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](http://www.ferc.gov/docs-filing/esubscription.asp).

Finally, public meetings or site visits will be posted on the Commission's calendar located at [www.ferc.gov/EventCalendar/EventsList.aspx](http://www.ferc.gov/EventCalendar/EventsList.aspx) along with other related information.

Dated: November 23, 2016.

**Kimberly D. Bose,**  
Secretary.

[FR Doc. 2016-28850 Filed 11-30-16; 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 rate filings:

*Docket Numbers:* ER15-1861-000.

*Applicants:* Tucson Electric Power Company.

*Description:* Report Filing: Refund Report to be effective N/A.

*Filed Date:* 11/23/16.

*Accession Number:* 20161123-5137.

*Comments Due:* 5 p.m. ET 12/14/16.

*Docket Numbers:* ER15-1862-000.

*Applicants:* Tucson Electric Power Company.

*Description:* Report Filing: Refund Report to be effective N/A.

*Filed Date:* 11/23/16.

*Accession Number:* 20161123-5141.

*Comments Due:* 5 p.m. ET 12/14/16.

*Docket Numbers:* ER17-414-000.

*Applicants:* Avista Corporation.

*Description:* Tariff Cancellation: Avista Corp Cancellation of Various Rate Schedules to be effective 11/25/2016.

*Filed Date:* 11/23/16.

*Accession Number:* 20161123-5175.

*Comments Due:* 5 p.m. ET 12/14/16.

*Docket Numbers:* ER17-415-000.

*Applicants:* California Independent System Operator Corporation.

*Description:* § 205(d) Rate Filing: 2016-11-23 Amdt—Implement

Administrative Pricing Policy & Tariff Clarification to be effective 2/1/2017.

*Filed Date:* 11/23/16.

*Accession Number:* 20161123-5185.

*Comments Due:* 5 p.m. ET 12/14/16.

*Docket Numbers:* ER17-416-000.

*Applicants:* California Independent System Operator Corporation.

*Description:* § 205(d) Rate Filing: 2016-11-22 PMin Re-Rate Consistency Amendment to be effective 2/1/2017.

*Filed Date:* 11/25/16.

*Accession Number:* 20161125-5003.

*Comments Due:* 5 p.m. ET 12/16/16.

*Docket Numbers:* ER17-417-000.

*Applicants:* Avista Corporation.

*Description:* Notice of Cancellation of Rate Schedule No. 105 of Avista Corporation.

*Filed Date:* 11/23/16.

*Accession Number:* 20161123-5196.

*Comments Due:* 5 p.m. ET 12/14/16.

Take notice that the Commission received the following qualifying facility filings:

*Docket Numbers:* QF17-312-000.

*Applicants:* Brigham Young University.

*Description:* Form 556 of Brigham Young University [Provo].

*Filed Date:* 11/22/16.

*Accession Number:* 20161122-5143.

*Comments Due:* None Applicable.

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: November 25, 2016.

**Nathaniel J. Davis, Sr.,**  
Deputy Secretary.

[FR Doc. 2016-28836 Filed 11-30-16; 8:45 am]

**BILLING CODE 6717-01-P**

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

[Docket Nos. EL17-24-000; QF83-205-009]

#### Clear Lake Cogeneration Limited Partnership; Notice of Petition for Temporary Waiver

Take notice that on November 22, 2016, pursuant to sections 292.205(c) and 385.207 of the Federal Energy Regulatory Commission's (Commission) Rules of Practice and Procedure, 18 CFR 292.205(c) and 385.207 (2016), Clear Lake Cogeneration Limited Partnership filed a Petition for Temporary Waiver of Operating and Efficiency Standards for Qualifying Cogeneration Facility, for calendar years 2016 and 2017, all as more fully explained in the petition.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211, 385.214). 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 "eFiling" link at <http://www.ferc.gov>. Persons unable to file electronically should submit an original and 5 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street NE., Washington, DC 20426.

This filing is accessible on-line at <http://www.ferc.gov>, using the "eLibrary" link and is 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](mailto: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 13, 2016.

Dated: November 25, 2016.

**Nathaniel J. Davis, Sr.,**

*Deputy Secretary.*

[FR Doc. 2016-28837 Filed 11-30-16; 8:45 am]

**BILLING CODE 6717-01-P**

## DEPARTMENT OF ENERGY

### Federal Energy Regulatory Commission

[FFP Project 133, LLC; Project No. 14524-001]

#### Notice of Intent To File License Application, Filing of Pre-Application Document, and Approving Use of the Traditional Licensing Process

a. *Type of Application:* Notice of Intent to File License Application and Request to Use the Traditional Licensing Process.

b. *Project No.:* 14524-001.

c. *Date filed:* September 26, 2016.

d. *Submitted by:* FFP Project 133, LLC.

e. *Name of Project:* Dashields Locks and Dam Hydroelectric Project.

f. *Location:* At the existing U.S. Army Corps of Engineers' Dashields Locks and Dam on the Ohio River in Edgeworth Borough, Allegheny County, Pennsylvania. The project would occupy United States lands administered by the U.S. Army Corps of Engineers.

g. *Filed Pursuant to:* 18 CFR 5.3 of the Commission's regulations.

h. *Potential Applicant Contact:* Mr. Erik Steimle, Vice President, Development, 334 NW., 11th Ave. Portland, OR 97209, Phone: (503) 998-0230, Email: [erik@ryeddevelopment.com](mailto:erik@ryeddevelopment.com) or Ms. Kellie M. Doherty, Vice President, Environmental, 745 Atlantic Ave., 8th Floor, Boston, MA 02111, Phone: (617) 701-3288, Email: [kellie@ryeddevelopment.com](mailto:kellie@ryeddevelopment.com).

i. *FERC Contact:* Brandi Sangunett, Phone: (202) 502-8393, Email: [brandi.sangunett@ferc.gov](mailto:brandi.sangunett@ferc.gov).

j. FFP Project 133, LLC filed its request to use the Traditional Licensing Process on September 26, 2016. FFP Project 133, LLC provided public notice of its request on September 26, 2016. In a letter dated November 25, 2016, the Director of the Division of Hydropower Licensing approved FFP Project 133, LLC's request to use the Traditional Licensing Process.

k. With this notice, we are initiating informal consultation with the U.S. Fish and Wildlife Service and/or NOAA Fisheries under section 7 of the Endangered Species Act and the joint agency regulations thereunder at 50 CFR, Part 402; and NOAA Fisheries

under section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act and implementing regulations at 50 CFR 600.920. We are also initiating consultation with the Pennsylvania State Historic Preservation Office, as required by section 106, National Historic Preservation Act, and the implementing regulations of the Advisory Council on Historic Preservation at 36 CFR 800.2.

l. With this notice, we are designating FFP Project 133, LLC as the Commission's non-federal representative for carrying out informal consultation pursuant to section 7 of the Endangered Species Act and section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act; and consultation pursuant to section 106 of the National Historic Preservation Act.

m. FFP Project 133, LLC filed a Pre-Application Document (PAD; including a proposed process plan and schedule) with the Commission, pursuant to 18 CFR 5.6 of the Commission's regulations.

n. A copy of the PAD is available for review at the Commission in the Public Reference Room or may be viewed on the Commission's Web site (<http://www.ferc.gov>), using the "eLibrary" link. Enter the docket number, excluding the last three digits in the docket number field to access the document. For assistance, contact FERC Online Support at [FERCOnlineSupport@ferc.gov](mailto:FERCOnlineSupport@ferc.gov), (866) 208-3676 (toll free), or (202) 502-8659 (TTY). A copy is also available for inspection and reproduction at the address in paragraph h.

o. Register online at <http://www.ferc.gov/docs-filing/esubscription.asp> to be notified via email of new filings and issuances related to this or other pending projects. For assistance, contact FERC Online Support.

Dated: November 25, 2016.

**Kimberly D. Bose,**

*Secretary.*

[FR Doc. 2016-28849 Filed 11-30-16; 8:45 am]

**BILLING CODE 6717-01-P**

## ENVIRONMENTAL PROTECTION AGENCY

[Regional Docket Nos. V-2013-12 and V-2013-15, FRL-9955-87-Region 5]

### Clean Air Act Operating Permit Program; Action on Petition for Objection to State Operating Permit for Appleton Coated LLC

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice of final Order on petition to object to Clean Air Act Title V operating permit.

**SUMMARY:** This document announces that the Environmental Protection Agency (EPA) Administrator has denied two petitions asking EPA to object to a Title V operating permit issued by the Wisconsin Department of Natural Resources (WDNR) to Appleton Coated LLC (Appleton Coated). The first petition was submitted by the Sierra Club, the Clean Water Action Council, and the Midwest Environmental Defense Center (Sierra Club Petition). The second petition was submitted by Appleton Coated and the Wisconsin Paper Council (Appleton Coated/WPC Petition). Sections 307(b) and 505(b)(32) of the Clean Air Act (Act) provide that a petitioner may ask for judicial review of those portions of the petition that EPA denies in the United States Court of Appeals for the appropriate circuit. Any petition for review shall be filed within 60 days from the date this notice appears in the **Federal Register**, pursuant to section 307 of the Act.

**ADDRESSES:** You may review copies of the final Order, the petition, and other supporting information at the EPA Region 5 Office, 77 West Jackson Boulevard, Chicago, Illinois 60604. If you wish to examine these documents, you should make an appointment at least 24 hours before the day you would like to visit. Additionally, the final Order for the Appleton petition is available electronically at: <https://www.epa.gov/title-v-operating-permits/title-v-petition-database>.

**FOR FURTHER INFORMATION CONTACT:** Genevieve Damico, Chief, Air Permits Section, Air Programs Branch, Air and Radiation Division, EPA, Region 5, 77 West Jackson Boulevard AR-18J, Chicago, Illinois 60604, telephone (312) 353-4761.

**SUPPLEMENTARY INFORMATION:** The Act affords EPA a 45-day period to review and object, as appropriate, to Title V operating permits proposed by state permitting authorities. Section 505(b)(2) of the Act authorizes any person to petition the EPA Administrator within 60 days after the expiration of the EPA review period to object to a Title V operating permit if EPA has not done so. A petition must be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the state, unless the petitioner demonstrates that it was impracticable to raise issues during the comment period, or the grounds for the issues arose after this period.



On October 28, 2013, EPA received the Sierra Club Petition which alleged that WDNR applied an erroneous interpretation of the "routine maintenance, repair, and replacement" exemption for a superheater boiler tube replacement project from 2005, and that the project resulted in a significant net emissions increase triggering New Source Review (NSR). On November 19, 2013, EPA received the Appleton Coated/WPC Petition which alleged that the permit is deficient because it lacks a permit shield from NSR requirements for the 2005 superheater boiler tube replacement project.

On October 14, 2016, the Administrator issued an Order denying both petitions. The Order explains the reasons behind EPA's conclusion.

Dated: November 18, 2016.

**Robert A. Kaplan,**

*Acting Regional Administrator, Region 9.*

[FR Doc. 2016-28880 Filed 11-30-16; 8:45 am]

**BILLING CODE 6560-50-P**

## ENVIRONMENTAL PROTECTION AGENCY

[EPA-R09-OAR-2016-0580; FRL-9955-86-Region 9]

### Comment Period Extended: General Permit Under the Federal Indian Country Minor NSR Program

**AGENCY:** United States Environmental Protection Agency (EPA).

**ACTION:** Notice; comment period extended.

**SUMMARY:** The Environmental Protection Agency (EPA) previously provided notice of, and requested public comment on, the EPA's draft general permit for gasoline dispensing facilities for use in Indian country within California pursuant to the Clean Air Act (CAA) Federal Indian Country Minor New Source Review (NSR) program for new and modified minor sources. The EPA is extending the deadline for submitting comments on this action until January 31, 2017. Any person may submit written comments on the draft permit during the public comment period.

**DATES:** Comments will be accepted until January 31, 2017.

**ADDRESSES:** Documents relevant to the above-referenced permit are available for public inspection during normal business hours at the following address: U.S. Environmental Protection Agency, Region 9, 75 Hawthorne Street, San Francisco, CA 94105-3901. To arrange for viewing of these documents, call Lisa Beckham at (415) 972-3811. Due to

building security procedures, at least 24 hours advance notice is required.

**FOR FURTHER INFORMATION CONTACT:** Lisa Beckham, EPA Region 9, (415) 972-3811, [beckham.lisa@epa.gov](mailto:beckham.lisa@epa.gov). Key portions of the administrative record for this decision are available through a link at Region 9's Web site, <https://www.epa.gov/caa-permitting/california-tribal-gasoline-permits>, or at [www.regulations.gov](http://www.regulations.gov) (Docket ID # EPA-R09-OAR-2016-0580).

### SUPPLEMENTARY INFORMATION:

#### Extension of Comment Period

On September 30, 2016, the EPA provided notice of, and requested public comment on, the EPA's draft general permit for gasoline dispensing facilities for use in Indian country within California pursuant to the Clean Air Act (CAA) Federal Indian Country Minor New Source Review (NSR) program for new and modified minor sources at 40 CFR 49.151 through 49.161. See also 81 FR 69814 (Oct. 7, 2016).

The EPA is extending the deadline for submitting comments on this action until January 31, 2017. Any person may submit written comments on the draft permit during the public comment period. These comments must raise any reasonably ascertainable issue with supporting arguments by the close of the public comment period. All written comments on the draft general permit must be received or postmarked by January 31, 2017. Comments must be sent or delivered in writing to Lisa Beckham at one of the following addresses:

*Email:* [R9airpermits@epa.gov](mailto:R9airpermits@epa.gov).

*Online Docket:* [www.regulations.gov](http://www.regulations.gov), Docket ID: EPA-R09-OAR-2016-0580.

*U.S. Mail:* Lisa Beckham (AIR-3), U.S. EPA Region 9, 75 Hawthorne Street, San Francisco, CA 94105-3901.

Please see our previous notice for additional information about this action, which is available through the online docket here: <https://www.regulations.gov/document?D=EPA-R09-OAR-2016-0580-0005>.

As detailed in our previous notice, the EPA has scheduled a public hearing for this action on November 30, 2016 from 2:00 to 3:30 p.m. at U.S. EPA Region 9, 1st Floor Conference Center, 75 Hawthorne Street, San Francisco, California. Please note that our previous notice for this action announced a deadline of November 16, 2016 for requesting an additional public hearing; this deadline has passed and is not being extended.

The draft general permit and other supporting information about this action are available through this Web page:

<https://www.epa.gov/caa-permitting/california-tribal-gasoline-permits>. If you have questions, or if you wish to obtain further information, please contact Lisa Beckham at (415) 972-3811, toll-free at (866) 372-9378, via email at [R9airpermits@epa.gov](mailto:R9airpermits@epa.gov), or at the mailing address above. If you would like to be added to our mailing list to receive future information about this draft permit decision or other permit decisions issued by the EPA Region 9, please contact Lisa Beckham, or visit the EPA Region 9's Web site at <http://www2.epa.gov/caa-permitting/tribal-nsr-permits-region-9>.

### Summary of Proposed Action

The draft general permit is for a single source category, gasoline dispensing facilities (GDFs), and would be available in certain areas of Indian country that are within the geographical boundaries of California. This includes areas located in an Indian reservation or in another area of Indian country (as defined in 18 U.S.C. 1151) over which an Indian tribe, or the EPA, has demonstrated that the tribe has jurisdiction and where there is no EPA-approved minor NSR program in place. The EPA is proposing this general permit as an option for CAA minor NSR preconstruction permitting to help streamline the EPA's permitting of certain minor sources that construct or modify in Indian country and belong to the GDF source category.

The primary pollutant of concern for GDFs that may use this general permit is volatile organic compounds (VOC), which are emitted from storage tanks and gasoline dispensing units at GDFs. Some GDFs may also have emergency engines, but only those sources with emergency engines that are exempt from minor NSR permitting requirements may use this general permit. Emissions of all other regulated NSR pollutants from new or modified GDF sources that may use the general permit are expected to be below the minor NSR permitting thresholds in 40 CFR 49.153.

This draft general permit regulates VOC emissions from GDFs, and includes emission limitations that require each GDF to control emissions from storage tanks during unloading of the gasoline cargo from the tanker truck, using what are known as Stage I controls. In addition, the draft general permit requires GDFs in ozone nonattainment areas to limit VOC emissions resulting from vehicle refueling by recovering vapors displaced from the vehicle fuel tank, using pump-based controls known as Stage II controls. There are also limits on the amount of gasoline each GDF can

dispense in a 12-month period: 25,000,000 million gallons in ozone attainment areas, and marginal and moderate ozone nonattainment areas; and 15,000,000 gallons in serious, severe, and extreme ozone nonattainment areas. The emission limitations in the draft general permit are expected to limit emissions of VOC from a new or modified GDF to less than 30 tons per year (tpy) in attainment areas and marginal and moderate ozone nonattainment areas and 8 tpy in serious, severe, and extreme ozone nonattainment areas. The detailed emission limitations are included in the draft permit and discussed in detail in our Technical Support Document for this draft permit, and are available for review here: <https://www.epa.gov/caa-permitting/california-tribal-gasoline-permits>.

Please bring the foregoing notice to the attention of all persons who would be interested in this matter.

Dated: November 22, 2106.

**Elizabeth J. Adams,**

*Acting Director, Air Division, Region IX.*

[FR Doc. 2016-28883 Filed 11-30-16; 8:45 am]

**BILLING CODE 6560-50-P**

## ENVIRONMENTAL PROTECTION AGENCY

[EPA-HQ-OPP-2016-0108; FRL-9955-33-OEI]

### Information Collection Request Submitted to OMB for Review and Approval; Comment Request; Notice of Supplemental Distribution of a Registered Pesticide Product

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice.

**SUMMARY:** The Environmental Protection Agency has submitted an information collection request (ICR), "Notice of Supplemental Distribution of a Registered Pesticide Product" (EPA ICR No. 0278.12, OMB Control No. 2070-0044) 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 November 30, 2016. Public comments were previously requested via the **Federal Register** (81 FR 19172) on April 4, 2016 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 3, 2017.

**ADDRESSES:** Submit your comments, referencing Docket ID Number EPA-HQ-OPP-2016-0108, to (1) EPA online using [www.regulations.gov](http://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](mailto: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:

Jeffrey Bryan, Field and External Affairs Division (7506P), Office of Pesticide Programs, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460-0001; telephone number: (703) 347-8782; email address: [bryan.jeffrey@epa.gov](mailto:bryan.jeffrey@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 <http://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:** This information collection activity provides the EPA with notification of supplemental registration of distributors of pesticide products. EPA is responsible for the regulation of pesticides as mandated by the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended. Section 3(e) of FIFRA (see 7 U.S.C. 136a(e)), allows pesticide registrants to distribute or sell a registered pesticide product under a different name instead of or in addition to the name under the original registration. Such distribution and sale is termed "supplemental distribution" and the product is termed a "distributor product." EPA requires the pesticide registrant to submit a supplemental statement (EPA Form 8570-5, Notice of

Supplemental Distribution of a Registered Pesticide Product) when the registrant has entered into an agreement with a second company that will distribute the registrant's product under the second company's name and product name.

**Burden statement:** The total estimated annual respondent paperwork burden to comply with this information collection activity is 603 hours, or about 19 minutes per response. This estimate includes the time needed to review instructions; utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to respond to a collection of information; search existing data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

**Form Numbers:** EPA Form 8750-5.

**Respondents/affected entities:** 1885.

**Respondent's obligation to respond:**

This information is required to be submitted pursuant to Section 3(e) of FIFRA, as amended. Regulations pertaining to supplemental distribution of pesticide products are contained in Title 40 CFR part 152.132.

**Estimated number of respondents:** 1885.

**Frequency of response:** On occasion.

**Total estimated burden:** 603 hours (per year). Burden is defined at 5 CFR 1320.03(b).

**Total estimated cost:** \$54,463 (per year), includes \$0.00 annualized capital or operation & maintenance costs.

**Changes in the Estimates:** There is an overall increase of 216 hours in the total estimated respondent burden compared with the ICR currently approved by OMB. This increase is due to the increase in the number of applications the Agency expects to receive in the next 3 years. EPA had expected to receive about 1,451 notice submissions annually over the past three years. Based on the number of submissions received annually over that period, the Agency now expects to receive about 1,885 notice submissions annually over the next 3 years. This change is an adjustment to reflect the observed annual increase in submissions.

**Courtney Kerwin,**

*Director, Regulatory Support Division.*

[FR Doc. 2016-28882 Filed 11-30-16; 8:45 am]

**BILLING CODE 6560-50-P**

**ENVIRONMENTAL PROTECTION AGENCY**

[EPA-HQ-OPPT-2016-0658; FRL-9955-38]

**New Chemicals Review Program Under the Amended Toxic Substances Control Act; Notice of Public Meeting and Opportunity for Public Comment****AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Notice.

**SUMMARY:** EPA is holding a meeting to update the public on changes to the New Chemicals Review Program under the Toxic Substances Control Act as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act (TSCA). EPA will describe its review process for new chemicals under the amended statute, as well as discuss issues, challenges, and opportunities that the Agency has identified in the first few months of implementation. The meeting will provide interested parties with an opportunity to provide input on their experiences with the New Chemicals Review Program, including submittal of pre-manufacture notices (PMNs), microbial commercial activities notices (MCANs), and significant new use notices (SNUNs) under section 5 of the law. Information obtained during these meetings will be considered as the Agency works to implement the new requirements and increase efficiency in its review process under TSCA.

**DATES:** The meeting will be held on December 14, 2016 from 9:00 a.m. to 3:00 p.m. Requests to participate in the meeting must be received on or before December 13, 2016. On-site registration will be permitted, but seating and speaking priority will be given to those who pre-register by the deadline.

To request accommodation of a disability, please contact the meeting logistics person listed under **FOR FURTHER INFORMATION CONTACT**, preferably at least 10 days prior to the meeting, to give EPA as much time as possible to process your request.

EPA will hear oral comments at the meeting, and will accept written comments and materials submitted to the docket on or before January 14, 2016.

**ADDRESSES:** The meeting will be held at The Ronald Reagan Building and International Trade Center, Polaris Room, 1300 Pennsylvania Avenue Northwest, Washington, DC 20004. The meetings will also be available by remote access for registered participants. For further information, see Unit III.A. under **SUPPLEMENTARY INFORMATION**.

To participate in the meeting, identified by docket identification (ID) number EPA-HQ-OPPT-2016-0658, you may register online (preferred) or in person at the meeting. To register online, for the meeting, go to <https://tscanewchemicals.eventbrite.com>.

Written comments, identified by the docket ID number, EPA-HQ-OPPT-2016-0658, can be submitted 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 Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.

- **Mail:** Document Control Office (7407M), Office of Pollution Prevention and Toxics (OPPT), Environmental Protection Agency, 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 in general is available at <http://www.epa.gov/dockets>.

**FOR FURTHER INFORMATION CONTACT:**

*For technical information contact:* Greg Schweer, Chemical Control Division (7405M), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460-0001; telephone number: (202)564-8469; email address: [schweer.greg@epa.gov](mailto:schweer.greg@epa.gov).

*For meeting logistics or registration contact:* Klara Zimmerman, Abt Associates; telephone number: (301) 634-1722; email address: [Klara\\_Zimmerman@abtassoc.com](mailto:Klara_Zimmerman@abtassoc.com).

*For general information contact:* The TSCA-Hotline, ABVI-Goodwill, 422 South Clinton Ave., Rochester, NY 14620; telephone number: (202) 554-1404; email address: [TSCA-Hotline@epa.gov](mailto:TSCA-Hotline@epa.gov).

**SUPPLEMENTARY INFORMATION:****I. General Information****A. Does this action apply to me?**

This action is directed to the public in general, and may be of interest to a wide range of stakeholders including chemical manufacturers, processors and users, consumer product companies, non-profit organizations in the environmental and public health sectors, state and local government agencies, and members of the public interested in the environmental and

human health assessment and regulation of chemical substances. Since others also may be interested, the Agency has not attempted to describe all the specific entities that may be affected by this action.

**B. How can I get copies of this document and other related information?**

The docket for this action, identified by docket ID number EPA-HQ-OPPT-2016-0658, is available at <http://www.regulations.gov> or at the Office of Pollution Prevention and Toxics Docket (OPPT Docket), Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Bldg., Rm. 3334, 1301 Constitution Ave. NW., Washington, DC. 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 OPPT Docket is (202) 566-0280. Please review the visitor instructions and additional information about the docket available at <http://www.epa.gov/dockets>. Documents and meeting information will also be available at the registration Web site and on EPA's new chemicals Web site at <https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca>.

**II. Background**

On June 22, 2016, President Obama signed into law the Frank R. Lautenberg Chemical Safety for the 21st Century Act, which amended the TSCA Act of 1976. A number of statutory changes have enhanced the EPA's authority to evaluate chemicals and make determinations regarding their unreasonable risk to health and the environment prior to commercialization. Specifically, under section 5 of the amended TSCA, there are new requirements and additional determinations that EPA must make. These requirements provide EPA new authority to review and determine risk associated with the manufacturing and processing of new chemicals.

*Background on EPA's New Chemicals Review Program.* EPA's New Chemicals Review Program has and will continue to help manage the potential risk to human health and the environment from chemicals new to the marketplace. The program functions as a "gatekeeper" that can identify conditions, up to and including a ban on production, to be placed on the use of a new chemical before it is entered into commerce. Under section 5 of TSCA, anyone who plans to manufacture (including import) a new

chemical substance for a non-exempt commercial purpose, is required to provide EPA with notice before initiating the activity. Additionally, EPA must also be notified before chemical substances are used in new significant uses. Pursuant to the amended law, EPA is now required to make an affirmative determination as to whether or not the new use or new chemical presents, may present, or is not likely to present an unreasonable risk of injury to health or the environment, or, alternatively, if there is insufficient information to allow for a determination. This amendment went into effect immediately after the law was signed by the President and has resulted in significant changes for both the EPA's New Chemicals Review Program and those manufacturers submitting notices, including manufacturers of the notices under review on June 22, 2016. EPA has worked to keep manufacturers informed of these changes and hopes to continue this dialogue during this public meeting.

Additional information on the revisions to TSCA can be found at <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/frank-r-lautenberg-chemical-safety-21st-century-act>.

### III. Meeting

#### A. Remote Access

The meetings will be accessible remotely for registered participants. Registered participants will receive information on how to connect to the meetings prior to their start.

#### B. Public Participation at the Meeting

Members of the public may register to attend the meeting as observers and may also register to provide oral comments on the day of the meeting. A registered speaker is encouraged to focus on issues directly relevant to the meeting's subject matter. Each speaker is allowed no more than 5 minutes to provide oral comments. To accommodate as many registered speakers as possible, speakers may present oral comments only, without visual aids or written material. Persons registered to speak (as well as others) may submit written materials to the docket as described under

#### ADDRESSES.

### IV. How can I request to participate in this meeting?

#### A. Registration

To attend the meeting in person or to receive remote access, you must register no later than December 13, 2016, using one of the methods described under **ADDRESSES**. While on-site registration

will be available, seating will be on a first-come, first-served basis, with priority given to early registrants, until room capacity is reached. The Agency anticipates that approximately 125 people will be able to attend the meeting in person. For registrants not able to attend in person, the meeting will also provide remote access capabilities; registered participants will be provided information on how to connect to the meeting prior to its start.

#### B. Required Registration Information

Members of the public may register to attend as observers or speak if planning to offer oral comments during the scheduled public comment period. To register for the meeting online, you must provide your full name, organization or affiliation, and contact information.

**Authority:** 15 U.S.C.2601 *et seq.*

Dated: November 21, 2016.

**Maria J. Doa,**

*Director, Chemical Control Division, Office of Pollution Prevention and Toxics.*

[FR Doc. 2016-28878 Filed 11-30-16; 8:45 am]

**BILLING CODE 6560-50-P**

## FEDERAL ELECTION COMMISSION

### Sunshine Act Meeting

**AGENCY:** Federal Election Commission.

**DATE AND TIME:** Tuesday, December 6, 2016 at 11:00 a.m.

**PLACE:** 999 E Street NW., Washington, DC.

**STATUS:** This meeting will be closed to the public.

#### ITEMS TO BE DISCUSSED:

Compliance matters pursuant to 52 U.S.C. 30109.

Matters concerning participation in civil actions or proceedings or arbitration.

Information the premature disclosure of which would be likely to have a considerable adverse effect on the implementation of a proposed Commission action.

#### PERSON TO CONTACT FOR INFORMATION:

Judith Ingram, Press Officer, Telephone: (202) 694-1220.

**Shelley E. Garr,**

*Deputy Secretary.*

[FR Doc. 2016-29014 Filed 11-29-16; 4:15 pm]

**BILLING CODE 6715-01-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 December 28, 2016.

*A. Federal Reserve Bank of St. Louis* (David L. Hubbard, Senior Manager) P.O. Box 442, St. Louis, Missouri 63166-2034. Comments can also be sent electronically to

*Comments.applications@stls.frb.org:*

1. *Simmons First National Corporation, Pine Bluff, Arkansas;* to acquire 100 percent of Hardeman County Investment Company Inc., and thereby indirectly acquire First South Bank, both of Jackson, Tennessee.

2. *Legacy BancShares, Inc., Springdale, Arkansas;* to become a bank holding company by acquiring 100 percent of Legacy National Bank, Springdale, Arkansas.

3. *First Security Bancorp, Searcy, Arkansas;* to increase its ownership in CrossFirst Holdings, LLC, from 10.43 percent to 14.53 percent through the purchase of up to 500,000 additional common member units, and thereby increase its interest in CrossFirst Bank, both of Leawood, Kansas.

4. *First National Bancorp, Inc., Green Forest, Arkansas;* to acquire 8.10 percent of Legacy BancShares, Inc., Springdale, Arkansas, and thereby indirectly acquire shares of Legacy National Bank, Springdale, Arkansas.

5. *Home BancShares, Inc., Conway, Arkansas;* to merge with, Giant

Holdings, Inc., and thereby indirectly acquire Landmark Bank, N.A., both of Fort Lauderdale, Florida.

*B. Federal Reserve Bank of Kansas City* (Dennis Denney, Assistant Vice President) 1 Memorial Drive, Kansas City, Missouri 64198-0001:

1. *The Banner County Bank Corporation Employee Stock Ownership Plan and Trust, Harrisburg, Nebraska*; to acquire up to an additional 1.85 percent for a total of 41.65 percent of the voting shares of Banner County Bank Corporation, parent of Banner Capital Bank, both of Harrisburg, Nebraska.

Board of Governors of the Federal Reserve System, November 28, 2016.

**Yao-Chin Chao,**

*Assistant Secretary of the Board.*

[FR Doc. 2016-28894 Filed 11-30-16; 8:45 am]

**BILLING CODE 6210-01-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 19, 2016.

*A. Federal Reserve Bank of Cleveland* (Nadine Wallman, Vice President) 1455 East Sixth Street, Cleveland, Ohio 44101-2566. Comments can also be sent electronically to

[Comments.applications@clev.frb.org](mailto:Comments.applications@clev.frb.org);

1. *Versailles Capital Group* ("VCG"), consisting of *Jeffrey D. Ball* (Nicholasville, Kentucky), *Amber K. Ball* (Nicholasville, Kentucky), *Raymond S. Haga* (Lexington, Kentucky), *Amy S. Haga* (Lexington, Kentucky), *David R. Brown* (Versailles, Kentucky), *David A. Brown* (Versailles, Kentucky), *Leah R. Brown* (Versailles, Kentucky), *Timothy J. Cambron* and his *Irrevocable Trust and Revocable Living Trust 2* (Versailles, Kentucky), *Anne M. Cambron* and her *Irrevocable Trust and Revocable Living Trust 2* (Versailles, Kentucky), *Carly A.*

*Cambron* (Nashville, Tennessee), *Lauren M. Cambron* (Versailles, Kentucky), *Seth J. Cambron* (Versailles, Kentucky), *Ruggles Sign Company* (Versailles, Kentucky), *Conny D. Goodin* (Versailles, Kentucky), *Cheryl J. Goodin* (Versailles, Kentucky), *John L. Goodin* (New Orleans, Louisiana), *Allyson J. Goodin* (New Orleans, Louisiana), *Trent L. Goodin* (Lexington, Kentucky), *Carol A. Goodin* (Louisville, Kentucky), *Jack A. Kain* (Versailles, Kentucky), *Denis G. King* (Frankfort, Kentucky), *Myra D. King* (Frankfort, Kentucky), *Brian J. King* (Brandenburg, Kentucky), *David T. Meyers* (Versailles, Kentucky), *Michelle S. Oxley* (Versailles, Kentucky), *Marion K. Reed* (Versailles, Kentucky), *Brenda A. Reed* (Versailles, Kentucky), *William R. Shanks* (Versailles, Kentucky), *Margaret W. Shanks* (Versailles, Kentucky), *Elizabeth A. Blevins* (Hanahan, South Carolina), *Willard M. Wickstrom* (Louisville, Kentucky), *Barry S. Settles* (Versailles, Kentucky), *Brian S. Settles* (Louisville, Kentucky), *Lindsay Settles* (Versailles, Kentucky), *Frank E. Stark* (Versailles, Kentucky), and *Marsha S. Stark* (Versailles, Kentucky); to acquire voting shares of *Citizens Commerce Bancshares, Inc.*, and thereby indirectly acquire *Citizens Commerce National Bank*, both of Versailles, Kentucky.

*B. Federal Reserve Bank of Minneapolis* (Jacquelyn K. Brunmeier, Assistant Vice President) 90 Hennepin Avenue, Minneapolis, Minnesota 55480-0291:

1. *Michael D. Toombs and Barbara A. Toombs, individually and as trustees of the David H. Toombs Family Trust (the Trust)*, all of *Rosemount, Minnesota*; to acquire voting shares of *Higgins Bancorporation, Inc.*, *Rosemount, Minnesota* (Higgins). In addition, the *Trust*; *Michael D. Toombs*; *Barbara A. Toombs*; *Gregory J. Toombs*, *Clear Lake, Wisconsin*; *James P. Toombs*, *Rosemount, Minnesota*; *Mark E. Toombs*, *Lakeville, Minnesota*; *Amy M. Murphy*, *Farmington, Minnesota*; and *Sarah J. Peterson*, *Lakeville, Minnesota*, to retain or acquire control of *Higgins* shares as part of the *Toombs* family shareholder group, and thereby indirectly retain or acquire control of *First State Bank of Rosemount, Rosemount, Minnesota*.

Board of Governors of the Federal Reserve System, November 28, 2016.

**Yao-Chin Chao,**

*Assistant Secretary of the Board.*

[FR Doc. 2016-28895 Filed 11-30-16; 8:45 am]

**BILLING CODE 6210-01-P**

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### Centers for Disease Control and Prevention

[60Day-17-1030; Docket No. CDC-2016-0115]

### Proposed Data Collection Submitted for Public Comment and Recommendations

**AGENCY:** Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS).

**ACTION:** Notice with comment period.

**SUMMARY:** The Centers for Disease Control and Prevention (CDC), as part of its continuing efforts to reduce public burden and maximize the utility of government information, invites the general public and other Federal agencies to take this opportunity to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995. This notice invites comment on the proposed extension of the Developmental Studies to Improve the National Health Care Surveys, a generic package that includes studies to evaluate and improve upon existing survey design and operations, as well as to examine the feasibility of, and address challenges that may arise with, future expansions of the National Health Care Surveys.

**DATES:** Written comments must be received on or before January 30, 2017.

**ADDRESSES:** You may submit comments, identified by Docket No. CDC-2016-0115 by any of the following methods:

- **Federal eRulemaking Portal:** [Regulations.gov](http://Regulations.gov). Follow the instructions for submitting comments.
- **Mail:** Leroy A. Richardson, Information Collection Review Office, Centers for Disease Control and Prevention, 1600 Clifton Road NE., MS-D74, Atlanta, Georgia 30329.

**Instructions:** All submissions received must include the agency name and Docket Number. All relevant comments received will be posted without change to [Regulations.gov](http://Regulations.gov), including any personal information provided. For access to the docket to read background documents or comments received, go to [Regulations.gov](http://Regulations.gov).

**Please note:** All public comment should be submitted through the *Federal eRulemaking portal* ([Regulations.gov](http://Regulations.gov)) or by U.S. mail to the address listed above.

**FOR FURTHER INFORMATION CONTACT:** To request more information on the proposed project or to obtain a copy of

the information collection plan and instruments, contact the Information Collection Review Office, Centers for Disease Control and Prevention, 1600 Clifton Road NE., MS-D74, Atlanta, Georgia 30329; phone: 404-639-7570; Email: [omb@cdc.gov](mailto:omb@cdc.gov).

#### **SUPPLEMENTARY INFORMATION:**

Under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501-3520), Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. In addition, the PRA also requires Federal agencies to provide a 60-day notice in the **Federal Register** concerning each proposed collection of information, including each new proposed collection, each proposed extension of existing collection of information, and each reinstatement of previously approved information collection before submitting the collection to OMB for approval. To comply with this requirement, we are publishing this notice of a proposed data collection as described below.

Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed 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 of information 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. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, disclose or provide information to or for a Federal agency. 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.

#### **Proposed Project**

Developmental Studies to Improve the National Health Care Surveys (OMB No.

0920-1030, expires 10/31/2017)—Extension—National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC).

#### *Background and Brief Description*

Section 306 of the Public Health Service (PHS) Act (42 U.S.C. 242k), as amended, authorizes the Secretary of Health and Human Services (DHHS), acting through the Division of Health Care Statistics (DHCS) within NCHS, shall collect statistics on the extent and nature of illness and disability of the population of the United States.

The DHCS conducts the National Health Care Surveys, a family of nationally representative surveys of encounters and health care providers in inpatient, outpatient, and long-term care settings. This information collection request (ICR) is for the extension of a generic clearance to conduct developmental studies to improve this family of surveys. This three year clearance period will include studies to evaluate and improve upon existing survey design and operations, as well as to examine the feasibility of, and address challenges that may arise with, future expansions of the National Health Care Surveys.

Specifically, this request covers developmental research with the following aims: (1) To explore ways to refine and improve upon existing survey designs and procedures; and (2) to explore and evaluate proposed survey designs and alternative approaches to data collection. The goal of these research studies is to further enhance DHCS existing and future data collection protocols to increase research capacity and improve health care data quality for the purpose of monitoring public health and well-being at the national, state and local levels, thereby informing the health policy decision-making process. The information collected through this generic ICR will not be used to make generalizable statements about the population of interest or to inform public policy; however, methodological findings may be reported.

This generic ICR would include studies conducted in person, via the telephone or internet, and by postal or electronic mail. Methods covered would include qualitative (e.g., usability testing, focus groups, ethnographic studies, and respondent debriefing questionnaires) and/or quantitative (e.g., pilot tests, pre-tests and split sample experiments) research methodologies. Examples of studies to improve existing survey designs and procedures may include evaluation of incentive approaches to improve recruitment and

increase participation rates; testing of new survey items to obtain additional data on providers, patients, and their encounters while minimizing misinterpretation and human error in data collection; testing data collection in panel surveys; triangulating and validating survey responses from multiple data sources; assessment of the feasibility of data retrieval; and development of protocols that will locate, identify, and collect accurate survey data in the least labor-intensive and burdensome manner at the sampled practice site.

To explore and evaluate proposed survey designs and alternative approaches to collecting data, especially with the nationwide adoption of electronic health records, studies may expand the evaluation of data extraction of electronic health records and submission via continuity of care documentation to small/mid-size/large medical providers and hospital networks, managed care health plans, prison-hospitals, and other inpatient, outpatient, and long-term care settings that are currently either in-scope or out-of-scope of the National Health Care Surveys. Research on feasibility, data quality and respondent burden also may be carried out in the context of developing new surveys of health care providers and establishments that are currently out-of-scope of the National Health Care Surveys.

Specific motivations for conducting developmental studies include: (1) Within the National Ambulatory Medical Care Survey (NAMCS), new clinical groups may be expanded to include dentists, psychologists, podiatrists, chiropractors, optometrists), mid-level providers (e.g., physician assistants, advanced practice nurses, nurse practitioners, certified nurse midwives) and allied-health professionals (e.g., certified nursing aides, medical assistants, radiology technicians, laboratory technicians, pharmacists, dietitians/nutritionists). Current sampling frames such as those from the American Medical Association may be obtained and studied, as well as frames that are not currently in use by NAMCS, such as state and organizational listings of other licensed providers. (2) Within the National Study of Long-Term Care Providers, additional new frames may be sought and evaluated and data items from home care agencies, long-term care hospitals, and facilities exclusively serving individuals with intellectual/developmental disability may be tested. Similarly, data may be obtained from lists compiled by states and other organizations. Data about the facilities

as well as residents and their visits will be investigated. (3) In the inpatient and outpatient care settings, the National Hospital Care Survey (NHCS) and the National Hospital Ambulatory Medical Care Survey (NHAMCS) may investigate the addition of facility and patient information especially as it relates to insurance and electronic medical records.

The National Health Care Surveys collect critical, accurate data that are used to produce reliable national estimates—and in recent years (when budget allows), state-level estimates—of

clinical services and of the providers who delivered those services in inpatient, outpatient, ambulatory, and long-term care settings. The data from these surveys are used by providers, policy makers and researchers to address important topics of interest, including the quality and disparities of care among populations, epidemiology of medical conditions, diffusion of technologies, effects of policies and practice guidelines, and changes in health care over time. Research studies need to be conducted to improve existing and proposed survey design

and procedures of the National Health Care Surveys, as well as to evaluate alternative data collection approaches particularly due to the expansion of electronic health record use, and to develop new sample frames of currently out-of-scope providers and settings of care. There is no cost to respondents other than their time to participate. Average burdens are designed to cover 15–40 min interviews as well as 90 minute focus groups, longer on-site visits, and situations where organizations may be preparing electronic data files.

#### ESTIMATED ANNUALIZED BURDEN HOURS

Type of respondents	Form name	Number of respondents	Number of responses per respondent	Average burden per response (in hours)	Total burden (in hours)
Health Care Providers and Business entities.	Interviews, surveys, focus groups, experiments (in person, phone, internet, postal/electronic mail).	6,667	1	1	6,667
Health Care Providers, State/local government agencies, and business entities.	Interviews, surveys, focus groups, experiments (in person, phone, internet, postal/electronic mail).	167	1	2.5	418
Total .....	.....	.....	.....	.....	7,085

#### 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. 2016–28874 Filed 11–30–16; 8:45 am]

BILLING CODE 4163–18–P

#### DEPARTMENT OF HEALTH AND HUMAN SERVICES

##### Health Resources and Services Administration

##### National Vaccine Injury Compensation Program; List of Petitions Received

**AGENCY:** Health Resources and Services Administration (HRSA), Department of Health and Human Services (HHS).

**ACTION:** Notice.

**SUMMARY:** HRSA is publishing this notice of petitions received under the National Vaccine Injury Compensation Program (the Program), as required by Section 2112(b)(2) of the Public Health Service (PHS) Act, as amended. While the Secretary of HHS (the Secretary) is named as the respondent in all proceedings brought by the filing of petitions for compensation under the Program, the United States Court of Federal Claims is charged by statute with responsibility for considering and acting upon the petitions.

**FOR FURTHER INFORMATION CONTACT:** For information about requirements for filing petitions, and the Program in general, contact the Clerk, United States Court of Federal Claims, 717 Madison Place NW., Washington, DC 20005, (202) 357–6400. For information on HRSA's role in the Program, contact the Director, National Vaccine Injury Compensation Program, 5600 Fishers Lane, Room 08N146B, Rockville, MD 20857; (301) 443–6593, or visit our Web site at: <http://www.hrsa.gov/vaccinecompensation/index.html>.

**SUPPLEMENTARY INFORMATION:** The Program provides a system of no-fault compensation for certain individuals who have been injured by specified childhood vaccines. Subtitle 2 of Title XXI of the PHS Act, 42 U.S.C. 300aa–10 *et seq.*, provides that those seeking compensation are to file a petition with the U.S. Court of Federal Claims and to serve a copy of the petition on the Secretary of HHS, who is named as the respondent in each proceeding. The Secretary has delegated this responsibility under the Program to HRSA. The Court is directed by statute to appoint special masters who take evidence, conduct hearings as appropriate, and make initial decisions as to eligibility for, and amount of, compensation.

A petition may be filed with respect to injuries, disabilities, illnesses, conditions, and deaths resulting from

vaccines described in the Vaccine Injury Table (the Table) set forth at 42 CFR 100.3. This Table lists for each covered childhood vaccine the conditions that may lead to compensation and, for each condition, the time period for occurrence of the first symptom or manifestation of onset or of significant aggravation after vaccine administration. Compensation may also be awarded for conditions not listed in the Table and for conditions that are manifested outside the time periods specified in the Table, but only if the petitioner shows that the condition was caused by one of the listed vaccines.

Section 2112(b)(2) of the PHS Act, 42 U.S.C. 300aa–12(b)(2), requires that “[w]ithin 30 days after the Secretary receives service of any petition filed under section 2111 the Secretary shall publish notice of such petition in the **Federal Register**.” Set forth below is a list of petitions received by HRSA on October 1, 2016, through October 31, 2016. This list provides the name of petitioner, city and state of vaccination (if unknown then city and state of person or attorney filing claim), and case number. In cases where the Court has redacted the name of a petitioner and/or the case number, the list reflects such redaction.

Section 2112(b)(2) also provides that the special master “shall afford all interested persons an opportunity to



submit relevant, written information” relating to the following:

1. The existence of evidence “that there is not a preponderance of the evidence that the illness, disability, injury, condition, or death described in the petition is due to factors unrelated to the administration of the vaccine described in the petition,” and

2. Any allegation in a petition that the petitioner either:

a. “[S]ustained, or had significantly aggravated, any illness, disability, injury, or condition not set forth in the Vaccine Injury Table but which was caused by” one of the vaccines referred to in the Table, or

b. “[S]ustained, or had significantly aggravated, any illness, disability, injury, or condition set forth in the Vaccine Injury Table the first symptom or manifestation of the onset or significant aggravation of which did not occur within the time period set forth in the Table but which was caused by a vaccine” referred to in the Table.

In accordance with Section 2112(b)(2), all interested persons may submit written information relevant to the issues described above in the case of the petitions listed below. Any person choosing to do so should file an original and three (3) copies of the information with the Clerk of the U.S. Court of Federal Claims at the address listed above (under the heading **FOR FURTHER INFORMATION CONTACT**), with a copy to HRSA addressed to Director, Division of Injury Compensation Programs, Healthcare Systems Bureau, 5600 Fishers Lane, 08N146B, Rockville, MD 20857. The Court’s caption (Petitioner’s Name v. Secretary of Health and Human Services) and the docket number assigned to the petition should be used as the caption for the written submission. Chapter 35 of title 44, United States Code, related to paperwork reduction, does not apply to information required for purposes of carrying out the Program.

Dated: November 23, 2016.

**James Macrae,**

*Acting Administrator.*

#### List of Petitions Filed

1. Chi Quach on behalf of J. T., Garden Grove, California, Court of Federal Claims No: 16–1258V.
2. Anthony Irwin, Midlothian, Texas, Court of Federal Claims No: 16–1260V.
3. Doncella H. Vancannon, Raleigh, North Carolina, Court of Federal Claims No: 16–1261V.
4. Sally Voice, Phoenix, Arizona, Court of Federal Claims No: 16–1262V.
5. Helen G. Isham, Greensboro, North Carolina, Court of Federal Claims No: 16–1266V.
6. Jarmaine Burkett on behalf of R. G., Allentown, Pennsylvania, Court of Federal Claims No: 16–1267V.
7. Tammy Gortmaker, Sioux Falls, South Dakota, Court of Federal Claims No: 16–1269V.
8. Angela Barry, Washington, District of Columbia, Court of Federal Claims No: 16–1270V.
9. Paloma Ermel, Las Vegas, Nevada, Court of Federal Claims No: 16–1271V.
10. Cecelia Buchanan, Arlington, Texas, Court of Federal Claims No: 16–1272V.
11. Staci Putnam on behalf of A. B., Deceased, Jackson, Michigan, Court of Federal Claims No: 16–1273V.
12. David Replogle, Rockford, Illinois, Court of Federal Claims No: 16–1274V.
13. Beth Cook on behalf of B. T., Washington, District of Columbia, Court of Federal Claims No: 16–1275V.
14. Mary Gallagher, Cambridge, Massachusetts, Court of Federal Claims No: 16–1277V.
15. Laurie Powell, Westminster, Colorado, Court of Federal Claims No: 16–1278V.
16. Alyssa Salerno, Brewster, New York, Court of Federal Claims No: 16–1280V.
17. Jody R. Smith, Marshfield, Wisconsin, Court of Federal Claims No: 16–1282V.
18. Curtis Bakken, Park Rapids, Minnesota, Court of Federal Claims No: 16–1283V.
19. Krista M. Gut on behalf of Jeremy D. Gut, Deceased, Columbus, Ohio, Court of Federal Claims No: 16–1284V.
20. Michael Ferg on behalf of Sarah Morcos, Deceased, Dallas, Texas, Court of Federal Claims No: 16–1285V.
21. William R. Choiniere, Minneapolis, Minnesota, Court of Federal Claims No: 16–1286V.
22. Nicole Mackey, Denver, Colorado, Court of Federal Claims No: 16–1289V.
23. Noreen Fontana, Roseville, Minnesota, Court of Federal Claims No: 16–1290V.
24. James E. Black, Scottsboro, Alabama, Court of Federal Claims No: 16–1292V.
25. Robert Kinzie, Seymour, Indiana, Court of Federal Claims No: 16–1293V.
26. Anthony Casciano, Bethlehem, Pennsylvania, Court of Federal Claims No: 16–1294V.
27. Glen A. Hein, Coventry, Connecticut, Court of Federal Claims No: 16–1295V.
28. Katherine M. Peterson on behalf of Marlee Michele Peterson, Frankfort, Kentucky, Court of Federal Claims No: 16–1296V.
29. Stacy Ragsdale on behalf of Earl Wayne Harner, Deceased, Harrisburg, Illinois, Court of Federal Claims No: 16–1298V.
30. Julie Jodoin, Sarasota, Florida, Court of Federal Claims No: 16–1299V.
31. Sarah Gantar and George Holloman on behalf of C. H., Deceased, Yucca Valley, California, Court of Federal Claims No: 16–1303V.
32. Sharyn Waidzunas, Tampa, Florida, Court of Federal Claims No: 16–1304V.
33. Cheryl Nicosia and David Nicosia on behalf of A. N., Chicago, Illinois, Court of Federal Claims No: 16–1305V.
34. Janna Duckett, Anniston, Alabama, Court of Federal Claims No: 16–1306V.
35. Thomas P. Kelleher, Sterling, Virginia, Court of Federal Claims No: 16–1307V.
36. Russell Blender, Washington, District of Columbia, Court of Federal Claims No: 16–1308V.
37. Inez Bush, Los Angeles, California, Court of Federal Claims No: 16–1310V.
38. Kathaleen N. Vuinovich, Greensboro, North Carolina, Court of Federal Claims No: 16–1312V.
39. Elaine Ross, Gibsonia, Pennsylvania, Court of Federal Claims No: 16–1313V.
40. Thaihoa Huynh and Cuong Nguyen on behalf of E. N., Chicago, Illinois, Court of Federal Claims No: 16–1314V.
41. Robert St. Pierre, Washington, District of Columbia, Court of Federal Claims No: 16–1315V.
42. Linda Meadows, Vancouver, Washington, Court of Federal Claims No: 16–1317V.
43. Gabriela Broughal, Ventura, California, Court of Federal Claims No: 16–1318V.
44. Randy Blair Davis, Ely, Nevada, Court of Federal Claims No: 16–1320V.
45. Brian Carney, Southwick, Massachusetts, Court of Federal Claims No: 16–1321V.
46. Lori Schoonover, Kansas City, Missouri, Court of Federal Claims No: 16–1324V.
47. Vada Kimey, Fort Walton Beach, Florida, Court of Federal Claims No: 16–1325V.
48. May Ruby Johnson, White Sands Missile Range, New Mexico, Court of Federal Claims No: 16–1326V.

49. Gretchen Maciver, Sarasota, Florida, Court of Federal Claims No: 16–1327V.
50. Donald Misch, Boulder, Colorado, Court of Federal Claims No: 16–1328V.
51. Lisa Lebron on behalf of L. L., Orlando, Florida, Court of Federal Claims No: 16–1329V.
52. Anthony Ricard, Lakeside, California, Court of Federal Claims No: 16–1330V.
53. Michael Parrish, Phoenix, Arizona, Court of Federal Claims No: 16–1331V.
54. Michele M. Phillips, Barberton, Ohio, Court of Federal Claims No: 16–1332V.
55. Julie R. Korb, Greenfield, Wisconsin, Court of Federal Claims No: 16–1333V.
56. Suzan Cluck, Irving, Texas, Court of Federal Claims No: 16–1334V.
57. Patricia G. Stewart, Elizabethtown, Kentucky, Court of Federal Claims No: 16–1336V.
58. Marguerite Acker, Midland, Michigan, Court of Federal Claims No: 16–1337V.
59. Robert Giesbrecht, Fargo, North Dakota, Court of Federal Claims No: 16–1338V.
60. Ron Collier, Annapolis, Maryland, Court of Federal Claims No: 16–1339V.
61. Elijah Thomas, Washington, District of Columbia, Court of Federal Claims No: 16–1340V.
62. Wossen Tariku, Spokane, Washington, Court of Federal Claims No: 16–1341V.
63. Brittany N. Ridgeway, Spokane, Washington, Court of Federal Claims No: 16–1342V.
64. Carol Stanley, Knoxville, Tennessee, Court of Federal Claims No: 16–1343V.
65. Carolyn E. Cecil, Baltimore, Maryland, Court of Federal Claims No: 16–1344V.
66. Linda Adkins Greer on behalf of Estate of Michael Stephen Greer, Deceased, Birmingham, Alabama, Court of Federal Claims No: 16–1345V.
67. Irvin Walser, Highpoint, North Carolina, Court of Federal Claims No: 16–1347V.
68. Justin Rogers, Lake Success, New York, Court of Federal Claims No: 16–1349V.
69. Stephanie Delguzzi on behalf of S. D., Beverly Hills, California, Court of Federal Claims No: 16–1350V.
70. Robin Posniak, Flushing, New York, Court of Federal Claims No: 16–1351V.
71. Jennifer N. Jarvis on behalf of J. N. J., Gassaway, West Virginia, Court of Federal Claims No: 16–1354V.
72. Debra Johnson, Lewiston, Maine, Court of Federal Claims No: 16–1356V.
73. Douglas A. Freedman, Chicago, Illinois, Court of Federal Claims No: 16–1357V.
74. Eric G. Winston, New York, New York, Court of Federal Claims No: 16–1359V.
75. Kathleen Gregory, Everett, Washington, Court of Federal Claims No: 16–1360V.
76. Yiwei Sun, Southborough, Massachusetts, Court of Federal Claims No: 16–1361V.
77. Martha-Helene Stapleton, Alexandria, Virginia, Court of Federal Claims No: 16–1362V.
78. Paulette R. Miliner, Greensboro, North Carolina, Court of Federal Claims No: 16–1364V.
79. Anne S. Andres, Pittsburgh, Pennsylvania, Court of Federal Claims No: 16–1366V.
80. Jacqueline M. Duncan, Delaware, Ohio, Court of Federal Claims No: 16–1367V.
81. Jacqueline Dickson, Lake City, Florida, Court of Federal Claims No: 16–1370V.
82. Elizabeth Trunk, Cincinnati, Ohio, Court of Federal Claims No: 16–1371V.
83. Richard Knauss, Easton, Pennsylvania, Court of Federal Claims No: 16–1372V.
84. Neely H. Cooke, Richmond, Virginia, Court of Federal Claims No: 16–1373V.
85. Alexis Farrell, Yuba City, California, Court of Federal Claims No: 16–1374V.
86. Thomas McCandless, San Mateo, California, Court of Federal Claims No: 16–1375V.
87. Virgilio Dasilveira, North Dartmouth, Massachusetts, Court of Federal Claims No: 16–1376V.
88. Elizabeth Glick, Dallas, Texas, Court of Federal Claims No: 16–1377V.
89. Amy Komaki, Dallas, Texas, Court of Federal Claims No: 16–1379V.
90. Wogayehu Dubale, Los Angeles, California, Court of Federal Claims No: 16–1381V.
91. Beth Taylor on behalf of K. S., Farmington Hills, Michigan, Court of Federal Claims No: 16–1382V.
92. Ray A. Robbins, Hardinsburg, Kentucky, Court of Federal Claims No: 16–1385V.
93. Andrew Sanders, Washington, District of Columbia, Court of Federal Claims No: 16–1386V.
94. Jodi Cooper, Washington, District of Columbia, Court of Federal Claims No: 16–1387V.
95. Michael Ray, Washington, District of Columbia, Court of Federal Claims No: 16–1388V.
96. Ritu Bhatia-Nunez, Delray Beach, Florida, Court of Federal Claims No: 16–1389V.
97. Heather Button on behalf of William S. Button, Wheaton, Illinois, Court of Federal Claims No: 16–1391V.
98. Meera Thakoor, Washington, District of Columbia, Court of Federal Claims No: 16–1392V.
99. Don Lewis, Mountain View, California, Court of Federal Claims No: 16–1394V.
100. Margaret Morelli, Northville, Michigan, Court of Federal Claims No: 16–1395V.
101. Noelle James on behalf of Theada Marie Gibbins, Yakima, Washington, Court of Federal Claims No: 16–1397V.
102. Linda Shonka, Lincoln, Nebraska, Court of Federal Claims No: 16–1398V.
103. William Bojduj, Beverly Hills, California, Court of Federal Claims No: 16–1399V.
104. Katharine Gmuer on behalf of T. G., Washington, District of Columbia, Court of Federal Claims No: 16–1400V.
105. Karen Aebig, Scarsdale, New York, Court of Federal Claims No: 16–1401V.
106. Kathy Woolard, Lexington, South Carolina, Court of Federal Claims No: 16–1402V.
107. Scott Taylor, Marysville, Washington, Court of Federal Claims No: 16–1403V.
108. Annemone Mohler, Gresham, Oregon, Court of Federal Claims No: 16–1404V.
109. Karina C. Kurtz, Gloucester, Virginia, Court of Federal Claims No: 16–1408V.
110. Charles A. Yancey, Houston, Texas, Court of Federal Claims No: 16–1410V.
111. Joseph Shapiro, Washington, District of Columbia, Court of Federal Claims No: 16–1411V.
112. Bradley Proctor, Pensacola, Florida, Court of Federal Claims No: 16–1412V.
113. Melinda Middlebrooks, Washington, District of Columbia, Court of Federal Claims No: 16–1413V.
114. Marc Meyer, Naples, Florida, Court of Federal Claims No: 16–1414V.
115. Charlotte Vaughn, Birmingham, Alabama, Court of Federal Claims No: 16–1415V.
116. Terry E. Christopher, Richmond, Virginia, Court of Federal Claims No: 16–1416V.
117. Corinna Baye, Morehead City, North Carolina, Court of Federal Claims No: 16–1419V.

118. Randall Fondow, Green Bay, Wisconsin, Court of Federal Claims No: 16–1420V.
119. Sharon Volpe, Arlington Heights, Illinois, Court of Federal Claims No: 16–1422V.
120. Donald A. Haubner, Cincinnati, Ohio, Court of Federal Claims No: 16–1426V.
121. Judith Wiersema, Greensboro, North Carolina, Court of Federal Claims No: 16–1430V.
122. Stephanie Mercado on behalf of L. A. W., West Hollywood, California, Court of Federal Claims No: 16–1433V.
123. Cheryl Walker, Beverly Hills, California, Court of Federal Claims No: 16–1434V.
124. Jerald Smith, Beverly Hills, California, Court of Federal Claims No: 16–1435V.
125. Clara Allevato, Beverly Hills, California, Court of Federal Claims No: 16–1437V.

[FR Doc. 2016–28868 Filed 11–30–16; 8:45 am]

BILLING CODE 4165–15–P

## DEPARTMENT OF HEALTH AND HUMAN SERVICES

### Health Resources and Services Administration

#### Notice of Single-Award Deviation From Competition Requirements for the National Technical Resource Center for the Newborn Hearing Screening and Intervention Program at Utah State University—Grant Number U52MC04391

**AGENCY:** Health Resources and Services Administration (HRSA), Department of Health and Human Services.

**ACTION:** Notice of Single-Award Deviation from Competition

Requirements for the National Technical Resource Center for the Newborn Hearing Screening and Intervention Program at Utah State University—Grant Number U52MC04391.

**SUMMARY:** HRSA announces the award of a supplement in the amount of \$460,000 for the National Technical Resource Center (NTRC) for the Newborn Hearing Screening and Intervention program cooperative agreement. The purpose of the NTRC is to promote the use of targeted and measurable interventions to increase the number of infants who are followed up for rescreening, referral, and intervention after having not passed a physiologic newborn screening examination prior to discharge from newborn nurseries. Under the authority of the Economy Act approved June 30, 1932, as amended (31 U.S.C. 1535) and Section 648(a)(1) of the Head Start Act (42 U.S.C. 9843(a)(1)), Public Law 110–134, the Administration for Children and Families (ACF) is delegating authority to HRSA to administer this grant supplement on its behalf and to obligate approximately \$460,000 under an Interdepartmental Delegation of Authority (IDDA) to provide funds to the NTRC for the Newborn Hearing Screening and Intervention Program. Authorized by Section 648(a)(1) of the Improving Head Start Readiness Act (42 U.S.C. 9843(a)(1)), ACF provides technical assistance and training for Head Start programs for the purpose of helping children succeed in school. In addition, the Head Start Program Performance Standard requires the Head Start program to ensure that hearing screening is provided within 45 days of the child entering the program.

The supplement, which was awarded on September 29, 2016, permits Utah State University, the cooperative

agreement recipient, to improve hearing screening for children in Early Head Start and Head Start programs to ensure school readiness of enrolled children.

#### SUPPLEMENTARY INFORMATION:

*Recipient of the Award:* Utah State University.

*Amount of Non-Competitive Awards:* \$460,000.

*Budget Period of Supplemental Funding:* 4/1/2016–3/31/2017.

*CFDA Number:* 93.251.

*Authority:* Public Health Service Act, § 399M, as added by § 702 of the Children's Health Act of 2000 (Pub. L. 106–310) and amended by § 2 of the Early Hearing Detection and Intervention Act of 2010 (Pub. L. 111–337) (42 U.S.C. 280g–1) and Improving Head Start Readiness Act (42 U.S.C. 9843(a)(1)).

*Justification:* NTRC serves as the National Resource Center for Early Detection and Intervention (EHDI) helping statewide EHDI programs ensure that children with hearing loss are identified as early as possible. NTRC is experienced in providing technical assistance and training to support hearing screening in Head Start programs. As such NTRC has the infrastructure, groundwork, and resources to improve hearing screening for children in Early Head Start and Head Start programs quickly and efficiently. In addition, ACF and HRSA-funded training and technical assistance at NTRC improves efficiency for hearing screening for children and newborns.

#### FOR FURTHER INFORMATION CONTACT:

Sadie Silcott, MBA, MPH, Division of Services for Children with Special Health Needs, Maternal and Child Health Bureau, HRSA, 5600 Fishers Lane, Room 18W57, Rockville, Maryland 20857, Phone: (301) 443–0133, Email: [ssilcott@hrsa.gov](mailto:ssilcott@hrsa.gov).

Grantee/organization name	Grant No.	State	FY 2016 Authorized funding level	FY 2016 Estimated supplemental funding
Utah State University .....	U52MC04391	UT	\$1,500,000	\$460,000

Dated: November 22, 2016.

James Macrae,

Acting Administrator.

[FR Doc. 2016–28866 Filed 11–30–16; 8:45 am]

BILLING CODE 4165–15–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; Scholarships for Disadvantaged Students Application**

**AGENCY:** Health Resources and Services Administration, (HRSA), Department of Health and Human Services.

**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 3, 2017.

**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](mailto: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](mailto:paperwork@hrsa.gov) or call (301) 443-1984.

**SUPPLEMENTARY INFORMATION:**

*Information Collection Request Title:* Scholarships for Disadvantaged

Students Application OMB No. 0915-0149—Revision.

**Abstract:** The purpose of the Scholarships for Disadvantaged Students (SDS) Program is to promote diversity among health profession students and practitioners by providing funds to eligible schools to provide scholarships to full-time, financially needy students from disadvantaged backgrounds enrolled in health professions and nursing programs.

To qualify for participation in the SDS program, a school must be carrying out a program for recruiting and retaining students from disadvantaged backgrounds, including students who are members of racial and ethnic minority groups (section 737(d)(1)(B) of the PHS Act). A school must meet the eligibility criteria to demonstrate that the program has achieved success based on the number and/or percentage of students from disadvantaged backgrounds who graduate from the school. In awarding SDS funds to eligible schools, funding priority points must be given to schools based on the proportion of graduate students practicing in primary care, the proportion of underrepresented minority students, and the proportion of graduates working in medically underserved communities (section 737(c) of the PHS Act).

Information collected for the SDS application is needed by HRSA to determine whether applicant schools meet applicable requirements and establish priority points for funding. Applicant schools must complete an application for each discipline or program. Data provided includes numbers of full-time student enrollment and their racial/ethnicity data, full-time enrollment by class year of students from disadvantaged background, full-

time students graduated, full-time students from disadvantaged background graduated, and full-time graduates serving in Medically Underserved Communities. Numbers of full-time graduates serving in primary care must be provided for schools of medicine, osteopathic medicine, dentistry, nursing (graduate degree program), physician assistants, dental hygiene, and mental and behavioral health.

Each school will determine the eligibility of students based on financial need and whether a student is from a disadvantaged background.

The SDS program specific form has been revised to reflect a change in the order of the fields only. Fields K (Public or Non Profit Institution) and H (Point of Contact) have been moved to fields A and B respectively. Now Field A is Public or Non Profit Institution and Field B is Point of Contact. All other fields remained in sequence and were renamed in appropriate letter order.

**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
SDS Application Program Specific form .....	400	1	400	13	5,200
Total .....	400	.....	400	.....	5,200

Jason E. Bennett,

Director, Division of the Executive Secretariat.

[FR Doc. 2016-28834 Filed 11-30-16; 8:45 am]

**BILLING CODE 4165-15-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; The Division of Independent Review Grant Reviewer Recruitment Form**

**AGENCY:** Health Resources and Services Administration (HRSA), Department of Health and Human Services.

**ACTION:** Notice.

**SUMMARY:** In compliance with Section 3507(a)(1)(D) of the Paperwork Reduction Act of 1995, 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 3, 2017.

**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](mailto: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](mailto:paperwork@hrsa.gov) or call (301) 443-1984.

**SUPPLEMENTARY INFORMATION:**

*Information Collection Request Title:* The Division of Independent Review Grant Reviewer Recruitment Form

OMB No. 0915-0295—Extension.

*Abstract:* HRSA's Division of Independent Review (DIR) is responsible for administering the review of eligible grant applications submitted to HRSA. DIR ensures that the objective review process is independent, efficient, effective, economical, and complies with the applicable statutes, regulations, and policies. Applications are reviewed by subject experts knowledgeable in health and public health disciplines for which support is requested. Review findings are advisory to HRSA programs responsible for making award decisions.

This request continues a web-based data collection system, the Reviewer Recruitment Module (RRM), used to gather critical review participant information. The RRM uses standardized categories of information in drop down menu format for data such as the following: degree, specialty, occupation, work setting, and, in select instances, affiliations with organizations and institutions that serve special populations. Other demographic data may be voluntarily provided by a potential review participant. HRSA maintains a roster of approximately 6,000 qualified individuals who are willing to serve on HRSA objective review committees.

Review participants may also update their information electronically. The RRM is 508 compliant and accessible to the general public using any of the commonly used internet browsers via a link on the HRSA "Grants" internet site

or by keying the RRM URL into their browser.

*Need and Proposed Use of the Information:* HRSA uses the RRM to collect information from individuals who are willing to volunteer as objective review committee participants for the Agency's competitive grant and cooperative agreement funding opportunities. The RRM provides HRSA with an effective search and communication functionality to identify and contact qualified potential grant review participants. Expertise is always the primary determinant in selecting potential review participants for any grant review. No participant is required to provide demographic information to RRM or obligated to participate if invited to serve on an objective review committee.

*Likely Respondents:* Potential reviewers with expertise and experience consistent with the HRSA mission.

*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 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	Responses per respondent	Total responses	Average burden per response (in hours)	Total burden hours
New review participants .....	250	1	250	.166	42
Updating review participants information .....	5,000	1	5,000	.333	1,665
Total .....	5,250	.....	5,250	.....	1,707

Jason E. Bennett,

Director, Division of the Executive Secretariat.

[FR Doc. 2016-28835 Filed 11-30-16; 8:45 am]

BILLING CODE 4165-15-P

**DEPARTMENT OF THE INTERIOR****Fish and Wildlife Service**

[Docket No. FWS-HQ-IA-2016-0140;  
FXIA16710900000-178-FF09A30000]

**Endangered Species; Receipt of Applications for Permit**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Notice of receipt of applications for permit.

**SUMMARY:** We, the U.S. Fish and Wildlife Service, invite the public to comment on the following applications to conduct certain activities with endangered species. With some exceptions, the Endangered Species Act (ESA) prohibit activities with listed species unless Federal authorization is acquired that allows such activities.

**DATES:** We must receive comments or requests for documents on or before January 3, 2017.

**ADDRESSES:** *Submitting Comments:* You may submit comments by one of the following methods:

- *Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments on Docket No. FWS-HQ-IA-2016-0140.

- *U.S. mail or hand-delivery:* Public Comments Processing, Attn: Docket No. FWS-HQ-IA-2016-0140; U.S. Fish and Wildlife Service Headquarters, MS: BPHC; 5275 Leesburg Pike, Falls Church, VA 22041-3803.

When submitting comments, please indicate the name of the applicant and the PRT# you are commenting on. We will post all comments on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see the Public Comments section below for more information).

*Viewing Comments:* Comments and materials we receive will be available for public inspection on <http://www.regulations.gov>, or by appointment, between 8 a.m. and 4 p.m., Monday through Friday, except Federal holidays, at the U.S. Fish and Wildlife Service, Division of Management Authority, 5275 Leesburg Pike, Falls Church, VA 22041-3803; telephone 703-358-2095.

**FOR FURTHER INFORMATION CONTACT:** Brenda Tapia, (703) 358-2104 (telephone); (703) 358-2281 (fax); [DMAFR@fws.gov](mailto:DMAFR@fws.gov) (email).

**SUPPLEMENTARY INFORMATION:****I. Public Comment Procedures**

*A. How do I request copies of applications or comment on submitted applications?*

Send your request for copies of applications or comments and materials concerning any of the applications to the contact listed under **ADDRESSES**. Please include the **Federal Register** notice publication date, the PRT-number, and the name of the applicant in your request or submission. We will not consider requests or comments sent to an email or address not listed under **ADDRESSES**. If you provide an email address in your request for copies of applications, we will attempt to respond to your request electronically.

Please make your requests or comments as specific as possible. Please confine your comments to issues for which we seek comments in this notice, and explain the basis for your comments. Include sufficient information with your comments to allow us to authenticate any scientific or commercial data you include.

The comments and recommendations that will be most useful and likely to influence agency decisions are: (1) Those supported by quantitative information or studies; and (2) Those that include citations to, and analyses of, the applicable laws and regulations. We will not consider or include in our administrative record comments we receive after the close of the comment period (see **DATES**) or comments delivered to an address other than those listed above (see **ADDRESSES**).

*B. May I review comments submitted by others?*

Comments, including names and street addresses of respondents, will be available for public review at the street address listed under **ADDRESSES**. The public may review documents and other information applicants have sent in support of the application unless our allowing viewing would violate the Privacy Act or Freedom of Information Act. 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.

**II. Background**

To help us carry out our conservation responsibilities for affected species, and

in consideration of section 10(a)(1)(A) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*), along with Executive Order 13576, “Delivering an Efficient, Effective, and Accountable Government,” and the President’s Memorandum for the Heads of Executive Departments and Agencies of January 21, 2009—Transparency and Open Government (74 FR 4685; January 26, 2009), which call on all Federal agencies to promote openness and transparency in Government by disclosing information to the public, we invite public comment on these permit applications before final action is taken.

**III. Permit Applications***Endangered Species*

Applicant: Smithsonian National Zoological Park, Washington, DC; PRT-05222C

The applicant requests a permit to export one female captive-bred giant panda (*Ailuropoda melanoleuca*) born at the zoo in 2013 and owned by the Government of China, to the China Conservation and Research Center for the Giant Panda Dujiangyan Base, Sichuan Province, China, under the terms of Smithsonian National Zoological Park loan agreement with the China Wildlife Conservation Association. This export is part of the approved loan program for the purpose of enhancement of the survival of the species through scientific research as outlined in the Smithsonian National Zoological Park’s original permit.

Applicant: Columbus Zoo & Aquarium, Powell, OH; PRT-04257C

The applicant requests a permit to import one captive-bred snow leopard (*Uncia uncia*) for the purpose of enhancement of the survival of the species. This notification covers activities to be conducted by the applicant over a 1-year period.

Applicant: Denver Zoological Foundation, Denver, CO; PRT-03552C

The applicant requests a captive-bred wildlife registration under 50 CFR 17.21(g) for the following species to enhance species propagation or survival: Asian elephant (*Elephas maximus*). This notification covers activities to be conducted by the applicant over a 5-year period.

Applicant: James Sauk, Addison, AL; PRT-93800B

The applicant requests a captive-bred wildlife registration under 50 CFR

17.21(g) for the following species to enhance species propagation or survival: Radiated tortoise (*Astrochelys radiata*). This notification covers activities to be conducted by the applicant over a 5-year period.

Applicant: Douglas Olsen, Eden Prairie, MN; PRT-11164C

The applicant requests a permit to import a sport-hunted trophy of one male bontebok (*Damaliscus pygargus pygargus*) culled from a captive herd maintained under the management program of the Republic of South Africa, for the purpose of enhancement of the survival of the species.

**Brenda Tapia,**

*Program Analyst/Data Administrator, Branch of Permits, Division of Management Authority.*

[FR Doc. 2016-28833 Filed 11-30-16; 8:45 am]

**BILLING CODE 4333-15-P**

## DEPARTMENT OF THE INTERIOR

### Bureau of Land Management

[17XL1109AF-LLUT922300-L13200000-EL0000, UTU-84102 24-1A]

### Notice of Federal Competitive Coal Lease Sale, Greens Hollow Tract, Utah (Coal Lease Application UTU-84102)

**AGENCY:** Bureau of Land Management, Interior.

**ACTION:** Notice.

**SUMMARY:** Notice is hereby given that the United States Department of the Interior, Bureau of Land Management (BLM) Utah State Office, will offer the Federal coal resources described below as the Greens Hollow Tract (UTU-84102) for competitive sale by sealed bid, in accordance with the Mineral Leasing Act of 1920, as amended, and the applicable implementing regulations. The sale tract is located in Sanpete and Sevier Counties, Utah. The Greens Hollow coal lease sale was originally scheduled to be held on September 22, 2016. Due to a Notice of Appeal and Petition for Stay on the BLM's Record of Decision filed with the Interior Board of Land Appeals (IBLA) by four environmental groups, BLM was required to postpone the previous lease sale. Under the Department of the Interior's regulations, when a decision is appealed to the IBLA and a stay is requested, the BLM's decision is stayed while the Board considers the stay request. On October 26, 2016, the IBLA denied the request for a stay, holding that the environmental groups failed to show a likelihood of immediate and irreparable harm resulting from BLM's

decision to hold a competitive coal lease sale for the Greens Hollow tract. This notice announces a new date for the previously postponed lease sale.

**DATES:** The lease sale will be held at 1 p.m. Mountain Time, on January 4, 2017. Sealed bids must be sent by certified mail, return receipt requested, to the Collections Officer, BLM, Utah State Office, or be hand-delivered to the BLM public room Contact Representatives, BLM Utah State Office, at the address indicated below, and must be received on or before 10 a.m. Mountain Time, on January 4, 2017. Any bid received after the time specified will not be considered and will be returned. The BLM Contact Representatives will issue a receipt for each hand-delivered, sealed bid. The outside of the sealed envelope containing the bid must clearly state the envelope contains a bid for Coal Lease Sale UTU-84102, and is not to be opened before the date and hour of the sale.

**ADDRESSES:** Sealed bids must be mailed to the Collection Officer or hand-delivered to the BLM public room Contact Representative at BLM, Utah State Office, 440 West 200 South, Suite 500, Salt Lake City, Utah 84101-1345. The opening of the sealed bids will take place at the Salt Lake City Public Library, 210 East 400 South, Salt Lake City, Utah at 1 p.m. Mountain Time on January 4, 2017.

**FOR FURTHER INFORMATION CONTACT:** Contact Jeff McKenzie, 440 West 200 South, Suite 500 Salt Lake City, Utah 84101-1345 or telephone 801-539-4038. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Relay Service (FRS) at 1-800-877-8339 to leave a message or question for the above individual. The FRS is available 24 hours a day, 7 days a week. Replies are provided during scheduled business hours.

**SUPPLEMENTARY INFORMATION:** This Competitive Coal Lease Sale is being held in response to a lease by application submitted by Ark Land Company (Ark). That application was assigned by Ark to Canyon Fuel Company, LLC, a subsidiary of Bowie Resource Partners, LLC. The assignment was effective September 1, 2013, and was approved by the BLM on July 1, 2014. The coal resources to be offered consist of all recoverable reserves available in the lands identified below. These lands are located in Sanpete and Sevier Counties, Utah, approximately 10.5 miles west of Emery, Utah, under surface lands managed by the Manti-La

Sal and Fishlake National Forests. Those lands are described as follows:

### Salt Lake Meridian, Sevier County, Utah

T. 20 S., R. 4 E.,  
Sec. 36, lot 4, E $\frac{1}{2}$ NE $\frac{1}{4}$ , NE $\frac{1}{4}$ SE $\frac{1}{4}$ .  
T. 21 S., R. 4 E.,  
Sec. 1;  
Sec. 2, SE $\frac{1}{4}$ ;  
Sec. 11, E $\frac{1}{2}$ , E $\frac{1}{2}$ W $\frac{1}{2}$ ;  
Sec. 12, NE $\frac{1}{4}$ , W $\frac{1}{2}$ , W $\frac{1}{2}$ SE $\frac{1}{4}$ ;  
Sec. 13, W $\frac{1}{2}$ NE $\frac{1}{4}$ , NW $\frac{1}{4}$ ;  
Sec. 14, NE $\frac{1}{4}$ , E $\frac{1}{2}$ NW $\frac{1}{4}$ .  
T. 21 S., R. 5 E.,  
Sec. 6.

### Salt Lake Meridian, Sanpete and Sevier Counties, Utah

T. 20 S., R. 5 E.,  
Sec. 19, lots 5 thru 8, E $\frac{1}{2}$ SW $\frac{1}{4}$ , SE $\frac{1}{4}$ ;  
Sec. 20, S $\frac{1}{2}$ ;  
Sec. 21, W $\frac{1}{2}$ SW $\frac{1}{4}$ ;  
Sec. 28, W $\frac{1}{2}$ ;  
Sec. 29, 30, and 31;  
Sec. 32, N $\frac{1}{2}$ , N $\frac{1}{2}$ S $\frac{1}{2}$ ;  
Sec. 33, NW $\frac{1}{4}$ NW $\frac{1}{4}$ .

The area described contains 6,175.39 acres.

The coal in the Greens Hollow Tract has one minable coal bed, which is designated as either the Upper Hiawatha or the Lower Hiawatha seam. These seams are approximately 11 feet in thickness. The coal beds contain approximately 73.4 million in-place tons of coal. However, based on BLM's assessment and mitigation proposed by the Forest Service to address subsidence impacts, the tract being offered for sale is projected to contain approximately 55.7 million tons of technically recoverable high-volatile C bituminous coal. The "as received basis" coal quality in the Upper Hiawatha coal bed is: 11,565 Btu/lb., 7.46 percent moisture, 9.81 percent ash, 36.55 percent volatile matter, 46.1 percent fixed carbon, and 0.55 percent sulfur. The "as received basis" coal quality in the Lower Hiawatha coal bed is: 11,538 Btu/lb., 7.21 percent moisture, 9.69 percent ash, 38.88 percent volatile matter, 43.85 percent fixed carbon, and 1.26 percent sulfur.

Pursuant to the applicable regulations, the Greens Hollow Tract may be leased to the qualified bidder (as established at 43 CFR subpart 3472) that submits the highest cash bonus bid that is equal to or exceeds the Fair Market Value (FMV) for the tract as determined by the authorized officer after the sale. The BLM has prepared its fair market value estimate for the tract, which has been reviewed by the Department of the Interior's Office of Valuation Services.

The Department of the Interior has established a general minimum bid of \$100 per acre or fraction thereof for the tract. The minimum bid is not intended to represent the FMV, and a tract will not be sold unless the bid received



meets or exceeds BLM's FMV estimate. The lease that may be issued as a result of this offering will provide for payment of an annual rental of \$3 per acre or fraction thereof, and a royalty of 8 percent of the value of the coal produced by underground mining methods. The value of the coal for royalty purposes will be determined in accordance with 30 CFR part 1206, subpart F.

This coal lease application (UTU-84102) is not subject to case-by-case processing fees pursuant to 43 CFR 3473.2(f). However, the successful bidder must pay to the BLM the cost BLM incurs for publishing this sale notice. If there is no successful bidder, the applicant will be responsible for all publishing costs.

The required detailed statement under 43 CFR 3422.2 for the offered tract, including bidding instructions and sale procedures under 43 CFR 3422.3-2, and the terms and conditions of the proposed coal lease, is available in the BLM Public Room (Suite 500), Utah State Office, 440 West 200 South, 5th Floor, Salt Lake City, Utah 84101-1345. All case file documents and written comments submitted by the public on FMV, except those portions identified as proprietary by the author and meeting exemptions stated in the Freedom of Information Act, are available for public inspection during normal business hours in the BLM Public Room (Suite 500). The actions announced by this notice are consistent with the Department of the Interior Secretarial Order 3338, which allows for the sale and issuance of a coal lease for a pending application where the environmental analysis under the National Environmental Policy Act had been completed and a Record of Decision or Decision Record had been issued by the BLM or the applicable surface management agency prior to the issuance of the Order. Here the BLM held a public hearing and requested comments on the Environmental Impact Statement, Maximum Economic Recovery, and the FMV of the Greens Hollow Tract on May 6, 2009. The Governor of the State of Utah recommended proceeding with this lease sale on May 26, 2011.

The United States Forest Service prepared a Final Supplemental Environmental Impact Statement, and signed a Record of Decision consenting to the sale on October 5, 2015, prior to the issuance of Secretarial Order 3338.

**Authority:** 43 CFR 3420.1

**Edwin L. Roberson,**  
*State Director.*

[FR Doc. 2016-28869 Filed 11-30-16; 8:45 am]

**BILLING CODE 4310-DQ-P**

## INTERNATIONAL TRADE COMMISSION

**[Investigation Nos. 701-TA-388, 389, and 391 and 731-TA-817, 818, and 821 (Third Review)]**

### Cut-to-Length Carbon-Quality Steel Plate From India, Indonesia, and Korea; Institution of Five-Year Reviews

**AGENCY:** United States International Trade Commission.

**ACTION:** Notice.

**SUMMARY:** The Commission hereby gives notice that it has instituted reviews pursuant to the Tariff Act of 1930 ("the Act"), as amended, to determine whether revocation of the antidumping and countervailing duty orders on cut-to-length carbon-quality steel plate ("CTL plate") from India, Indonesia, and Korea would be likely to lead to continuation or recurrence of material injury. Pursuant to the Act, interested parties are requested to respond to this notice by submitting the information specified below to the Commission.

**DATES:** Effective December 1, 2016. To be assured of consideration, the deadline for responses is January 3, 2017. Comments on the adequacy of responses may be filed with the Commission by February 13, 2017.

**FOR FURTHER INFORMATION CONTACT:** Mary Messer (202-205-3193), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000. General information concerning the Commission may also be obtained by accessing its internet server (<https://www.usitc.gov>). The public record for this proceeding may be viewed on the Commission's electronic docket (EDIS) at <https://edis.usitc.gov>.

#### SUPPLEMENTARY INFORMATION:

**Background.**—On February 10, 2000, the Department of Commerce ("Commerce") issued antidumping and countervailing duty orders on imports of CTL plate from India, Indonesia, and

Korea (65 FR 6585 and 6587). Following first five-year reviews by Commerce and the Commission, effective December 6, 2005, Commerce issued a continuation of the antidumping and countervailing duty orders on CTL plate from India, Indonesia, and Korea (70 FR 72607). Following the second five-year reviews by Commerce and the Commission, effective January 4, 2012, Commerce issued a continuation of the antidumping and countervailing duty orders on imports of CTL plate from India, Indonesia, and Korea (77 FR 264). The Commission is now conducting third reviews pursuant to section 751(c) of the Act, as amended (19 U.S.C. 1675(c)), to determine whether revocation of the orders would be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time. Provisions concerning the conduct of this proceeding may be found in the Commission's Rules of Practice and Procedure at 19 CFR parts 201, subparts A and B and 19 CFR part 207, subparts A and F. The Commission will assess the adequacy of interested party responses to this notice of institution to determine whether to conduct full or expedited reviews. The Commission's determinations in any expedited reviews will be based on the facts available, which may include information provided in response to this notice.

**Definitions.**—The following definitions apply to these reviews:

(1) *Subject Merchandise* is the class or kind of merchandise that is within the scope of the five-year reviews, as defined by the Department of Commerce.

(2) The *Subject Countries* in these reviews are India, Indonesia, and Korea.

(3) The *Domestic Like Product* is the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the *Subject Merchandise*. In its original determinations and its full first and second five-year review determinations, the Commission defined the *Domestic Like Product* as all domestically produced CTL steel plate that corresponds to Commerce's scope description, including grade X-70 plate, micro-alloy steel plate, and plate cut from coils.

(4) The *Domestic Industry* is the U.S. producers as a whole of the *Domestic Like Product*, or those producers whose collective output of the *Domestic Like Product* constitutes a major proportion of the total domestic production of the product. In its original determinations and its full first and second five-year

review determinations, the Commission defined the *Domestic Industry* as all producers of CTL steel plate, including processors.

(5) An *Importer* is any person or firm engaged, either directly or through a parent company or subsidiary, in importing the *Subject Merchandise* into the United States from a foreign manufacturer or through its selling agent.

**Participation in the proceeding and public service list.**—Persons, including industrial users of the *Subject Merchandise* and, if the merchandise is sold at the retail level, representative consumer organizations, wishing to participate in the proceeding as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11(b)(4) of the Commission's rules, no later than 21 days after publication of this notice in the **Federal Register**. The Secretary will maintain a public service list containing the names and addresses of all persons, or their representatives, who are parties to the proceeding.

Former Commission employees who are seeking to appear in Commission five-year reviews are advised that they may appear in a review even if they participated personally and substantially in the corresponding underlying original investigation or an earlier review of the same underlying investigation. The Commission's designated agency ethics official has advised that a five-year review is not the same particular matter as the underlying original investigation, and a five-year review is not the same particular matter as an earlier review of the same underlying investigation for purposes of 18 U.S.C. 207, the post employment statute for Federal employees, and Commission rule 201.15(b) (19 CFR 201.15(b)), 79 FR 3246 (Jan. 17, 2014), 73 FR 24609 (May 5, 2008).

Consequently, former employees are not required to seek Commission approval to appear in a review under Commission rule 19 CFR 201.15, even if the corresponding underlying original investigation or an earlier review of the same underlying investigation was pending when they were Commission employees. For further ethics advice on this matter, contact Carol McCue Verratti, Deputy Agency Ethics Official, at 202–205–3088.

**Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and APO service list.**—Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI submitted in this proceeding available to authorized applicants under the APO

issued in the proceeding, provided that the application is made no later than 21 days after publication of this notice in the **Federal Register**. Authorized applicants must represent interested parties, as defined in 19 U.S.C. 1677(9), who are parties to the proceeding. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

**Certification.**—Pursuant to section 207.3 of the Commission's rules, any person submitting information to the Commission in connection with this proceeding must certify that the information is accurate and complete to the best of the submitter's knowledge. In making the certification, the submitter will acknowledge that information submitted in response to this request for information and throughout this proceeding or other proceeding may be disclosed to and used: (i) by the Commission, its employees and Offices, and contract personnel (a) for developing or maintaining the records of this or a related proceeding, or (b) in internal investigations, audits, reviews, and evaluations relating to the programs, personnel, and operations of the Commission including under 5 U.S.C. Appendix 3; or (ii) by U.S. government employees and contract personnel, solely for cybersecurity purposes. All contract personnel will sign appropriate nondisclosure agreements.

**Written submissions.**—Pursuant to section 207.61 of the Commission's rules, each interested party response to this notice must provide the information specified below. The deadline for filing such responses is January 3, 2017. Pursuant to section 207.62(b) of the Commission's rules, eligible parties (as specified in Commission rule 207.62(b)(1)) may also file comments concerning the adequacy of responses to the notice of institution and whether the Commission should conduct expedited or full reviews. The deadline for filing such comments is February 13, 2017. All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules. The Commission's Handbook on E-Filing, available on the Commission's Web site at <https://edis.usitc.gov>, elaborates upon the Commission's rules with respect to electronic filing. Also, in accordance with sections 201.16(c) and 207.3 of the Commission's rules, each document filed by a party to the proceeding must be served on all other parties to the

proceeding (as identified by either the public or APO service list as appropriate), and a certificate of service must accompany the document (if you are not a party to the proceeding you do not need to serve your response).

No response to this request for information is required if a currently valid Office of Management and Budget (OMB) number is not displayed; the OMB number is 3117 0016/USITC No. 16–5–375, expiration date June 30, 2017. Public reporting burden for the request is estimated to average 15 hours per response. Please send comments regarding the accuracy of this burden estimate to the Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436.

**Inability to provide requested information.**—Pursuant to section 207.61(c) of the Commission's rules, any interested party that cannot furnish the information requested by this notice in the requested form and manner shall notify the Commission at the earliest possible time, provide a full explanation of why it cannot provide the requested information, and indicate alternative forms in which it can provide equivalent information. If an interested party does not provide this notification (or the Commission finds the explanation provided in the notification inadequate) and fails to provide a complete response to this notice, the Commission may take an adverse inference against the party pursuant to section 776(b) of the Act (19 U.S.C. 1677e(b)) in making its determinations in the reviews.

**Information To Be Provided in Response to This Notice of Institution:** If you are a domestic producer, union/worker group, or trade/business association; import/export *Subject Merchandise* from more than one *Subject Country*; or produce *Subject Merchandise* in more than one *Subject Country*, you may file a single response. If you do so, please ensure that your response to each question includes the information requested for each pertinent *Subject Country*. As used below, the term “firm” includes any related firms.

(1) The name and address of your firm or entity (including World Wide Web address) and name, telephone number, fax number, and Email address of the certifying official.

(2) A statement indicating whether your firm/entity is an interested party under 19 U.S.C. 1677(9) and if so, how, including whether your firm/entity is a U.S. producer of the *Domestic Like Product*, a U.S. union or worker group, a U.S. importer of the *Subject Merchandise*, a foreign producer or

exporter of the *Subject Merchandise*, a U.S. or foreign trade or business association (a majority of whose members are interested parties under the statute), or another interested party (including an explanation). If you are a union/worker group or trade/business association, identify the firms in which your workers are employed or which are members of your association.

(3) A statement indicating whether your firm/entity is willing to participate in this proceeding by providing information requested by the Commission.

(4) A statement of the likely effects of the revocation of the antidumping and countervailing duty orders on the *Domestic Industry* in general and/or your firm/entity specifically. In your response, please discuss the various factors specified in section 752(a) of the Act (19 U.S.C. 1675a(a)) including the likely volume of subject imports, likely price effects of subject imports, and likely impact of imports of *Subject Merchandise* on the *Domestic Industry*.

(5) A list of all known and currently operating U.S. producers of the *Domestic Like Product*. Identify any known related parties and the nature of the relationship as defined in section 771(4)(B) of the Act (19 U.S.C. 1677(4)(B)).

(6) A list of all known and currently operating U.S. importers of the *Subject Merchandise* and producers of the *Subject Merchandise* in each *Subject Country* that currently export or have exported *Subject Merchandise* to the United States or other countries after 2010.

(7) A list of 3–5 leading purchasers in the U.S. market for the *Domestic Like Product* and the *Subject Merchandise* (including street address, World Wide Web address, and the name, telephone number, fax number, and Email address of a responsible official at each firm).

(8) A list of known sources of information on national or regional prices for the *Domestic Like Product* or the *Subject Merchandise* in the U.S. or other markets.

(9) If you are a U.S. producer of the *Domestic Like Product*, provide the following information on your firm's operations on that product during calendar year 2015, except as noted (report quantity data in short tons and value data in U.S. dollars, f.o.b. plant). If you are a union/worker group or trade/business association, provide the information, on an aggregate basis, for the firms in which your workers are employed/which are members of your association.

(a) Production (quantity) and, if known, an estimate of the percentage of

total U.S. production of the *Domestic Like Product* accounted for by your firm's(s') production;

(b) Capacity (quantity) of your firm to produce the *Domestic Like Product* (that is, the level of production that your establishment(s) could reasonably have expected to attain during the year, assuming normal operating conditions (using equipment and machinery in place and ready to operate), normal operating levels (hours per week/weeks per year), time for downtime, maintenance, repair, and cleanup, and a typical or representative product mix);

(c) the quantity and value of U.S. commercial shipments of the *Domestic Like Product* produced in your U.S. plant(s);

(d) the quantity and value of U.S. internal consumption/company transfers of the *Domestic Like Product* produced in your U.S. plant(s); and

(e) the value of (i) net sales, (ii) cost of goods sold (COGS), (iii) gross profit, (iv) selling, general and administrative (SG&A) expenses, and (v) operating income of the *Domestic Like Product* produced in your U.S. plant(s) (include both U.S. and export commercial sales, internal consumption, and company transfers) for your most recently completed fiscal year (identify the date on which your fiscal year ends).

(10) If you are a U.S. importer or a trade/business association of U.S. importers of the *Subject Merchandise* from any *Subject Country*, provide the following information on your firm's(s') operations on that product during calendar year 2015 (report quantity data in short tons and value data in U.S. dollars). If you are a trade/business association, provide the information, on an aggregate basis, for the firms which are members of your association.

(a) The quantity and value (landed, duty-paid but not including antidumping or countervailing duties) of U.S. imports and, if known, an estimate of the percentage of total U.S. imports of *Subject Merchandise* from each *Subject Country* accounted for by your firm's(s') imports;

(b) the quantity and value (f.o.b. U.S. port, including antidumping and/or countervailing duties) of U.S. commercial shipments of *Subject Merchandise* imported from each *Subject Country*; and

(c) the quantity and value (f.o.b. U.S. port, including antidumping and/or countervailing duties) of U.S. internal consumption/company transfers of *Subject Merchandise* imported from each *Subject Country*.

(11) If you are a producer, an exporter, or a trade/business association of producers or exporters of the *Subject*

*Merchandise* in any *Subject Country*, provide the following information on your firm's(s') operations on that product during calendar year 2015 (report quantity data in short tons and value data in U.S. dollars, landed and duty-paid at the U.S. port but not including antidumping or countervailing duties). If you are a trade/business association, provide the information, on an aggregate basis, for the firms which are members of your association.

(a) Production (quantity) and, if known, an estimate of the percentage of total production of *Subject Merchandise* in each *Subject Country* accounted for by your firm's(s') production;

(b) Capacity (quantity) of your firm(s) to produce the *Subject Merchandise* in each *Subject Country* (that is, the level of production that your establishment(s) could reasonably have expected to attain during the year, assuming normal operating conditions (using equipment and machinery in place and ready to operate), normal operating levels (hours per week/weeks per year), time for downtime, maintenance, repair, and cleanup, and a typical or representative product mix); and

(c) the quantity and value of your firm's(s') exports to the United States of *Subject Merchandise* and, if known, an estimate of the percentage of total exports to the United States of *Subject Merchandise* from each *Subject Country* accounted for by your firm's(s') exports.

(12) Identify significant changes, if any, in the supply and demand conditions or business cycle for the *Domestic Like Product* that have occurred in the United States or in the market for the *Subject Merchandise* in each *Subject Country* after 2010, and significant changes, if any, that are likely to occur within a reasonably foreseeable time. Supply conditions to consider include technology; production methods; development efforts; ability to increase production (including the shift of production facilities used for other products and the use, cost, or availability of major inputs into production); and factors related to the ability to shift supply among different national markets (including barriers to importation in foreign markets or changes in market demand abroad). Demand conditions to consider include end uses and applications; the existence and availability of substitute products; and the level of competition among the *Domestic Like Product* produced in the United States, *Subject Merchandise* produced in each *Subject Country*, and such merchandise from other countries.

(13) (OPTIONAL) A statement of whether you agree with the above definitions of the *Domestic Like Product* and *Domestic Industry*; if you disagree with either or both of these definitions, please explain why and provide alternative definitions.

**Authority:** This proceeding is being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.61 of the Commission's rules.

By order of the Commission.

Issued: November 22, 2016.

**Lisa R. Barton,**

*Secretary to the Commission.*

[FR Doc. 2016-28494 Filed 11-30-16; 8:45 am]

**BILLING CODE 7020-02-P**

## INTERNATIONAL TRADE COMMISSION

[Investigation No. 731-TA-638 (Fourth Review)]

### Stainless Steel Wire Rod From India; Institution of a Five-Year Review

**AGENCY:** United States International Trade Commission.

**ACTION:** Notice.

**SUMMARY:** The Commission hereby gives notice that it has instituted a review pursuant to the Tariff Act of 1930 ("the Act"), as amended, to determine whether revocation of the antidumping duty order on stainless steel wire rod from India would be likely to lead to continuation or recurrence of material injury. Pursuant to the Act, interested parties are requested to respond to this notice by submitting the information specified below to the Commission.

**DATES:** Effective December 1, 2016. To be assured of consideration, the deadline for responses is January 3, 2017. Comments on the adequacy of responses may be filed with the Commission by February 13, 2017.

#### FOR FURTHER INFORMATION CONTACT:

Mary Messer (202-205-3193), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000. General information concerning the Commission may also be obtained by accessing its internet server (<https://www.usitc.gov>). The public record for this proceeding may be viewed on the

Commission's electronic docket (EDIS) at <https://edis.usitc.gov>.

#### SUPPLEMENTARY INFORMATION:

**Background.**—On December 1, 1993, the Department of Commerce ("Commerce") issued an antidumping duty order on imports of stainless steel wire rod from India (58 FR 63335). Following first five-year reviews by Commerce and the Commission, effective August 2, 2000, Commerce issued a continuation of the antidumping duty order on imports of stainless steel wire rod from India (65 FR 47403). Following second five-year reviews by Commerce and the Commission, effective August 8, 2006, Commerce issued a continuation of the antidumping duty order on imports of stainless steel wire rod from India (71 FR 45023). Following the third five-year reviews by Commerce and the Commission, effective January 23, 2012, Commerce issued a continuation of the antidumping duty order on imports of stainless steel wire rod from India (77 FR 3231). The Commission is now conducting a fourth review pursuant to section 751(c) of the Act, as amended (19 U.S.C. 1675(c)), to determine whether revocation of the order would be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time. Provisions concerning the conduct of this proceeding may be found in the Commission's Rules of Practice and Procedure at 19 CFR parts 201, subparts A and B and 19 CFR part 207, subparts A and F. The Commission will assess the adequacy of interested party responses to this notice of institution to determine whether to conduct a full review or an expedited review. The Commission's determination in any expedited review will be based on the facts available, which may include information provided in response to this notice.

**Definitions.**—The following definitions apply to this review:

(1) *Subject Merchandise* is the class or kind of merchandise that is within the scope of the five-year review, as defined by the Department of Commerce.

(2) The *Subject Country* in this review is India.

(3) The *Domestic Like Product* is the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the *Subject Merchandise*. In its original determinations, its full first and second five-year review determinations, and its expedited third five-year review determination, the Commission defined the *Domestic Like Product* as all

stainless steel wire rod within Commerce's scope.

(4) The *Domestic Industry* is the U.S. producers as a whole of the *Domestic Like Product*, or those producers whose collective output of the *Domestic Like Product* constitutes a major proportion of the total domestic production of the product. In its original determinations, its full first and second five-year review determinations, and its expedited third five-year review determination, the Commission defined the *Domestic Industry* as all domestic producers of stainless steel wire rod.

(5) An *Importer* is any person or firm engaged, either directly or through a parent company or subsidiary, in importing the *Subject Merchandise* into the United States from a foreign manufacturer or through its selling agent.

**Participation in the proceeding and public service list.**—Persons, including industrial users of the *Subject Merchandise* and, if the merchandise is sold at the retail level, representative consumer organizations, wishing to participate in the proceeding as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11(b)(4) of the Commission's rules, no later than 21 days after publication of this notice in the **Federal Register**. The Secretary will maintain a public service list containing the names and addresses of all persons, or their representatives, who are parties to the proceeding.

Former Commission employees who are seeking to appear in Commission five-year reviews are advised that they may appear in a review even if they participated personally and substantially in the corresponding underlying original investigation or an earlier review of the same underlying investigation. The Commission's designated agency ethics official has advised that a five-year review is not the same particular matter as the underlying original investigation, and a five-year review is not the same particular matter as an earlier review of the same underlying investigation for purposes of 18 U.S.C. 207, the post employment statute for Federal employees, and Commission rule 201.15(b) (19 CFR 201.15(b)), 79 FR 3246 (Jan. 17, 2014), 73 FR 24609 (May 5, 2008). Consequently, former employees are not required to seek Commission approval to appear in a review under Commission rule 19 CFR 201.15, even if the corresponding underlying original investigation or an earlier review of the same underlying investigation was pending when they were Commission employees. For further ethics advice on

this matter, contact Carol McCue Verratti, Deputy Agency Ethics Official, at 202–205–3088.

**Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and APO service list.**—Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI submitted in this proceeding available to authorized applicants under the APO issued in the proceeding, provided that the application is made no later than 21 days after publication of this notice in the **Federal Register**. Authorized applicants must represent interested parties, as defined in 19 U.S.C. 1677(9), who are parties to the proceeding. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

**Certification.**—Pursuant to section 207.3 of the Commission's rules, any person submitting information to the Commission in connection with this proceeding must certify that the information is accurate and complete to the best of the submitter's knowledge. In making the certification, the submitter will acknowledge that information submitted in response to this request for information and throughout this proceeding or other proceeding may be disclosed to and used: (i) By the Commission, its employees and Offices, and contract personnel (a) for developing or maintaining the records of this or a related proceeding, or (b) in internal investigations, audits, reviews, and evaluations relating to the programs, personnel, and operations of the Commission including under 5 U.S.C. Appendix 3; or (ii) by U.S. government employees and contract personnel, solely for cybersecurity purposes. All contract personnel will sign appropriate nondisclosure agreements.

**Written submissions.**—Pursuant to section 207.61 of the Commission's rules, each interested party response to this notice must provide the information specified below. The deadline for filing such responses is January 3, 2017. Pursuant to section 207.62(b) of the Commission's rules, eligible parties (as specified in Commission rule 207.62(b)(1)) may also file comments concerning the adequacy of responses to the notice of institution and whether the Commission should conduct an expedited or full review. The deadline for filing such comments is February 13, 2017. All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of

sections 201.6, 207.3, and 207.7 of the Commission's rules. The Commission's Handbook on E-Filing, available on the Commission's Web site at <https://edis.usitc.gov>, elaborates upon the Commission's rules with respect to electronic filing. Also, in accordance with sections 201.16(c) and 207.3 of the Commission's rules, each document filed by a party to the proceeding must be served on all other parties to the proceeding (as identified by either the public or APO service list as appropriate), and a certificate of service must accompany the document (if you are not a party to the proceeding you do not need to serve your response).

No response to this request for information is required if a currently valid Office of Management and Budget (OMB) number is not displayed; the OMB number is 3117 0016/USITC No. 16–5–374, expiration date June 30, 2017. Public reporting burden for the request is estimated to average 15 hours per response. Please send comments regarding the accuracy of this burden estimate to the Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436.

**Inability to provide requested information.**—Pursuant to section 207.61(c) of the Commission's rules, any interested party that cannot furnish the information requested by this notice in the requested form and manner shall notify the Commission at the earliest possible time, provide a full explanation of why it cannot provide the requested information, and indicate alternative forms in which it can provide equivalent information. If an interested party does not provide this notification (or the Commission finds the explanation provided in the notification inadequate) and fails to provide a complete response to this notice, the Commission may take an adverse inference against the party pursuant to section 776(b) of the Act (19 U.S.C. 1677e(b)) in making its determination in the review.

**Information to be provided in response to this notice of institution:** As used below, the term “firm” includes any related firms.

(1) The name and address of your firm or entity (including World Wide Web address) and name, telephone number, fax number, and Email address of the certifying official.

(2) A statement indicating whether your firm/entity is an interested party under 19 U.S.C. 1677(9) and if so, how, including whether your firm/entity is a U.S. producer of the *Domestic Like Product*, a U.S. union or worker group, a U.S. importer of the *Subject*

*Merchandise*, a foreign producer or exporter of the *Subject Merchandise*, a U.S. or foreign trade or business association (a majority of whose members are interested parties under the statute), or another interested party (including an explanation). If you are a union/worker group or trade/business association, identify the firms in which your workers are employed or which are members of your association.

(3) A statement indicating whether your firm/entity is willing to participate in this proceeding by providing information requested by the Commission.

(4) A statement of the likely effects of the revocation of the antidumping duty order on the *Domestic Industry* in general and/or your firm/entity specifically. In your response, please discuss the various factors specified in section 752(a) of the Act (19 U.S.C. 1675a(a)) including the likely volume of subject imports, likely price effects of subject imports, and likely impact of imports of *Subject Merchandise* on the *Domestic Industry*.

(5) A list of all known and currently operating U.S. producers of the *Domestic Like Product*. Identify any known related parties and the nature of the relationship as defined in section 771(4)(B) of the Act (19 U.S.C. 1677(4)(B)).

(6) A list of all known and currently operating U.S. importers of the *Subject Merchandise* and producers of the *Subject Merchandise* in the *Subject Country* that currently export or have exported *Subject Merchandise* to the United States or other countries after 2010.

(7) A list of 3–5 leading purchasers in the U.S. market for the *Domestic Like Product* and the *Subject Merchandise* (including street address, World Wide Web address, and the name, telephone number, fax number, and Email address of a responsible official at each firm).

(8) A list of known sources of information on national or regional prices for the *Domestic Like Product* or the *Subject Merchandise* in the U.S. or other markets.

(9) If you are a U.S. producer of the *Domestic Like Product*, provide the following information on your firm's operations on that product during calendar year 2015, except as noted (report quantity data in short tons and value data in U.S. dollars, f.o.b. plant). If you are a union/worker group or trade/business association, provide the information, on an aggregate basis, for the firms in which your workers are employed/which are members of your association.

(a) Production (quantity) and, if known, an estimate of the percentage of total U.S. production of the *Domestic Like Product* accounted for by your firm's(s') production;

(b) Capacity (quantity) of your firm to produce the *Domestic Like Product* (that is, the level of production that your establishment(s) could reasonably have expected to attain during the year, assuming normal operating conditions (using equipment and machinery in place and ready to operate), normal operating levels (hours per week/weeks per year), time for downtime, maintenance, repair, and cleanup, and a typical or representative product mix);

(c) the quantity and value of U.S. commercial shipments of the *Domestic Like Product* produced in your U.S. plant(s);

(d) the quantity and value of U.S. internal consumption/company transfers of the *Domestic Like Product* produced in your U.S. plant(s); and

(e) the value of (i) net sales, (ii) cost of goods sold (COGS), (iii) gross profit, (iv) selling, general and administrative (SG&A) expenses, and (v) operating income of the *Domestic Like Product* produced in your U.S. plant(s) (include both U.S. and export commercial sales, internal consumption, and company transfers) for your most recently completed fiscal year (identify the date on which your fiscal year ends).

(10) If you are a U.S. importer or a trade/business association of U.S. importers of the *Subject Merchandise* from the *Subject Country*, provide the following information on your firm's(s') operations on that product during calendar year 2015 (report quantity data in short tons and value data in U.S. dollars). If you are a trade/business association, provide the information, on an aggregate basis, for the firms which are members of your association.

(a) The quantity and value (landed, duty-paid but not including antidumping duties) of U.S. imports and, if known, an estimate of the percentage of total U.S. imports of *Subject Merchandise* from the *Subject Country* accounted for by your firm's(s') imports;

(b) the quantity and value (f.o.b. U.S. port, including antidumping duties) of U.S. commercial shipments of *Subject Merchandise* imported from the *Subject Country*; and

(c) the quantity and value (f.o.b. U.S. port, including antidumping duties) of U.S. internal consumption/company transfers of *Subject Merchandise* imported from the *Subject Country*.

(11) If you are a producer, an exporter, or a trade/business association of producers or exporters of the *Subject*

*Merchandise* in the *Subject Country*, provide the following information on your firm's(s') operations on that product during calendar year 2015 (report quantity data in short tons and value data in U.S. dollars, landed and duty-paid at the U.S. port but not including antidumping duties). If you are a trade/business association, provide the information, on an aggregate basis, for the firms which are members of your association.

(a) Production (quantity) and, if known, an estimate of the percentage of total production of *Subject Merchandise* in the *Subject Country* accounted for by your firm's(s') production;

(b) Capacity (quantity) of your firm(s) to produce the *Subject Merchandise* in the *Subject Country* (that is, the level of production that your establishment(s) could reasonably have expected to attain during the year, assuming normal operating conditions (using equipment and machinery in place and ready to operate), normal operating levels (hours per week/weeks per year), time for downtime, maintenance, repair, and cleanup, and a typical or representative product mix); and

(c) the quantity and value of your firm's(s') exports to the United States of *Subject Merchandise* and, if known, an estimate of the percentage of total exports to the United States of *Subject Merchandise* from the *Subject Country* accounted for by your firm's(s') exports.

(12) Identify significant changes, if any, in the supply and demand conditions or business cycle for the *Domestic Like Product* that have occurred in the United States or in the market for the *Subject Merchandise* in the *Subject Country* after 2010, and significant changes, if any, that are likely to occur within a reasonably foreseeable time. Supply conditions to consider include technology; production methods; development efforts; ability to increase production (including the shift of production facilities used for other products and the use, cost, or availability of major inputs into production); and factors related to the ability to shift supply among different national markets (including barriers to importation in foreign markets or changes in market demand abroad). Demand conditions to consider include end uses and applications; the existence and availability of substitute products; and the level of competition among the *Domestic Like Product* produced in the United States, *Subject Merchandise* produced in the *Subject Country*, and such merchandise from other countries.

(13) (OPTIONAL) A statement of whether you agree with the above

definitions of the *Domestic Like Product* and *Domestic Industry*; if you disagree with either or both of these definitions, please explain why and provide alternative definitions.

**Authority:** This proceeding is being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.61 of the Commission's rules.

By order of the Commission.

Issued: November 21, 2016.

**Lisa R. Barton,**

*Secretary to the Commission.*

[FR Doc. 2016-28489 Filed 11-30-16; 8:45 am]

**BILLING CODE 7020-02-P**

## DEPARTMENT OF JUSTICE

### Foreign Claims Settlement Commission

**[F.C.S.C. Meeting and Hearing Notice No. 11-16]**

#### Sunshine Act Meeting

The Foreign Claims Settlement Commission, pursuant to its regulations (45 CFR part 503.25) and the Government in the Sunshine Act (5 U.S.C. 552b), hereby gives notice in regard to the scheduling of open meetings as follows:

**Thursday, December 15, 2016: 12:00 p.m.**—Issuance of Proposed Decisions in claims against Libya.

**Status:** Open.

All meetings are held at the Foreign Claims Settlement Commission, 600 E Street NW., Washington, DC. Requests for information, or advance notices of intention to observe an open meeting, may be directed to: Patricia M. Hall, Foreign Claims Settlement Commission, 600 E Street NW., Suite 6002, Washington, DC 20579. Telephone: (202) 616-6975.

**Brian M. Simkin,**

*Chief Counsel.*

[FR Doc. 2016-28991 Filed 11-29-16; 4:15 pm]

**BILLING CODE 4410-BA-P**

## DEPARTMENT OF LABOR

### Office of the Secretary

**Agency Information Collection Activities; Submission for OMB Review; Revision of Confidentiality Pledges Under the Confidential Information Protection and Statistical Efficiency Act**

**ACTION:** Notice.

**SUMMARY:** Under 44 U.S.C. 3506(e) and 44 U.S.C. 3501, the Department of Labor

(DOL) is announcing revisions to Bureau of Labor Statistics (BLS) confidentiality pledges provided to respondents under the Confidential Information Protection and Statistical Efficiency Act (44 U.S.C. 3501) (CIPSEA). These revisions are required by the passage and implementation of provisions of the Federal Cybersecurity Enhancement Act of 2015 (H.R. 2029, Division N, Title II, Subtitle B, Sec. 223), that permit and require the Secretary for the Department of Homeland Security (DHS) to provide Federal civilian agencies' information technology systems with cybersecurity protection for their Internet traffic. More details on this announcement are presented in the **SUPPLEMENTARY INFORMATION** section below.

**DATES:** These revisions become effective upon publication of this notice in the **Federal Register**.

**ADDRESSES:** Questions about this notice should be addressed to Michel Smyth by telephone at 202-693-4129 (this is not a toll-free number); by email at [DOL\\_PRA\\_PUBLIC@dol.gov](mailto:DOL_PRA_PUBLIC@dol.gov); or by mail or courier to the U.S. Department of Labor-OASAM, Office of the Chief Information Officer, Attn: Departmental Information Compliance Management Program, Room N1301, 200 Constitution Avenue NW., Washington, DC 20210. Because of delays in the receipt of regular mail related to security screening, respondents are encouraged to use electronic communications.

**FOR FURTHER INFORMATION CONTACT:** Michel Smyth at (202)693-4129 (this is not a toll-free number) or by email at [DOL\\_PRA\\_PUBLIC@dol.gov](mailto:DOL_PRA_PUBLIC@dol.gov); or by mail or courier to the U.S. Department of Labor-OASAM, Office of the Chief Information Officer, Attn: Departmental Information Compliance Management Program, Room N1301, 200 Constitution Avenue NW., Washington, DC 20210. Because of delays in the receipt of regular mail related to security screening, respondents are encouraged to use electronic communications.

**SUPPLEMENTARY INFORMATION:** Federal statistics provide key information that the Nation uses to measure its performance and make informed choices about budgets, employment, health, investments, taxes, and a host of other significant topics. The overwhelming majority of Federal surveys are conducted on a voluntary basis. Respondents, ranging from businesses to households to institutions, may choose whether to provide the requested information. Many of the most valuable Federal statistics come from surveys that ask for highly sensitive information such as

proprietary business data from companies or particularly personal information or practices from individuals. Strong and trusted confidentiality and exclusively statistical use pledges under the CIPSEA and similar statistical confidentiality pledges are effective and necessary in honoring the trust that businesses, individuals, and institutions, by their responses, place in statistical agencies.

Under the CIPSEA and similar statistical confidentiality protection statutes, many Federal statistical agencies make statutory pledges that the information respondents provide will be seen only by statistical agency personnel or their sworn agents, and will be used only for statistical purposes. The CIPSEA and similar statutes protect the confidentiality of information that agencies collect solely for statistical purposes and under a pledge of confidentiality. These Acts protect such statistical information from administrative, law enforcement, taxation, regulatory, or any other non-statistical use and immunize the information submitted to statistical agencies from many legal processes. Moreover, statutes like the CIPSEA carry criminal penalties of a Class E felony (fines up to \$250,000, or up to five years in prison, or both) for conviction of a knowing and willful unauthorized disclosure of covered information.

As part of the Consolidated Appropriations Act for Fiscal Year 2016 signed on December 17, 2015, the Congress enacted the Federal Cybersecurity Enhancement Act of 2015 (H.R. 2029, Division N, Title II, Subtitle B, Sec. 223). This Act, among other provisions, requires the DHS to provide Federal civilian agencies' information technology systems with cybersecurity protection for their Internet traffic. The DHS cybersecurity program's objective is to protect Federal civilian information systems from malicious malware attacks. The Federal statistical system's objective is to ensure that the DHS Secretary performs those essential duties in a manner that honors the Government's statutory promises to the public to protect their confidential data. Given that the DHS is not a Federal statistical agency, both DHS and the Federal statistical system have been successfully engaged in finding a way to balance both objectives and achieve these mutually reinforcing objectives.

As required by passage of the Federal Cybersecurity Enhancement Act of 2015, the Federal statistical community will implement DHS' cybersecurity protection program, called Einstein.

The technology currently used to provide this protection against cyber

malware electronically searches Internet traffic in and out of Federal civilian agencies in real time for malware signatures. When such a signature is found, the Internet packets that contain the malware signature are shunted aside for further inspection by DHS personnel. Because it is possible that such packets entering or leaving a statistical agency's information technology system may contain confidential statistical data, statistical agencies can no longer promise their respondents that their responses will be seen only by statistical agency personnel or their sworn agents. However, they can promise, in accordance with provisions of the Federal Cybersecurity Enhancement Act of 2015, that such monitoring can be used only to protect information and information systems from cybersecurity risks, thereby, in effect, providing stronger protection to the security and integrity of the respondents' submissions.

Accordingly, DHS and Federal statistical agencies, in cooperation with their parent Departments, have developed a Memorandum of Agreement for the installation of Einstein cybersecurity protection technology to monitor their Internet traffic.

The DOL is providing this notice to alert the public in an efficient and coordinated fashion that it is revising its confidentiality pledge. Below is a listing of the current numbers and information collection titles for those BLS programs whose confidentiality pledges will change to reflect the statutory implementation of DHS' Einstein monitoring for cybersecurity protection purposes.

For the Information Collections listed in the table below, BLS statistical confidentiality pledges will be modified to include the following sentence, "*Per the Federal Cybersecurity Enhancement Act of 2015, Federal information systems are protected from malicious activities through cybersecurity screening of transmitted data.*"

OMB Control No.	Information collection title
1220-0039 ...	Consumer Price Index Commodities and Services Survey.
1220-0008 ...	Producer Price Index Survey.
1220-0011 ...	Report on Employment, Payroll, and Hours.
1220-0164 ...	National Compensation Survey.
1220-0170 ...	Job Openings and Labor Turnover Survey (JOLTS).
1220-0189 ...	Occupational Requirements Survey (Production).



OMB Control No.	Information collection title
1220-0025 ...	International Price Program—U.S. Export Product Information.
1220-0163 ...	Consumer Price Index Housing Survey.
1220-0042 ...	Report on Occupational Employment.
1220-0045 ...	Survey of Occupational Injuries.
1220-0133 ...	Census of Fatal Occupational Injuries.
1220-0012 ...	Employment, Wages and Contributions Report (ES-202 Program).
1220-0032 ...	Annual Refiling Survey.
1220-0141 ...	Cognitive and Psychological Research.
1220-0134 ...	Multiple Worksite Report and the Report of Federal Employment and Wages.

Dated: November 29, 2016.

**Michel Smyth,**

*Departmental Clearance Officer.*

[FR Doc. 2016-29009 Filed 11-29-16; 4:15 pm]

**BILLING CODE 4510-24-P**

## NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50-259, 50-260, and 50-296; NRC-2016-0244]

### Tennessee Valley Authority; Browns Ferry Nuclear Plant, Units 1, 2, and 3

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Draft environmental assessment and draft finding of no significant impact; request for comment.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of amendments to Renewed Facility Operating License Nos. DPR-33, DPR-52, and DPR-68 issued to Tennessee Valley Authority (TVA, the licensee) for operation of Browns Ferry Nuclear Plant, Units 1, 2, and 3 (BFN) located in Limestone County, Alabama. The proposed amendments would increase the maximum licensed thermal power level for each reactor from 3,458 megawatts thermal (MWt) to 3,952 MWt. This change, referred to as an extended power uprate (EPU), represents an increase of approximately 14.3 percent above the current licensed thermal power limit. The NRC is issuing a draft environmental assessment (EA) and draft finding of no significant impact (FONSI) for public comment associated with the proposed EPU.

**DATES:** Submit comments by January 3, 2017. The NRC can only ensure that its staff considers comments received on or

before this date. Comments received after this date will be considered if it is practicable to do so.

**ADDRESSES:** You may submit comments by any of the following methods (unless this document describes a different method for submitting comments on a specific subject):

- *Federal Rulemaking Web site:* Go to <http://www.regulations.gov> and search for Docket ID NRC-2016-0244. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; email: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov). For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- *Mail comments to:* Cindy Bladey, Office of Administration, Mail Stop: OWFN-12-H08, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

For additional direction on obtaining information and submitting comments, see “Obtaining Information and Submitting Comments” in the **SUPPLEMENTARY INFORMATION** section of this document.

**FOR FURTHER INFORMATION CONTACT:** Siva P. Lingam, telephone: 301-415-1564; email: [Siva.Lingam@nrc.gov](mailto:Siva.Lingam@nrc.gov); or Briana Grange, telephone: 301-415-1042; email: [Briana.Grange@nrc.gov](mailto:Briana.Grange@nrc.gov). Both are staff members of the Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

#### SUPPLEMENTARY INFORMATION:

#### I. Obtaining Information and Submitting Comments

##### A. Obtaining Information

Please refer to Docket ID NRC-2016-0244 when contacting the NRC about the availability of information for this action. You may obtain publicly available information related to this action by any of the following methods:

- *Federal Rulemaking Web site:* Go to <http://www.regulations.gov> and search for Docket ID NRC-2016-0244.

- *NRC’s Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the NRC 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](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced in this notice (if it is available in ADAMS) is

provided in a table in the section of this notice entitled, “Availability of Documents.”

- *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.

##### B. Submitting Comments

Please include Docket ID NRC-2016-0244 in the subject line of your comment submission, in order to ensure that the NRC is able to make your comment submission available to the public in this docket.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC posts all comment submissions at <http://www.regulations.gov> as well as entering the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment submissions into ADAMS.

#### II. Introduction

The NRC is considering issuance of amendments to Renewed Facility Operating License Nos. DPR-33, DPR-52, and DPR-68 issued to TVA for operation of BFN located in Limestone County, Alabama. The licensee submitted its license amendment request in accordance with section 50.90 of title 10 of the *Code of Federal Regulations* (10 CFR), by letter dated September 21, 2015 (TVA 2015a). The licensee subsequently supplemented its application as described under “Description of the Proposed Action” in Section III of this document. If approved, the license amendments would increase the maximum thermal power level at each of the three BFN units from 3,458 MWt to 3,952 MWt. The NRC staff prepared a draft EA for comment to document its findings related to the proposed EPU in accordance with 10 CFR 51.21. Based on the results of the draft EA contained in Section III of this document, the NRC did not identify any significant

environmental impacts associated with the proposed amendments and has, therefore, prepared a FONSI in accordance with 10 CFR 51.32. The NRC staff is issuing its FONSI as a draft for public review and comment in accordance with 10 CFR 51.33. The draft EA and draft FONSI are being published in the **Federal Register** (FR) with a 30-day public comment period ending January 3, 2017. Publishing these documents as drafts for comment is in accordance with NRC Review Standard 001 (RS-001), Revision 0, "Review Standard for Extended Power Upgrades" (NRC 2003).

### III. Draft Environmental Assessment

#### *Plant Site and Environs*

The BFN site encompasses 840 acres (ac) (340 hectares (ha)) of Federally owned land that is under the custody of TVA in Limestone County, Alabama. The site lies on the north shore of Wheeler Reservoir at Tennessee River Mile (TRM) 294 and is situated approximately 10 miles (mi) (16 kilometers [km]) south of Athens, Alabama, 10 mi (16 km) northwest of Decatur, Alabama, and 30 mi (48 km) west of Huntsville, Alabama.

Each of BFN's three nuclear units is a General Electric boiling-water reactor that produces steam to turn turbine to generate electricity. The BFN uses a once-through (open-cycle) condenser circulating water system with seven helper cooling towers to dissipate waste heat. Four of the original six cooling towers that serve BFN have undergone replacement, and TVA plans to replace the remaining two towers in fiscal years 2018 and 2019. Additionally, TVA constructed a seventh cooling tower in May 2012 (TVA 2016a).

Wheeler Reservoir serves as the source of water for condenser cooling and for most of BFN's auxiliary water systems. Pumps and related equipment to supply water to plant systems are housed in BFN's intake structure on Wheeler Reservoir. The reservoir is formed by Wheeler Dam, which is owned and operated by TVA, and it extends from Guntersville Dam at TRM 349.0 downstream to Wheeler Dam at TRM 274.9. Wheeler Reservoir has an area of 67,070 ac (27,140 ha) and a volume of 1,050,000 acre-feet (1,233 cubic meters) at its normal summer pool elevation of 556 feet (ft) (169 meters (m)) above mean sea level (TVA 2016a).

The Alabama Department of Environmental Management (ADEM) establishes beneficial uses of waters of the State and has classified the majority of the reservoir for use as a public water supply, for recreational use, and as a

fish and wildlife resource. The reservoir is currently included on the State of Alabama's Federal Water Pollution Control Act (*i.e.*, Clean Water Act (CWA)) of 1972, as amended, Section 303(d) list of impaired waters as partially supporting its designated uses due to excess nutrients from agricultural sources. The CWA Section 303(d) requires states to identify all "impaired" waters for which effluent limitations and pollution control activities are not sufficient to attain water quality standards. The 303(d) list includes those water quality-limited bodies that require the development of maximum pollutant loads to assure future compliance with water quality standards (ADEM 2016; TVA 2016a). Water temperature in Wheeler Reservoir naturally varies from around 35 degrees Fahrenheit (°F) (1.6 degrees Celsius (°C)) in January, to 88 to 90 °F (31 to 32 °C) in July and August, and temperature patterns near BFN are typically well mixed or exhibit weak thermal stratification (TVA 2016a).

The BFN intake structure draws water from Wheeler Reservoir at TRM 294.3. The intake forebay includes a 20-foot (6-meters)-high gate structure that can be raised or lowered depending on the operational requirements of the plant. The flow velocity through the openings varies depending on the gate position. When the gates are in a full open position and the plant is operating in either open or helper modes, the average flow velocity through the openings is about 0.2 meters per second (m/s) (0.6 feet per second (fps)) for the operation of one unit, 0.34m/s (1.1 fps) for the operation of two units, and 0.52 m/s (1.7 fps) for the operation of all three units assuming a water withdrawal rate of approximately 734,000 gallons per minute (gpm) (46.3 cubic meters per second (m³/s)) per unit, for a total withdrawal of about 2,202,000 gpm (4,906 cubic feet per second (cfs); 138.6 m³/s) of water for all three units (NRC 2005; TVA 2016b). BFN's total per-unit condenser circulating water system flow is generally higher than the original design values due to system upgrades that included the refit of the condensers with larger diameter and lower resistance tubes (NRC 2005; TVA 2016a, 2016b).

The licensee maintains a Certificate of Use (Certificate No. 1058.0, issued December 5, 2005) for its surface water withdrawals. The Alabama Department of Economic and Community Affairs, Office of Water Resources issues this certificate to register large water users (*i.e.*, those with a water withdrawal capacity of 100,000 gallons per day (380 cubic meters)) within the State. The licensee periodically notifies the Office

of Water Resources of facility data updates and submits annual water use reports for BFN as specified under the Certificate of Use as part of TVA's efforts to voluntarily cooperate with the State of Alabama's water management programs. The licensee most recently submitted an application to renew BFN's Certificate of Use in September 2015. Based on the staff's review of BFN water use reports submitted by TVA to the State for the period of 2011 through 2015, BFN's total water withdrawals from Wheeler Reservoir have averaged 1,848,000 gpm (4,117 cfs; 116.3 m³/s). For 2015, BFN's total surface water withdrawal rate averaged 1,991,200 gpm (4,437 cfs; 125 m³/s) (TVA 2016b).

Once withdrawn water has passed through the condensers for cooling, it is discharged back to Wheeler Reservoir via three large submerged diffuser pipes. The pipes range in diameter from 5.2 to 6.2 m (17 to 20.5 ft) and are perforated to maximize mixing into the water column. Water exits the pipes through 7,800 individual 5-centimeter (2-inch) ports. This straight-through flow path is called "open mode." As originally designed, the maximum thermal discharge back to the reservoir from the once-through condenser circulating water system operated in open mode is 25 °F (13.9 °C) above the intake temperature (NRC 2005). Some of the heated water can also be directed through cooling towers to reduce its temperature, as necessary to comply with State environmental regulations and BFN's ADEM-issued National Pollutant Discharge Elimination System (NPDES) Permit No. AL0022080 (ADEM 2012), in what is called "helper mode." The plant design also allows for a closed mode of operation in which water from the cooling towers is recycled directly back to the intake structure without discharge to the reservoir. However, TVA has not used this mode for many years due to the difficulty in maintaining temperature limits in the summer months (NRC 2005).

To operate BFN, TVA must comply with the CWA, including associated requirements imposed by the State as part of the NPDES permitting system under CWA Section 402. The BFN NPDES permit (ADEM 2012) specifies that at the downstream end of the mixing zone, which lies 2,400 ft (732 m) downstream of the diffusers, operation of the plant shall not cause the:

- Measured 1-hour average temperature to exceed 93 °F (33.9 °C),
- measured daily average temperature to exceed 90 °F (32.2 °C), or
- measured daily average temperature rise relative to ambient to exceed 10 °F (5.6 °C).

In cases where the daily average ambient temperature of the Tennessee River as measured 3.8 mi (6.1 km) upstream of BFN exceeds 90 °F (32.2 °C), the daily average downstream temperature may equal, but not exceed, the upstream value. In connection with such a scenario, if the daily average upstream ambient river temperature begins to cool at a rate of 0.5 °F (0.3 °C) or more per day, the downstream temperature is allowed to exceed the upstream value for that day.

When plant operating conditions create a river temperature approaching one of the NPDES limits specified in the preceding paragraphs, TVA shifts BFN from open mode to helper mode. The three units can be placed in helper mode individually or collectively. Thus, the amount of water diverted to the cooling towers in helper mode depends on the amount of cooling needed for the plant to remain in compliance with the NPDES permit limits. If helper mode operation is not sufficient to avoid the river temperature approaching the NPDES permit limits, TVA reduces (*i.e.*, derates) the thermal power of one or more of the units to maintain regulatory compliance (TVA 2016a).

The licensee performed hydrothermal modeling to compare the impacts of BFN operations at the current licensed thermal power level (*i.e.*, 105 percent of the original licensed thermal power, or 3,458 MWt) to 120 percent original licensed thermal power as requested under the proposed EPU. Under current operations and based on river flow, meteorological, and ambient river temperature data for the 6-year period 2007 through 2012, the modeling results indicate that the temperature of water exiting the diffusers and entering Wheeler Reservoir is an average of 86.9 °F (30.5 °C) during warm summer conditions. The river temperature at the NPDES compliance depth at the downstream end of the mixing zone is an average of 70.8 °F (21.6 °C) with a 1-hour average temperature maximum of 92.1 °F (33.4 °C) and a daily average temperature maximum of 89.4 °F (31.9 °C). On average, TVA operates the cooling towers 66 days per year. The licensee derates BFN approximately 1 in every 6 summers for a maximum of 185 hours in order to maintain compliance with the NPDES permit (TVA 2016a). By comparison, for the period 2011 through 2015, TVA operated BFN's cooling towers an average of 73 days per year and had incurred derates during two of the years (2011 and 2015) (TVA 2016b).

The BFN site, plant operations, and environs are described in greater detail in Chapter 2 of NRC's June 2005 NUREG-1437, Supplement 21, Generic

Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Browns Ferry Nuclear Plant, Units 1, 2, and 3—Final Report (herein referred to as "BFN FSEIS") (NRC 2005). Updated information that pertains to the plant site and environs and that is relevant to the assessment of the environmental impacts of the proposed EPU is included throughout this draft EA, as appropriate.

#### *Power Uprate History*

The BFN units were originally licensed to operate in 1973 (Unit 1), 1974 (Unit 2), and 1976 (Unit 3) at 3,293 MWt per unit. In 1997, TVA submitted a license amendment request to the NRC for a stretch power uprate (SPU) to increase the thermal output of Units 2 and 3 by 5 percent (to 3,458 MWt per unit). The NRC prepared an EA and FONSI for the SPU, which was published in the FR on September 1, 1998 (NRC 1998, 63 FR 46491), and NRC subsequently issued the amendments later that month.

In June 2004, TVA submitted license amendment requests for uprates at all three units (TVA 2004a, 2004b). The licensee requested a 15 percent EPU at Units 2 and 3 and a 20 percent EPU at Unit 1 such that if the proposed EPU was granted, each unit would operate at 3,952 MWt (120 percent of the original licensed power level). In September 2006, TVA submitted a supplement to the EPU application that requested interim operation of Unit 1 at 3,458 MWt (the Units 2 and 3 SPU power level) (TVA 2006). The NRC prepared a draft EA and FONSI, which were published for public comment in the FR on November 6, 2006 (NRC 2006b, 71 FR 65009). The draft EA and FONSI addressed the impacts of operating all three BFN units at EPU levels. The NRC received comments from TVA and the U.S. Fish and Wildlife Service (FWS), which the staff addressed in the NRC's final EA and FONSI dated February 12, 2007 (NRC 2007a, 72 FR 6612). The NRC issued an amendment approving the SPU for Unit 1 in March 2007 (NRC 2007b); the staff's 2007 final EPU EA was used to support the SPU. Subsequently, in September 2014, TVA withdrew the 2004 EPU license amendment requests and stated that it would submit a new, consolidated EPU request by October 2015 (TVA 2014).

Separately, on May 4, 2006, the NRC approved TVA's application for renewal of the BFN operating licenses for an additional 20-year period (NRC 2006a). As part of its environmental review of the license renewal application, the NRC issued the BFN FSEIS (NRC 2005). In the BFN FSEIS, the NRC staff

analyzed the environmental impacts of license renewal, the environmental impacts of alternatives to license renewal, and mitigation measures available for reducing or avoiding any adverse impacts. Although the NRC did not evaluate impacts associated specifically with the then-pending EPU in the BFN FSEIS, it performed an evaluation of the impacts of license renewal assuming that all three BFN units would operate at the EPU level of 3,952 MWt during the 20-year period of extended operations.

#### *Description of the Proposed Action*

The proposed action is the NRC's issuance of amendments to the BFN operating licenses that would increase the maximum licensed thermal power level for each reactor from 3,458 MWt to 3,952 MWt. This change, referred to as an EPU, represents an increase of approximately 14.3 percent above the current licensed thermal power level and would result in BFN operating at 120 percent of the original licensed thermal power level (3,293 MWt). The proposed action is in accordance with TVA's application dated September 21, 2015 (TVA 2015a) as supplemented by letters, which affected the EA, dated November 13, 2015 (TVA 2015b), December 15, 2015 (TVA 2015c), December 18, 2015 (TVA 2015d), April 22, 2016 (TVA 2016b), and May 27, 2016 (TVA 2016c).

#### *Plant Modifications and Upgrades*

An EPU usually requires significant modifications to major balance-of-plant equipment. The proposed EPU for BFN would require the modifications described in Attachment 47 to the licensee's application entitled "List and Status of Plant Modifications, Revision 1" (TVA 2016e), which include replacement of the steam dryers, replacement of the high pressure turbine rotors, replacement of reactor feedwater pumps, installation of higher capacity condensate booster pumps and motors, modifications to the condensate demineralizer system, modifications to the feedwater heaters, and upgrade of miscellaneous instrumentation, setpoint changes, and software modifications.

All onsite modifications associated with the proposed action would be within the existing structures, buildings, and fenced equipment yards. All deliveries of materials to support EPU-related modifications and upgrades would be by truck, and equipment and materials would be temporarily stored in existing storage buildings and laydown areas. The licensee anticipates no changes in existing onsite land uses

or disturbance of previously undisturbed onsite land (TVA 2016a).

According to TVA's current schedule, modifications and upgrades related to the proposed EPU would be completed at Unit 1 during the fall 2018 refueling outage, at Unit 2 during the spring 2019 outage, and at Unit 3 during the spring 2018 outage. If the NRC approves the proposed EPU, TVA would begin operating each unit at the uprated power level following these outages.

#### Cooling Tower Operation and Thermal Discharge

Operating BFN at the EPU power level of 3,952 MWt per unit would increase the heat generated by the plant's steam turbines, which would in turn increase the amount of waste heat that must be dissipated. The licensee would increase its use of the cooling towers (*i.e.*, operate in helper mode) to dissipate some of this additional heat; the remaining heat would be discharged to Wheeler Reservoir. If helper mode operation were to be insufficient to keep the reservoir temperatures within BFN's NPDES permit limits, TVA would reduce (*i.e.*, derate) the thermal power of one or more of the units to maintain regulatory compliance, a practice which TVA currently employs at BFN as necessary. Currently, TVA personnel examine forecast conditions for up to a week or more into the future and determine when and for how long TVA might need to operate BFN in helper mode operation and/or derate the BFN units to ensure compliance with the NPDES permit. TVA would maintain this process under EPU conditions.

The licensee simulated possible future discharge scenarios under EPU conditions using river flows and meteorological data for the 6-year period 2007 through 2012. This period included the warmest summer of record (2010) as well as periods of extreme drought conditions (2007 and 2008). For years with warm summers, TVA predicts that the temperature of water exiting the diffusers and entering Wheeler Reservoir (assuming all BFN units are operating at the full EPU power level) would be 2.6 °F (1.4 °C) warmer on average than current operations. The river temperature at the NPDES compliance depth at the downstream end of the mixing zone would be 0.6 °F (0.3 °C) warmer on average. The licensee predicts that it would operate the cooling towers in helper mode an additional 22 days per year on average (88 days total) and that the most extreme years could result in an additional 39 days per year of cooling tower helper mode operation (121 days total).

#### Transmission System Upgrades

The EPU would require several upgrades to the transmission system and the BFN main generator excitation system to ensure transmission system stability at EPU power levels. The licensee performed a Revised Interconnection System Impact Study in May 2016, which determined that the EPU would require the following transmission upgrades: (1) Replacement of six 500-kilovolt (kV) breaker failure relays, (2) installation of 764 megavolt-ampere reactive (MVAR) capacitor banks in five locations throughout TVA transmission system, and (3) modification of the excitation system of all three BFN main generators (TVA 2016c). These upgrades are described in more detail as follows.

#### Breaker Failure Relay Replacements

The licensee would replace the 500-kV breaker failure relays at BFN for breakers 5204, 5208, 5254, 5258, 5274, and 5278 to mitigate potential transmission system issues resulting from specific fault events on the transmission system. The relays are located in panels in the relay room inside the BFN control building, and physical work would be limited to this area. TVA would complete the breaker failure relay replacements prior to spring 2018 (TVA 2016c, 2016e).

#### MVAR Capacitor Bank Installations

The licensee would install 764 MVAR capacitor banks in five locations throughout TVA service area to address MVAR deficiencies associated with the additional power generation that would occur at EPU power levels. The proposed locations are the Clayton Village 161-kV Substation in Oktibbeha County, Mississippi; Holly Springs 161-kV Substation in Marshall County, Mississippi; Corinth 161-kV Substation in Alcorn County, Mississippi; East Point 161-kV Substation in Cullman County, Alabama; and Wilson 500-kV Substation in Wilson County, Tennessee. Two of the five capacitor bank installations (Clayton Village and East Point substations) would be within existing substation boundaries, while three installations (Holly Springs, Corinth, and Wilson substations) would require expansion of the existing substation footprint and additional grading and clearing. The licensee expects to purchase approximately 2.5 ac (1 ha) of land and disturb 2.25 ac (0.9 ha) of land for the Holly Springs Substation expansion. For the Corinth Substation expansion, TVA would purchase 3.5 ac (1.4 ha) of land and disturb 3 ac (1.2 ha) of land. For the

Wilson Substation expansion, TVA owns the land that would be required for expansion, and TVA anticipates disturbing a total of 5 ac (2 ha). The licensee would complete the MVAR capacitor bank installations by spring 2019, although TVA's transmission system operator does not preclude BFN from operating at EPU levels during the capacitor bank installations (TVA 2016c, 2016e).

#### BFN Main Generator Excitation System Modifications

The licensee would replace the BFN main generator Alterrex excitation system with a bus-fed static excitation system consisting of a 3-phase power potential transformer, an automatic voltage regulator, and a power section. Physical work to complete these modifications would be performed within existing BFN structures and would not involve any previously undisturbed land. The licensee is in the preliminary phase of the design change notice development for these modifications; therefore, TVA has not yet developed a specific timeline for implementation of the main generator excitation system modifications. However, TVA projects that these upgrades would be completed by 2020 (Unit 1), 2023 (Unit 2), and 2024 (Unit 3) (TVA 2016c, 2016e).

#### *The Need for the Proposed Action*

As stated by the licensee in its application, the proposed action would allow TVA to meet the increasing power demand forecasted in TVA service area. The licensee estimates that energy consumption in this area will increase at a compound annual growth rate of 1.2 percent until 2020 with additional moderate growth continuing after 2020.

#### *Environmental Impacts of the Proposed Action*

This section addresses the radiological and non-radiological impacts of the proposed EPU. Separate from this EA, the NRC staff is evaluating the potential radiological consequences of an accident that may result from the proposed action. The results of the NRC staff's safety analysis will be documented in a safety evaluation, which will be issued with the license amendment package approving the license amendment, if granted.

#### Radiological Impacts

##### Radioactive Gaseous and Liquid Effluents and Solid Waste

The BFN's waste treatment systems collect, process, recycle, and dispose of gaseous, liquid, and solid wastes that contain radioactive material in a safe

and controlled manner within the NRC and U.S. Environmental Protection Agency (EPA) radiation safety standards. Although there may be a small increase in the volume of radioactive waste and spent fuel, the proposed EPU would not result in changes in the operation or design of equipment in the gaseous, liquid, or solid waste systems.

#### Radioactive Gaseous Effluents

The Gaseous Waste Management System manages radioactive gases generated during the nuclear fission process. Radioactive gaseous wastes are principally activation gases and fission product radioactive noble gases resulting from process operations. The licensee's evaluation submitted as part of TVA's EPU application determined that implementation of the proposed EPU would not significantly increase the inventory of carrier gases normally processed in the Gaseous Waste Management System since plant system functions are not changing and the volume inputs remain the same. The analysis showed that the proposed EPU would result in an increase in radioiodines of approximately 5 percent and particulates by approximately 13 percent. The expected increase in tritium is linear with the proposed power level increase and is, therefore, estimated to increase by 14.3 percent (TVA 2016a).

The licensee's evaluation (TVA 2016a) concluded that the proposed EPU would not change the radioactive gaseous waste system's design function and reliability to safely control and process waste. The projected gaseous release following implementation of the EPU would remain bounded by the values given in the BFN FSEIS. The existing equipment and plant procedures that control radioactive releases to the environment would continue to be used to maintain radioactive gaseous releases within the dose limits of 10 CFR 20.1302 and the as low as is reasonably achievable (ALARA) dose objectives in Appendix I to 10 CFR part 50. Therefore, the NRC staff concludes that the increase in offsite dose due to gaseous effluent release following implementation of the EPU would not be significant.

#### Radioactive Liquid Effluents

The Liquid Waste Management System collects, processes, and prepares radioactive liquid waste for disposal. During normal operation, the liquid effluent treatment systems process and control the release of liquid radioactive effluents to the environment such that the doses to individuals offsite are

maintained within the limits of 10 CFR part 20 and 10 CFR part 50, appendix I. The Liquid Waste Management System is designed to process the waste and then recycle it within the plant as condensate, reprocess it through the radioactive waste system for further purification, or discharge it to the environment as liquid radioactive waste effluent in accordance with State and Federal regulations. The licensee's evaluation shows that implementation of the proposed EPU would increase the volume of liquid waste effluents by approximately 3.44 percent due to increased flow in the condensate demineralizers requiring more frequent backwashes. The current Liquid Waste Management System would be able to process the 3.44 percent increase in the total volume of liquid radioactive waste without any modifications. The licensee's evaluation determined that implementation of the proposed EPU would result in an increase in reactor coolant inventory of radioiodines of approximately 5 percent and an increase in radionuclides with long half-lives of approximately 13 percent. The expected increase in tritium is linear with the proposed power level increase and is, therefore, estimated to increase by 15 percent (TVA 2016a).

Since the composition of the radioactive material in the waste and the volume of radioactive material processed through the system are not expected to significantly change, the current design and operation of the Liquid Waste Management System would accommodate the effects of the proposed EPU. The projected liquid effluent release following the EPU would remain bounded by the values given in the BFN FSEIS. The existing equipment and plant procedures that control radioactive releases to the environment would continue to be used to maintain radioactive liquid releases within the dose limits of 10 CFR 20.1302 and ALARA dose standards in appendix I to 10 CFR part 50. Therefore, the NRC staff concludes that there would not be a significant environmental impact from the additional volume of liquid radioactive waste generated following EPU implementation.

#### Solid Low-Level Radioactive Waste

Radioactive solid wastes at BFN include solids from reactor coolant systems, solids in contact with liquids or gases from reactor coolant systems, and solids used in support of reactor coolant systems operation. The licensee evaluated the potential effects of the proposed EPU on the Solid Waste Management System. The low-level

radioactive waste (LLRW) consists of resins, filters and evaporator bottoms, dry active waste, irradiated components, and other waste (combined packages). The majority of BFN solid LLRW is shipped offsite as dry active waste. This LLRW is generated from outages, special projects and normal BFN operations. Normal operations at BFN are also a contributor to solid LLRW shipments due to system cleanup activities. This is due to resins from six waste phase separators and three reactor water cleanup phase separators. The licensee states (TVA 2016a) that BFN has approximately 29 spent resin shipments per year. The licensee's evaluation determined that implementation of the proposed EPU would result in an increase in activity of the solid wastes proportionate to an increase of 5 to 13 percent in the activity of long-lived radionuclides in the reactor coolant. The results of the licensee's evaluation also determined that the proposed EPU would result in a 15 percent increase in the total volume of solid waste generated for shipment offsite.

Since the composition and volume of the radioactive material in the solid wastes are not expected to significantly change, they can be handled by the current Solid Waste Management System without modification. The equipment is designed and operated to process the waste into a form that minimizes potential harm to the workers and the environment. Waste processing areas are monitored for radiation, and there are safety features to ensure worker doses are maintained within regulatory limits. The proposed EPU would not generate a new type of waste or create a new waste stream. Therefore, the NRC staff concludes that the impact from the proposed EPU on the management of radioactive solid waste would not be significant.

#### Occupational Radiation Dose at EPU Conditions

The licensee states (TVA 2016a) that in-plant radiation sources are expected to increase approximately linearly with the proposed increase in core power level of 14.3 percent. To protect the workers, the BFN Radiation Protection Program monitors radiation levels throughout the plant to establish appropriate work controls, training, temporary shielding, and protective equipment requirements to minimize worker doses.

Plant shielding is designed to provide for personnel access to the plant to perform maintenance and carry out operational duties with minimal personnel exposures. In-plant radiation levels and associated doses are

controlled by the BFN Radiation Protection Program to ensure that internal and external radiation exposures to station personnel, and the general population exposure level would be ALARA, as required by 10 CFR part 20. Access to radiation areas is strictly controlled by existing Radiation Protection Program procedures. Furthermore, it is TVA policy to maintain occupational doses to individuals and the sum of dose equivalents received by all exposed workers ALARA.

Based on the preceding paragraphs, the NRC staff concludes that the proposed EPU is not expected to significantly affect radiation levels within BFN and, therefore, there would not be a significant radiological impact to the workers.

#### Offsite Doses at EPU Conditions

The primary sources of offsite dose to members of the public from BFN are radioactive gaseous, liquid effluents, and skyshine from Nitrogen-16 (N-16). As previously discussed, operation under proposed EPU conditions would not change the radioactive waste management systems' abilities to perform their intended functions. Also, there would be no change to the radiation monitoring system and procedures used to control the release of radioactive effluents in accordance with NRC radiation protection standards in 10 CFR part 20 and appendix I to 10 CFR part 50.

The licensee states (TVA 2016a) that the contribution of radiation shine from the implementation of the proposed EPU from N-16 would increase linearly with the EPU. The licensee estimates that this increase could result in offsite doses up to 32 percent greater than current operating levels. However, since current offsite doses due to N-16 skyshine are on average less than 1 millirem, doses would still be well within the 10 CFR 20.1301 and 40 CFR part 190 dose limits to members of the public following implementation of the proposed EPU. Further, any increase in radiation would be monitored at the on-site environmental thermoluminescent dosimeter stations at BFN to make sure offsite doses would remain in regulatory compliance (TVA 2016a).

Based on the preceding paragraphs, the NRC staff concludes that the impact of offsite radiation dose to members of the public at EPU conditions would continue to be within the NRC and EPA regulatory limits and would not be significant.

#### Spent Nuclear Fuel

Spent fuel from BFN is stored in the plant's spent fuel pool and in dry casks in the independent spent fuel storage installation (ISFSI). The licensee estimates that the impact on spent fuel storage from operating at EPU conditions would increase the number of dry storage casks necessary for storage by approximately 19 percent. The licensee also states that the current ISFSI storage pad is projected to be filled on or before 2022 prior to being loaded with EPU fuel. An additional storage pad is anticipated to be required even if no EPU is approved. Since BFN's initial ISFSI plans included sufficient room for any necessary ISFSI expansion, the additional dry casks necessary for spent fuel storage at EPU levels can be accommodated on site and, therefore, would not have any significant environmental impact (TVA 2016a).

Approval of the proposed EPU would not increase the maximum fuel enrichment above 5 percent by weight uranium-235. The average fuel assembly discharge burnup for the proposed EPU is not expected to exceed the maximum fuel rod burnup limit of 62,000 megawatt days per metric ton of uranium. The licensee's fuel reload design goals would maintain the fuel cycles within the limits bounded by the impacts analyzed in 10 CFR part 51, Table S-3, "Table of Uranium Fuel Cycle Environmental Data," and Table S-4, "Environmental Impact of Transportation of Fuel and Waste to and from One Light Water-Cooled Nuclear Power Reactor," as supplemented by the findings documented in Section 6.3, "Transportation," Table 9.1, "Summary of findings on NEPA [National Environmental Policy Act] issues for license renewal of nuclear power plants" in NRC (1999). Therefore, the NRC staff concludes that the environmental impacts of the EPU would remain bounded by the impacts in Tables S-3 and S-4, and would not be significant.

#### Postulated Accident Doses

As a result of implementation of the proposed EPU, there would be an increase in the source term used in the evaluation of some of the postulated accidents in the BFN FSEIS. The inventory of radionuclides in the reactor core is dependent upon power level; therefore, the core inventory of radionuclides could increase by as much as 14.3 percent. The concentration of radionuclides in the reactor coolant may also increase by as much as 14.3 percent; however, this concentration is limited by the BFN

Technical Specifications. Therefore, the reactor coolant concentration of radionuclides would not be expected to increase significantly. This coolant concentration is part of the source term considered in some of the postulated accident analyses. Some of the radioactive waste streams and storage systems evaluated for postulated accidents may contain slightly higher quantities of radionuclides (TVA 2016a).

In 2002, TVA requested a license amendment to allow the use of Alternate Source Term (AST) methodology for design basis accident analyses for BFN. The licensee conducted full-scope AST analyses, which considered the core isotopic values for the current and future vendor products under EPU conditions. The licensee concluded that the calculated post-accident offsite doses for the EPU using AST methodologies meet all the applicable acceptance criteria of 10 CFR 50.67 and the NRC Regulatory Guide 1.183, "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors" (NRC 2000). The NRC staff is reviewing the licensee's analyses and performing confirmatory calculations to verify the acceptability of the licensee's calculated doses under accident conditions. The results of the NRC staff's calculations will be presented in the safety evaluation to be issued with the license amendment, if approved, and the EPU would not be approved by NRC unless the NRC staff's independent review of dose calculations under postulated accident conditions determines that dose is within regulatory limits. Therefore, the NRC staff concludes that the EPU would not significantly increase the consequences of accidents and would not result in a significant increase in the radiological environmental impact of BFN from postulated accidents.

#### Radiological Impacts Summary

The proposed EPU would not significantly increase the consequences of accidents, would not result in a significant increase in occupational or public radiation exposure, and would not result in significant additional fuel cycle environmental impacts. Accordingly, the NRC staff concludes that there would be no significant radiological environmental impacts associated with the proposed action.

#### Non-Radiological Impacts

##### Land Use Impacts

The potential impacts associated with land use for the proposed action include

effects from onsite EPU-related modifications and upgrades that would take place between spring 2018 and spring 2019 and impacts of the transmission system upgrades previously described in the "Description of the Proposed Action" section of this document.

The onsite plant modifications and upgrades would occur within existing structures, buildings, and fenced equipment yards and would use existing parking lots, road access, lay-down areas, offices, workshops, warehouses, and restrooms in previously developed areas of the BFN site. Thus, existing onsite land uses would not be affected by onsite plant modifications and upgrades (TVA 2016a).

Regarding transmission system upgrades, the breaker failure relay replacements and BFN main generator excitation system modifications would occur within existing BFN structures and would not involve any previously undisturbed land. The MVAR capacitor bank installations would occur at five offsite locations throughout TVA service area as described previously. Two of the capacitor bank installations would be within existing substation boundaries and would, therefore, not affect any previously undisturbed land or alter existing land uses (TVA 2016d). The remaining three capacitor bank installations would require expansion of the existing substation footprints and would require additional grading and clearing (TVA 2016d). TVA expects that the expansions would disturb 2.25 ac (0.9 ha), 3 ac (1.2 ha), and 5 ac (2 ha) of land at the Holly Springs, Corinth, and Wilson substations, respectively (TVA 2016d). The affected land currently contains terrestrial habitat or other semi-maintained natural areas, but none of the three land parcels contain wetlands, ecologically sensitive or important habitats, prime or unique farmland, scenic areas, wildlife management areas, recreational areas, greenways, or trails. TVA would implement Best Management Practices (BMPs) to minimize the duration of soil exposure during clearing, grading, and construction (TVA 2016d). TVA would also revegetate and mulch the disturbed areas as soon as practicable after each disturbance (TVA 2016d). The NRC staff did not identify any significant environmental impacts related to altering land uses within the small parcels of land required for the capacitor bank installations.

Following the necessary plant modifications and transmission system upgrades, operation of BFN at the EPU power level would not affect onsite or offsite land uses.

The NRC staff concludes that the proposed EPU would not result in significant impacts on onsite or offsite land use.

#### Visual Resource Impacts

No residential homes occur within foreground viewing distance of the BFN site to the north and east. A small residential development located to the northwest and another residential development located across Wheeler Reservoir to the southwest have at least partial views of the BFN site.

Additionally, the site can be seen from the Mallard Creek public use area directly across the reservoir. Two earthen berms lie adjacent to the cooling tower complex that block views of the northern and eastern plant areas. The berms, as well as portions of the cooling tower complex, are visible to motorists traveling on Shaw Road (TVA 2016b).

Plant modifications and upgrades associated with the proposed EPU are unlikely to result in additional visual resource impacts beyond those already occurring from ongoing operation of BFN for several reasons. First, the BFN site is already an industrial-use site. Therefore, the short-term, intensified use of the site that would be required to implement EPU-related modifications and upgrades is unlikely to be noticeable to members of the public within the site's viewshed. Second, TVA would implement all EPU-related modifications and upgrades during scheduled refueling outages when additional machinery and heightened activity would already be occurring on the site. Accordingly, the NRC staff does not expect that EPU-related modifications and upgrades would result in significant impacts to visual resources.

Regarding transmission system upgrades, the breaker failure relay replacements and BFN main generator excitation system modifications would occur within existing BFN structures and thus would not result in visual impacts. The MVAR capacitor bank installations would result in short-term visual impacts at the three sites for which substation expansion would be required. However, these areas are industrial-use sites, and use of machinery and equipment for ongoing maintenance and upgrades is common.

Following the necessary plant modifications and transmission system upgrades, operation of BFN at the EPU power level would not significantly affect visual resources. The licensee estimates that the EPU would require cooling tower operation 22 more days per year on average, which would increase the number of days in which a

plume would be visible. However, given that the cooling towers are already operated intermittently, the additional use of the cooling towers following the EPU would not result in significantly different visual impacts that those experienced during current operations.

The NRC staff concludes that the temporary visual impacts during implementation of EPU modifications and upgrades and capacitor bank installations would be minor and of short duration, and would not result in significant impacts to visual resources. The additional cooling tower operation following implementation of the EPU would also result in minor and insignificant visual impacts.

#### Air Quality Impacts

Onsite non-radioactive air emissions from BFN are primarily from operation of the emergency diesel generators. Emissions occur when these generators are tested or are used to supply backup power. The licensee (2016a) does not anticipate an increase in use of the emergency diesel generators as a result of the proposed EPU, nor is it planning to increase the frequency or duration of the emergency diesel generator surveillance testing. Additionally, TVA (2016a) maintains a Synthetic Minor Source Air Operating Permit for its diesel generators issued and enforced by the ADEM, and TVA would continue to comply with the requirements of this permit under EPU conditions. Accordingly, the NRC staff does not expect that onsite emission sources attributable to the EPU would result in significant impacts to air quality.

Offsite non-radioactive emissions related to the proposed EPU would result primarily from personal vehicles of EPU-related workforce members driving to and from the site and from work vehicles delivering supplies and equipment to the site. The licensee (2016a) estimates that of the additional workers that would be present on the site during each of the refueling outages, 80 to 120 workers or less would be dedicated to implementing EPU-related modifications and upgrades. The licensee (2016a) generally ramps up outage staffing two to three weeks prior to the outage start and ramps down staffing beginning 21 to 28 days from the start of the outage. Major equipment and materials to support the EPU-related modifications and upgrades would be transported to the site well before the start of each outage period, and smaller EPU supplies will be delivered on trucks that routinely supply similar tools and materials to support BFN operations (TVA 2016a). The capacitor bank installations



associated with the proposed EPU would result in additional minor air quality impacts from construction vehicle emissions and fugitive dust from ground disturbance and vehicle travel on unpaved roads (TVA 2016d). These impacts would be temporary and controlled through TVA's BMPs (TVA 2016d).

Following the necessary plant modifications and transmission system upgrades, operation at EPU levels would result in no additional air emissions as compared to operations at the current licensed power levels.

The NRC staff concludes that the temporary increase in air emissions during implementation of EPU modifications and upgrades and capacitor bank installations would be minor and of short duration, and would not result in significant impacts to air quality.

#### Noise Impacts

The potential noise impacts related to the proposed action would be primarily confined to those resulting from the use of construction equipment and machinery during the EPU outage periods. However, implementation of EPU-related modifications and upgrades during these periods is unlikely to result in additional noise impacts beyond those already occurring from ongoing operation because the BFN site is already an industrial-use site and because TVA would implement all EPU-related modifications and upgrades during scheduled refueling outages when additional machinery and heightened activity would already be occurring on the site. Accordingly, the NRC staff does not expect that EPU-related modifications and upgrades would result in significant noise impacts.

Regarding transmission system upgrades, the breaker failure relay replacements and BFN main generator excitation system modifications would occur within existing BFN structures, and would, therefore, not result in noise impacts. The MVAR capacitor bank installations would result in short-term and temporary noise impacts associated with construction equipment and machinery use at the three sites for which substation expansion would be required. However, these areas are industrial-use sites, and periodic noise impacts associated with ongoing maintenance and upgrades are common.

Following the EPU outages, operation of BFN at EPU levels would result in an average of 22 additional days per year of cooling tower operation, which would slightly increase the duration for which residents nearest the BFN site

would experience cooling tower-related noise during the warmer months. The NRC staff reviewed information submitted by TVA (2016a) regarding an environmental sound pressure level assessment performed in 2012 at the BFN site in 2012. The assessment found that background noise levels without cooling tower operation was 59.7 decibels A-weighted scale (dBA), and that the noise levels with operation of six of the seven cooling towers was 61.9 dBA, an increase of 2.2 dBA. The licensee compared this level with the Federal Interagency Committee on Noise's (FICON) recommendation that a 3-dBA increase in noise indicates a possible impact and the need for further analysis. Based on this criteria, TVA determined that the noise level emitted by operation of the cooling towers is acceptable. Additionally, TVA (2016c) is planning to conduct additional sound monitoring following the replacement of Cooling Towers 1 and 2, which are scheduled for replacement in fiscal years 2018 and FY 2019. The licensee will continue to meet FICON guidelines by working with the cooling tower vendor to ensure noise attenuating features, such as low-noise fans, lower speed fans, and sound attenuators, are incorporated as required to meet the guidelines. In the event that TVA (2016a) finds that the resulting noise levels exceed the FICON guidelines, TVA would develop and implement additional acoustical mitigation, such as modifications to fans and motors or the installation of barriers. The licensee will also continue to comply with Occupational Safety and Health Administration (OSHA) regulations to protect worker health onsite.

The NRC staff concludes that the implementation of EPU modifications and upgrades, the capacitor bank installations, and additional operation of the cooling towers following implementation of the EPU would not result in significant noise impacts. Additionally, TVA would continue to comply with FICON guidelines and OSHA regulations regarding noise impacts, which would further ensure that future cooling tower operation would not result in significant impacts on the acoustic environment and human health.

#### Water Resources Impacts

As previously described, EPU-related modifications at BFN to include replacement and upgrades of plant equipment would occur within existing structures, buildings, and fenced equipment yards. The licensee does not expect any impact on previously undisturbed land. Any ground-

disturbing activity would be subject to BFN's BMP Plan, which TVA must maintain as a condition of the BFN site NPDES permit (ADEM 2012). The licensee must implement and maintain the BMP Plan to prevent or minimize the potential for the release of pollutants in site runoff, spills, and leaks to waters of the State from site activities and operational areas. Consequently, the NRC staff concludes that onsite EPU activities at BFN would have no significant effect on surface water runoff and no impact on surface water or groundwater quality.

Implementation of the EPU would also require upgrades to TVA's transmission system, including installation of 764 MVAR capacitor banks at five sites throughout TVA service area (see "MVAR Capacitor Bank Installations" under "Description of the Proposed Action"). At two of the substations, new equipment installation would take place outdoors but within the confines of existing substation enclosures with ground disturbance limited to previously disturbed areas. As appropriate, TVA would use standard BMPs to minimize any potential impacts to surface water and groundwater. The licensee's BMPs address preventive measures such as use of proper containment, treatment, and disposal of wastewaters, stormwater runoff, wastes, and other potential pollutants. The BMPs would also address soil erosion and sediment control and prevention and response to spills and leaks from construction equipment that could potentially runoff or infiltrate to underlying groundwater. After installation, the capacitor banks would result in no wastewater discharges (TVA 2016d). Therefore, there would be no operational impact on water resources.

Capacitor installation work at three substations (Holly Springs and Corinth in Mississippi and Wilson in Tennessee) would require expansion of the existing substation footprints and additional grading and clearing. Projected new ground disturbance for these substation expansions would range from approximately 2.25 ac (0.9 ha) of land for the Holly Springs, Mississippi Substation to 5 ac (2 ha) at the Wilson, Tennessee Substation. The substation expansion projects would have no impact on perennial surface water features. A small portion of the expanded footprint of the Wilson Substation lies within the 100-year floodplain, but TVA proposes no construction activities in the floodplain. At the Holly Springs substation, TVA staff identified an ephemeral stream that may lie within the expansion footprint.

However, adherence by TVA to project specifications and application of appropriate BMPs would ensure that there would be no impacts to hydrologic features or conditions. The licensee would also conduct all construction activities in accordance with standard BMPs as previously described and would perform specific work elements as further discussed below (TVA 2016d).

To support substation expansion work, water would be required for such uses as potable and sanitary use by the construction workforce and for concrete production, equipment washdown, dust suppression, and soil compaction. The NRC staff assumes that the modest volumes of water needed would be supplied from local sources and transported to the work sites. Use of portable sanitary facilities, typically serviced offsite by a commercial contractor, would serve to reduce the volume of water required to meet the sanitary needs of the construction workforce.

The licensee would obtain any necessary construction fill material from an approved borrow pit, and TVA would place any spoils generated from site grading, trenching, or other excavation work in a permitted spoil area on the substation property, or the material would be spread or graded across the site. Areas disturbed by construction work and equipment installation would be stabilized by applying new gravel or resurfacing the disturbed areas (TVA 2016d). Consequently, following the completion of construction, disturbed areas would lie within the footprint of the expanded substation footprint and otherwise overlain by equipment or hard surfaces and would not be subject to long-term soil erosion and with little potential to impact surface water or groundwater resources.

The expansion projects at all three substations would also be subject to various permits and approvals, which TVA would obtain. Construction stormwater runoff from land disturbing activities of 1 ac (0.4 ha) or more is subject to regulation in accordance with Section 402 of the CWA. Section 402 establishes the NPDES permit program. Mississippi and Tennessee administer these regulatory requirements through State NPDES general permits. Specifically, State construction stormwater general permits will be required for construction activities at the Holly Springs, Corinth, and Wilson substations. Additionally, for the Wilson Substation, a Wilson County Land Disturbance permit will also be required (TVA 2016d). For NPDES

general permits, permit holders must also develop and implement a Stormwater Pollution Prevention Plan to ensure the proper design and maintenance of stormwater and soil erosion BMPs to prevent sediment and other pollutants in stormwater discharges and ensure compliance with State water quality standards.

Based on the foregoing, the NRC staff finds that the transmission system upgrades and associated substation expansion projects would have negligible direct impacts on water resources and would otherwise be conducted in accordance with TVA standard BMPs to minimize environmental impacts. The licensee's construction activities would also be subject to regulation under NPDES general permits for stormwater discharges associated with construction activity. Accordingly, the NRC staff concludes that EPU-related transmission system upgrades would not result in significant impacts on surface water or groundwater resources.

The EPU implementation at BFN would result in operational changes with implications for environmental conditions. As further detailed under "Plant Site and Environs" of this EA, BFN withdraws surface water from Wheeler Reservoir to supply water for condenser cooling and other in-plant uses. Total water withdrawals by BFN have averaged 1,848,000 gpm (4,117 cfs; 116.3 m/s) over the last 5 years, although the average withdrawal rate in 2015 exceeded the average rate (TVA 2016b). The BFN uses a once-through circulating water system for condenser cooling aided by periodic operation of helper cooling towers. Normally, during once-through (open cycle) operation, BFN returns nearly all of the water it withdraws back to the reservoir, albeit at a higher temperature, through three, submerged diffuser pipes. When necessary throughout the course of the year, BFN's return condenser cooling water is routed through one or more of the helper cooling towers based on the level of cooling needed so that the resulting discharge to the river meets thermal limits as stipulated in TVA's NPDES permit. The licensee may also derate one or more BFN generating units in order to ensure compliance with NPDES thermal limits, as previously described (TVA 2016a).

Following implementation of the EPU, TVA predicts that BFN would need to operate helper cooling towers an additional 22 days per year on average (for a total of 88 days per year) to maintain compliance with NPDES thermal limits, as compared to a projected average of 66 days per year at

current power levels (TVA 2016b; TVA 2016a). When helper cooling towers are used, a portion of the water passing through the towers is consumptively used (lost) due to evaporation and cooling tower drift. The results of TVA's hydrothermal modeling, as previously described, indicate that approximately 3 percent of the cooling water flow passed through the helper towers is consumptively used (TVA 2016a). Thus, for an additional 22 days per year on average, BFN's cooling water return flows to Wheeler Reservoir would be reduced by approximately 3 percent following the proposed EPU as compared to current operations. This is a negligible percentage of the total volume of water passing through Wheeler Reservoir and that is otherwise diverted by TVA to meet BFN cooling and other in-plant needs (TVA 2016a).

Operations at EPU power levels would not require any modifications to BFN's circulating water system, residual heat removal service water system, emergency equipment cooling water system, raw cooling water, or raw water systems. Therefore, TVA expects no changes in the volume of water that would be withdrawn from Wheeler Reservoir during operations (TVA 2016b). The EPU operations would result in an increase in the temperature of the condenser cooling water discharged to Wheeler Reservoir. The licensee's hydrothermal modeling predicts that the average temperature of the return discharge through BFN's submerged diffusers would be 2.6 °F (1.4 °C) warmer than under current operations and that the average temperature at the downstream edge of the mixing zone prescribed by BFN's NPDES permit would increase by 0.6 °F (0.3 °C). Nevertheless, these thermal changes would continue to meet BFN's NPDES permit limits, including temperature change limitations within the prescribed mixing zone (TVA 2016b, 2016a). In addition, there would also be no change in the use of cooling water treatment chemicals or other changes in the quality of other effluents discharged to Wheeler Reservoir in conjunction with implementation of the EPU (TVA 2016b).

In summary, implementation of the EPU at BFN and associated operational changes would not affect water availability or impair ambient surface water or groundwater quality. The NRC staff concludes that the proposed EPU would not result in significant impacts on water resources.

#### Terrestrial Resource Impacts

The BFN site's natural areas include riparian areas, upland forests, and

wetlands that have formed on previously disturbed land cleared prior to BFN construction. Onsite plant modifications and upgrades would not disturb these areas because the EPU-related modifications and upgrades would not involve any new construction outside of the existing facility footprint, as previously described under “Land Use Impacts.” For this reason, sediment transport and erosion are also not a concern. The modifications and upgrades would result in additional noise and lighting, which could disturb wildlife. However, such impacts would be similar to and indistinguishable from what nearby wildlife already experience during normal operations because the upgrades and modifications would take place during regularly scheduled outages, which are already periods of heightened site activity.

Regarding transmission system upgrades, the breaker failure relay replacements and BFN main generator excitation system modifications would occur within existing BFN structures and would not involve any previously undisturbed land. These upgrades would result in no impacts on terrestrial resources. The MVAR capacitor bank installations would occur at five offsite locations throughout TVA service area as described previously. Three of the five capacitor bank installations would require expansion of the existing substation footprints and additional grading and clearing, as described in the “Land Use Impacts” section. The affected land currently contains terrestrial habitat or other semi-maintained natural areas, and TVA (2016d) reports that all three areas are likely to contain primarily non-native, invasive botanicals. None of the three land parcels contain wetlands, ecologically sensitive or important habitats, prime or unique farmland, scenic areas, wildlife management areas, recreational areas, greenways, or trails. The licensee (2016d) also reports that no bird colonies or aggregations of migratory birds have been documented within 3 mi (4.8 km) of the substation footprints. The licensee would implement BMPs to minimize the duration of soil exposure during clearing, grading, and construction (TVA 2016d). The licensee would also revegetate and mulch the disturbed areas as soon as practicable after each disturbance, and TVA’s landscaping BMPs require revegetation with native plants or non-invasive species (TVA 2016d). The NRC staff did not identify any significant environmental impacts to terrestrial resources related to altering land uses within the small parcels of

land required for the capacitor bank installations.

Following the necessary plant modifications and transmission system upgrades, operation at EPU levels would result in no additional or different impacts on terrestrial resources as compared to operations at the current licensed power levels. The NRC assessed the impacts of continued operation of BFN through the period of extended operation in the BFN FSEIS (NRC 2005) and determined that impacts on terrestrial resources would be small (*i.e.*, effects would not be detectable or would be so minor that they would neither destabilize nor noticeably alter any important attribute of the resource).

The NRC staff concludes that the temporary noise and lighting during implementation of EPU modifications and upgrades and small areas of land disturbance associated with the MVAR capacitor bank installations would be minor and would not result in significant impacts to terrestrial resources.

#### Aquatic Resource Impacts

Aquatic habitats associated with the site include Wheeler Reservoir and 14 related tributaries, of which Elk River, located 10 mi (16 km) downstream of BFN, is the largest. Onsite plant modifications and upgrades would not affect aquatic resources because EPU-related modifications and upgrades would not involve any new construction outside existing facility footprints and would not result in sedimentation or erosion or any other disturbances that would otherwise affect aquatic habitats.

Regarding transmission system upgrades, the breaker failure relay replacements and BFN main generator excitation system modifications would occur within existing BFN structures and would, therefore, not affect aquatic resources. Although three of the five MVAR capacitor bank installations would require expansion of existing substation footprints as described previously, TVA (2016d) reports that the expansions would not affect the flow, channels, or banks of any nearby streams. As described previously in the “Water Resource Impacts” section, the substation expansions would have negligible direct impacts on water resources, and TVA would implement BMPs, as appropriate, and be subject to regulations under NPDES general permits during any construction activities. Accordingly, the NRC staff did not identify any significant environmental impacts related to aquatic resources with respect to transmission system upgrades.

Following the necessary plant modifications and transmission system upgrades, operation at EPU levels would result in additional thermal discharge to Wheeler Reservoir. As described in the “Cooling Tower Operation and Thermal Discharge” and “Water Resources Impacts” sections of this document, TVA predicts that the temperature of water entering Wheeler Reservoir would be 2.6 °F (1.4 °C) warmer on average than current operations and that the river temperature at the NPDES compliance depth at the downstream end of the mixing zone would be 0.6 °F (0.3 °C) warmer on average. In the BFN FSEIS, the NRC (2005) evaluated the potential impacts of thermal discharges in Section 4.1.4, “Heat Shock,” assuming continued operation at EPU power levels. The NRC (2005) found that the BFN thermal mixing zone constitutes a small percentage of the Wheeler Reservoir surface area, that the maximum temperatures at the edge of the mixing zone do not exceed the upper thermal limits for common aquatic species, and that continued compliance with the facility’s NPDES permit would ensure that impacts to aquatic biota are minimized. Since the time the NRC staff performed its license renewal review, the ADEM has issued a renewed BFN NPDES permit. The CWA requires the EPA or States, where delegated, to set thermal discharge variances such that compliance with the NPDES permit assures the protection and propagation of a balanced, indigenous community of shellfish, fish, and wildlife in and on the body of water into which the discharge is made, taking into account the cumulative impact of a facility’s thermal discharge together with all other significant impacts on the species affected. Under the proposed action, TVA would remain subject to the limitations set forth in the renewed BFN NPDES permit. The NRC staff finds it reasonable to assume that TVA’s continued compliance with, and the State’s continued enforcement of, the BFN NPDES permit would ensure that Wheeler Reservoir aquatic resources are protected.

Regarding impingement and entrainment, in Sections 4.1.2 and 4.1.3 of the BFN FSEIS, the NRC (2005) determined that impingement and entrainment during the period of extended operation would be small. The proposed EPU would not increase the volume or rate of water withdrawal from Wheeler Reservoir and no modifications to the current cooling system design would be required. Thus, the NRC finds that the proposed EPU would not change the rate of impingement or

entrainment of fish, shellfish, or other aquatic organisms compared to current operations.

Regarding chemical effluents, the types and amounts of effluents would not change under the proposed EPU, and effluent discharges to Wheeler Reservoir would continue to be regulated by the ADEM under the facility's NPDES permit. Thus, the NRC concludes that compared to current operations, the proposed EPU would not change the type or concentration of chemical effluents that could impact aquatic resources.

The NRC staff concludes that onsite plant modifications and transmission system upgrades associated with the proposed EPU would not affect aquatic resources. Although operation at EPU levels would increase thermal effluent to Wheeler Reservoir, the NRC staff

concludes that any resulting impacts on aquatic resources would not be significant because thermal discharges would remain within the limits imposed by the BFN NPDES permit.

#### Special Status Species and Habitats Impacts

Under section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (ESA), Federal agencies must consult with the FWS or the National Marine Fisheries Service, as appropriate, to ensure that actions the agency authorizes, funds, or carries out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat.

The FWS lists 31 Federally endangered, threatened, or candidate species as potentially occurring near the BFN site. Of these species, 11 are

terrestrial. As described under "Terrestrial Resource Impacts," the NRC determined that the proposed EPU would not have significant impacts on the terrestrial environment. The NRC staff did not identify any unique or different impacts that might affect Federally listed or candidate terrestrial species, and as such, the NRC staff concludes that the proposed EPU would have no effect on any listed or candidate terrestrial species. Terrestrial species are not addressed in detail in this EA, but a list of these species can be viewed in the FWS's (2016) Environmental Conservation Online System Information for Planning and Conservation report (FWS 2016). The remaining 20 species are aquatic and are listed in Table 1 of this document. No proposed or designated critical habitat occurs near the BFN site (FWS 2016).

TABLE 1—FEDERALLY LISTED AQUATIC SPECIES WITH THE POTENTIAL TO OCCUR NEAR THE BFN SITE

Species	Common name	Federal status <sup>a</sup>	Known to occur in the vicinity of BFN? <sup>b</sup>
<b>Fishes</b>			
<i>Elassoma alabamae</i> .....	spring pygmy sunfish .....	FT .....	Y
<i>Etheostoma boschungii</i> .....	slackwater darter .....	FT .....	—
<i>Etheostoma phytophilum</i> .....	rush darter .....	FE .....	—
<i>Etheostoma wapiti</i> .....	Boulder darter .....	FE .....	—
<b>Freshwater Mussels</b>			
<i>Cumberlandia monodonta</i> .....	spectaclecase .....	FE .....	Y
<i>Cyprogenia stegaria</i> .....	fanshell .....	FE .....	—
<i>Epioblasma triquetra</i> .....	snuffbox mussel .....	FE .....	—
<i>Hemistena lata</i> .....	cracking pearlymussel .....	FE .....	—
<i>Lampsilis abrupta</i> .....	pink mucket .....	FE .....	Y
<i>Lampsilis perovalis</i> .....	orangenacre mucket .....	FT .....	—
<i>Medionidus acutissimus</i> .....	Alabama moccasinshell .....	FT .....	—
<i>Pegias fabula</i> .....	littlewing pearlymussel .....	FE .....	—
<i>Plethobasus cyphus</i> .....	sheepnose .....	FE .....	—
<i>Pleurobema furvum</i> .....	dark pigtoe .....	FE .....	—
<i>Pleurobema perovatum</i> .....	ovate clubshell .....	FE .....	—
<i>Pleurobema plenum</i> .....	rough pigtoe .....	FE .....	Y
<i>Ptychobranchius greenii</i> .....	triangular kidneyshell .....	FE .....	—
<b>Snails</b>			
<i>Athearnia anthonyi</i> .....	Anthony's riversnail .....	FE .....	Y
<i>Campeloma decampi</i> .....	slender campeloma .....	FE .....	Y
<i>Pyrgulopsis pachyta</i> .....	armored snail .....	FE .....	Y

<sup>a</sup>FE = Federally endangered under the ESA; FT = Federally threatened under the ESA; FC = Candidate for listing under the ESA.

<sup>b</sup>Y = yes; — = no. Occurrence information is based on species identified in TVA's (2016a) supplemental environmental report submitted as part of its EPU application as occurring within tributaries to Wheeler Reservoir, within a 10-mi (16-km) radius of BFN, or from Tennessee River Mile 274.9 to 310.7.

Sources: FWS 2016; TVA 2016a.

#### Action Area

The implementing regulations for section 7(a)(2) of the ESA define "action area" as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved

in the action (50 CFR 402.02). The action area effectively bounds the analysis of ESA-protected species and habitats because only species that occur within the action area may be affected by the Federal action.

For the purposes of the ESA analysis for the proposed BFN EPU, the NRC staff considers the action area to be the full bank width of Wheeler Reservoir from the point of water withdrawal downstream to the edge of the mixing

zone (2,400 ft (732 m) downstream of the diffusers). The NRC staff expects all direct and indirect effects of the proposed action to be contained within this area. The NRC staff recognizes that while the action area is stationary, Federally listed species can move in and out of the action area. For instance, a migratory fish species could occur in the action area seasonally as it travels up and down the river past BFN.

The NRC staff are not including the areas that would be affected by the Holly Springs, Corinth, and Wilson substation expansions in the BFN EPU action area. The licensee, as a Federal agency, must itself comply with ESA section 7. The NRC has no authority over transmission upgrades. Therefore, prior to undertaking the expansions, TVA, and not NRC, would conduct section 7 consultation with the FWS, if necessary, to address any potential impacts to Federally listed species and critical habitats related to the substation expansions. Tennessee Valley Authority's (2016d) preliminary review did not identify any Federally listed species or critical habitats within the vicinity of the three substations.

#### Impact Assessment

Since the 1970s, TVA has maintained a Natural Heritage Database that includes data on sensitive species and habitats, including Federally threatened and endangered species, in TVA's power service area. Based on its Natural Heritage Database, TVA (2016a) reports that seven Federally listed aquatic species occur in the vicinity of the BFN site (see Table 1).

Tennessee Valley Authority (2016a) Natural Heritage Database records indicate that three freshwater mussels—spectaclecase (*Cumberlandia monodonta*), pink mucket (*Lampsilis abrupta*), and rough pigtoe (*Pleurobema plenum*)—occur within the vicinity of BFN. These species occur in sand, gravel, and cobble substrates in large river habitats within the Tennessee River system. All three species are now extremely rare and are primarily found in unimpounded tributary rivers and in more riverine reaches of the main stem Tennessee River (TVA 2016a). Most of the remaining large river habitat in Wheeler Reservoir occurs upstream of the BFN action area. Section 5.2 of the NRC's (2004) biological assessment for license renewal describes Tennessee River collection records for these three species, which date back to the 1990s. Relict shells of spectaclecase were collected in Wheeler Reservoir in 1991 (Ahlstedt and McDonough 1992). Pink mucket and rough pigtoe were collected near Hobbs Island (over 64 km (40 mi)

upstream of BFN) in 1998 (Yokely 1998). Tennessee Valley Authority (2016a) reports no more recent records of these three species in its supplemental environmental report submitted as part of the EPU application, and the NRC staff did not identify any studies or information suggesting that populations of these species exist in Wheeler Reservoir in the vicinity of the BFN action area. Because these species do not occur in the action area, the NRC staff concludes that the proposed BFN EPU would have *no effect* on spectaclecase, pink mucket, and rough pigtoe.

Tennessee Valley Authority (2016a) Natural Heritage Database records indicate that three aquatic snails—Anthony's snail (*Athearnia anthonyi*), slender campeloma (*Campeloma decampi*), and armored snail (*Pyrgulopsis pachyta*)—and one fish—spring pygmy sunfish (*Elassoma alabamae*)—occur in the vicinity of BFN. However, these species are restricted to tributary streams that feed into Wheeler Reservoir upstream of BFN (TVA 2016a). The NRC staff did not identify any studies or information suggesting that populations of these species exist in the main stem of the Tennessee River (*i.e.*, Wheeler Reservoir). Because these species do not occur in the action area, the NRC staff concludes that the proposed BFN EPU would have *no effect* on Anthony's snail, slender capeloma, armored snail, or spring pygmy sunfish.

#### ESA Effect Determination

The NRC staff concludes that the proposed EPU would have *no effect* on Federally endangered, threatened, or candidate species. Federal agencies are not required to consult with the FWS if they determine that an action will not affect listed species or critical habitats (FWS 2013). Thus, the ESA does not require consultation for the proposed EPU, and the NRC considers its obligations under ESA section 7 to be fulfilled for the proposed action.

#### Historic and Cultural Resource Impacts

The National Historic Preservation Act of 1966, as amended (16 U.S.C. 470 *et seq.*), requires Federal agencies to consider the effects of their undertakings on historic properties, and the proposed EPU is an undertaking that could potentially affect historic properties. Historic properties are defined as resources eligible for listing in the National Register of Historic Places (NRHP). The criteria for eligibility are listed in 36 CFR 60.4 and include (1) association with significant events in history; (2) association with

the lives of persons significant in the past; (3) embodiment of distinctive characteristics of type, period, or construction; and (4) sites or places that have yielded, or are likely to yield, important information.

According to the BFN FSEIS (NRC 2005), the only significant cultural resources in the proximity of BFN are Site 1Li535 and the Cox Cemetery, which was moved to accommodate original construction of the plant. Tennessee Valley Authority (2016a) researched current historic property records and found nothing new within 3 mi (4.8 km) of the plant. As described under "Description of the Proposed Action," all onsite modifications associated with the proposed action would be within existing structures, buildings, and fenced equipment yards, and TVA anticipates no disturbance of previously undisturbed onsite land. Thus, historic and cultural resources would not be affected by onsite power plant modifications and upgrades at BFN.

Regarding transmission system upgrades, Tennessee Valley Archaeological Research (TVAR) performed Phase I Cultural Surveys to determine if the expansion of the Holly Springs, Corinth, and Wilson substations would affect any historic or cultural resources. Tennessee Valley Archaeological Research's findings are summarized in the following paragraphs.

During its Phase I Cultural Resource Survey for the Holly Springs Substation (Karpynek et al. 2016b), TVAR revisited two NRHP-listed historic districts, the Depot-Compress Historic District and the East Holly Springs Historic District, within the survey radius. Tennessee Valley Archaeological Research determined that the historic districts are outside the viewshed of the proposed substation expansion. During the survey, TVAR also identified 14 potentially historic properties, none of which were found to be eligible for listing on the NRHP due to their lack of architectural and historic significance. Tennessee Valley Archaeological Research concluded that no historic properties would be affected by the Holly Spring Substation expansion.

During its Phase I Cultural Resource Survey for the Corinth Substation (Karpynek et al. 2016b), TVAR identified 13 properties within the area of potential effect, none of which were determined to be eligible for listing on the NRHP due to their lack of architectural distinction and loss of integrity caused by modern alterations or damage. Tennessee Valley Archaeological Research concluded that

no historic properties would be affected by the Corinth Substation expansion.

During its Phase I Cultural Resources Survey for the Wilson Substation (Karpynec et al. 2016c), TVAR identified one property within the area of potential effect, which was determined as eligible for listing on the NRHP under Criteria A and C for its historical and archaeological significance. Tennessee Valley Archaeological Research concluded that the Wilson Substation expansion would have a visual effect on the property. However, the effect would not be adverse due to the fact that the existing substation and modern development located immediately northwest and southeast of the property have already established a visual effect.

Following power plant modifications and substation upgrades, operation of BFN at EPU power levels would have no effect on existing historic and cultural resources. Further, TVA has procedures in place to ensure that BFN operations would continue to protect historic and cultural resources, and the proposed action would not change such procedures (NRC 2005). Therefore, the NRC staff concludes that EPU-related power plant modifications and substation upgrades would not result in significant impacts to historic and cultural resources.

#### Socioeconomic Impacts

Potential socioeconomic impacts from the proposed EPU include increased demand for short-term housing, public services, and increased traffic due to the temporary increase in the size of the workforce required to implement the EPU at BFN and upgrade affected substations. The proposed EPU also could generate increased tax revenues for the State and surrounding counties due to increased “book” value of BFN and increased power generation.

During outages, the workforce at BFN increases by 800 to 1,200 workers for an average of 1,000 additional workers onsite. Normally, outage workers begin to arrive at BFN 2 to 3 weeks prior to the start of the outage, and the total number of onsite workers peaks at about the 3rd day of the 21- to 28-day outage. The EPU outage for each unit would last 35 days or less (TVA 2016a). Once EPU-related plant modifications have been completed, the size of the workforce at BFN would return to pre-EPU levels approximately 1 week after the end of the outage with no significant increases during future outages. The size of the operations workforce would be unaffected by the proposed EPU.

Most of the EPU plant modification workers are expected to relocate

temporarily to the Huntsville metropolitan area during outages, resulting in short-term increased demands for public services and housing. Because plant modification work would be temporary, most workers would stay in available rental homes, apartments, mobile homes, and camper-trailers.

The additional number of outage workers and truck material and equipment deliveries needed to support EPU-related power plant modifications could cause short-term level-of-service impacts (restricted traffic flow and higher incident rates) on secondary roads in the immediate vicinity of BFN. However, only small traffic delays are anticipated during the outages.

The BFN currently makes payments in lieu of taxes to states and counties in which power operations occur and on properties previously subjected to state and local taxation. The licensee pays a percentage of its gross power revenues to such states and counties. Only a very small share of TVA payment is paid directly to counties; most is paid to the states, which use their own formulas for redistribution of some or all of the payments to local governments to fund their respective operating budgets. In general, half of TVA payment is apportioned based on power sales and half is apportioned based on the “book” value of TVA property. Therefore, for a capital improvement project such as the EPU, the in-lieu-of-tax payments are affected in two ways: (1) As power sales increase, the total amount of the in-lieu-of-tax payment to be distributed increases, and (2) the increased “book” value of BFN causes a greater proportion of the total payment to be allocated to Limestone County. The state’s general fund, as well as all of the counties in Alabama that receive TVA in-lieu-of-tax distributions from the State of Alabama, benefit under this method of distribution (TVA 2016a).

Due to the short duration of EPU-related plant modification and substation upgrade activities, there would be little or no noticeable effect on tax revenues generated by additional workers temporarily residing in Limestone County and elsewhere. In addition, there would be little or no noticeable increased demand for housing and public services or level-of-service traffic impacts beyond what is experienced during normal refueling outages at BFN. Therefore, the NRC staff concludes that there would be no significant socioeconomic impacts from EPU-related plant modifications, substation upgrades, and power plant operations under EPU conditions.

#### Environmental Justice Impacts

The environmental justice impact analysis evaluates the potential for disproportionately high and adverse human health and environmental effects on minority and low-income populations that could result from activities associated with the proposed EPU at BFN. Such effects may include human health, biological, cultural, economic, or social impacts. Minority and low-income populations are subsets of the general public residing in the vicinity of BFN, and all are exposed to the same health and environmental effects generated from activities at BFN.

#### Minority Populations in the Vicinity of the BFN

According to the 2010 Census, an estimated 22 percent of the total population (approximately 978,000 individuals) residing within a 50-mile radius of BFN identified themselves as a minority (MCDC 2016). The largest minority populations were Black or African American (approximately 135,000 persons or 14 percent), followed by Hispanic, Latino, or Spanish origin of any race (approximately 44,000 persons or 4.5 percent). According to the U.S. Census Bureau’s 2010 Census, about 21 percent of the Limestone County population identified themselves as minorities, with Black or African Americans comprising the largest minority population (approximately 13 percent) (U.S. Census Bureau (USCB) 2016). According to the USCB’s 2015 American Community Survey 1-Year Estimates, the minority population of Limestone County, as a percent of the total population, had increased to about 23 percent with Black or African Americans comprising 14 percent of the total county population (USCB 2016).

#### Low-Income Populations in the Vicinity of BFN

According to the USCB’s 2010–2014 American Community Survey 5-Year Estimates, approximately 32,000 families and 154,000 individuals (12 and 16 percent, respectively) residing within a 50-mile radius of BFN were identified as living below the Federal poverty threshold (MCDC 2016). The 2014 Federal poverty threshold was \$24,230 for a family of four (USCB 2016).

According to the USCB’s 2015 American Community Survey 1-Year Estimates, the median household income for Alabama was \$44,765, while 14 percent of families and 18.5 percent of the state population were found to be living below the Federal poverty

threshold (USCB 2016). Limestone County had a higher median household income average (\$55,009) and a lower percentage of families (12 percent) and persons (15 percent) living below the poverty level, respectively (USCB 2016).

#### Impact Analysis

Potential impacts to minority and low-income populations would consist of environmental and socioeconomic effects (*e.g.*, noise, dust, traffic, employment, and housing impacts) and radiological effects. Radiation doses from plant operations after implementation of the EPU are expected to continue to remain well below regulatory limits.

Noise and dust impacts would be temporary and limited to onsite activities. Minority and low-income populations residing along site access roads could experience increased commuter vehicle traffic during shift changes. Increased demand for inexpensive rental housing during the EPU-related plant modifications could disproportionately affect low-income populations; however, due to the short duration of the EPU-related work and the availability of housing, impacts to minority and low-income populations would be of short duration and limited. According to 2015 American Community Survey 1-Year Estimates, there were approximately 4,016 vacant housing units in Limestone County (USCB 2016).

Based on this information and the analysis of human health and environmental impacts presented in this EA, the NRC staff concludes that the proposed EPU would not have disproportionately high and adverse human health and environmental effects on minority and low-income populations residing in the vicinity of BFN.

#### Cumulative Impacts

The Council on Environmental Quality defines cumulative impacts under the NEPA of 1969, as amended (42 U.S.C. 4321 *et seq.*) as the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 CFR 1508.7). Cumulative impacts may result when the environmental effects associated with the proposed action are overlaid or added to temporary or permanent effects associated with other actions. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a

period of time. For the purposes of this cumulative analysis, past actions are related to the resource conditions when BFN was licensed and constructed; present actions are related to the resource conditions during current operations; and future actions are those that are reasonably foreseeable through the expiration of BFN's renewed facility operating licenses (*i.e.*, through 2033, 2034, and 2036 for Units 1, 2, and 3, respectively).

In Section 4.8 of the BFN FSEIS (NRC 2005), the NRC staff assessed the cumulative impacts related to continued operation of BFN through the license renewal term assuming operation of BFN at EPU levels. In its analysis, the NRC (2005) considered changes and modifications to the Tennessee River; current and future water quality; current and future competing water uses, including public supply, industrial water supply, irrigation, and thermoelectric power generation; the radiological environment; future socioeconomic impacts; historic and cultural resources; and cumulative impacts to Federally endangered and threatened species. The NRC (2005) determined that the contribution of BFN continued operations at EPU levels to past, present, and reasonably foreseeable future actions would not be detectable or would be so minor as to not destabilize or noticeably alter any important attribute of the resources.

Because the proposed EPU would either not change or result in significant impacts to the radiological environment, onsite or offsite land uses, visual resources, air quality, noise, terrestrial resources, special status species and habitats, historical and cultural resources, socioeconomic conditions, or environmental justice populations, the NRC concludes that implementation of the proposed action would not incrementally contribute to cumulative impacts to these resources. Regarding water resources and aquatic resources, although the proposed EPU would result in more thermal effluent, discharges would remain within the limits set forth in the current BFN NPDES permit, and no other facilities discharge thermal effluent within the BFN mixing zone that would exacerbate thermal effects. As described in this document, the NRC (2005) determined cumulative impacts to these resources would not be detectable or would be so minor as to not destabilize or noticeably alter any important attribute of the resources. Accordingly, the NRC staff finds that cumulative impacts on water resources and aquatic resources under the proposed action would not be significant.

Additionally, for those resources identified as potentially impacted by activities associated with the proposed EPU (*i.e.*, water resources and aquatic resources), the NRC staff also considered current resource trends and conditions, including the potential impacts of climate change. The NRC staff considered the U.S. Global Change Research Program's (USGCRP's) most recent compilation of the state of knowledge relative to global climate change effects (USGCRP 2009, 2014).

#### Water Resources

Predicted changes in the timing, intensity, and distribution of precipitation would be likely to result in changes in surface water runoff affecting water availability across the Southeastern United States. Specifically, while average precipitation during the fall has increased by 30 percent since about 1900, summer and winter precipitation has declined by about 10 percent across the eastern portion of the region, including eastern Tennessee (USGCRP 2009). A continuation of this trend coupled with predicted higher temperatures during all seasons (particularly the summer months), would reduce groundwater recharge during the winter, produce less runoff and lower stream flows during the spring, and potentially lower groundwater base flow to rivers during the drier portions of the year (when stream flows are already lower). As cited by the USGCRP, the loss of moisture from soils because of higher temperatures along with evapotranspiration from vegetation is likely to increase the frequency, duration, and intensity of droughts across the region into the future (USGCRP 2009, USGCRP 2014).

Changes in runoff in a watershed along with reduced stream flows and higher air temperatures all contribute to an increase in the ambient temperature of receiving waters. Annual runoff and river-flow are projected to decline in the Southeast region (USGCRP 2014). Land use changes, particularly those involving the conversion of natural areas to impervious surface, exacerbate these effects. These factors combine to affect the availability of water throughout a watershed, such as that of the Tennessee River, for aquatic life, recreation, and industrial uses. While changes in projected precipitation for the Southeast region are uncertain, the USGCRP has reasonable expectation that there will be reduced water availability due to the increased evaporative losses from rising temperatures alone (USGCRP 2014). Nevertheless, when considering that the



Tennessee River System and associated reservoirs are closely operated, managed, and regulated for multiple uses which include thermoelectric power generation, the incremental contribution of the proposed EPU on climate change impacts is not significant.

#### Aquatic Resources

The potential effects of climate change described in preceding paragraphs for water resources, whether from natural cycles or man-made activities, could result in changes that would affect aquatic resources in the Tennessee River. Increased air temperatures could result in higher water temperatures in the Tennessee River reservoirs. For instance, TVA found that a 1 °F (0.5 °C) increase in air temperature resulted in an average water temperature increase between 0.25 °F and 0.5 °F (0.14 °C and 0.28 °C) in the Chickamauga Reservoir (NRC 2015). Higher water temperatures would increase the potential for thermal effects on aquatic biota and, along with altered river flows, could exacerbate existing environmental stressors, such as excess nutrients and lowered dissolved oxygen associated with eutrophication. Even slight changes could alter the structure of aquatic communities. Invasions of non-native species that thrive under a wide range of environmental conditions could further disrupt the current structure and function of aquatic communities (NRC 2015). Nevertheless, when considering that the Tennessee River System and associated reservoirs are closely operated, managed, and regulated for multiple uses that include thermoelectric power generation, the incremental contribution of the proposed EPU on climate change impacts is not significant.

#### Alternatives to the Proposed Action

As an alternative to the proposed action, the NRC staff considered denial of the proposed license amendments (i.e., the “no-action” alternative). Denial of the application would result in no change in current environmental conditions or impacts. However, if the EPU were not approved, other agencies and electric power organizations might be required to pursue other means of providing electric generation capacity, such as fossil fuel or alternative fuel power generation, to offset future demand. Construction and operation of such generating facilities could result in air quality, land use, ecological, and waste management impacts significantly greater than those identified for the proposed EPU.

#### Alternative Use of Resources

The action does not involve the use of any different resources than those previously considered in NUREG-1437, Supplement 21, Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Browns Ferry Station, Units 1, 2, and 3—Final Report (NRC 2005).

#### Agencies and Persons Consulted

The NRC staff did not enter into consultation with any other Federal or State agency regarding the environmental impact of the proposed action. However, on October 6, 2016, the NRC notified the Alabama State official, Mr. David Walter, Director of Alabama Office of Radiation Control of the proposed amendments, requesting his comments by October 13, 2016. If the State official has any comments, the comments will be addressed and resolved in the final EA. The NRC will also forward copies of this draft EA and

FONSI to the EPA, FWS, and ADEM and publish the draft EA and FONSI in the FR for comment. The NRC will address any comments received during the comment period in the final EA.

#### IV. Finding of No Significant Impact

The NRC is considering issuing amendments for Renewed Facility Operating License Nos. DPR-33, DPR-52, and DPR-68, issued to TVA for operation of BFN to increase the maximum licensed thermal power level for each of the three BFN reactor units from 3,458 MWt to 3,952 MWt.

On the basis of the EA included in Section III of this document and incorporated by reference in this finding, the NRC concludes that the proposed action would not have significant effects on the quality of the human environment. The NRC's evaluation considered information provided in the licensee's application and associated supplements as well as the NRC's independent review of other relevant environmental documents. Section of this document lists the environmental documents related to the proposed action and includes information on the availability of these documents. Based on its findings, the NRC has decided not to prepare an environmental impact statement for the proposed action.

#### V. Availability of Documents

The following table identifies the environmental and other documents cited in this document and related to the NRC's FONSI. Documents with an ADAMS accession number are available for public inspection online through ADAMS at <http://www.nrc.gov/reading-rm/adams.html> or in person at the NRC's PDR as previously described.

Document	ADAMS accession No., FRN, or URL reference
Steven A. Ahlstedt and Thomas A. McDonough ..... Quantitative Evaluation of Commercial Mussel Populations in the Tennessee River Portion of Wheeler Reservoir, Alabama. Dated October 1992 ..... (Prepared by Ahlstedt and McDonough 1992) .....	ML042790392
Alabama Department of Environmental Management ..... National Pollutant Discharge Elimination System Permit No. AL0022080, Tennessee Valley Authority, Browns Ferry Nuclear Plant. Dated July 3, 2012 ..... (ADEM 2012) .....	ML16159A040
Alabama Department of Environmental Management ..... Alabama's Draft 2016 §303(d) List Fact Sheet ..... Dated February 7, 2016 ..... (ADEM 2016) .....	ML16259A186
Karpynec T, Rosenwinkel H, Weaver M, Wright K, and Crook E ..... A Phase I Cultural Resources Surveys of Tennessee Valley Authority's Corinth and Holly Springs Substation Expansions in Alcorn and Marshall Counties, Mississippi. Dated May 2016 ..... (Karpynec et al. 2016b) .....	ML16197A563

Document	ADAMS accession No., FRN, or URL reference
Karpynek T., Rosenwinkel H., Weaver M., Wright K., and Crook E ..... A Phase I Cultural Resources Survey of the Wilson Substation Expansion Project in Wilson County, Tennessee. Dated May 2016 ..... (Karpynek et al. 2016c) .....	ML16197A563
Missouri Census Data Center ..... Circular Area Profiles (CAPS), 2010 Census Summary File 1, Aggregated Census Block Group Hispanic or Latino and Race data and 2010–2014 American Community Survey (ACS) data, Summary of Aggregated Census Tract data in a 50-mile (80-kilometer) radius around BFN (Latitude= 34.703889355505075, Longitude= – 87.11862504482272). Accessed September 2016 ..... (MCDCC 2016) .....	<a href="http://mcdc.missouri.edu/websas/caps10c.html">http://mcdc.missouri.edu/websas/caps10c.html</a>
Tennessee Valley Authority ..... Browns Ferry Nuclear Plant Units 2 and 3—Proposed Technical Specifications Change TS–418—Request for License Amendment Extended Power Uprate (EPU) Operation.. Dated June 25, 2004 ..... (TVA 2004a) .....	ML041840301
Tennessee Valley Authority ..... Browns Ferry Nuclear Plant Unit 1—Proposed Technical Specifications Change TS–431—Request for License Amendment—Extended Power Uprate (EPU) Operation. Dated June 28, 2004 ..... (TVA 2004b) .....	ML042800186
Tennessee Valley Authority ..... Browns Ferry Nuclear Plant—Unit 1—Technical Specifications Change TS–431, Supplement 1—Extended Power Uprate (EPU). Dated September 22, 2006 ..... (TVA 2006) .....	ML062680459
Tennessee Valley Authority ..... Technical Specifications Changes TS–431 and TS–418 –Extended Power Uprate (EPU)—Withdrawal of Requests and Update to EPU Plans and Schedules. Dated September 18, 2014 ..... (TVA 2014) .....	ML14265A487
Tennessee Valley Authority ..... Proposed Technical Specifications Change TS–505—Request for License Amendments—Extended Power Uprate, Cover Letter. Dated September 21, 2015 ..... (TVA 2015a) .....	ML15282A152
Tennessee Valley Authority ..... Proposed Technical Specification Change TS–505—Request for License Amendments—Extended Power Uprate—Supplemental Information. Dated November 13, 2015 ..... (TVA 2015b) .....	ML15317A361
Tennessee Valley Authority ..... Proposed Technical Specifications (TS) Change TS–505—Request for License Amendments—Extended Power Uprate (EPU)—Supplement 2, MICROBURN–B2 Information. Dated December 15, 2015 ..... (TVA 2015c) .....	ML15351A113
Tennessee Valley Authority ..... Proposed Technical Specifications (TS) Change TS–505—Request for License Amendments—Extended Power Uprate (EPU)—Supplement 3, Interconnection System Impact Study Information. Dated December 18, 2015 ..... (TVA 2015d) .....	ML15355A413
Tennessee Valley Authority ..... Proposed Technical Specifications (TS) Change TS–505—Request for License Amendments—Extended Power Uprate, BFN EPU LAR, Attachment 42, Supplemental Environmental Report, Revision 1. Dated May 27, 2016 ..... (TVA 2016a) .....	ML16197A563
Tennessee Valley Authority ..... Proposed Technical Specifications (TS) Change TS–505—Request for License Amendments—Extended Power Uprate (EPU)—Supplement 13, Responses to Requests for Additional Information. Dated April 22, 2016 ..... (TVA 2016b) .....	ML16159A040
Tennessee Valley Authority ..... Proposed Technical Specifications (TS) Change TS–505—Request for License Amendments—Extended Power Uprate (EPU)—Supplement 18, Responses to Requests for Additional Information and Updates Associated with Interconnection System Impact Study Modifications. Dated May 27, 2016 ..... (TVA 2016c) .....	ML16197A563

Document	ADAMS accession No., FRN, or URL reference
Tennessee Valley Authority ..... Browns Ferry Nuclear Plant, RERP-RAI-GE-2 Response, Attachment 1: Supplemental Environmental Information for Transmission System and BFN Main Generator Upgrades. Dated May 27, 2016 ..... (TVA 2016d) .....	ML16197A563
Tennessee Valley Authority ..... BFN EPU LAR, Attachment 47, List and Status of Plant Modifications, Revision 1 (Enclosure 10) ..... Dated May 27, 2016 ..... (TVA 2016e) .....	ML16197A563
U.S. Census Bureau ..... American FactFinder, Table DP-1, "Profile of General Population and Housing Characteristics: 2010, 2010 Census Summary File 1" for Limestone County, Alabama; American FactFinder, Table DP05, "ACS Demographic and Housing Estimates, 2015 American Community Survey 1-Year Estimates" for Limestone County, Alabama; and Table DP03—"Selected Economic Characteristics, 2015 American Community Survey 1-Year Estimates" for Alabama and Limestone County, and Table B25002—"Occupancy Status, 2015 American Community Survey 1-Year Estimates" for Limestone County, Alabama. Accessed September 2016 ..... (USCB 2016) .....	<a href="http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t">http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t</a>
U.S. Fish and Wildlife Service ..... Endangered Species Consultations Frequently Asked Questions ..... Dated July 15, 2013 ..... (FWS 2013) .....	ML16120A505
U.S. Fish and Wildlife Service ..... Updated List of Threatened and Endangered Species That May Occur in Your Proposed Project Location for Browns Ferry EPU. Dated February 1, 2016 ..... (FWS 2016) .....	ML16032A044
U.S. Global Change Research Program ..... Global Climate Change Impacts in the United States ..... Dated June 2009 ..... (USGCRP 2009) .....	ML100580077
U.S. Global Change Research Program ..... Climate Change Impacts in the United States: The Third National Climate Assessment ..... Dated May 2014 ..... (USGCRP 2014) .....	ML14129A233
U.S. Nuclear Regulatory Commission ..... Browns Ferry Nuclear Plant, Units 2 and 3—Environmental Assessment Regarding Power Uprate ..... Dated September 1, 1998 ..... (NRC 1998) .....	63 FR 46491
U.S. Nuclear Regulatory Commission ..... Generic Environmental Impact Statement for License Renewal of Nuclear Plants (NUREG-1437, Volume 1, Addendum 1). Dated August 1999 ..... (NRC 1999) .....	ML040690720
U.S. Nuclear Regulatory Commission ..... Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors (Regulatory Guide 1.183). Dated July 2000 ..... (NRC 2000) .....	ML003716792
U.S. Nuclear Regulatory Commission ..... Review Standard for Extended Power Upgrades (RS-001). Revision 0 ..... Dated December 2003 ..... (NRC 2003) .....	ML033640024
U.S. Nuclear Regulatory Commission ..... Biological Assessment, Browns Ferry Nuclear Power Plant, License Renewal Review, Limestone County, Alabama. Dated October 2004 ..... (NRC 2004) .....	ML042990348
U.S. Nuclear Regulatory Commission ..... Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Browns Ferry Plant, Units 1, 2, and 3—Final Report (NUREG-1437, Supplement 21). Dated June 30, 2005 ..... (NRC 2005) .....	ML051730443
U.S. Nuclear Regulatory Commission ..... Issuance of Renewed Facility Operating License Nos. DPR-33, DPR-52, and DPR-68 for Browns Ferry Nuclear Plant, Units 1, 2, and 3. Dated May 4, 2006 ..... (NRC 2006a) .....	ML060970332

Document	ADAMS accession No., FRN, or URL reference
U.S. Nuclear Regulatory Commission ..... Browns Ferry Nuclear Plant, Units 1, 2, and 3—Draft Environmental Assessment and Finding of No Significant Impact Related to the Proposed Extended Power Uprate. Dated November 6, 2006 ..... (NRC 2006b) .....	71 FR 65009
U.S. Nuclear Regulatory Commission ..... Browns Ferry Nuclear Plant, Units 1, 2, and 3—Final Environmental Assessment and Finding of No Significant Impact Related to the Proposed Extended Power Uprate. Dated February 12, 2007 ..... (NRC 2007a) .....	72 FR 6612
U.S. Nuclear Regulatory Commission ..... Browns Ferry Nuclear Plant, Unit 1—Issuance of Amendment Regarding Five Percent Uprate ..... Dated March 6, 2007 ..... (NRC 2007b) .....	ML063350404
U.S. Nuclear Regulatory Commission ..... Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Regarding Sequoyah Nuclear Plant, Unit 1 and 2 —Final Report (NUREG-1437, Supplement 53). Dated March 2015 ..... (NRC 2015) .....	ML15075A438
Yokely P Jr ..... Mussel Study near Hobbs Island on the Tennessee River for Butler Basin Marina ..... Dated April 1998 ..... (Yokely 1998) .....	ML042800176

Dated at Rockville, Maryland, this 21st day of November 2016.

For The Nuclear Regulatory Commission.

**Jeanne A. Dion,**

*Acting Chief, Plant Licensing Branch II-2,  
Division of Operating Reactor Licensing,  
Office of Nuclear Reactor Regulation.*

[FR Doc. 2016-28865 Filed 11-30-16; 8:45 am]

**BILLING CODE 7590-01-P**

meeting should be addressed to the Secretary of the Board, Julie S. Moore, at 202-268-4800.

**Julie S. Moore,**

*Secretary, Board of Governors.*

[FR Doc. 2016-28921 Filed 11-29-16; 11:15 am]

**BILLING CODE 7710-12-P**

## POSTAL SERVICE

### Temporary Emergency Committee of the Board of Governors; Sunshine Act Meeting

**DATES AND TIMES:** December 5, 2016 at 2:00 p.m., and December 6, 2016, at 9:00 a.m.

**PLACE:** Las Vegas, Nevada.

**STATUS:** Closed.

**MATTERS TO BE CONSIDERED:**

*Monday, December 5, 2016 at 2:00 p.m.*

1. Strategic Issues.
2. Financial Matters.
3. Pricing.
4. Personnel Matters and Compensation Issues.

*Tuesday, December 6, 2016 at 9:00 a.m.*

1. Executive Session—Discussion of prior agenda items and Board governance.

**GENERAL COUNSEL CERTIFICATION:** The General Counsel of the United States Postal Service has certified that the meeting may be closed under the Government in the Sunshine Act.

**CONTACT PERSON FOR MORE INFORMATION:** Requests for information about the

## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-7398; File No. SR-NYSEArca-2016-63]

### Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Designation of a Longer Period for Commission Action on Proceedings To Determine Whether To Approve or Disapprove a Proposed Rule Change Relating to the Listing and Trading of Shares of BlackRock Government Collateral Pledge Unit Under NYSE Arca Equities Rule 8.600

November 25, 2016.

On May 19, 2016, NYSE Arca, Inc. filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> a proposed rule change to list and trade shares of the BlackRock Government Collateral Pledge Unit. The proposed rule change was published for comment in the **Federal Register** on June 2, 2016.<sup>3</sup> On July 14, 2016, pursuant to Section

19(b)(2) of the Act,<sup>4</sup> the Commission designated a longer period within which to approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether to disapprove the proposed rule change.<sup>5</sup> On August 30, 2016, the Commission instituted proceedings to determine whether to approve or disapprove the proposed rule change.<sup>6</sup> The Commission has received no comments on the proposed rule change.

Section 19(b)(2) of the Act<sup>7</sup> provides that, after initiating disapproval proceedings, the Commission shall issue an order approving or disapproving the proposed rule change not later than 180 days after the date of publication of notice of filing of the proposed rule change. The Commission may extend the period for issuing an order approving or disapproving the proposed rule change, however, by not more than 60 days if the Commission determines that a longer period is appropriate and publishes the reasons for such determination. The proposed rule change was published for notice and comment in the **Federal Register** on

<sup>1</sup> 15 U.S.C. 78s(b)(2).

<sup>2</sup> See Securities Exchange Act Release No. 78328, 81 FR 47222 (July 20, 2016).

<sup>3</sup> See Securities Exchange Act Release No. 78728, 81 FR 61260 (September 6, 2016). Specifically, the Commission instituted proceedings to allow for additional analysis of the proposed rule change’s consistency with Section 6(b)(5) of the Act, which requires, among other things, that the rules of a national securities exchange be “designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade,” and “to protect investors and the public interest.” See *id.* at 61262.

<sup>4</sup> 15 U.S.C. 78s(b)(2).

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> See Securities Exchange Act Release No. 77941 (May 27, 2016), 81 FR 35425.

June 2, 2016. November 29, 2016 is 180 days from that date, and January 28, 2017 is 240 days from that date.

The Commission finds it appropriate to designate a longer period within which to issue an order approving or disapproving the proposed rule change so that it has sufficient time to consider this proposed rule change. Accordingly, the Commission, pursuant to Section 19(b)(2) of the Act,<sup>8</sup> designates January 28, 2017 as the date by which the Commission shall either approve or disapprove the proposed rule change (File No. SR-NYSEArca-2016-63).

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>9</sup>

**Brent J. Fields,**  
Secretary.

[FR Doc. 2016-28825 Filed 11-30-16; 8:45 am]

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## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-79400; File No. SR-NYSEMKY-2016-103]

### Self-Regulatory Organizations; NYSE MKT LLC; Notice of Filing of Proposed Rule Change Allowing the Exchange To Trade Pursuant to Unlisted Trading Privileges for Any NMS Stock Listed On Another National Securities Exchange; Establishing Rules for the Trading Pursuant to UTP of Exchange Traded Products and Adopting New Equity Trading Rules Relating to Trading Halts of Securities Traded Pursuant to UTP on the Pillar Platform

November 25, 2016.

Pursuant to Section 19(b)(1)<sup>1</sup> of the Securities Exchange Act of 1934 (the “Act”)<sup>2</sup> and Rule 19b-4 thereunder,<sup>3</sup> notice is hereby given that, on November 17, 2016, 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.

### I. Self-Regulatory Organization’s Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to (1) allow the Exchange to trade pursuant to unlisted trading privileges (“UTP”) for any NMS Stock listed on another national securities exchange; (2) establish rules for the trading pursuant to UTP of exchange traded products (“ETPs”); and (3) adopt new equity trading rules relating to trading halts of securities traded pursuant to UTP on the Pillar platform. The proposed rule change is available on the Exchange’s Web site at [www.nyse.com](http://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 the Statutory Basis for, the Proposed Rule Change

##### 1. Purpose

The Exchange is proposing new rules to trade all Tape A and Tape C symbols, on a UTP basis, on its new trading platform, Pillar.<sup>4</sup>

In addition, the Exchange is proposing rules for the trading on Pillar

<sup>4</sup> On January 29, 2015, the Exchange announced the implementation of Pillar, which is an integrated trading technology platform designed to use a single specification for connecting to the equities and options markets operated by the Exchange and its affiliates, NYSE Arca, Inc. (“NYSE Arca”) and New York Stock Exchange LLC (“NYSE LLC”). See Trader Update dated January 29, 2015, available here: [http://www1.nyse.com/pdfs/Pillar\\_Trader\\_Update\\_Jan\\_2015.pdf](http://www1.nyse.com/pdfs/Pillar_Trader_Update_Jan_2015.pdf). In February 2016, NYSE Arca Equities was the first market to begin migration to the Pillar platform. In March of 2016, NYSE Group, Inc. announced the completion of a “key phase” of the project and, in May 2016, NYSE Group, Inc. completed the rollout of NYSE Pillar matching engines on NYSE Arca. The next phase of the NYSE Pillar migration will begin in November 2016 with certification testing for the new gateways and protocols. See Content To Live: <https://WWW.NYSE.COM/PILLAR>.

pursuant to UTP of the following types of Exchange Traded Products:<sup>5</sup>

- Equity Linked Notes (“ELNs”);
- Investment Company Units;
- Index-Linked Exchangeable Notes;
- Equity Gold Shares;
- Equity Index-Linked Securities;
- Commodity-Linked Securities;
- Currency-Linked Securities;
- Fixed-Income Index-Linked

Securities;

- Futures-Linked Securities;
- Multifactor-Index-Linked

Securities;

- Trust Certificates;
- Currency and Index Warrants;
- Portfolio Depositary Receipts;
- Trust Issued Receipts;
- Commodity-Based Trust Shares;
- Currency Trust Shares;
- Commodity Index Trust Shares;
- Commodity Futures Trust Shares;
- Partnership Units;
- Paired Trust Shares;
- Trust Units;
- Managed Fund Shares; and
- Managed Trust Securities.

The Exchange’s proposed rules for these products are substantially identical (other than with respects[sic] to certain non-substantive and technical amendments described below) as the rules of NYSE Arca Equities for the qualification, listing and trading of such products.<sup>6</sup>

The Exchange’s approach in this filing is the same as the approach of (1) BATS BYX Exchange, Inc. f/k/a BATS Y-Exchange, Inc. (“BYX”), which filed a proposed rule change with the Commission to conform its rules to the rules of its affiliate, Bats BZX Exchange, Inc. f/k/a BATS Exchange, Inc. (“BATS”),<sup>7</sup> (2) NASDAQ Stock Market LLC, which filed a proposed rule change with the Commission to amend its rules regarding Portfolio Depositary Receipts and Index Fund Shares to conform to the rules of NYSE Arca,<sup>8</sup> and (3) American Stock Exchange LLC (“Amex”), which filed a proposed rule change with the Commission to copy all of the relevant rules of Amex in their entirety (other than with respects[sic] to

<sup>5</sup> The Exchange is proposing to define the term “Exchange Traded Product” to mean a security that meets the definition of “derivative securities product” in Rule 19b-4(e) under the Securities Exchange Act of 1934. See proposed Rule 1.1E(bbb). This proposed definition is identical to the definition of “Derivatives Securities Product” in NYSE Arca Equities Rule 1.1(bbb).

<sup>6</sup> See NYSE Arca Equities Rules 5 (Listings) and 8 (Trading of Certain Equities Derivatives).

<sup>7</sup> See, Securities Exchange Act Release No. 63097 (October 13, 2010), 75 FR 64767 (October 20, 2010) (SR-BYX-2010-002).

<sup>8</sup> See, Securities Exchange Act Release No. 69928 (July 3, 2013), 78 FR 41489 (July 10, 2013) (SR-NASDAQ-2013-094).

<sup>8</sup> *Id.*

<sup>9</sup> 17 CFR 200.30-3(a)(57).

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 15 U.S.C. 78a.

<sup>3</sup> 17 CFR 240.19b-4.

certain non-substantive and technical changes) for adoption by its new trading platform for equity products and exchange traded funds—AEMI.<sup>9</sup>

The Exchange's only trading pursuant to UTP will be on the Pillar platform; it will not trade securities pursuant to UTP on its current platform. Further, at this time, the Exchange does not intend to list ETPs on its Pillar platform and will only trade ETPs on the Pillar platform pursuant to UTP.<sup>10</sup> Therefore, the Exchange is only proposing ETP rules in this rule filing that would apply to the Pillar platform and trading pursuant to UTP. Since the Exchange does not plan to trade ETPs on the Pillar platform that would be listed under these proposed rules, the Exchange is not proposing to change any of the current rules of the Exchange pertaining to the listing and trading of ETPs in the NYSE MKT Company Guide<sup>11</sup> or in its other rules.

In accordance with the rule numbering framework adopted by the Exchange in the Pillar Framework Filing,<sup>12</sup> each rule proposed herein would have the same rule numbers as the NYSE Arca Equities rules with which it conforms.

Finally, in the Pillar Framework Filing, the Exchange adopted rules grouped under proposed Rule 7E relating to equities trading.<sup>13</sup> The Exchange now proposes Rule 7.18E under Rule 7E relating to trading halts of securities traded pursuant to UTP on the Pillar platform. The Exchange's proposed Rule 7.18E is substantially identical (other than with respects[sic]

to certain non-substantive and technical amendments described below) as NYSE Arca Equities Rule 7.18.<sup>14</sup>

#### Proposal To Trade Securities Pursuant to UTP

The Exchange is proposing new Rule 5.1E(a) to establish rules regarding the extension of UTP securities to the Pillar platform, which are listed on other national securities exchanges. As proposed, the first sentence of new Rule 5.1E(a) would allow the Exchange to trade securities eligible for UTP under Section 12(f) of the Exchange Act.<sup>15</sup> This proposed text is identical to Rules 14.1 of both BYX and EDGA Exchange, Inc. ("EDGA") and substantially similar to NYSE Arca Equities Rule 5.1(a).

Proposed Rule 5.1E(a) would adopt rules reflecting requirements for trading products on the Exchange pursuant to UTP that have been established in various new product proposals previously approved by the Commission.<sup>16</sup> In addition, proposed Rule 5.1E(a) would state that the securities the Exchange trades pursuant to UTP would be traded on the new Pillar trading platform under the rules applicable to such trading.<sup>17</sup> Accordingly, the Exchange would not trade UTP securities on the Pillar platform until its trading rules for the Pillar platform are effective.

Finally, proposed Rule 5.1E(a)(1) would make clear that the Exchange would not list any ETPs, unless it filed a proposed rule change under Section 19(b)(2)<sup>18</sup> under the Act. Therefore, the provisions of proposed Rules 5E and 8E described below, which permit the listing of ETPs, would not be effective until the Exchange files a proposed rule

change to amend its rules to comply with Rules 10A-3 and 10C-1 under the Act and to incorporate qualitative listing criteria, and such proposed rule change is approved by the Commission. This would require the Exchange to adopt rules relating to the independence of compensation committees and their advisors.<sup>19</sup>

#### UTP of Exchange Traded Products

The Exchange proposes Rule 5.1E(a)(2) to specifically govern trading of ETPs pursuant to UTP. Specifically, the requirements in subparagraphs (A)–(F) of proposed Rule 5.1E(a)(2) would apply to ETPs traded pursuant to UTP on the Exchange.

Under proposed Rule 5.1E(a)(2)(A), the Exchange would file a Form 19b-4(e) with the Commission with respect to each ETP<sup>20</sup> the Exchange trades pursuant to UTP within five days after commencement of trading.

The Exchange proposes Supplementary Material .01 to Rule 5.1E(a) to allow the Exchange to trade, pursuant to UTP, any ETP that (1) was originally listed on another registered national securities exchange ("Other SRO") and continues to be listed on such Other SRO; and (2) satisfies the Exchange's continued listing criteria for the trading pursuant to UTP, which is applicable to the product class that would include such ETP. For the purposes of Supplementary Material .01 to proposed Rule 5.1E(a), the term "Exchange Traded Product" would include securities described in proposed Rules 5.2E(j)(2) (Equity Linked Notes); 5.2E(j)(3) (Investment Company Units); 5.2E(j)(4) (Index-Linked Exchangeable Notes); 5.2E(j)(6) (Equity Index-Linked Securities, Commodity-Linked

<sup>9</sup> See, Securities Exchange Act Release No. 54552 (September 29, 2006), 71 FR 59546 (October 10, 2006) (SR-Amex-2005-104) and Securities Exchange Act Release No. 54145 (July 14, 2006), 71 FR 41654 (July 21, 2006) (SR-Amex-2005-104).

<sup>10</sup> The Exchange currently lists five ETPs on its current trading platform. These ETPs will continue to be listed and traded pursuant to the NYSE MKT Company Guide and the other rules of the Exchange that do not apply to the Pillar platform.

<sup>11</sup> NYSE MKT Company Guide, <http://wallstreet.cch.com/MKT/CompanyGuide/>.

<sup>12</sup> See, SR-NYSEMKT-2016-97 Initial Filing (October 25, 2016) ("Pillar Framework Filing"). The Exchange is using the same rule numbering framework as the NYSE Arca Equities rules and would consist of proposed Rules 1E-13E. Rules 1E-13E would be operative for securities that are trading on the Pillar trading platform.

<sup>13</sup> The Pillar Framework Filing added Rules 7.5E and 7.6E to establish the trading units and trading differentials for trading on the Pillar platform. The Exchange also added Rule 7.12E, related to Trading Halts Due to Extraordinary Market Volatility in the Pillar Framework Filing. Since trading on the Pillar platform will be under these new rules, the Exchange specified in the Pillar Framework Filing that current Exchange Rule 7—Equities (which defines the term "Exchange BBO") would not be applicable to trading on the Pillar trading platform. In addition, with the exception of Rules 7.5E, 7.6E and 7.12E, the Exchange added Rules 7.1E–Rule 7.44E on a "Reserved" basis. *Id.*

<sup>14</sup> See, NYSE Arca Equities Rule 7.18. See, also, Securities Exchange Act Release No. 75467 (July 16, 2015), 80 FR 43515 (July 22, 2015) (SR-NYSEArca-2015-58), as amended by Amendment No. 1; Securities Exchange Act Release No. 76198A[sic] (October 20, 2015), 80 FR 65274 (October 26, 2015) (SR-NYSEArca-2015-58).

<sup>15</sup> Section 12(f) of the Exchange Act. 15 U.S.C. 78l(f).

<sup>16</sup> See, NYSE Arca Equities Rule 5.1(a)(1) and Securities Exchange Act Release No. 67066 (May 29, 2012), 77 FR 33010 (June 4, 2012) (SR-NYSEArca-2012-46); BATS Rule 14.11 and Securities Exchange Act Release No. 58623 (September 23, 2008), 73 FR 57169 (October 1, 2008) (SR-BATS-2008-004); National Stock Exchange, Inc. ("NSX") Rule 15.9 and Securities Exchange Act Release No. 57448 (March 6, 2008), 73 FR 13597 (March 13, 2008) (SR-NSX-2008-05); NASDAQ OMX PHLX LLC ("Phlx") Phlx Rule 803(o) and Securities Exchange Act Release No. 57806 (May 9, 2008), 73 FR 28541 (May 16, 2008) (SR-Phlx2008-34); International Securities Exchange, LLC ("ISE") ISE Rule 2101 and Securities Exchange Act Release No. 57387 (February 27, 2008), 73 FR 11965 (March 5, 2008) (SR-ISE-2007-99).

<sup>17</sup> See supra note 13.

<sup>18</sup> 15 U.S.C. 78s(b)(2).

<sup>19</sup> On June 20, 2012, the Commission adopted Rule 10C-1 to implement Section 10C of the Act, as added by Section 952 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. Rule 10C-1 under the Act directs each national securities exchange to prohibit the listing of any equity security of an issuer, with certain exceptions, that does not comply with the rule's requirements regarding compensation committees of listed issuers and related requirements regarding compensation advisers. See, CFR 240.10C-1; Securities Act Release No. 9199, Securities Exchange Act Release No. 64149 (March 30, 2011), 76 FR 18966 (April 6, 2011) and Securities Exchange Act Release No. 67220 (June 20, 2012), 77 FR 38422 (June 27, 2012).

<sup>20</sup> Although Rule 19b-4(e) of the Act defines any type of option, warrant, hybrid securities product or any other security, other than a single equity option or a security futures product, whose value is based, in whole or in part, upon the performance of, or interest in, an underlying instrument, as a "new derivative securities product," the Exchange prefers to refer to these types of products that it will be trading as "exchange traded products," so as not to confuse investors with a term that can be deemed to imply such products are futures or options related.

Securities, Currency-Linked Securities, Fixed Income Index-Linked Securities, Futures-Linked Securities and Multifactor Index-Linked Securities); 8.100E (Portfolio Depositary Receipts); and Supplementary Material .01 to Rule 8.200E (Trust Issued Receipts).

In addition, proposed Rule 5.1E(a)(2)(B) would provide that the Exchange will distribute an information circular prior to the commencement of trading in such an ETP that generally would include the same information as the information circular provided by the listing exchange, including (a) the special risks of trading the ETP, (b) the Exchange's rules that will apply to the ETP, including Rules 2090—Equities and 2111—Equities,<sup>21</sup> and (c) information about the dissemination of value of the underlying assets or indices.

Under proposed Rule 5.1E(a)(2)(D), the Exchange would halt trading in a UTP Exchange Traded Product in certain circumstances. Specifically, if a temporary interruption occurs in the calculation or wide dissemination of the intraday indicative value (or similar value) or the value of the underlying index or instrument and the listing market halts trading in the product, the Exchange, upon notification by the listing market of such halt due to such temporary interruption, also would immediately halt trading in that product on the Exchange. If the intraday indicative value (or similar value) or the value of the underlying index or instrument continues not to be calculated or widely available as of the commencement of trading on the Exchange on the next business day, the Exchange would not commence trading of the product that day. If an interruption in the calculation or wide dissemination of the intraday indicative value (or similar value) or the value of the underlying index or instrument continues, the Exchange could resume trading in the product only if calculation and wide dissemination of the intraday indicative value (or similar value) or the value of the underlying index or instrument resumes or trading in such series resumes in the listing market. The Exchange also would halt trading in a UTP Exchange Traded Product listed on the Exchange for which a net asset value (and in the case of managed fund shares or actively managed exchange-traded funds, a "disclosed portfolio") is disseminated if

the Exchange became aware that the net asset value or, if applicable, the disclosed portfolio was not being disseminated to all market participants at the same time. The Exchange would maintain the trading halt until such time as the Exchange became aware that the net asset value and, if applicable, the disclosed portfolio was available to all market participants.

Finally, the Exchange represents that its surveillance procedures for ETPs traded on the Exchange pursuant to UTP would be similar to the procedures used for equity securities traded on the Exchange and would incorporate and rely upon existing Exchange surveillance systems.

Proposed Rules 5.1E(a)(2)(C) and (E) would establish the following requirements for ETP Holders that have customers that trade UTP Exchange Traded Products:

- *Prospectus Delivery Requirements.* Proposed Rule 5.1E(a)(2)(C)(i) would remind ETP Holders that they are subject to the prospectus delivery requirements under the Securities Act of 1933, as amended (the "Securities Act"), unless the ETP is the subject of an order by the Commission exempting the product from certain prospectus delivery requirements under Section 24(d) of the Investment Company Act of 1940, as amended (the "1940 Act"), and the product is not otherwise subject to prospectus delivery requirements under the Securities Act. ETP Holders would also be required to provide a prospectus to a customer requesting a prospectus.<sup>22</sup>

- *Written Description of Terms and Conditions.* Proposed Rule 5.1E(a)(2)(C)(ii) would require ETP Holders to provide a written description of the terms and characteristics of UTP Exchange Traded Products to purchasers of such securities, not later than the time of confirmation of the first transaction, and with any sales materials relating to UTP Exchange Traded Products.

- *Market Maker Restrictions.* Proposed Rule 5.1E(a)(E) would establish certain restrictions for any ETP Holder registered as a market maker in an ETP that derives its value from one or more currencies, commodities, or derivatives based on one or more currencies or commodities, or is based on a basket or index composed of currencies or commodities (collectively, "Reference Assets"). Specifically, such an ETP Holder must file with the Exchange and keep current a list identifying all accounts for trading the underlying physical asset or commodity, related futures or options

on futures, or any other related derivatives, which the ETP Holder acting as registered market maker may have or over which it may exercise investment discretion.<sup>23</sup> If an account in which an ETP Holder acting as a registered market maker, directly or indirectly, controls trading activities, or has a direct interest in the profits or losses thereof, has not been reported to the Exchange as required by this Rule, an ETP Holder acting as registered market maker in the ETP would be permitted to trade in the underlying physical asset or commodity, related futures or options on futures, or any other related derivatives. Finally, a market maker could not use any material nonpublic information in connection with trading a related instrument.

#### Proposed Requirements for Exchange Traded Products

##### Definitions & Terms of Use

The Exchange proposes to define the term "exchange traded product" in Rule 1.1E(bbb). Proposed Rule 1.1E(bbb) would define the term "Exchange Traded Product" to mean a security that meets the definition of "derivative securities product" in Rule 19b-4(e) under the Securities Exchange Act of 1934 and a "UTP Exchange Traded Product" to mean an Exchange Traded Product that trades on the Exchange pursuant to unlisted trading privileges.<sup>24</sup> The Exchange proposes to use the term Exchange Traded Product instead of "derivative securities product," because it believes that the term "Exchange Traded Product" more accurately describes the types of products the Exchange proposes to trade and is less likely to confuse investors by using a term that implies such products are futures or options related.

Next, the Exchange proposes to add the definitions contained in NYSE Arca Equities Rule 5.1(b) that are relevant to the rules for the trading pursuant to UTP of the ETPs that the Exchange proposes in this filing, which are described below. To maintain

<sup>23</sup> The proposed rule would also, more specifically, require a market maker to file with the Exchange and keep current a list identifying any accounts ("Related Instrument Trading Accounts") for which related instruments are traded (1) in which the market maker holds an interest, (2) over which it has investment discretion, or (3) in which it shares in the profits and/or losses. In addition, a market maker would not be permitted to have an interest in, exercise investment discretion over, or share in the profits and/or losses of a Related Instrument Trading Account that has not been reported to the Exchange as required by the proposed rule.

<sup>24</sup> This proposed definition is identical to the definition of "Derivative Securities Product" in NYSE Arca Equities Rule 1.1(bbb).

<sup>21</sup> See, Rule 2090—Equities (the Exchange's Know Your Customer Rule) and Rule 2111—Equities (the Exchange's Suitability Rule). See, also, Securities Exchange Act Release No. 78106 (June 20, 2016), 81 FR 41364 (June 24, 2016) (SR-NYSEMKT-2016-59).

<sup>22</sup> Proposed Rule 5.1E(a)(2)(C)(iii).



consistency in rule references between the Exchange's proposed rules and NYSE Arca Equities' rules, the Exchange proposes to Reserve subparagraphs to the extent it is not now proposing certain definitions from NYSE Arca Equities Rule 5.1(b).<sup>25</sup> Other than a non-substantive difference to use the term "Exchange" instead of "Corporation," "NYSE Arca Marketplace," or "NYSE Arca Parent," the terms defined in this proposed Rule 5.1E(b) would have the identical meanings to the terms used in NYSE Arca Equities Rule 5.1(b).

Finally, the Exchange proposes to make the following substitutions in its proposed rules for terms used in the NYSE Arca Equities ETP listing and trading rules (collectively, the "General Definitional Term Changes"):

- Because the Exchange uses the term "Supplementary Material" to refer to commentaries to its Rules, the Exchange proposes to substitute this term where "Commentary" is used in the rules of NYSE Arca Equities;
- Because the Exchange tends to use the term "will" to impose obligations or duties on its members and ETP Holders, the Exchange proposes to substitute this term where "shall" is used in the rules of NYSE Arca Equities;
- The Exchange proposes to use the term "ETP Holder"<sup>26</sup> instead of "member organization," as defined in Rule 2—Equities, because member organizations would be required to hold an Equity Trading Permit issued by the Exchange to effect transactions on the Exchange's Pillar platform;
- The Exchange proposes to use the term "Exchange"<sup>27</sup> instead of "Corporation," "NYSE Arca Marketplace," or "NYSE Arca Parent;"
- Because the Exchange's hours for business are described in Rule 51—Equities and the Exchange's rules do not use a defined term to refer to such hours, the Exchange is proposing to refer to its core trading hours as the "Exchange's normal trading hours," and

substitute this phrase for "Core Trading Session" and "Core Trading Hours," as defined in the rules of NYSE Arca Equities;

- Because the Exchange's rules pertaining to trading halts due to extraordinary market volatility on the Pillar platform are described in Rule 7.12E, the Exchange is proposing to refer to Rule 7.12E in its proposed rules wherever NYSE Arca Equities Rule 7.12<sup>28</sup> is referenced in the rules of NYSE Arca Equities proposed in this filing;
- Because the Exchange's rules pertaining to the mechanics of the limit-up-limit down plan as it relates to trading pauses in individual securities due to extraordinary market volatility are described in Rule 80C—Equities, the Exchange is proposing to refer to Rule 80C—Equities in its proposed rules wherever NYSE Arca Equities Rule 7.11<sup>29</sup> is referenced in the rules of NYSE Arca Equities proposed in this filing;
- Because NYSE Arca Equities Rule 7.18<sup>30</sup> establishes the requirements for trading halts in securities traded on the Pillar trading platform, and the Exchange is proposing new Rule 7.18E in this filing, based on NYSE Arca Equities Rule 7.18, the Exchange is proposing to refer to Rule 7.18E in its proposed rules wherever NYSE Arca Equities Rule 7.34 is referenced in the rules of NYSE Arca Equities proposed in this filing; and
- Because the Exchange's rules regarding the production of books and records are described in Rule 440—Equities, the Exchange is proposing to refer to Rule 440—Equities in its proposed rules wherever NYSE Arca Equities Rule 4.4<sup>31</sup> is referenced in the rules of NYSE Arca Equities proposed in this filing.

#### Rules for the Trading Pursuant to UTP of ETPs

The Exchange would have to file a Form 19b-4(e) with the Commission to trade these ETPs pursuant to UTP. The Exchange is proposing substantially identical rules to those of NYSE Arca

Equities for the qualification, listing and delisting of companies on the Exchange applicable to the ETPs.<sup>32</sup>

#### Proposed Rule 5E—Securities Traded

The Exchange proposes to add introductory language under the main heading of proposed Rule 5E, which states that the provisions of proposed Rule 5E would apply only to the trading pursuant to UTP of ETPs, and would not apply to the listing of ETPs on the Exchange. The Exchange is proposing this language to clarify that the rules incorporated in proposed Rule 5E should not be interpreted to be listing requirements of the Exchange, but rather, requirements that pertain solely to the trading of ETPs pursuant to UTP on the Pillar platform.

The Exchange proposes to add Rules 5.2E(j)(2)–(j)(7), which would be substantially identical to NYSE Arca Equities Rules 5.2(j)(2)–(j)(7). These proposed rules would permit the Exchange to trade pursuant to UTP the following:

- Equity Linked Notes that meet the rules for the trading pursuant to UTP that are contained in proposed Rule 5.2E(j)(2);
- Investment Company Units that meet the rules for the trading pursuant to UTP that are contained in proposed Rule 5.2E(j)(3);
- Index-Linked Exchangeable Notes that meet the rules for the trading pursuant to UTP that are contained in proposed Rule 5.2E(j)(4);
- Equity Gold Shares that meet the rules for the trading pursuant to UTP that are contained in proposed Rule 5.2E(j)(5);
- Equity Index Linked Securities, Commodity-Linked Securities, Currency-Linked Securities, Fixed Income Index-Linked Securities, Futures-Linked Securities, and Multifactor Index-Linked Securities that meet the rules for the trading pursuant to UTP that are contained in proposed Rule 5.2E(j)(6); and
- Trust Certificates that meet the rules for the trading pursuant to UTP that are contained in proposed Rule 5.2E(j)(7).

The text of these proposed rules is identical to NYSE Arca Equities Rules 5.2(j)(2)–5.2(j)(7), other than certain non-substantive and technical differences explained below.

<sup>25</sup> The Exchange is proposing to Reserve paragraphs (b)(3), (b)(7), (b)(8), (b)(10), (b)(17) and (b)(19) of proposed Rule 5.1E(b), because the terms used in the parallel provisions of the NYSE Arca Equities rules would not be used in the rules for the trading pursuant to UTP of the ETPs that the Exchange is proposing in this filing.

<sup>26</sup> The Exchange plans to file additional proposed rule changes under Rule 19b-4 of the Act to implement the Pillar platform on the Exchange. These additional proposed rule changes would define the terms "ETP Holder" and "Market Maker" as they would be used on the Exchange's Pillar platform and specify the requirements for obtaining an Equity Trading Permit.

<sup>27</sup> Under Rule 1E, the term "the Exchange," when used with reference to the administration of any rule, means the NYSE MKT LLC or the officer, employee, person, entity or committee to whom appropriate authority to administer such rule has been delegated by the Exchange.

<sup>28</sup> Exchange Rule 7.12E is substantially identical to NYSE Arca Equities Rule 7.12, which pertains to Trading Halts Due to Extraordinary Market Volatility.

<sup>29</sup> Exchange Rule 80C—Equities is substantially identical to NYSE Arca Equities Rule 7.11, which pertains to the Limit Up-Limit Down Plan and Trading Pauses In Individual Securities Due to Extraordinary Market Volatility.

<sup>30</sup> See *supra* note 15.

<sup>31</sup> In addition to the existing obligations under the rules of NYSE Arca Equities regarding the production of books and records, NYSE Arca Equities Rule 4.4 provides restrictions on ETP Holder activities pertaining to books and records.

<sup>32</sup> Each proposed NYSE Rule corresponds to the same rule number as the NYSE Arca Equities rules with which it conforms.

The Exchange proposes to Reserve paragraphs 5.2E(a)–(i)<sup>33</sup> and (j)(1),<sup>34</sup> to maintain the same rule numbers as the NYSE Arca rules with which it conforms.

**Proposed Rule 5.2E(j)(2)—Equity Linked Notes (“ELNs”)**

The Exchange is proposing Rule 5.2E(j)(2) to provide rules for the trading pursuant to UTP of ELNs, so that they may be traded on the Exchange pursuant to UTP.

Other than with respect to the General Definitional Term Changes described above, there are no differences between this proposed rule and NYSE Arca Equities Rule 5.2(j)(2).<sup>35</sup>

**Proposed Rule 5.2E(j)(3)—Investment Company Units**

The Exchange is proposing Rule 5.2E(j)(3) to provide rules for the trading pursuant to UTP of investment company units, so that they may be traded on the Exchange pursuant to UTP.

Other than with respect to the General Definitional Term Changes described above, there are no differences between this proposed rule and NYSE Arca Equities Rule 5.2(j)(3).<sup>36</sup>

<sup>33</sup> NYSE Arca Equities Rules 5.2(a) pertains to applications for admitting securities to list on NYSE Arca and NYSE Arca Equities Rule 5.2(b) pertains to NYSE Arca's unique two-tier listing structure. As these rules pertain to specific listing criteria for NYSE Arca and not trading ETPs pursuant to UTP, the Exchange is not proposing similar rules. Because NYSE Arca Equities Rules 5.2(c)–(g) relate to listing standards for securities that are not ETPs, the Exchange's listing rules contained in the NYSE MKT Company Guide would apply and it is not proposing rule changes related to such securities. Finally, NYSE Arca Equities Rule 5.2(h) pertains to Unit Investment Trusts (“UITs”). The Exchange proposes to trade any UITs pursuant to UTP under proposed Rule 5.2E(j)(3) (Investment Company Units) or proposed Rule 8.100E (Portfolio Depository Receipts).

<sup>34</sup> NYSE Arca Equities Rule 5.2(j)(1) pertains to “Other Securities” that are not otherwise covered by the requirements contained in the other listing rules of NYSE Arca Equities. As the Exchange is proposing only the rules that are necessary for the Exchange to trade ETPs pursuant to UTP, the Exchange is not proposing a rule comparable to NYSE Arca Equities 5.2(j)(1).

<sup>35</sup> See, NYSE Arca Equities Rule 5.2(j)(2). See, also, Securities Exchange Act Release No. 50319 (September 7, 2004), 69 FR 55204 (September 13, 2004) (SR-PCX–2004–75); Securities Exchange Act Release No. 56924 (December 7, 2007), 72 FR 70918 (December 13, 2007) (SR-NYSEArca–2007–98); Securities Exchange Act Release No. 58745 (October 7, 2008), 73 FR 60745 (October 14, 2008) (SR-NYSEArca–2008–94).

<sup>36</sup> See, NYSE Arca Equities Rule 5.2(j)(3). See, also, Securities Exchange Act Release No. 44551 (July 12, 2001), 66 FR 37716 (July 19, 2001) (SR-PCX–2001–14); Securities Exchange Act Release No. 40603 (November 3, 1998), 63 FR 59354 (November 3, 1998) (SR-PCX–98–29).

**Proposed Rule 5.2E(j)(4)—Index-Linked Exchangeable Notes**

The Exchange is proposing Rule 5.2E(j)(4) to provide rules for the trading pursuant to UTP of index-linked exchangeable notes, so that they may be traded on the Exchange pursuant to UTP.

In addition to the General Definitional Term Changes described above, the Exchange is proposing the following non-substantive changes between this proposed rule and NYSE Arca Equities Rule 5.2(j)(4):<sup>37</sup>

- To qualify for listing and trading under NYSE Arca Equities Rule 5.2(j)(4), an index-linked exchangeable note and its issuer must meet the criteria in NYSE Arca Equities Rule 5.2(j)(1) (Other Securities), except that the minimum public distribution will be 150,000 notes with a minimum of 400 public note-holders, except, if traded in thousand dollar denominations then there is no minimum public distribution and number of holders.

Because the Exchange does not have and is not proposing a rule for “Other Securities” comparable to NYSE Arca Rule 5.2(j)(1), the Exchange proposes to reference NYSE Arca Equities Rule 5.1(j)(1) in subparagraphs (a) and (c) of proposed Rule 5.2E(j)(4) in establishing the criteria that an issuer and issue must satisfy.<sup>38</sup>

- To qualify for listing and trading under NYSE Arca Equities Rule 5.2(j)(4), an index to which an exchangeable note is linked and its underlying securities must meet (i) the procedures in NYSE Arca Options Rules 5.13(b)–(c); or (ii) the criteria set forth in subsections (C) and (D) of NYSE Arca Equities Rule 5.2(j)(2), the index concentration limits set forth in NYSE Arca Options Rule 5.13(b)(6), and Rule 5.13(b)(12) insofar as it relates to Rule 5.13(b)(6). Because the Exchange's rules for listing of index option contracts are described in Rule 901C, the Exchange is proposing to refer to Rule 901C wherever NYSE Arca Options Rule 5.13<sup>39</sup> is referenced in paragraph (d) of proposed Rule

<sup>37</sup> See NYSE Arca Equities Rule 5.2(j)(4). See, also, Securities Exchange Act Release No. 49532 (April 7, 2004), 69 FR 19593 (April 13, 2004) (SR-PCX–2004–01).

<sup>38</sup> The Exchange will monitor for any changes to the rules of NYSE Arca, and will amend its rules accordingly to conform to the rules of NYSE Arca. The Exchange notes that it is proposing to cross-reference to the rules of an affiliate of the Exchange, which will facilitate monitoring for changes to such rules.

<sup>39</sup> Commentary .03 to Exchange Rule 901C is substantially identical to NYSE Arca Options Rule 5.13, and sets forth criteria for narrow-based and micro narrow-based indexes on which an options contract may be listed without filing a proposed rule change under Section 19(b) of the Exchange Act.

5.2E(j)(4). The Exchange would apply the criteria set forth in Rule 901C in determining whether an index underlying an index-linked exchangeable note satisfies the requirements of Rule 5.2E(j)(4)(d).

- Correction of a typographical error in NYSE Arca Equities Rule 5.2(j)(4)(f)(iii), so that proposed Rule 5.2E(j)(4)(f)(iii) reads “further dealings on the Exchange,” rather than “further dealings of the Exchange,” as is currently drafted in NYSE Arca Equities Rule 5.2(j)(4)(f)(iii).

**Proposed Rule 5.2E(j)(5)—Equity Gold Shares**

The Exchange is proposing Rule 5.2E(j)(5) to provide rules for the trading pursuant to UTP of equity gold shares, so that they may be traded on the Exchange pursuant to UTP.

Other than with respect to the General Definitional Term Changes described above, there are no differences between this proposed rule and NYSE Arca Equities Rule 5.2(j)(5).<sup>40</sup>

**Proposed Rule 5.2E(j)(6)—Index-Linked Securities**

The Exchange is proposing Rule 5.2E(j)(6) to provide rules for the trading pursuant to UTP of equity index-linked securities, so that they may be traded on the Exchange pursuant to UTP.

In addition to the General Definitional Term Changes described above, the Exchange is proposing the following non-substantive changes between this proposed rule and NYSE Arca Equities Rule 5.2(j)(6):<sup>41</sup>

- To qualify for listing and trading under NYSE Arca Equities Rule 5.2(j)(6), both the issue and issuer of an index-linked security must meet the criteria in NYSE Arca Equities Rule 5.2(j)(1) (Other Securities), with certain specified exceptions. Because the Exchange does not have and is not proposing a rule for “Other Securities” comparable to NYSE Arca Rule 5.1(j)(1), the Exchange proposes to reference NYSE Arca Equities Rule 5.1(j)(1) in proposed Rule 5.2E(j)(6)(A)(a) establishing the criteria that an issue and issuer must satisfy.<sup>42</sup>

- The listing standards for Equity Index-Linked Securities in NYSE Arca

<sup>40</sup> See, NYSE Arca Equities Rule 5.2(j)(5); See, also, Securities Exchange Act Release No. 51245 (February 23, 2005), 70 FR 10731 (March 4, 2005) (SR-PCX–2004–117).

<sup>41</sup> See, NYSE Arca Equities Rule 5.2(j)(6); See, also, Securities Exchange Act Release No. 54231 (July 27, 2006), 71 FR 44339 (August 4, 2006) (SR-NYSEArca–2006–19); Securities Exchange Act Release No. 59332 (January 30, 2009), 74 FR 6338 (February 6, 2009) (SR-NYSEArca–2008–136); Securities Exchange Act Release No. 52204 (August 3, 2005), 70 FR 46559 (August 10, 2005) (SR-PCX–2005–63).

<sup>42</sup> See supra note 39.

Equities Rule 5.2(j)(6) reference NYSE Arca Options Rule 5.3 in describing the criteria for securities that compose 90% of an index's numerical value and at least 80% of the total number of components. Because the Exchange's rules for establishing the criteria for underlying securities of put and call options contracts is described in Rule 915, the Exchange proposes to reference to Rule 915<sup>43</sup> wherever NYSE Arca Options Rule 5.3 is referenced in paragraph (B)(1)(1)(b)(2)(iv) of proposed Rule 5.2E(j)(6), to establish the initial listing criteria that an index must meet to trade pursuant to UTP.

#### Proposed Rule 5.2E(j)(7)—Trust Certificates

The Exchange is proposing Rule 5.2E(j)(7) to provide rules for the trading pursuant to UTP of trust certificates, so that they may be traded on the Exchange pursuant to UTP.

In addition to the General Definitional Term Changes described above, the Exchange is proposing the following non-substantive change between this proposed rule and NYSE Arca Equities Rule 5.2(j)(7):<sup>44</sup>

- Commentary .08 to NYSE Arca Equities Rule 5.2(j)(7) contains a cross-reference to NYSE Arca Rule 9.2.<sup>45</sup> Because the Exchange does not currently have and is not proposing to add rules that pertain to the opening of accounts that are approved for options trading, the Exchange proposes to require an ETP Holder to ensure that the account of a holder of a Trust Certificate that is exchangeable, at the holder's option, into securities that participate in the return of the applicable underlying asset is approved for options trading in accordance with the rules of a national securities exchange.

#### Proposed Rule 8E—Trading of Certain Exchange Traded Products

The Exchange proposes to add introductory language under the main

heading of proposed Rule 8E, which states that the provisions of proposed Rule 8E would apply only to the trading pursuant to UTP of ETPs, and would not apply to the listing of ETPs on the Exchange. The Exchange is proposing this language to clarify that the rules incorporated in proposed Rule 8E should not be interpreted to be listing requirements of the Exchange, but rather, requirements that pertain solely to the trading of ETPs pursuant to UTP on the Pillar platform.

The Exchange proposes to add Rule 8E, which would be substantially identical to Sections 1 and 2 of NYSE Arca Equities Rule 8. These proposed rules would permit the Exchange to trade pursuant to UTP the following: Currency and Index Warrants, Portfolio Depositary Receipts, Trust Issued Receipts, Commodity-Based Trust Shares, Currency Trust Shares, Commodity Index Trust Shares, Commodity Futures Trust Shares, Partnership Units, Paired Trust Shares, Trust Units, Managed Fund Shares, and Managed Trust Securities.<sup>46</sup>

The Exchange proposes to Reserve Rule 8.100E(g), to maintain the same rule numbers as the NYSE Arca rules with which it conforms.

The text of proposed Rule 8E is identical to Sections 1 and 2 of NYSE Arca Equities Rule 8, other than certain non-substantive and technical differences explained below. The Exchange also proposes that all of the General Definitional Term Changes described under proposed Rule 5E above would also apply to proposed Rule 8E.

#### Proposed Rules 8.1E–8.13E—Currency and Index Warrants

The Exchange is proposing Rules 8.1E–8.13E to provide rules for the trading pursuant to UTP (including sales-practice rules such as those relating to suitability and supervision of accounts) of currency and index warrants, so that they may be traded on the Exchange pursuant to UTP.<sup>47</sup>

In addition to the General Definitional Term Changes described above under proposed Rule 5E, the Exchange is

proposing the following non-substantive changes between these proposed rules and NYSE Arca Equities Rules 8.1–8.13 (Currency and Index Warrants):

#### Proposed Rule 8.1E—General

- Other than with respect to the General Definitional Term Changes described above, there are no differences between this proposed rule and NYSE Arca Equities Rule 8.1.

#### Proposed Rule 8.2E—Definitions

- Other than with respect to the General Definitional Term Changes described above, there are no differences between this proposed rule and NYSE Arca Equities Rule 8.2.

#### Proposed Rule 8.3E—Listing of Currency and Index Warrants

- NYSE Arca Equities Rule 8.3 references NYSE Arca Equities Rule 5.2(c) to establish the earnings requirements that a warrant issuer is required to substantially exceed. Because the Exchange does not currently have and is not proposing a rule similar to NYSE Arca Equities Rule 5.2(c), the Exchange proposes to include the earnings requirements set forth in NYSE Arca Equities Rule 5.2(c) in subparagraph (a) of proposed Rule 8.3E.

#### Proposed Rule 8.4E—Account Approval

- The account approval rules of NYSE Arca Equities Rule 8.4 reference NYSE Arca Equities Rule 9.18(b) in describing the criteria that must be met for opening up a customer account for options trading. Because the Exchange's account approval rules are described in Rule 921,<sup>48</sup> the Exchange would cross-reference to Rule 921 wherever NYSE Arca Rule 9.18(b) is referenced in proposed Rule 8.4E.

#### Proposed Rule 8.5E—Suitability

- The account suitability rules of NYSE Arca Equities Rule 8.5 reference NYSE Arca Equities Rule 9.18(c) in describing rules that apply to recommendations made in stock index, currency index and currency warrants. Because the Exchange's account suitability rules are described in Rule 923,<sup>49</sup> the Exchange would cross-reference to Rule 923 wherever NYSE Arca Rule 9.18(c) is referenced in proposed Rule 8.5E.

<sup>43</sup> Rule 915 is substantially identical to NYSE Arca Options Rule 5.3, and establishes the criteria for underlying securities of put and call option contracts listed on the exchange.

<sup>44</sup> See, NYSE Arca Equities Rule 5.2(j)(7); See, also, Securities Exchange Act Release No. 59051 (December 4, 2008), 73 FR 75155 (December 10, 2008) (SR–NYSEArca–2008–123); Securities Exchange Act Release No. 58920 (November 7, 2008), 73 FR 68479 (November 18, 2008) (SR–NYSEArca–2008–123).

<sup>45</sup> Commentary .08 to NYSE Arca Equities Rule 5.2(j)(7) states that Trust Certificates may be exchangeable at the option of the holder into securities that participate in the return of the applicable underlying asset. In the event that the Trust Certificates are exchangeable at the option of the ETP Holder and contains an Index Warrant, then the ETP Holder must ensure that the ETP Holder's account is approved in accordance with Rule 9.2 in order to exercise such rights.

<sup>46</sup> The Exchange is only proposing listing and trading rules necessary to trade ETPs pursuant to UTP. Accordingly, the Exchange is not proposing a rule comparable to NYSE Arca Equities Rule 8.100(g).

<sup>47</sup> NYSE Arca Equities Rules 8.1–8.13 all pertain to the listing and trading requirements (including sales-practice rules such as those relating to suitability and supervision of accounts) for Currency and Index Warrants. See, Section 1 of NYSE Arca Equities Rule 8; See, also, Securities Exchange Act Release Nos. 44983 (October 25, 2001), 66 FR 55225 (November 1, 2001) (SR–PCX–00–25); 59886 (May 7, 2009), 74 FR 22779 (May 14, 2009) (SR–NYSEArca–2009–39).

<sup>48</sup> Rule 921 is substantially similar to NYSE Arca Equities Rule 9.18(b), and establishes criteria that must be met to open up a customer account for options trading.

<sup>49</sup> Rule 923 is substantially similar to NYSE Arca Equities Rule 9.18(c), and establishes suitability rules that pertain to recommendations in stock index, currency index and currency warrants.

#### Proposed Rule 8.6E—Discretionary Accounts

• The rules of NYSE Arca Equities Rule 8.6 reference the fact that NYSE Arca Equities Rule 9.6(a) will not apply to customer accounts insofar as they may relate to discretion to trade in stock index, currency index and currency warrants, and that NYSE Arca Equities Rule 9.18(e) will apply to such discretionary accounts instead. Because the Exchange's discretionary account rules for equity trading are described in Rule 408—Equities,<sup>50</sup> the Exchange would cross-reference to Rule 408—Equities wherever NYSE Arca Equities Rule 9.6(a) is referenced in proposed Rule 8.6E. Because the Exchange's discretionary account rules for options trading are described in Rule 924,<sup>51</sup> the Exchange would cross-reference to Rule 924 wherever NYSE Arca Equities Rule 9.18(e) is referenced in proposed Rule 8.6E.

#### Proposed Rule 8.7E—Supervision of Accounts

• The account supervision rules of NYSE Arca Equities Rule 8.7 reference NYSE Arca Equities Rule 9.18(d) in describing rules that apply to the supervision of customer accounts in which transactions in stock index, currency index or currency warrants are effected. Because the Exchange's rules that apply to the supervision of customer accounts of such nature are described in Rule 922,<sup>52</sup> the Exchange would cross-reference to Rule 922 wherever NYSE Arca Equities Rule 9.18(d) is referenced in proposed Rule 8.7E.

#### Proposed Rule 8.8E—Customer Complaints

• The customer complaint rules of NYSE Arca Equities Rule 8.8 reference NYSE Arca Equities Rule 9.18(l) in describing rules that apply to customer complaints received regarding stock index, currency index or currency warrants. Because the Exchange's rules that govern doing a public business in options are described in Rule 932,<sup>53</sup> the

Exchange would cross-reference to Rule 932 wherever NYSE Arca Equities Rule 9.18(l) are referenced in proposed Rule 8.8E.

#### Proposed Rule 8.9E—Prior Approval of Certain Communications to Customers

• The rules pertaining to communications to customers regarding stock index, currency index and currency warrants described in NYSE Arca Equities Rule 8.9 reference NYSE Arca Equities Rule 9.28. Because the Exchange's rules that govern advertisements, market letters and sales literature relating to options are described in Rule 991,<sup>54</sup> the Exchange would cross-reference to Rule 991 wherever NYSE Arca Equities Rule 9.28 is referenced in proposed Rule 8.9E.

#### Proposed Rule 8.10E—Position Limits

• Other than with respect to the General Definitional Term Changes described above, there are no differences between this proposed rule and NYSE Arca Equities Rule 8.10.

#### Proposed Rule 8.11E—Exercise Limits

• Other than with respect to the General Definitional Term Changes described above, there are no differences between this proposed rule and NYSE Arca Equities Rule 8.11.

#### Proposed Rule 8.12E—Trading Halts or Suspensions

• Other than with respect to the General Definitional Term Changes described above, there are no differences between this proposed rule and NYSE Arca Equities Rule 8.12.

#### Proposed Rule 8.13E—Reporting of Warrant Positions

• The Exchange proposes to correct a typographical error in NYSE Arca Equities Rule 8.13. Proposed Rule 8.13E would read “whenever a report shall be required to be filed with respect to an account pursuant to this Rule, the ETP Holder filing the report shall file with the Exchange such additional periodic reports with respect to such account as the Exchange may from time to time prescribe,” rather than “whenever a report shall be required to be filed with respect to an account pursuant to this Rule, the ETP Holder filing the same file with the Exchange such additional periodic reports with respect to such account as the Exchange may from time

apply to customer complaints received regarding stock index, currency index or currency warrants.

<sup>54</sup> Rule 991 is substantially similar to NYSE Arca Equities Rule 9.28, and establishes rules regarding advertisements, sales literature and educational material issued to any customer or member of the public pertaining to stock index, currency index or currency warrants.

to time prescribe,” as in current NYSE Arca Equities Rule 8.13.

#### Proposed Rule 8.100E—Portfolio Depositary Receipts

The Exchange is proposing Rule 8.100E to provide rules for the trading pursuant to UTP of portfolio depositary receipts, so that they may be traded on the Exchange pursuant to UTP.

Other than with respect to the General Definitional Term Changes described above under proposed Rule 5E, there are no differences between this proposed rule and NYSE Arca Equities Rule 8.100.<sup>55</sup>

#### Proposed Rule 8.200E—Trust Issued Receipts

The Exchange is proposing Rule 8.200E to provide rules for the trading pursuant to UTP of trust issued receipts, so that they may be traded on the Exchange pursuant to UTP.

Other than with respect to the General Definitional Term Changes described above under proposed Rule 5E, there are no differences between this proposed rule and NYSE Arca Equities Rule 8.200.<sup>56</sup>

#### Proposed Rule 8.201E—Commodity-Based Trust Shares

The Exchange is proposing Rule 8.201E to provide rules for the trading pursuant to UTP of commodity-based trust shares, so that they may be traded on the Exchange pursuant to UTP.

Other than with respect to the General Definitional Term Changes described above under proposed Rule 5E, there are no differences between this proposed rule and NYSE Arca Equities Rule 8.201.<sup>57</sup>

#### Proposed Rule 8.202E—Currency Trust Shares

The Exchange is proposing Rule 8.202E to provide rules for the trading pursuant to UTP of currency trust shares, so that they may be traded on the Exchange pursuant to UTP.

Other than with respect to the General Definitional Term Changes described

<sup>55</sup> See, NYSE Arca Equities Rule 8.100; See, also, Securities Exchange Act Release No. 39461 (December 17, 1997), 62 FR 67674 (December 29, 1997) (SR-PCX-97-35); Securities Exchange Act Release No. 39188 (October 2, 1997), 62 FR 53373 (October 14, 1997) (SR-PCX-97-35); Securities Exchange Act Release No. 44551 (July 12, 2001), 66 FR 37716 (July 19, 2001) (SR-PCX-2001-14).

<sup>56</sup> See, NYSE Arca Equities Rule 8.200; See, also, Securities Exchange Act Release No. 58162 (July 15, 2008), 73 FR 42391 (July 21, 2008) (SR-NYSEArca-2008-73); Securities Exchange Act Release No. 44182 (April 16, 2001), 66 FR 21798 (April 16, 2001) (SR-PCX-2001-01).

<sup>57</sup> See, NYSE Arca Equities Rule 8.201; See, also, Securities Exchange Act Release No. 51067 (January 21, 2005), 70 FR 3952 (January 27, 2005) (SR-PCX-2004-132).

<sup>50</sup> Rule 408—Equities is substantially similar to NYSE Arca Equities Rule 9.6(a), and pertains to the rules of the Exchange with regard to discretionary power in customer accounts for equity trading.

<sup>51</sup> Rule 924 is substantially similar to NYSE Arca Equities Rule 9.18(e), and establishes rules pertaining to discretion as to customer accounts for options trading.

<sup>52</sup> Rule 922 is substantially similar to NYSE Arca Equities Rule 9.18(d), and establishes account supervision rules that apply to the supervision of customer accounts in which transactions in stock index, currency index and currency warrants are effected.

<sup>53</sup> Rule 932 is substantially similar to NYSE Arca Equities Rule 9.18(l), and establishes rules that

above under proposed Rule 5E, there are no differences between this proposed rule and NYSE Arca Equities Rule 8.202.<sup>58</sup>

#### Proposed Rule 8.203E—Commodity Index Trust Shares

The Exchange is proposing Rule 8.203E to provide rules for the trading pursuant to UTP of commodity index trust shares, so that they may be traded on the Exchange pursuant to UTP.

In addition to the General Definitional Term Changes described above, the Exchange is proposing the following non-substantive change between this proposed rule and NYSE Arca Equities Rule 8.203:<sup>59</sup>

- Correction of a typographical error in NYSE Arca Equities Rule 8.203(d), so that proposed Rule 8.203E(d) reads “one or more” in the first sentence, rather than “one more more,” as is currently drafted in NYSE Arca Equities Rule 8.203(d).

#### Proposed Rule 8.204E—Commodity Futures Trust Shares

The Exchange is proposing Rule 8.204E to provide rules for the trading pursuant to UTP of commodity futures trust shares, so that they may be traded on the Exchange pursuant to UTP.

Other than with respect to the General Definitional Term Changes described above under proposed Rule 5E, there are no differences between this proposed rule and NYSE Arca Equities Rule 8.204.<sup>60</sup>

#### Proposed Rule 8.300E—Partnership Units

The Exchange is proposing Rule 8.300E to provide rules for the trading pursuant to UTP of partnership units, so that they may be traded on the Exchange pursuant to UTP.

Other than with respect to the General Definitional Term Changes described above under proposed Rule 5E, there are no differences between this proposed rule and NYSE Arca Equities Rule 8.300.<sup>61</sup>

<sup>58</sup> See, NYSE Arca Equities Rule 8.202; *See, also*, Securities Exchange Act Release No. 60065 (June 8, 2009), 74 FR 28310 (June 15, 2009) (SR–NYSEArca–2009–47); Securities Exchange Act Release No. 53253 (February 8, 2006), 71 FR 8029 (February 15, 2006) (SR–PCX–2005–123).

<sup>59</sup> See, NYSE Arca Equities Rule 8.203; *See, also*, Securities Exchange Act Release No. 54025 (June 21, 2006), 71 FR 36856 (June 28, 2006) (SR–NYSEArca–2006–12).

<sup>60</sup> See, NYSE Arca Equities Rule 8.204; *See, also*, Securities Exchange Act Release No. 57838 (May 20, 2008), 73 FR 30649 (May 28, 2008) (SR–NYSEArca–2008–09); Securities Exchange Act Release No. 57636 (April 8, 2008), 73 FR 20344 (April 15, 2008) (SR–NYSEArca–2008–09).

<sup>61</sup> See, NYSE Arca Equities Rule 8.300; *See, also*, Securities Exchange Act Release No. 53875 (May

#### Proposed Rule 8.400E—Paired Trust Shares

The Exchange is proposing Rule 8.400E to provide rules for the trading pursuant to UTP of paired trust shares, so that they may be traded on the Exchange pursuant to UTP.

In addition to the General Definitional Term Changes described above, the Exchange is proposing the following non-substantive change between this proposed rule and NYSE Arca Equities Rule 8.400:<sup>62</sup>

- To be consistent with the Exchange’s definitions proposed in Rule 5.1E(b), the Exchange proposes to substitute the terms “security” and “equity securities” (as such terms are defined in proposed Rule 5.1E(b)<sup>63</sup>) in subparagraph (a) of proposed Rule 8.400E<sup>64</sup> instead of the terms “security,” “securities” and “derivative products” (as used in the rules of NYSE Arca Equities) to refer to the definition of Paired Trust Shares. The Exchange proposes this change because it believes it is more accurate to refer to paired trust shares as securities and equity securities.

#### Proposed Rule 8.500E—Trust Units

The Exchange is proposing Rule 8.500E to provide rules for the trading pursuant to UTP of trust units, so that they may be traded on the Exchange pursuant to UTP.

In addition to the General Definitional Term Changes described above, the Exchange is proposing the following non-substantive change between this proposed rule and NYSE Arca Equities Rule 8.500:<sup>65</sup>

25, 2006), 71 FR 32164 (January 2, 2006) (SR–NYSEArca–2006–11).

<sup>62</sup> See, NYSE Arca Equities Rule 8.400; *See, also*, Securities Exchange Act Release No. 55033 (December 29, 2006), 72 FR 1253 (January 10, 2007) (SR–NYSEArca–2006–75); Securities Exchange Act Release No. 58312 (August 5, 2008), 73 FR 46689 (August 11, 2008) (SR–NYSEArca–2008–63).

<sup>63</sup> Proposed Rule 5.1E(b) defines the term “security” to mean any security as defined in Rule 3(a)(10) under the Act and the term “equity security” to include any equity security defined as such pursuant to Rule 3a11–1 under the Act.

<sup>64</sup> NYSE Arca Equities Rule 8.400(a) reads as follows: “(a) Applicability. The provisions in this Rule are applicable only to Paired Trust Shares. In addition, except to the extent inconsistent with this Rule, or unless the context otherwise requires, the rules and procedures of the Board of Directors shall be applicable to the trading on the Corporation of such securities. Paired Trust Shares are included within the definition of “security,” “securities” and “derivative products” as such terms are used in the Rules of the Corporation.”

<sup>65</sup> See, NYSE Arca Equities Rule 8.500; *See, also*, Securities Exchange Act Release No. 57059 (December 28, 2007), 73 FR 909 (January 4, 2008) (SR–NYSEArca–2006–76); Securities Exchange Act Release No. 63129 (October 19, 2010), 75 FR 65539 (October 25, 2010) (SR–NYSEArca–2010–91).

• To be consistent with the Exchange’s definitions proposed in Rule 5.1E(b), the Exchange proposes to substitute the terms “security” and “equity securities” (as such terms are defined in proposed Rule 5.1E(b)<sup>66</sup>) in subparagraph (a) of proposed Rule 8.500E<sup>67</sup> instead of the terms “security,” “securities” and “derivative products” (as used in the rules of NYSE Arca Equities) to refer to the definition of Trust Units. The Exchange proposes this change because it believes it is more accurate to refer to trust units as securities and equity securities.

#### Proposed Rule 8.600E—Managed Fund Shares

The Exchange is proposing Rule 8.600E to provide rules for the trading pursuant to UTP of managed fund shares, so that they may be traded on the Exchange pursuant to UTP.

Other than with respect to the General Definitional Term Changes described above under proposed Rule 5E, there are no differences between this proposed rule and NYSE Arca Equities Rule 8.600.<sup>68</sup>

#### Proposed Rule 8.700E—Managed Trust Securities

The Exchange is proposing Rule 8.700E to provide rules for the trading pursuant to UTP of managed trust securities, so that they may be traded on the Exchange pursuant to UTP.

Other than with respect to the General Definitional Term Changes described above under proposed Rule 5E, there are no differences between this proposed rule and NYSE Arca Equities Rule 8.700.<sup>69</sup>

#### Proposed Rule 7.18E—Requirements for Halts on Pillar Platform

In conjunction with the implementation of the Pillar trading

<sup>66</sup> See *supra* note 70.

<sup>67</sup> NYSE Arca Equities Rule 8.500(a) reads as follows: “(a) Applicability. The provisions in this Rule are applicable only to Trust Units. In addition, except to the extent inconsistent with this Rule, or unless the context otherwise requires, the rules and procedures of the Board of Directors shall be applicable to the trading on the Corporation of such securities. Trust Units are included within the definition of “security,” “securities” and “derivative products” as such terms are used in the Rules of the Corporation.”

<sup>68</sup> See, NYSE Arca Equities Rule 8.600; *See, also*, Securities Exchange Act Release No. 57395 (February 28, 2008), 73 FR 11974 (March 5, 2008) (SR–NYSEArca–2008–25); Securities Exchange Act Release No. 57619 (April 4, 2008), 73 FR 19544 (April 10, 2008) (SR–NYSEArca–2008–25).

<sup>69</sup> See, NYSE Arca Equities Rule 8.700; *See, also*, Securities Exchange Act Release No. 60064 (June 8, 2009), 74 FR 28315 (June 15, 2009) (SR–NYSEArca–2009–30); Securities Exchange Act Release No. 59835 (April 28, 2009), 74 FR 21041 (May 6, 2009) (SR–NYSEArca–2009–30).

platform for trading of securities pursuant to UTP, the Exchange proposes new Rule 7.18E, under Rule 7E, which would govern trading halts in symbols trading on the Pillar platform.

Since the Exchange is only proposing rules in this filing pertaining to trading pursuant to UTP on the Pillar platform, the Exchange is only proposing Rules 7.18E(a) and (d)(1)(B), which pertain to trading halts of securities traded pursuant to UTP and UTP Exchange Traded Products. The Exchange proposes to Reserve Rules 7.18E(b)–(c)<sup>70</sup> and Rules 7.18E(d)(1)(A)–(C),<sup>71</sup> to maintain the same rule numbers as the NYSE Arca rules with which it conforms.

Other than with respect to the proposed General Definitional Term Changes described above, there are no differences between proposed Rules 7.18E(a) and (d)(1)(B) and NYSE Arca Equities Rules 7.18(a) and (d)(1)(B).

Finally, proposed Rules 7.18E(a) and (d)(1)(B) would use the terms and definitions that were added in the Pillar Framework Filing and proposed as new Rules 1.1E(aaa) and (bbb), described above. The Exchange also proposes to define the term “UTP regulatory halt” in Rule 1.1E(kk).<sup>72</sup> Proposed Rule 1.1E(kk) would define the term “UTP Regulatory Halt” to mean a trade suspension, halt, or pause called by the UTP Listing Market<sup>73</sup> in a UTP Security<sup>74</sup> that requires all market centers to halt trading in that security.<sup>75</sup>

## 2. Statutory Basis

The Exchange believes that its proposal is consistent with Section 6(b) of the Act,<sup>76</sup> in general, and furthers the objectives of Section 6(b)(5) of the Act,<sup>77</sup> in particular, in that it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to remove impediments to and perfect the

mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest by providing for the trading of securities, including UTP Exchange Traded Products, on the Exchange pursuant to UTP, subject to consistent and reasonable standards. Accordingly, the proposed rule change would contribute to the protection of investors and the public interest because it may provide a better trading environment for investors and, generally, encourage greater competition between markets.

The Exchange believes the proposed rule change also supports the principals of Section 11A(a)(1)<sup>78</sup> of the Act in that it seeks to ensure the economically efficient execution of securities transactions and fair competition among brokers and dealers and among exchange markets. The proposed rule change also supports the principles of Section 12(f) of the Act, which govern the trading of securities pursuant to a grant of unlisted trading privileges consistent with the maintenance of fair and orderly markets, the protection of investors and the public interest, and the impact of extending the existing markets for such securities.

The Exchange believes that the proposed rule change is consistent with these principles. By providing for the trading of securities on the Exchange on a UTP basis, the Exchange believes its proposal will lead to the addition of liquidity to the broader market for these securities and to increased competition among the existing group of liquidity providers. The Exchange also believes that, by so doing, the proposed rule change would encourage the additional utilization of, and interaction with, the exchange market, and provide market participants with improved price discovery, increased liquidity, more competitive quotes and greater price improvement for securities traded pursuant to UTP.

The Exchange further believes that enhancing liquidity by trading securities on a UTP basis would help raise investors' confidence in the fairness of the market, generally, and their transactions in particular. As such, the general UTP trading rule would foster cooperation and coordination with persons engaged in facilitating securities transactions, enhance the mechanism of a free and open market, and promote fair and orderly markets in securities on the Exchange.

In addition, the trading criteria set forth in proposed Rule 5.1E(a) is intended to protect investors and the

public interest. The requirements for trading securities pursuant to UTP, as proposed herein in a single, consolidated Rule 5.1E(a), are at least as stringent as those of any other national securities exchange and, specifically, are based on the consolidated rules for trading UTP securities established by other national securities exchanges.<sup>79</sup> Consequently, the proposed rule change is consistent with the protection of investors and the public interest. Additionally, the proposal is designed to prevent fraudulent and manipulative acts and practices, as trading pursuant to UTP is subject to existing Exchange trading rules, together with specific requirements for registered market makers, books and record production, surveillance procedures, suitability and prospectus requirements, and requisite the Exchange approvals, all set forth above.

The proposal is also designed to promote just and equitable principles of trade by way of initial and continued listing standards which, if not maintained, will result in the discontinuation of trading in the affected products. These requirements, together with the applicable Exchange trading rules (which apply to the proposed products), ensure that no investor would have an unfair advantage over another respecting the trading of the subject products. On the contrary, all investors will have the same access to, and use of, information concerning the specific products and trading in the specific products, all to the benefit of public customers and the marketplace as a whole.

The proposal is intended to ensure that investors receive up-to-date information on the value of certain underlying securities and indices in the products in which they invest, and protect investors and the public interest, enabling investors to: (i) Respond quickly to market changes through intra-day trading opportunities; (ii) engage in hedging strategies; and (iii) reduce transaction costs for trading a group or index of securities.

Furthermore, the proposal is designed to remove impediments to and perfect the mechanism of a free and open market and a national market system by adopting rules that will lead ultimately to the trading pursuant to UTP of the

<sup>70</sup> Because NYSE Arca Equities Rules 7.18(b)–(c) pertain specifically to specific NYSE Arca order types that the Exchange has not yet proposed, the Exchange proposes such sub-sections of proposed Rule 7.18E on a “reserved” basis, until such later time when the Exchange proposes rules regarding order types to be operative on the Pillar platform.

<sup>71</sup> Since NYSE Arca Equities Rules 7.18(d)(1)(A) and (C) pertain to trading outside of normal business hours, the Exchange proposes such sub-sections of proposed Rule 7.18E on a “reserved” basis. If the Exchange determines to expand its trading hours outside of normal business hours it would propose amendments to Rule 7.18E.

<sup>72</sup> The Pillar Framework Filing added Rule 1.1E(kk) on a “reserved” basis.

<sup>73</sup> See, proposed Rule 1.1E(jj).

<sup>74</sup> See, proposed Rule 1.1E(ii).

<sup>75</sup> This proposed definition is identical to the definition of “UTP Regulatory Halt” in NYSE Arca Equities Rule 1.1(kk).

<sup>76</sup> 15 U.S.C. 78f(b).

<sup>77</sup> 15 U.S.C. 78f(b)(5).

<sup>78</sup> 15 U.S.C. 78k–1(a)(1).

<sup>79</sup> See NSX Rule 15.9 and Securities Exchange Act Release No. 57448 (March 6, 2008), 73 FR 13597 (March 13, 2008) (SR–NSX–2008–05); Phlx Rule 803(o) and Securities Exchange Act Release No. 57806 (May 9, 2008), 73 FR 28541 (May 16, 2008) (SR–Phlx–2008–34); ISE Rule 2101 and Securities Exchange Act Release No. 57387 (February 27, 2008), 73 FR 11965 (March 5, 2008) (SR–ISE–2007–99).

proposed new products on the Exchange, just as they are currently traded on other exchanges. The proposed changes do nothing more than match Exchange rules with what is currently available on other exchanges. The Exchange believes that by conforming its rules and allowing trading opportunities on the Exchange that are already allowed by rule on another market, the proposal would offer another venue for trading Exchange Traded Products and thereby promote broader competition among exchanges. The Exchange believes that individuals and entities permitted to make markets on the Exchange in the proposed new products should enhance competition within the mechanism of a free and open market and a national market system, and customers and other investors in the national market system should benefit from more depth and liquidity in the market for the proposed new products.

The proposed change is not designed to address any competitive issue, but rather to adopt new rules that are word-for-word identical to the rules of NYSE Arca (other than with respects[sic] to certain non-substantive and technical amendments described above), to support the Exchange's new Pillar trading platform. As discussed in detail above, with this rule filing, the Exchange is not proposing to change its core functionality, but rather to adopt a rule numbering framework and rules based on the rules of NYSE Arca. The Exchange believes that the proposed rule change would promote consistent use of terminology to support the Pillar trading platform on both the Exchange and its affiliate, NYSE Arca, thus making the Exchange's rules easier to navigate.

#### *B. Self-Regulatory Organization's Statement on Burden on Competition*

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. To the contrary, the current variances between the Exchange's rules for the trading pursuant to UTP and the rules of other exchanges limit competition in that there are certain products that the Exchange cannot trade pursuant to UTP, while other exchanges can trade such products. Thus, approval of the proposed rule change will promote competition because it will allow the Exchange to compete with other national securities exchanges for the trading of securities pursuant to UTP.

#### *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 up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

(A) By order approve or disapprove the 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](mailto:rule-comments@sec.gov). Please include File Number SR-NYSEMKT-2016-103 on the subject line.

##### *Paper Comments*

- Send paper comments in triplicate to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-NYSEMKT-2016-103. 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 the 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 Number SR-NYSEMKT-2016-103 and should be submitted on or before December 22, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>80</sup>

**Brent J. Fields,**  
Secretary.

[FR Doc. 2016-28827 Filed 11-30-16; 8:45 am]

**BILLING CODE 8011-01-P**

## **SECURITIES AND EXCHANGE COMMISSION**

**[Release No. 34-79399; File No. SR-NASDAQ-2016-135]**

### **Self-Regulatory Organizations; The NASDAQ Stock Market LLC; Notice of Designation of a Longer Period for Commission Action on a Proposed Rule Change To Amend the Continued Listing Requirements for Exchange-Traded Products**

November 25, 2016.

On September 30, 2016, The NASDAQ Stock Market LLC ("Nasdaq") filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> a proposed rule change to amend: (a) The continued listing requirements for exchange-traded products in the Nasdaq Rule 5700 Series; and (b) certain requirements under Nasdaq Rule 5810 (Notification of Deficiency by the Listing Qualifications Department). The proposed rule change was published for comment in the **Federal Register** on October 17, 2016.<sup>3</sup> The Commission received no comment letters on the proposed rule change.

<sup>80</sup> 17 CFR 200.30-3(a)(12).

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> See Securities Exchange Act Release No. 79081 (October 11, 2016), 81 FR 71548.



Section 19(b)(2) of the Act<sup>4</sup> provides that, within 45 days of the publication of notice of the filing of a proposed rule change, or within such longer period up to 90 days as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or as to which the self-regulatory organization consents, the Commission shall either approve the proposed rule change, disapprove the proposed rule change, or institute proceedings to determine whether the proposed rule change should be disapproved. The 45th day after publication of the notice for this proposed rule change is December 1, 2016. The Commission is extending this 45-day time period.

The Commission finds that it is appropriate to designate a longer period within which to take action on the proposed rule change so that it has sufficient time to consider the proposed rule change. Accordingly, the Commission, pursuant to Section 19(b)(2) of the Act,<sup>5</sup> designates January 15, 2017, as the date by which the Commission shall either approve or disapprove or institute proceedings to determine whether to disapprove the proposed rule change (File Number SR–NASDAQ–2016–135).

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>6</sup>

**Brent J. Fields,**  
Secretary.

[FR Doc. 2016–28826 Filed 11–30–16; 8:45 am]

BILLING CODE 8011–01–P

## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–79402; File No. SR–NYSEArca–2016–131]

### Self-Regulatory Organizations; NYSE Arca, Inc.; Order Approving a Proposed Rule Change Relating To Listing and Trading of Shares of the Virtus Enhanced U.S. Equity ETF Under Commentary .01 to NYSE Arca Equities Rule 5.2(j)(3)

November 25, 2016.

#### I. Introduction

On October 3, 2016, NYSE Arca, Inc. (“Exchange”) filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”) <sup>1</sup> and Rule 19b–4

thereunder,<sup>2</sup> a proposed rule change to list and trade shares (“Shares”) of the Virtus Enhanced U.S. Equity ETF (“Fund”), a series of Virtus ETF Trust II (“Trust”), under Commentary .01 to NYSE Arca Equities Rule 5.2(j)(3) (“Investment Company Units”). The proposed rule change was published for comment in the **Federal Register** on October 20, 2016.<sup>3</sup> The Commission received no comments on the proposed rule change. This order approves the proposed rule change.

#### II. Exchange’s Description of the Proposal<sup>4</sup>

The Exchange proposes to list and trade Shares of the Fund under Commentary .01 to NYSE Arca Equities Rule 5.2(j)(3), which governs the listing and trading of Investment Company Units on the Exchange. The Exchange represents that it has submitted the proposed rule change because the underlying index of the Fund does not meet all of the generic listing requirements of Commentary .01(a)(A) to NYSE Arca Equities Rule 5.2(j)(3), applicable to the listing of Investment Company Units based upon an index of “US Component Stocks.” Specifically, as discussed in the Notice,<sup>5</sup> options on the S&P 500 index may be Index components. Consequently, the Index is not composed entirely of US Component Stocks, and therefore the Shares do not satisfy the requirements for generic listing under Commentary .01(a)(A) to NYSE Arca Equities Rule 5.2(j)(3).

The Fund will be an index-based exchange traded fund (“ETF”). The Shares will be offered by the Trust, which is registered with the Commission as an investment company and has filed a registration statement on Form N–1A (the “Registration Statement”) with the Commission on behalf of the Fund.<sup>6</sup>

<sup>2</sup> 17 CFR 240.19b–4.

<sup>3</sup> See Securities Exchange Act Release No. 79101 (October 14, 2016), 81 FR 72630 (“Notice”).

<sup>4</sup> The Commission notes that additional information regarding the Fund, the Trust, and the Shares, including investment strategies, risks, creation and redemption procedures, fees, portfolio holdings disclosure policies, calculation of net asset value (“NAV”), distributions, and taxes, among other things, can be found in the Notice, and the Registration Statement, as applicable. See Notice, *supra* note 3, and Registration Statement, *infra* note 6.

<sup>5</sup> See Notice, *supra* note 3, 81 FR at 72631.

<sup>6</sup> The Exchange represents that, on September 1, 2016, the Trust filed a Registration Statement on Form N–1A under the Securities and Exchange Act of 1933 and the Investment Company Act of 1940 (“1940 Act”) (File Nos. 333–206600 and 811–23078). According to the Exchange, the Trust has obtained certain exemptive relief from the Commission under the 1940 Act. See Investment

The investment adviser to the Fund will be Virtus ETF Advisers LLC (“Adviser”). ETF Distributors LLC will serve as the distributor (“Distributor”) of Fund shares on an agency basis. The Bank of New York Mellon (“Administrator”) will be the administrator, custodian and transfer agent for the Fund.

#### A. The Fund’s Principal Investments

According to the Exchange, the Fund’s investment objective is to seek investment results that, before fees and expenses, closely correspond to the price and yield performance of the Rampart Enhanced U.S. Equity Index (“Index”).<sup>7</sup> Under normal market conditions,<sup>8</sup> the Fund will invest not less than 80% of its total assets in component securities of the Index. Additionally, under normal market conditions, the Fund will invest not less than 80% of its total assets in U.S. exchange-traded common stocks. The Fund will also seek to generate additional income by writing SPX call options and will seek additional capital appreciation by purchasing SPX call options.

#### B. The Fund’s Non-Principal Investments

While the Fund, under normal market conditions will invest at least 80% of its net assets in the securities and financial instruments described above, the Fund may invest its remaining assets in the securities and financial instruments described below.

The Fund may invest in short-term, high quality securities issued or guaranteed by the U.S. government (in addition to U.S. Treasury securities) and non-U.S. governments, and each of their agencies and instrumentalities; debt securities issued by U.S. government sponsored enterprises; repurchase

Company Act Release No. 30825 (December 11, 2013) (File No. 812–14212).

<sup>7</sup> According to the Exchange, the Index was developed by Rampart Investment Management Company, LLC (“Index Provider”), and is calculated and maintained by NYSE Global Index Group (“Index Calculation Agent”). The Index Provider is affiliated with the Adviser and the Distributor. The Index Calculation Agent is not affiliated with the Adviser, Distributor, Administrator, or the Trust.

<sup>8</sup> The term “normal market conditions” is defined in NYSE Arca Equities Rule 8.600(c)(5). On a temporary basis, including for defensive purposes, during the initial invest-up period and during periods of high cash inflows or outflows, the Fund may depart from its principal investment strategies; for example, it may hold a higher than normal proportion of its assets in cash. During such periods, the Fund may not be able to achieve its investment objectives. The Fund may adopt a defensive strategy when the Adviser believes securities in which the Fund normally invests have elevated risks due to political or economic factors and in other extraordinary circumstances.

<sup>4</sup> 15 U.S.C. 78s(b)(2).

<sup>5</sup> *Id.*

<sup>6</sup> 17 CFR 200.30–3(a)(31).

<sup>1</sup> 15 U.S.C. 78s(b)(1).

agreements backed by U.S. government and non-U.S. government securities; money market mutual funds; and deposit and other obligations of U.S. and non-U.S. banks and financial institutions ("Money Market Instruments").

The Fund may invest in ETFs.<sup>9</sup>

The Fund may invest in U.S. exchange-traded equity index futures contracts.

The Fund may invest in U.S. exchange-traded index options (other than SPX) and U.S. exchange-traded options on ETFs.

The Fund may invest in U.S. exchange-traded options on futures contracts and U.S. exchange-traded options on stocks.

### C. Investment Restrictions

The Exchange represents that the Fund will not invest in any non-U.S. equity securities. The Fund's investments will be consistent with the Fund's investment objective and will not be used to enhance leverage.

The Fund intends to qualify each year as a regulated investment company under Subchapter M of the Internal Revenue Code of 1986, as amended.<sup>10</sup>

### III. Discussion and Commission's Findings

After careful review, the Commission finds that the proposed rule change is consistent with the requirements of Section 6 of the Act<sup>11</sup> and the rules and regulations thereunder applicable to a national securities exchange.<sup>12</sup> In particular, the Commission finds that the proposal is consistent with Section 6(b)(5) of the Act,<sup>13</sup> which requires, among other things, that the Exchange's rules be 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 mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest.

The Commission also finds that the proposal to list and trade the Shares on

the Exchange is consistent with Section 11A(a)(1)(C)(iii) of the Act,<sup>14</sup> which sets forth Congress' finding that it is in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets to assure the availability to brokers, dealers, and investors of information with respect to quotations for, and transactions in, securities. Quotation and last-sale information for the Shares will be available via the Consolidated Tape Association ("CTA"). The current value of the Index will be widely disseminated by one or more major market data vendors as required by NYSE Arca Equities Rule 5.2(j)(3), Commentary .02(b)(iii). In addition, during the Core Trading Session (9:30 a.m. to 4:00 p.m. Eastern Time), an IIV for the Shares will be disseminated by one or more major market data vendors and updated at least every 15 seconds.<sup>15</sup> Information regarding market price and trading volume of the Shares will be continually available on a real-time basis throughout the day on brokers' computer screens and other electronic devices. The Web site for the Fund will include the prospectus for the Fund and additional data relating to the net asset value ("NAV") and other applicable quantitative information. Information regarding each portfolio holding will be disclosed by the Trust on each business day before commencement of trading in Shares in the Core Trading Session on the Exchange.

The Commission believes that the proposal to list and trade the Shares is reasonably designed to promote fair disclosure of information that may be necessary to price the Shares appropriately and to prevent trading when a reasonable degree of transparency cannot be assured. The Exchange may consider all relevant factors in exercising its discretion to halt or suspend trading in the Shares of a Fund. Shares of the Fund will be halted if the "circuit breaker" parameters in NYSE Arca Equities Rule 7.12 are reached. Trading may be halted because of market conditions or for reasons that, in the view of the Exchange, make trading in the Shares inadvisable. These may include: (1) The extent to which trading is not occurring in the securities and/or the financial instruments of the Fund; or (2) whether other unusual conditions or circumstances detrimental to the

maintenance of a fair and orderly market are present.

If the IIV, Index value or the value of the Index components is not being disseminated as required, the Exchange may halt trading during the day in which the disruption occurs; if the interruption persists past the day in which it occurred, the Exchange will halt trading no later than the beginning of the trading day following the interruption.<sup>16</sup> The Exchange will obtain a representation from the Fund that the NAV for the Fund will be calculated daily and will be made available to all market participants at the same time.<sup>17</sup> Under NYSE Arca Equities Rule 7.34(a)(5), if the Exchange becomes aware that the NAV for the Fund is not being disseminated to all market participants at the same time, it will halt trading in the Shares until such time as the NAV is available to all market participants.

In support of this proposal, the Exchange has made the following representations:

(1) The Shares will conform to the initial and continued listing criteria under NYSE Arca Equities Rules 5.2(j)(3) and 5.5(g)(2), except that the Index will not meet the requirements of NYSE Arca Equities Rule 5.2(j)(3), Commentary .01(a)(A)(1–5) in that the Index will include options.

(2) The Exchange represents that trading in the Shares will be subject to the existing Exchange trading surveillances procedures, as well as cross-market surveillances administered by the Financial Industry Regulatory Authority ("FINRA") on behalf of the Exchange.<sup>18</sup> The Exchange represents that these procedures are adequate to properly monitor Exchange trading of the Shares in all trading sessions and to deter and detect violations of Exchange rules and federal securities laws applicable to trading on the Exchange.<sup>19</sup>

(3) The Exchange or FINRA, on behalf of the Exchange will communicate as needed regarding trading in the Shares, ETFs, options, and futures with markets and other entities that are members of the Intermarket Surveillance Group ("ISG"), and the Exchange or FINRA, on behalf of the Exchange may obtain trading information regarding trading in the Shares, ETFs, options, and futures from those markets and other entities that are members of ISG or with which

<sup>9</sup> The Fund will not invest in leveraged ETFs, (e.g., 2X or 3X) or inverse or inverse leveraged ETFs (e.g., -1X or -2X).

<sup>10</sup> 26 U.S.C. 851.

<sup>11</sup> 15 U.S.C. 78f.

<sup>12</sup> In approving this proposed rule change, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

<sup>13</sup> 17 U.S.C. 78f(b)(5).

<sup>14</sup> 15 U.S.C. 78k-1(a)(1)(C)(iii).

<sup>15</sup> The Exchange states that it understands that several major market data vendors display and/or make widely available IIV's taken from the CTA or other data feeds. See Notice, *supra* note 3, 81 FR at 72634, n.20.

<sup>16</sup> See *id.* at 72634.

<sup>17</sup> See *id.*

<sup>18</sup> FINRA conducts cross-market surveillances on behalf of the Exchange pursuant to a regulatory services agreement. The Exchange is responsible for FINRA's performance under this regulatory services agreement.

<sup>19</sup> See *id.*

the Exchange has in place a comprehensive surveillance sharing agreement.<sup>20</sup> The Exchange is able to access from FINRA, as needed, trade information for certain fixed income securities held by the Fund reported to FINRA's Trade Reporting and Compliance Engine.<sup>21</sup>

(4) For initial and continued listing of the Shares, the Trust is required to comply with Rule 10A-3 under the Act.<sup>22</sup>

(5) Prior to the commencement of trading of Shares in the Fund, the Exchange will inform its ETP Holders in an Information Bulletin ("Bulletin") of the special characteristics and risks associated with trading the Shares. Specifically, the Bulletin will discuss the following: (a) The procedures for purchases and redemptions of Shares in Creation Unit aggregations (and that Shares are not individually redeemable); (b) NYSE Arca Equities Rule 9.2(a), which imposes a duty of due diligence on its ETP Holders to learn the essential facts relating to every customer prior to trading the Shares; (c) the risks involved in trading the Shares during the Opening and Late Trading Sessions when an updated IIV or Index value will not be calculated or publicly disseminated; (d) how information regarding the IIV and Index value will be disseminated; (e) the requirement that ETP Holders deliver a prospectus to investors purchasing newly issued Shares prior to or concurrently with the confirmation of a transaction; and (f) trading information.

(6) A minimum of 100,000 Shares will be outstanding at the commencement of trading on the Exchange.<sup>23</sup>

(7) The Exchange represents that all statements and representations made in this filing regarding (a) the description of the portfolio, (b) limitations on portfolio holdings or reference assets, or (c) the applicability of Exchange rules and surveillance procedures shall constitute continued listing requirements for listing the Shares on the Exchange.<sup>24</sup>

(8) The issuer has represented to the Exchange that it will advise the Exchange of any failure by the Fund to comply with the continued listing requirements, and, pursuant to its obligations under Section 19(g)(1) of the Act, the Exchange will surveil for compliance with the continued listing requirements. If the Fund is not in

compliance with the applicable listing requirements, the Exchange will commence delisting procedures under NYSE Arca Equities Rule 5.5(m).<sup>25</sup>

This approval order is based on all of the Exchange's representations, including those set forth above and in the Notice.

For the foregoing reasons, the Commission finds that the proposed rule change, is consistent with Section 6(b)(5) of the Act<sup>26</sup> and the rules and regulations thereunder applicable to a national securities exchange.

#### IV. Conclusion

*It is therefore ordered*, pursuant to Section 19(b)(2) of the Act,<sup>27</sup> that the proposed rule change (SR-NYSEArca-2016-131), *be, and it hereby is, approved.*

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>28</sup>

**Brent J. Fields,**

*Secretary.*

[FR Doc. 2016-28830 Filed 11-30-16; 8:45 am]

**BILLING CODE 8011-01-P**

#### SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-79401; File No. SR-FINRA-2016-044]

#### Self-Regulatory Organizations; Financial Industry Regulatory Authority, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Extend the Tier Size Pilot of FINRA Rule 6433 (Minimum Quotation Size Requirements for OTC Equity Securities)

November 25, 2016.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on November 23, 2016, Financial Industry Regulatory Authority, Inc. ("FINRA") filed with the Securities and Exchange Commission ("SEC" or "Commission") the proposed rule change as described in Items I and II below, which Items have been prepared by FINRA. FINRA has designated the proposed rule change as constituting a "non-controversial" rule change under paragraph (f)(6) of Rule 19b-4 under the Act,<sup>3</sup> which renders the proposal effective upon receipt of

this filing by the Commission. 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 Substance of the Proposed Rule Change

FINRA is proposing to amend FINRA Rule 6433 (Minimum Quotation Size Requirements for OTC Equity Securities) to extend the Tier Size Pilot, which currently is scheduled to expire on December 9, 2016, until June 9, 2017.

The text of the proposed rule change is available on FINRA's Web site at <http://www.finra.org>, at the principal office of FINRA 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, FINRA 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 these statements may be examined at the places specified in Item IV below. FINRA has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

##### A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

##### 1. Purpose

FINRA proposes to amend FINRA Rule 6433 (Minimum Quotation Size Requirements for OTC Equity Securities) (the "Rule") to extend, until June 9, 2017, the amendments set forth in File No. SR-FINRA-2011-058 ("Tier Size Pilot" or "Pilot"), which currently are scheduled to expire on December 9, 2016.<sup>4</sup>

The Tier Size Pilot was filed with the SEC on October 6, 2011,<sup>5</sup> to amend the minimum quotation sizes (or "tier sizes") for OTC Equity Securities.<sup>6</sup> The goals of the Pilot were to simplify the tier structure, facilitate the display of customer limit orders, and expand the

<sup>20</sup> For a list of the current members of ISC, see [www.isgportal.org](http://www.isgportal.org).

<sup>21</sup> See *id.*

<sup>22</sup> See 17 CFR 240.10A-3.

<sup>23</sup> See Notice, *supra* note 3, 81 FR at 76234.

<sup>24</sup> See *id.* at 72635.

<sup>25</sup> See *id.*

<sup>26</sup> 15 U.S.C. 78f(b)(5).

<sup>27</sup> 15 U.S.C. 78s(b)(2).

<sup>28</sup> 17 CFR 200.30-3(a)(12).

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> 17 CFR 240.19b-4(f)(6).

<sup>4</sup> See Securities Exchange Act Release No. 77923 (May 26, 2016), 81 FR 35432 (June 2, 2016) (Notice of Filing and Immediate Effectiveness of File No. SR-FINRA-2016-016) ("June 2016 Extension").

<sup>5</sup> See Securities Exchange Act Release No. 65568 (October 14, 2011), 76 FR 65307 (October 20, 2011) (Notice of Filing of File No. SR-FINRA-2011-058).

<sup>6</sup> "OTC Equity Security" means any equity security that is not an "NMS stock" as that term is defined in Rule 600(b)(47) of SEC Regulation NMS; provided, however, that the term OTC Equity Security shall not include any Restricted Equity Security. See FINRA Rule 6420.

scope of the Rule to apply to additional quoting participants. During the course of the Pilot, FINRA collected and provided to the SEC specified data with which to assess the impact of the Pilot tiers on market quality and limit order display.<sup>7</sup> On September 13, 2013, FINRA provided to the Commission an assessment on the operation of the Tier Size Pilot utilizing data covering the period from November 12, 2012 through June 30, 2013.<sup>8</sup> As noted in the 2013 Assessment, FINRA believed that the analysis of the data generally showed that the Tier Size Pilot had a neutral to positive impact on OTC market quality for the majority of OTC Equity Securities and tiers; and that there was an overall increase of 13% in the number of customer limit orders that met the minimum quotation sizes to be eligible for display under the Pilot tiers. In the 2013 Assessment, FINRA recommended adopting the tiers as permanent, but extended the Pilot period to allow more time to gather and analyze data after the November 12, 2012 through June 30, 2013 assessment period.<sup>9</sup> The purpose of this filing is to further extend the operation of the Tier Size Pilot until June 9, 2017, to provide additional time to finalize a permanent proposal with regard to the Tier Size Pilot.<sup>10</sup>

FINRA has filed the proposed rule change for immediate effectiveness. The operative date of the proposed rule change will be December 9, 2016.

## 2. Statutory Basis

FINRA believes that the proposed rule change is consistent with the provisions of Section 15A(b)(6) of the Act,<sup>11</sup> which requires, among other things, that FINRA rules must be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, and, in general, to protect investors and the public interest. FINRA also believes that the proposed rule change is consistent with the provisions of Section 15A(b)(11) of the Act.<sup>12</sup> Section

15A(b)(11) requires that FINRA rules include provisions governing the form and content of quotations relating to securities sold otherwise than on a national securities exchange which may be distributed or published by any member or person associated with a member, and the persons to whom such quotations may be supplied.

FINRA believes that the extension of the Tier Size Pilot until June 9, 2017, is consistent with the Act in that it would provide the Commission and FINRA with additional time to finalize a proposal with regard to the Tier Size Pilot.

### *B. Self-Regulatory Organization's Statement on Burden on Competition*

FINRA does not believe that the proposed rule change will result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act.

### *C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others*

Written comments were neither solicited nor received.

## III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing proposed rule change does not: (i) Significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A) of the Act<sup>13</sup> and Rule 19b-4(f)(6) thereunder.<sup>14</sup>

A proposed rule change filed under Rule 19b-4(f)(6)<sup>15</sup> normally does not become operative prior to 30 days after the date of filing. However, pursuant to Rule 19b-4(f)(6)(iii),<sup>16</sup> the Commission may designate a shorter time if such action is consistent with the protection of investors and the public interest.

FINRA has asked the Commission to waive the 30-day operative delay so that the proposal may become operative immediately upon filing. The Commission believes that waiver of the operative delay is consistent with the

protection of investors and the public interest because such waiver will allow the pilot program to continue without interruption. Therefore, the Commission designates the proposal operative upon filing.<sup>17</sup>

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or 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](mailto:rule-comments@sec.gov). Please include File Number SR-FINRA-2016-044 on the subject line.

### *Paper Comments*

- Send paper comments in triplicate to Brent J. Fields, Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090.

All submissions should refer to File Number SR-FINRA-2016-044. 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

<sup>7</sup> FINRA ceased collecting Pilot data for submission to the Commission on February 13, 2015.

<sup>8</sup> The assessment is part of the SEC's comment file for SR-FINRA-2011-058 and also is available on FINRA's Web site at: <http://www.finra.org/Industry/Regulation/RuleFilings/2011/P124615> ("Pilot Assessment").

<sup>9</sup> See Securities Exchange Act Release No. 70839 (November 8, 2013), 78 FR 68893 (November 15, 2013) (Notice of Filing and Immediate Effectiveness of File No. SR-FINRA-2013-049).

<sup>10</sup> FINRA reviewed the post-June 30, 2013 data, and stated that the impact described in the 2013 Assessment continued to hold (and improved in certain areas). See June 2016 Extension.

<sup>11</sup> 15 U.S.C. 78o-3(b)(6).

<sup>12</sup> 15 U.S.C. 78o-3(b)(11).

<sup>13</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>14</sup> 17 CFR 240.19b-4(f)(6). As required under Rule 19b-4(f)(6)(iii), the Exchange provided the Commission with written notice of its intent to file the proposed rule change, along with a brief description and the text of the proposed rule change, at least five business days prior to the date of filing of the proposed rule change.

<sup>15</sup> 17 CFR 240.19b-4(f)(6).

<sup>16</sup> 17 CFR 240.19b-4(f)(6)(iii).

<sup>17</sup> For purposes only of waiving the 30-day operative delay, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

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 FINRA. 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 Number SR-FINRA-2016-044 and should be submitted on or before December 22, 2016.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>18</sup>

**Brent J. Fields,**  
*Secretary.*

[FR Doc. 2016-28828 Filed 11-30-16; 8:45 am]

**BILLING CODE 8011-01-P**

## SMALL BUSINESS ADMINISTRATION

### Senior Executive Service: Performance Review Board Members

**AGENCY:** U. S. Small Business Administration.

**ACTION:** Notice of members for the FY 2016 Performance Review Board.

**SUMMARY:** Title 5 U.S.C. 4314(c) (4) requires each agency to publish notification of the appointment of individuals who may serve as members of that Agency's Performance Review Board (PRB). The following individuals have been designated to serve on the FY 2016 Performance Review Board for the U.S. Small Business Administration. Members:

1. Delorice Ford (Chair), Assistant Administrator, Office of Hearings and Appeals
  2. Eugene Cornelius Jr., Deputy Associate Administrator, Office of Field Operations
  3. Nick Maduros, Chief of Staff, Office of the Administrator
  4. Robert Steiner, District Director (Illinois District Office), Office of Field Operations
  5. Jackie Robinson-Burnette, Deputy Associate Administrator, Office of Government Contracting and Business Development
  6. Linda Rusche, Director of Credit Risk Management, Office of Capital Access
  7. Mark Walsh, Associate Administrator, Office of Investment and Innovation
- Alternate PRB:

1. Daniel Krupnick, Associate Administrator, Office of Congressional and Legislative Affairs
2. John Miller, Deputy Associate Administrator, Office of Capital Access
3. Victor Parker, District Director (LA District Office), Office of Field Operations

**Maria Contreras-Sweet,**  
*Administrator.*

[FR Doc. 2016-28824 Filed 11-30-16; 8:45 am]

**BILLING CODE 8025-01-P**

## SMALL BUSINESS ADMINISTRATION

### Surrender of License of Small Business Investment Company

Pursuant to the authority granted to the United States Small Business Administration under the Small Business Investment Act of 1958, as amended, under Section 309 of the Act and Section 107.1900 of the Small Business Administration Rules and Regulations (13 CFR 107.1900) to function as a small business investment company under the Small Business Investment Company License No. 05/75-0252 issued to EDF Ventures II, L.P., said license is hereby declared null and void.

United States Small Business Administration

Dated: November 16, 2016.

**Mark Walsh,**  
*Associate Administrator for Investment and Innovation.*

[FR Doc. 2016-28829 Filed 11-30-16; 8:45 am]

**BILLING CODE P**

## SMALL BUSINESS ADMINISTRATION

### [Disaster Declaration #14929 and #14930]

#### Kansas Disaster Number KS-00098

**AGENCY:** U.S. Small Business Administration.

**ACTION:** Amendment 2.

**SUMMARY:** This is an amendment of the Presidential declaration of a major disaster for Public Assistance Only for the State of Kansas (FEMA-4287-DR), dated 10/20/2016.

Incident: Severe Storms and Flooding.  
Incident Period: 09/02/2016 through 09/12/2016.

**EFFECTIVE DATE:** 11/21/2016.

Physical Loan Application Deadline Date: 12/19/2016.

Economic Injury (EIDL) Loan Application Deadline Date: 07/20/2017.

**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 President's major disaster declaration for Private Non-Profit organizations in the State of Kansas, dated 10/20/2016, is hereby amended to include the following areas as adversely affected by the disaster.

Primary Counties: Woodson.

All other information in the original declaration remains unchanged.

(Catalog of Federal Domestic Assistance Number 59008)

**James E. Rivera,**  
*Associate Administrator for Disaster Assistance.*

[FR Doc. 2016-28831 Filed 11-30-16; 8:45 am]

**BILLING CODE 8025-01-P**

## SMALL BUSINESS ADMINISTRATION

### [Disaster Declaration #14970 and #14971]

#### North Carolina Disaster Number NC-00086

**AGENCY:** U.S. Small Business Administration.

**ACTION:** Amendment 2.

**SUMMARY:** This is an amendment of the Presidential declaration of a major disaster for Public Assistance Only for the State of North Carolina (FEMA-4285-DR), dated 11/10/2016.

Incident: Hurricane Matthew.

Incident Period: 10/04/2016 through 10/24/2016.

**EFFECTIVE DATE:** 11/21/2016.

Physical Loan Application Deadline Date: 01/09/2017.

Economic Injury (EIDL) Loan Application Deadline Date: 08/10/2017.

**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 President's major disaster declaration for Private Non-Profit organizations in the State of North

<sup>18</sup> 17 CFR 200.30-3(a)(12).

Carolina, dated 11/10/2016, is hereby amended to include the following areas as adversely affected by the disaster.

Primary Counties: Beaufort, Bertie, Brunswick, Camden, Carteret, Chowan, Columbus, Craven, Currituck, Dare, Duplin, Edgecombe, Gates, Greene, Harnett, Hertford, Hyde, Jones, Lenoir, Martin, Montgomery, Moore, New Hanover, Northampton, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Pitt, Robeson, Sampson, Tyrrell, Washington, Wayne, Wilson.

All other information in the original declaration remains unchanged.

(Catalog of Federal Domestic Assistance Number 59008)

**James E. Rivera,**  
*Associate Administrator for Disaster Assistance.*

[FR Doc. 2016-28832 Filed 11-30-16; 8:45 am]

**BILLING CODE 8025-01-P**

## DEPARTMENT OF STATE

[Public Notice: 9790]

### **Nominations for Lead Authors or Review Editors on the First Special Report To Be Undertaken by the Intergovernmental Panel on Climate Change During the Sixth Assessment Report (AR6) Cycle**

The United States Department of State, in cooperation with the United States Global Change Research Program, seeks nominations for U.S. scientists with requisite expertise to serve as Lead Authors or Review Editors on the first Special Report to be undertaken by the Intergovernmental Panel on Climate Change (IPCC) during the Sixth Assessment Report (AR6) cycle. The outline for the "Special Report on Impacts of Global Warming of 1.5 °C above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty" was adopted at the 44th session of the IPCC Plenary.

Nominations may be submitted at <https://contribute.globalchange.gov/>. This is an Open Call. All registered users can nominate U.S. citizens and permanent lawful residents to be considered by the IPCC Science Steering Committee (SSC). The call for nominations will close on Tuesday, December 6, 2016, and a nominations package transmitted on behalf of the U.S. IPCC Focal Point on December

11th. The SSC will complete its work and issue appointment memos in late January 2017.

The United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) established the IPCC in 1988. In accordance with its mandate and as reaffirmed in various decisions by the Panel, the major activity of the IPCC is to prepare comprehensive and up-to-date assessments of policy-relevant scientific, technical, and socio-economic information for understanding the scientific basis of climate change, potential impacts, and options for mitigation and adaptation.

This notice will be published in the **Federal Register**.

**Christo Artusio,**  
*Director, Office of Global Change, Department of State.*

Drafted by:

Farhan Akhtar, OES/EGC, x7-3489

Cleared by:

Christo Artusio, OES/E (acting) (ok)  
Trigg Talley, S/SECC (info)  
Rick Driscoll, OES/EGC (ok)  
Andy Neustaetter, L/OES (ok)  
Esther Bell, OES/PPO (ok)  
Teresa Hobgood, OES/Congressional (ok)

[FR Doc. 2016-28841 Filed 11-30-16; 8:45 am]

**BILLING CODE P**

## DEPARTMENT OF STATE

[Public Notice: 9806]

### **Notice of Meeting of the International Telecommunication Advisory Committee and Preparations for Upcoming International Telecommunications Meetings**

This notice announces a meeting of the Department of State's International Telecommunication Advisory Committee (ITAC) to review recent activities of the Department of State in international meetings on international communications and information policy and prepare for similar activities in the next quarter. The ITAC will meet on December 16, 2016 at 2:00 p.m. EST at: 1120 20th Street NW., Suite 1000, Washington, DC 20036 to discuss the results of recent events and preparations for upcoming meetings at the International Telecommunication Union (ITU), the Inter-American Telecommunications Commission of the Organization of American States (OAS CITEL), Organization for Economic Cooperation and Development (OECD), and Asia-Pacific Economic Cooperation Telecommunication and Information

Working Group (APEC TEL). The meeting will focus on the following topics:

- Outcome of the 25 October–3 November, 2016, ITU World Telecommunication Standardization Assembly (WTSA-16) and future engagement in the ITU Telecommunication Standardization Sector
- Preparation for the 2017 World Telecommunication Development Conference (WTDC) taking place from 9 to 20 October 2017
- Preparation for the 2019 ITU World Radiocommunication Conference (WRC-19) taking place from 28 October to 22 November 2019
- Current and future work of the OECD Committee on Digital Economy Policy

Attendance at this meeting is open to the public as seating capacity allows. The public will have an opportunity to provide comments at this meeting at the invitation of the chair. Further details on this ITAC meeting will be announced on the Department of State's email list, [ITAC@lmlist.state.gov](mailto:ITAC@lmlist.state.gov). Use of the ITAC list is limited to meeting announcements and confirmations, distribution of agendas and other relevant meeting documents. The Department welcomes any U.S. citizen or legal permanent resident to remain on or join the ITAC listserv by registering on <https://www.eventbrite.com/o/ebcip-11891185682> and providing his or her name, email address, and the company, organization, or community that he or she is representing, if any. Persons wishing to request reasonable accommodation during the meeting should contact [jacksonln@state.gov](mailto:jacksonln@state.gov) or [gadsdensf@state.gov](mailto:gadsdensf@state.gov) no later than December 12, 2016. Requests made after that time will be considered, but might not be able to be fulfilled.

Please note that the Charter of the Advisory Committee has been extended until July 22, 2018, which was erroneously reflected as 2016 in Public Notice: 9658 on the Renewal of the Charter of the International Telecommunication Advisory Committee (ITAC).

**FOR FURTHER INFORMATION CONTACT:**  
Please contact Franz Zichy at 202-647-5778, [zichyff@state.gov](mailto:zichyff@state.gov).

Dated: November 28, 2016.

**Julie N. Zoller,**  
*Senior Deputy Coordinator, International Communications and Information Policy, U.S. State Department.*

[FR Doc. 2016-28891 Filed 11-30-16; 8:45 am]

**BILLING CODE 4710-AE-P**

**DEPARTMENT OF STATE****[Public Notice: 9807]****Meeting of Advisory Committee on International Communications and Information Policy**

The Department of State's Advisory Committee on International Communications and Information Policy (ACICIP) will hold a public meeting on Friday, December 16, 2016 from 9:30 a.m. to 12:00 p.m. in the Room 1107 of the Harry S Truman (HST) Building of the U.S. Department of State. The Truman Building is located at 2201 C Street NW., Washington, DC 20520.

The committee provides a formal channel for regular consultation and coordination on major economic, social and legal issues and problems in international communications and information policy, especially as these issues and problems involve users of information and communications services, providers of such services, technology research and development, foreign industrial and regulatory policy, the activities of international organizations with regard to communications and information, and developing country issues.

The meeting will be led by Ambassador Daniel A. Sepulveda, U.S. Coordinator for International Communications and Information Policy. The meeting's agenda will include discussions pertaining to various upcoming international telecommunications meetings and conferences, as well as efforts focused on technology and international development, including updates from the ACICIP ICT for International Development and International Disaster Response Sub-Committees.

Members of the public may submit suggestions and comments to the ACICIP. Comments concerning topics to be addressed in the agenda should be received by the ACICIP Executive Secretary (contact information below) at least ten working days prior to the date of the meeting. All comments must be submitted in written form and should not exceed one page. Resource limitations preclude acknowledging or replying to submissions.

While the meeting is open to the public, admittance to the building is only by means of a pre-clearance. For placement on the pre-clearance list, please submit the following information no later than 5:00 p.m. on Tuesday, December 13, 2015. (Please note that this information is required by Diplomatic Security for each entrance

into HST and must therefore be re-submitted for each ACICIP meeting):

- I. State That You Are Requesting Pre-Clearance to a Meeting
- II. Provide the Following Information
  1. Name of meeting and its date and time
  2. Visitor's full name
  3. Visitor's organization/company affiliation
  4. Date of Birth
  5. Citizenship

6. Acceptable forms of identification for entry into the building include:

- U.S. driver's license with photo
- Passport
- U.S. government agency ID

7. ID number on the form of ID that the visitor will show upon entry.

8. Whether the visitor has a need for reasonable accommodation. Such requests received after December 1st, 2016, might not be possible to fulfill.

Send the above information to Joseph Burton by fax (202) 647-5957 or email [BurtonKJ@state.gov](mailto:BurtonKJ@state.gov).

Please note that registrations will be accepted to the capacity of the meeting room. All visitors for this meeting must use the 23rd Street entrance. The valid ID bearing the number provided with your pre-clearance request will be required for admittance. Non-U.S. government attendees must be escorted by Department of State personnel at all times when in the building.

Personal data is requested pursuant to Public Law 99-399 (Omnibus Diplomatic Security and Antiterrorism Act of 1986), as amended; Public Law 107-56 (USA PATRIOT Act); and Executive Order 13356. The purpose of the collection is to validate the identity of individuals who enter Department facilities. The data will be entered into the Visitor Access Control System (VACS-D) database. Please see the Security Records System of Records Notice (State-36) at <https://foia.state.gov/docs/SORN/State-36.pdf> for additional information.

For further information, please contact Joseph Burton, Executive Secretary of the Committee, at (202) 647-5231 or [BurtonKJ@state.gov](mailto:BurtonKJ@state.gov).

General information about ACICIP and the mission of International Communications and Information Policy is available at: <http://www.state.gov/e/eb/adcom/acicip/index.htm>.

Dated: November 28, 2016.

**Joseph Burton,**  
*ACICIP Executive Secretary, Department of State.*

[FR Doc. 2016-28892 Filed 11-30-16; 8:45 am]

**BILLING CODE 4710-AE-P**

**SUSQUEHANNA RIVER BASIN COMMISSION****Projects Rescinded for Consumptive Uses of Water**

**AGENCY:** Susquehanna River Basin Commission.

**ACTION:** Notice.

**SUMMARY:** This notice lists the approved by rule projects rescinded by the Susquehanna River Basin Commission during the period set forth in **DATES**.

**DATES:** October 1–31, 2016.

**ADDRESSES:** Susquehanna River Basin Commission, 4423 North Front Street, Harrisburg, PA 17110-1788.

**FOR FURTHER INFORMATION CONTACT:** Jason E. Oyler, General Counsel, telephone: (717) 238-0423, ext. 1312; fax: (717) 238-2436; email: [joyler@srbc.net](mailto:joyler@srbc.net). Regular mail inquiries may be sent to the above address.

**SUPPLEMENTARY INFORMATION:** This notice lists the projects, described below, being rescinded for the consumptive use of water pursuant to the Commission's approval by rule process set forth in 18 CFR 806.22(e) and § 806.22(f) for the time period specified above:

**Rescinded ABRs Issued**

1. Chesapeake Appalachia, LLC, Pad ID: A&M, ABR-201501005, Wilmot Township, Bradford County, Pa.; Rescind Date: October 27, 2016.

2. Chesapeake Appalachia, LLC, Pad ID: Dingo, ABR-201401008, Cherry Township, Sullivan County, Pa.; Rescind Date: October 27, 2016.

3. Chesapeake Appalachia, LLC, Pad ID: Kintner, ABR-201309016, Wilmot Township, Bradford County, Pa.; Rescind Date: October 27, 2016.

4. Chesapeake Appalachia, LLC, Pad ID: Three D Acres, ABR-201301009, Monroe Township, Bradford County, Pa.; Rescind Date: October 27, 2016.

5. Chesapeake Appalachia, LLC, Pad ID: Windswept, ABR-201407002, Auburn Township, Susquehanna County, Pa.; Rescind Date: October 27, 2016.

6. Chesapeake Appalachia, LLC, Pad ID: Packard, ABR-2011050122.R1, Sheshequin Township, Bradford County, Pa.; Rescind Date: October 31, 2016.

**Authority:** Pub. L. 91-575, 84 Stat. 1509 *et seq.*, 18 CFR parts 806, 807, and 808.

Dated: November 28, 2016.

**Stephanie L. Richardson,**  
*Secretary to the Commission.*

[FR Doc. 2016-28876 Filed 11-30-16; 8:45 am]

**BILLING CODE 7040-01-P**



**SUSQUEHANNA RIVER BASIN COMMISSION****Projects Approved for Consumptive Uses of Water**

**AGENCY:** Susquehanna River Basin Commission.

**ACTION:** Notice.

**SUMMARY:** This notice lists the projects approved by rule by the Susquehanna River Basin Commission during the period set forth in **DATES**.

**DATES:** October 1–31, 2016.

**ADDRESSES:** Susquehanna River Basin Commission, 4423 North Front Street, Harrisburg, PA 17110–1788.

**FOR FURTHER INFORMATION CONTACT:**

Jason E. Oyler, General Counsel, telephone: (717) 238–0423, ext. 1312; fax: (717) 238–2436; email: [joyler@srbc.net](mailto:joyler@srbc.net). Regular mail inquiries may be sent to the above address.

**SUPPLEMENTARY INFORMATION:** This notice lists the projects, described below, receiving approval for the consumptive use of water pursuant to the Commission's approval by rule process set forth in 18 CFR 806.22(f) for the time period specified above:

**Approvals by Rule Issued Under 18 CFR 806.22(f)**

1. Talisman Energy USA, Inc., Pad ID: 02 113 Reinfried C, ABR–201109004.R1, Warren Township, Tioga County, Pa.; Consumptive Use of Up to 6.0000 mgd; Approval Date: October 5, 2016.

2. Chesapeake Appalachia, LLC, Pad ID: Circle Z BRA, ABR–201203031.R1, Wilmot Township, Bradford County, Pa.; Consumptive Use of Up to 7.5000 mgd; Approval Date: October 5, 2016.

3. Chesapeake Appalachia, LLC, Pad ID: Floydie, ABR–201203019.R1, Tuscarora Township, Bradford County, Pa.; Consumptive Use of Up to 7.5000 mgd; Approval Date: October 5, 2016.

4. Chesapeake Appalachia, LLC, Pad ID: Hattie BRA, ABR–201203030.R1, Wilmot Township, Bradford County, Pa.; Consumptive Use of Up to 7.5000 mgd; Approval Date: October 5, 2016.

5. Chesapeake Appalachia, LLC, Pad ID: Maggie, ABR–201203020.R1, Tuscarora Township, Bradford County, Pa.; Consumptive Use of Up to 7.5000 mgd; Approval Date: October 5, 2016.

6. Chesapeake Appalachia, LLC, Pad ID: R&N, ABR–201203014.R1, Cherry Township, Sullivan County, Pa.; Consumptive Use of Up to 7.5000 mgd; Approval Date: October 5, 2016.

7. EOG Resources, Inc., Pad ID: WOLFE Pad, ABR–201110033.R1, Smithfield Township, Bradford County, Pa.; Consumptive Use of Up to 4.9990 mgd; Approval Date: October 6, 2016.

8. EOG Resources, Inc., Pad ID: WALLACE Pad, ABR–201110032.R1, Smithfield Township, Bradford County, Pa.; Consumptive Use of Up to 4.9990 mgd; Approval Date: October 6, 2016.

9. EOG Resources, Inc., Pad ID: PRUYNE 1H Pad, ABR–201110034.R1, Smithfield Township, Bradford County, Pa.; Consumptive Use of Up to 4.9990 mgd; Approval Date: October 6, 2016.

10. SWN Production Company, LLC, Pad ID: CSB, ABR–201108013.R1, Cherry Township, Sullivan County, Pa.; Consumptive Use of Up to 7.5000 mgd; Approval Date: October 11, 2016.

11. Cabot Oil & Gas Corporation, Pad ID: WilliamsD P1, ABR–201110018.R1, Brooklyn Township, Susquehanna County, Pa.; Consumptive Use of Up to 3.5750 mgd; Approval Date: October 11, 2016.

12. SWN Production Company, LLC, Pad ID: CHILSON–JENNINGS, ABR–201201012.R1, Herrick Township, Bradford County, Pa.; Consumptive Use of Up to 4.9990 mgd; Approval Date: October 13, 2016.

13. Chesapeake Appalachia, LLC, Pad ID: Manning, ABR–201204009.R1, Cherry Township, Sullivan County, Pa.; Consumptive Use of Up to 7.5000 mgd; Approval Date: October 17, 2016.

14. Chesapeake Appalachia, LLC, Pad ID: Freed, ABR–201204014.R1, Albany Township, Bradford County, Pa.; Consumptive Use of Up to 7.5000 mgd; Approval Date: October 17, 2016.

15. Chesapeake Appalachia, LLC, Pad ID: Reilly, ABR–201204015.R1, Colley Township, Sullivan County, Pa.; Consumptive Use of Up to 7.5000 mgd; Approval Date: October 17, 2016.

16. EOG Resources, Inc., Pad ID: ASHBY Pad, ABR–201110031.R1, Athens and Smithfield Townships, Bradford County, Pa.; Consumptive Use of Up to 4.9990 mgd; Approval Date: October 17, 2016.

17. SWN Production Company, LLC, Pad ID: Carty–Wisemen Well Pad, ABR–201109006.R1, Liberty Township, Susquehanna County, Pa.; Consumptive Use of Up to 4.0000 mgd; Approval Date: October 17, 2016.

18. SWN Production Company, LLC, Pad ID: Kass North Well Pad, ABR–201109007.R1, Liberty Township, Susquehanna County, Pa.; Consumptive Use of Up to 4.0000 mgd; Approval Date: October 17, 2016.

19. SWN Production Company, LLC, Pad ID: Robinson Well Pad, ABR–201109009.R1, Liberty Township, Susquehanna County, Pa.; Consumptive Use of Up to 4.0000 mgd; Approval Date: October 17, 2016.

20. SWN Production Company, LLC, Pad ID: HDK Pad, ABR–201112001.R1, Franklin Township, Susquehanna

County, Pa.; Consumptive Use of Up to 4.0000 mgd; Approval Date: October 17, 2016.

21. Chief Oil & Gas LLC, Pad ID: Leh Drilling Pad #1, ABR–201204002.R1, Burlington Township, Bradford County, Pa.; Consumptive Use of Up to 2.0000 mgd; Approval Date: October 19, 2016.

22. Talisman Energy USA, Inc., Pad ID: 03 078 Bellows L, ABR–201610001, Columbia Township, Bradford County, Pa.; Consumptive Use of Up to 6.0000 mgd; Approval Date: October 21, 2016.

23. SWN Production Company, LLC, Pad ID: HOWLAND–LENT, ABR–201112032.R1, Herrick Township, Bradford County, Pa.; Consumptive Use of Up to 4.9990 mgd; Approval Date: October 21, 2016.

24. Chesapeake Appalachia, LLC, Pad ID: Rainbow BRA, ABR–201203033.R1, Terry Township, Bradford County, Pa.; Consumptive Use of Up to 7.5000 mgd; Approval Date: October 24, 2016.

25. Inflection Energy (PA), LLC, Pad ID: Ultimate Warrior, ABR–201111036.R1, Upper Fairfield Township, Lycoming County, Pa.; Consumptive Use of Up to 4.0000 mgd; Approval Date: October 27, 2016.

26. Range Resources—Appalachia, LLC, Pad ID: Bobst Unit #34H–#37H, ABR–201111004.R1, Cogan House Township, Lycoming County, Pa.; Consumptive Use of Up to 1.0000 mgd; Approval Date: October 31, 2016.

27. Range Resources—Appalachia, LLC, Pad ID: Sechrist, Mark—#1H–#3H, ABR–201111005.R1, Anthony Township, Lycoming County, Pa.; Consumptive Use of Up to 1.0000 mgd; Approval Date: October 31, 2016.

28. Range Resources—Appalachia, LLC, Pad ID: Red Bend B Unit—#1H–#8H, ABR–201111006.R1, Cogan House Township, Lycoming County, Pa.; Consumptive Use of Up to 1.0000 mgd; Approval Date: October 31, 2016.

29. Range Resources—Appalachia, LLC, Pad ID: Red Bend C Unit—#1H–#5H, ABR–201111007.R1, Cogan House Township, Lycoming County, Pa.; Consumptive Use of Up to 1.0000 mgd; Approval Date: October 31, 2016.

**Authority:** Pub. L. 91–575, 84 Stat. 1509 *et seq.*, 18 CFR parts 806, 807, and 808.

Dated: November 28, 2016.

**Stephanie L. Richardson,**  
*Secretary to the Commission.*

[FR Doc. 2016–28875 Filed 11–30–16; 8:45 am]

**BILLING CODE 7040–01–P**

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****Applicability of National Environmental Policy Act (NEPA) to Federal Aviation Administration (FAA) Review of Airport Wildlife Hazard Management Plans**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice and request for comments, extension of comment period.

**SUMMARY:** FAA is extending the comment period on a Notice published in the **Federal Register** of October 19, 2016, entitled “Applicability of National Environmental Policy Act (NEPA) to Federal Aviation Administration (FAA) Review of Airport Wildlife Hazard Management Plans.” In that notice, the FAA requested comments be received by November 18, 2016.

**DATES:** The comment period for the Notice published October 19, 2016 (81 FR 72145), is extended until January 17, 2017.

**ADDRESSES:** Send comments identified by docket number to FAA–2016–9284 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:* The FAA will post all comments it receives, without change, to <http://www.regulations.gov>, including any personal information the commenter provides. DOT’s complete Privacy Act Statement can be found in the **Federal Register** published on April 11, 2000 (65 FR 19477–19478), as well as at <http://DocketsInfo.dot.gov>.

*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:** Mr. Elliott Black, Director, Office of Airport Planning and Programming, Federal Aviation Administration, 800 Independence Ave. SW., Washington, DC 20591. Telephone (202) 267–8775. Email Address: [Elliott.Black@faa.gov](mailto:Elliott.Black@faa.gov).

**SUPPLEMENTARY INFORMATION:****History**

A Notice published in the **Federal Register** (81 FR 72145, October 19, 2016), entitled “Applicability of National Environmental Policy Act (NEPA) to Federal Aviation Administration (FAA) Review of Airport Wildlife Hazard Management Plans” requested clarification of Wildlife Hazard Management Plan (WHMP) Program and Policy Guidance Letter 92 issued in 2006. The clarification concerns how federal environmental laws apply to FAA approval of a new or updated WHMP.

The notice requested that interested parties submit written comments by November 18, 2016. On November 18, 2016, an airport industry association requested an extension to the comment period. After careful consideration, the FAA has decided to extend the comment period until January 17, 2017.

Issued in Washington, DC, on November 23, 2016.

**Elliott Black,**

*Director, Office of Airport Planning and Programming.*

[FR Doc. 2016–28887 Filed 11–30–16; 8:45 am]

**BILLING CODE 4910–13–P**

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****Agency Information Collection Activities: Requests for Comments; Clearance of Renewed Approval of Information Collection: Mitsubishi MU–2B Series Airplane Special Training, Experience, and Operating Procedures**

**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 renew a previously approved information collection. The collection of information is necessary to document participation, completion, and compliance with the pilot training program for the MU–2B under the

newly published subpart N of part 91 which will replace SFAR No. 108.

**DATES:** Written comments should be submitted by January 3, 2017.

**ADDRESSES:** Interested persons are invited to submit written comments on the proposed information collection to the Office of Information and Regulatory Affairs, Office of Management and Budget. Comments should be addressed to the attention of the Desk Officer, Department of Transportation/FAA, and sent via electronic mail to [oira\\_submission@omb.eop.gov](mailto:oira_submission@omb.eop.gov), or faxed to (202) 395–6974, or mailed to the Office of Information and Regulatory Affairs, Office of Management and Budget, Docket Library, Room 10102, 725 17th Street NW., Washington, DC 20503.

**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 by email at: [Ronda.Thompson@faa.gov](mailto:Ronda.Thompson@faa.gov).

**SUPPLEMENTARY INFORMATION:**

*OMB Control Number:* 2120–0725.

*Title:* Mitsubishi MU–2B Series Airplane Special Training, Experience, and Operating Procedures.

*Form Numbers:* There are no FAA forms associated with this collection.

*Type of Review:* Renewal of an information collection.

*Background:* The **Federal Register** Notice with a 60-day comment period soliciting comments on the following collection of information was published on September 26, 2016 (81 FR 66119). There were no comments. In response to the increasing number of accidents and incidents involving the Mitsubishi MU–2B series airplane, the Federal Aviation Administration (FAA) began a safety evaluation of the MU–2B in July of 2005. As a result of this safety evaluation, the FAA issued Special Federal Aviation Regulation No. 108—Mitsubishi MU–2B Series Special Training, Experience, and Operating Requirements on February 6, 2008. This Special Federal Aviation Regulation (SFAR) established a standardized pilot training program. The collection of information is necessary to document participation, completion, and

compliance with the pilot training program for the MU-2B under the newly published subpart N of part 91 which will replace SFAR No. 108.

*Respondents:* Approximately 600 pilots.

*Frequency:* On occasion.

*Estimated Average Burden per Response:* 10 minutes.

*Estimated Total Annual Burden:* 100 hours.

Issued in Washington, DC, on November 25, 2016.

**Ronda L. Thompson,**

*FAA Information Collection Clearance Officer, Performance, Policy & Records Management Branch, ASP-110.*

[FR Doc. 2016-28890 Filed 11-30-16; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### Agency Information Collection

#### **Activities: Requests for Comments; Clearance of Renewed Approval of Information Collection: Qualification, Service, and Use of Crewmembers and Aircraft Dispatchers**

**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 renew a previously approved information collection. 14 CFR part 121 to ensure safety-of-flight by making certain that adequate training is obtained and maintained by those who operate under this part of the regulation.

**DATES:** Written comments should be submitted by January 3, 2017.

**ADDRESSES:** Interested persons are invited to submit written comments on the proposed information collection to the Office of Information and Regulatory Affairs, Office of Management and Budget. Comments should be addressed to the attention of the Desk Officer, Department of Transportation/FAA, and sent via electronic mail to [oir\\_submission@omb.eop.gov](mailto:oir_submission@omb.eop.gov), or faxed to (202) 395-6974, or mailed to the Office of Information and Regulatory Affairs, Office of Management and Budget, Docket Library, Room 10102, 725 17th Street NW., Washington, DC 20503.

#### **FOR FURTHER INFORMATION CONTACT:**

Ronda Thompson by email at: [Ronda.Thompson@faa.gov](mailto:Ronda.Thompson@faa.gov).

#### **SUPPLEMENTARY INFORMATION:**

*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.

*OMB Control Number:* 2120-0739.

*Title:* Qualification, Service, and Use of Crewmembers and Aircraft Dispatchers.

*Form Numbers:* There are no FAA forms associated with this collection.

*Type of Review:* Renewal of an information collection.

*Background:* The **Federal Register** Notice with a 60-day comment period soliciting comments on the following collection of information was published on September 9, 2016 (81 FR 62550). There were no comments. The Airline Safety and Federal Aviation Administration Extension Act of 2010 (Pub. L. 111-216) specifically required the FAA to conduct rulemaking to ensure that all flightcrew members receive ground training and flight training in recognizing and avoiding stalls, recovering from stalls, and recognizing and avoiding upset of an aircraft, as well as the proper techniques to recover from upset. Public Law 111-216 also directed the FAA to require air carriers to develop remedial training programs for flightcrew members who have demonstrated performance deficiencies or experienced failures in the training environment.

*Respondents:* Approximately 83 operators.

*Frequency:* Approximately 10 times.

*Estimated Average Burden per Response:* 1 hour.

*Estimated Total Annual Burden:* 802 hours.

Issued in Washington, DC, on November 23, 2016.

**Ronda L. Thompson,**

*FAA Information Collection Clearance Officer, Performance, Policy & Records Management Branch, ASP-110.*

[FR Doc. 2016-28886 Filed 11-30-16; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### Agency Information Collection

#### **Activities: Requests for Comments; Clearance of Renewed Approval of Information Collection: Reduction of Fuel Tank Flammability on Transport Category Airplanes**

**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 renew a previously approved information collection. The FAA's Fuel Tank Flammability rule requires manufacturers to report to the FAA every six months for up to 5 years after the flammability reduction system is incorporated into the fleet. The data is needed to assure system performance meets that predicted at the time of certification.

**DATES:** Written comments should be submitted by January 3, 2017.

**ADDRESSES:** Interested persons are invited to submit written comments on the proposed information collection to the Office of Information and Regulatory Affairs, Office of Management and Budget. Comments should be addressed to the attention of the Desk Officer, Department of Transportation/FAA, and sent via electronic mail to [oir\\_submission@omb.eop.gov](mailto:oir_submission@omb.eop.gov), or faxed to (202) 395-6974, or mailed to the Office of Information and Regulatory Affairs, Office of Management and Budget, Docket Library, Room 10102, 725 17th Street NW., Washington, DC 20503.

#### **FOR FURTHER INFORMATION CONTACT:**

Ronda Thompson by email at: [Ronda.Thompson@faa.gov](mailto:Ronda.Thompson@faa.gov).

#### **SUPPLEMENTARY INFORMATION:**

*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.

*OMB Control Number:* 2120-0710.

**Title:** Anti-Drug Program for Personnel Engaged in Specified Aviation Activities.

**Form Numbers:** There are no FAA forms associated with this collection.

**Type of Review:** Renewal of an information collection.

**Background:** The **Federal Register** Notice with a 60-day comment period soliciting comments on the following collection of information was published on September 9, 2016 (81 FR 62551). There were no comments. Design approval holders use flammability analysis documentation to demonstrate to their FAA Oversight Office that they are compliant with the Fuel Tank Flammability Safety rule (73 FR 42443). Semi-annual reports submitted by design approval holders provide listings of component failures discovered during scheduled or unscheduled maintenance so that the reliability of the flammability reduction means can be verified by the FAA.

**Respondents:** Approximately 5 design approval holders.

**Frequency:** Information is collected on occasion.

**Estimated Average Burden per**

**Response:** 100 hours.

**Estimated Total Annual Burden:** 4000 hours.

Issued in Washington, DC, on November 23, 2016.

**Ronda L. Thompson,**

*FAA Information Collection Clearance Officer, Performance, Policy & Records Management Branch, ASP-110.*

[FR Doc. 2016-28888 Filed 11-30-16; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### Agency Information Collection Activities: Requests for Comments; Clearance of Renewed Approval of Information Collection: Aviation Medical Examiners 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 renew a previously approved information collection. This collection is necessary in order to determine applicants qualification for certification as Aviation Medical Examiners (AME's).

**DATES:** Written comments should be submitted by January 3, 2017.

**ADDRESSES:** Interested persons are invited to submit written comments on the proposed information collection to the Office of Information and Regulatory Affairs, Office of Management and Budget. Comments should be addressed to the attention of the Desk Officer, Department of Transportation/FAA, and sent via electronic mail to [aira\\_submission@omb.eop.gov](mailto:aira_submission@omb.eop.gov), or faxed to (202) 395-6974, or mailed to the Office of Information and Regulatory Affairs, Office of Management and Budget, Docket Library, Room 10102, 725 17th Street NW., Washington, DC 20503.

#### FOR FURTHER INFORMATION CONTACT:

Ronda Thompson by email at:

[Ronda.Thompson@faa.gov](mailto:Ronda.Thompson@faa.gov).

#### SUPPLEMENTARY INFORMATION:

**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.

**OMB Control Number:** 2120-0604.

**Title:** Aviation Medical Examiners Program.

**Form Numbers:** FAA Form 8520-2.

**Type of Review:** Renewal of an information collection.

**Background:** The **Federal Register** Notice with a 60-day comment period soliciting comments on the following collection of information was published on August 25, 2016 (81 FR 58555). There were no comments. 14 CFR part 183 describes the requirements for delegating to private physicians the authority to conduct physical examinations on persons wishing to apply for their airmen medical certificate. This collection of information is for the purpose of obtaining essential information concerning the applicants' professional and personal qualifications. The FAA uses the information to screen and select the designees who serve as aviation medical examiners.

**Respondents:** Approximately 450 applicants annually.

**Frequency:** Information is collected on occasion.

**Estimated Average Burden per**

**Response:** 30 minutes.

**Estimated Total Annual Burden:** 225 hours.

Issued in Washington, DC, on November 23, 2016.

**Ronda L. Thompson,**

*FAA Information Collection Clearance Officer, Performance, Policy & Records Management Branch, ASP-110.*

[FR Doc. 2016-28889 Filed 11-30-16; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

[Summary Notice No. 2016-93]

#### Petition for Exemption; Summary of Petition Received; Western Oklahoma State College

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice.

**SUMMARY:** This notice contains a summary of a petition seeking relief from specified requirements of Title 14 of the Code of Federal Regulations. The purpose of this notice is to improve the public's awareness of, and participation in, the FAA's exemption process. Neither publication of this notice nor the inclusion or omission of information in the summary is intended to affect the legal status of the petition or its final disposition.

**DATES:** Comments on this petition must identify the petition docket number and must be received on or before December 21, 2016.

**ADDRESSES:** Send comments identified by docket number FAA-2016-8884 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:** For technical questions concerning this action, contact Nia Daniels, (202)267-7626, 800 Independence Avenue SW., Washington, DC 20591.

This notice is published pursuant to 14 CFR 11.85.

Issued in Washington, DC, on November 23, 2016.

**Lirio Liu,**

*Director, Office of Rulemaking.*

#### Petition for Exemption

**Docket No.:** FAA-2016-8884.

**Petitioner:** Western Oklahoma State College.

**Section of 14 CFR Affected:** 61.156.

**Description of Relief Sought:** Western Oklahoma State College (WOSC), a part 141 pilot school, seeks an exemption for a portion of the Airline Transport Pilot Certification Training Program (ATP CTP) ground training requirements and all of the flight simulation training device requirements set forth in § 61.156. WOSC's proposed course would only be available for United States Air Force C-17A Globemaster III qualified military transport pilots and would contain only those ATP CTP ground training subject areas with differences specific to civilian air carrier operations. A military pilot who completes this program would receive a graduation certificate and be eligible to take the multiengine airplane ATP knowledge test in accordance with § 61.35(a)(2).

[FR Doc. 2016-28885 Filed 11-30-16; 8:45 am]

**BILLING CODE 4910-13-P**

#### DEPARTMENT OF TRANSPORTATION

##### Federal Aviation Administration

##### Notice of Opportunity for Public Comment on Disposal of 2.96 Acres of Airport Land at Laconia Municipal Airport in Gilford, NH

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Request for public comments.

**SUMMARY:** The FAA is considering a request from the Laconia Airport Authority in Gilford, NH, to dispose of 2.96 acres of airport land that is not required for aviation purposes at Laconia Municipal Airport.

The subject parcel has been identified as property no longer needed for aviation use by the Laconia Airport Authority (LAA). The property, Lot 13, located along the east side of Lily Pond Road (NH Route 11C) in the Town of Gilford, is located on the northerly side of the airport's existing business park. The intended use of the property is for boat storage, which is a compatible use adjacent to the airport. Given the location of the parcel, the disposal of this property will have no effect on aviation land nor future development opportunities for the airport. The proceeds of the disposal will be placed in the airport's account and to be used for the operation and maintenance of the airport. Appropriate aviation easements will be placed on the property to ensure compatibility with the airport and the airport's airspace.

**DATES:** Comments must be received on or before January 3, 2017.

**ADDRESSES:** You may send comments using any of the following methods:

- **Federal eRulemaking Portal:** Go to <http://www.regulations.gov>, and follow the instructions on providing comments.
- **Fax:** 202-493-2251.
- **Mail:** U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W 12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- **Hand Delivery:** Deliver to mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Interested persons may inspect the request and supporting documents by contacting the FAA at the address listed under **FOR FURTHER INFORMATION CONTACT**.

**FOR FURTHER INFORMATION CONTACT:** Mr. Jorge E. Panteli, Compliance and Land Use Specialist, Federal Aviation Administration New England Region Airports Division, 1200 District Avenue, Burlington, Massachusetts 01803. Telephone: 781-238-7618.

Issued in Burlington, Massachusetts, on November 17, 2016.

**Gail B. Lattrell,**  
*Manager, ANE-630.*

[FR Doc. 2016-28544 Filed 11-30-16; 8:45 am]

**BILLING CODE 4910-13-P**

#### DEPARTMENT OF TRANSPORTATION

##### Maritime Administration

**[Docket No. MARAD 2015-0049]**

##### Application of Cargo Preference Requirements to the Federal Ship Financing Program

**AGENCY:** Maritime Administration (MARAD).

**ACTION:** Final Policy Clarification.

**SUMMARY:** On April 22, 2015, the Maritime Administration (MARAD) published a Notice of Proposed Policy Clarification (80 FR 22611) seeking comments on a proposed policy clarifying the application of the Cargo Preference Act of 1954 (CPA 1954), 46 U.S.C. 55305, to applications, commitments, and guarantees under MARAD's Federal Ship Financing Program (Title XI), 46 U.S.C. Chapter 537. This Notice finalizes MARAD's policy clarification.

**DATES:** This policy is effective on the date of publication, including for all pending Title XI applications.

**FOR FURTHER INFORMATION CONTACT:**

Owen J. Doherty, Associate Administrator for Business and Finance Development, Maritime Administration, 1200 New Jersey Avenue SE., Washington, DC 20590, (202) 366-9595, [owen.doherty@dot.gov](mailto:owen.doherty@dot.gov).

**SUPPLEMENTARY INFORMATION:** MARAD received ten (10) public comments in response to its Notice of Proposed Policy Clarification. In addition, on July 9, 2015, MARAD held a meeting with interested stakeholders, a transcript of which was published on the public docket folder at [www.regulations.gov](http://www.regulations.gov) under docket number MARAD-2015-0049. The public comments ranged from full support for the Proposed Policy Clarification as published to complete opposition to the application of the CPA 1954 to the Title XI program.

Numerous comments focused on the application of the CPA 1954 to mortgage-period financing. Some commenters asserted that the application of the CPA 1954 to mortgage-period financing would result in such a severe administrative and cost burden that it would render compliance with the CPA 1954 impracticable and deter future Title XI applications. Commenters also asserted that the Proposed Policy Clarification was a significant deviation from MARAD's prior practice of not applying the CPA 1954 to mortgage-period financing. Relatedly, virtually all commenters were concerned about the timing for application of the CPA 1954, with

particular focus on mortgage-period applications, contending that cargo preference would add costs without any assurance of an application's approval.

MARAD has revisited the text of the CPA 1954 and its regulations at 46 CFR 381.7 and determined that cargo preference will not be applied to mortgage-period financing. This decision required conscientious consideration of all public input and is focused on the project scope under Title XI mortgage-period financing and that of construction-period financing. MARAD bases its decision upon the statutory text, which provides in relevant part that the CPA 1954 applies when the U.S. Government "provides financing in any way for . . . equipment, materials, or commodities . . . which may be transported on ocean vessels." 46 U.S.C. 55305(b). In mortgage-period financing, separate and distinct from construction-period financing, MARAD is only providing financing for the completed, delivered vessel. Financing is not provided for any actual vessel construction activities or vessel components prior to the completed vessel's delivery, which in turn are privately financed. It is further compelling that in admiralty, a vessel, once completed and delivered, is a distinct legal entity that is, for example, "treated in other connections as an entity capable of entering into relations with others, of acting independently and of becoming responsible for her acts." *Piedmont & George's Creek Coal Co. v. Seaboard Fisheries Co.*, 254 U.S. 1, 9 (1920). This position is also consistent with MARAD's existing regulations, applying the CPA 1954 to "cargoes . . . which are generated by U.S. Government Grant, Guaranty, Loan and/or Advance of Funds Programs." 46 CFR 381.7. Thus, it is MARAD's conclusion that because no financing is provided for equipment or materials which may be transported on ocean vessels, the CPA 1954 is not applicable to mortgage-period financing.

Consistent with the above analysis, MARAD notes that a narrow exception to the inapplicability of the CPA 1954 to mortgage-period financing may exist. Specifically, the CPA 1954 may apply if a vessel is financed with a mortgage-period guarantee and the completed vessel is to be delivered at a location other than the shipyard. For example, if MARAD provides a mortgage-period guarantee for a completed vessel and the shipyard places that vessel on a heavy lift ship for final delivery to the Title XI recipient, the ocean transportation for that final delivery may be subject to the CPA 1954. MARAD will review this exceptional circumstance on a case-by-

case basis and may apply the contents of this Notice as appropriate.

Separate from mortgage-period financing, and consistent with the project scope analysis described above, the CPA 1954 does apply to all cargoes under Title XI construction-period financing, without regard to the timing of the Title XI application or approval. In construction-period financing, when an application is approved, MARAD is providing financing based upon the "Actual Cost" of the vessel as defined by 46 CFR 298.2 and further described in 46 CFR 298.13(b). In providing construction-period financing, MARAD is therefore financing all discrete equipment and materials that will be incorporated into the vessel and included in the Actual Cost, regardless of when an application is submitted or approved. In this manner, equipment and materials purchased and transported prior to the approval and issuance of a Title XI guarantee but included in Actual Cost is akin to using Federal assistance to finance pre-award costs. See 2 CFR 200.458 ("Pre-award costs are those incurred prior to the effective date of the Federal award directly pursuant to the negotiation and in anticipation of the Federal award where such costs are necessary for efficient and timely performance of the scope of work. Such costs are allowable only to the extent that they would have been allowable if incurred after the date of the Federal award and only with the written approval of the Federal awarding agency."). Therefore, all equipment and materials that are transported by ocean and included in the Actual Cost of a vessel built with Title XI construction-period financing will be included in determining compliance with the CPA 1954.

It is further noted that the above analysis regarding construction-period financing will also generally apply to Title XI financing for vessel reconstruction or reconditioning. Therefore, absent evidence to the contrary for a particular project, the CPA 1954 is applicable in the same manner to cargoes for vessel reconstruction or reconditioning projects financed through a Title XI guarantee.

Beyond the applicability to different types of financing, MARAD also received multiple comments asserting that the submission of bills of lading was overly burdensome. Bills of lading are the sole basis by which MARAD can assess what cargo has been transported and whether program participants have complied with the CPA 1954. The requirement to submit bills of lading under Federal acquisitions and Federal

financing agreements is long established. See 48 CFR 52.247-64; 46 CFR 381.3; and 46 CFR 381.7. The requirement to submit bills of lading within thirty (30) days is consistent with MARAD's existing regulations and is routinely met by shippers across all industries, often with little expertise of marine transportation. Administrative requirements found in Section 2 of this Final Policy Clarification therefore remain unchanged.

Commenters also expressed concern regarding the submission of transportation plans, specifically that there was a lack of clarity for what needs to be contained in a transportation plan. In response, MARAD has included example transportation plan contents below in Section 3 of this Final Policy Clarification. It is also noted that while a transportation plan is required to be submitted at the time of application, MARAD views transportation plans as cooperative documents that should be updated as construction progresses. This process ensures that all parties, including MARAD, the Title XI participant, and the shipyard have a continuing understanding of the participant's CPA 1954 compliance as the project evolves.

A number of commenters also expressed concern regarding the process used to determine U.S.-flag vessel availability and the related issue of determining when an offered rate is fair and reasonable. The comments often incorrectly cited the cost differential between U.S.-flag and foreign-flag vessels. The statute unambiguously states that availability is based upon "fair and reasonable rates for commercial vessels of the United States." 46 U.S.C. 55305 (emphasis added). See also *Administration of Cargo Preference Act [50-50 Law: Hearing on Public Law 664 Before the H. Comm. on Merchant Marine and Fisheries]*, 83d Cong. 178 (1955) ("It may be noted at the outset that only rates 'for United States-flag commercial vessel' are considered in determining a fair and reasonable rate, so that foreign-flag rates do not enter into the determination."). The comments generally go beyond the scope of this policy clarification to the general administration of the CPA 1954; however, understanding that there are significant commercial concerns, MARAD has expanded Section 4 of this Final Policy Clarification to provide additional insight into the criteria that MARAD may consider in determining vessel availability and fair and reasonable rates. Furthermore, it is anticipated that coordination and regular dialogue between MARAD and

vessel reconstruction, reconditioning, or construction-period financing applicants, which typically submit applications early in the vessel construction, reconstruction, or reconditioning process, will alleviate many of the concerns expressed by the commenters.

Finally, some commenters disagree with the potential remedies listed in Section 5 of the Notice of Proposed Policy Clarification and expressed doubt that MARAD possesses the requisite authority to impose such remedies. MARAD disagrees and affirms that it possesses the discretion to impose the remedies in Section 5. If MARAD chooses to impose civil penalties under 46 U.S.C. 55305(d) as a result of a violation of the CPA 1954 by a Title XI participant, MARAD would also follow applicable procedures to afford all protections under the Administrative Procedure Act. *See* 5 U.S.C. 554–558. Therefore, Section 5 is unchanged; however, MARAD remains of the view that early planning and close coordination by vessel reconstruction, reconditioning, or construction-period financing participants will ensure that no CPA 1954 violations will occur.

### **Section 1: What is Cargo Preference?**

The CPA 1954 mandates that shippers use U.S.-flag vessels to transport a portion of Government-impelled, ocean borne cargoes. Through statutory amendments in 2008 to 46 U.S.C. 55305(b), the CPA 1954 was clarified to state that the statute applies whenever the U.S. Government provides financing in any way with Federal funds for the account of any person. MARAD, as the agency charged with implementing and overseeing compliance administration of the CPA 1954, previously determined that “financing in any way” includes Federal loan guarantee programs, such as Title XI.

### **Section 2: What are the Cargo Preference requirements?**

There are both transportation and administrative requirements associated with the CPA 1954:

**Transportation:** For vessel reconstruction, reconditioning, or construction-period financing, at least 50 percent of the gross tons of the equipment or materials which are transported by ocean and included in the Actual Cost of vessel in accordance with 46 CFR 298.13(b) must be transported on privately-owned commercial vessels of the United States, to the extent those vessels are available at fair and reasonable rates. To ensure a fair and reasonable participation of U.S.-flag vessels, MARAD’s established

definition of the undefined term “gross ton” means a revenue ton (metric ton or cubic meter of cargo, by whichever measure the number is greater). This greater number is the standard by which compliance with the CPA 1954 will be evaluated.

**Administrative:** For each covered shipment, consistent with 46 CFR 381.3, within thirty (30) days of the foreign export loading, the shipper (Title XI participant or its representative) must submit a legible copy of a rated on-board ocean master bill of lading to MARAD. This requirement exists whether the particular shipment was transported aboard a U.S.-flag or a foreign-flag vessel to establish a correct denominator on which CPA 1954 compliance is calculated. The bills of lading must be submitted to the Office of Cargo and Commercial Sealift, Maritime Administration, 1200 New Jersey Avenue SE., Washington, DC 20590 or via email to [cargo.marad@dot.gov](mailto:cargo.marad@dot.gov). The bills of lading or the transmittal cover must clearly state the Title XI project to which they apply and must contain the following information: (1) The name of the vessel carrying the cargo(s); (2) The carrying vessel’s International Maritime Organization (IMO) number; (3) The carrying vessel’s flag of registry; (4) The date of cargo loading; (5) The port of loading; (6) The port(s) of trans-shipment (if any); (7) The port of final destination; (8) A description of the cargo(s); (9) The gross weight of the cargo(s) in kilograms and the volume of the cargo(s) in cubic meters; and (10) The total ocean freight revenue in U.S. dollars.

### **Section 3: To what cargoes does Cargo Preference apply?**

For vessel reconstruction, reconditioning, or construction-period financing, the cargo preference requirements apply to all foreign components that are transported by ocean and included in the “Actual Cost” of the project in accordance with 46 CFR 298.13(b). Consistent with the statutory mandate, given that MARAD is providing financing for all equipment included in Actual Cost, including equipment transported prior to approval, the total revenue tonnage of all foreign equipment transported by ocean will serve as the denominator from which the at-least-50-percent-U.S.-flag transportation calculation will be made.

At the time of application, all vessel reconstruction, reconditioning, or construction-period financing applicants are required to submit a transportation plan for review by MARAD to ensure that sufficient

planning has occurred to meet the CPA 1954 requirements. This requirement will be discussed with each applicant and potential applicant at the earliest possible time. A transportation plan generally contains a description of each shipment cargo including weight and volume, country of origin, date of shipment, the flag of the vessels that will carry the cargo, and, to the extent known, the vessel and/or carrier that will be engaged for future shipments. Ideally, the U.S.-flag portion is shipped first under a transportation plan to ensure compliance with the CPA 1954; however, a plan that does not conform to this principle may still be acceptable. Furthermore, understanding that schedules will change as the project develops, MARAD anticipates that the Title XI participant and the shipyard constructing the vessel will continuously engage with MARAD to update the transportation plan as necessary. By reviewing the shipping plan early in the application process, or prior to submission of any application if possible, MARAD can work with Title XI participants and their respective shipyards to help identify and work with them to mitigate challenges to CPA 1954 compliance.

### **Section 4: What if an available U.S.-flag vessel cannot be found or the total ocean freight rate appears too expensive?**

Only MARAD can issue a determination that no U.S.-flag vessels are available at fair and reasonable rates. If a Title XI participant, through demonstrably diligent efforts, is unable to find U.S.-flag service, without MARAD’s issuance of a determination of the non-availability of qualified U.S.-flag carriage, the participant’s due diligence alone will not excuse that applicant from CPA 1954 requirements. Title XI participants must communicate with U.S.-flag carriers at the earliest possible time to ensure the greatest degree of coordination and to obtain the best freighted rates. In the event that a Title XI participant experiences difficulty obtaining U.S.-flag service, or if it can only find partial U.S.-flag service, the participant must contact MARAD without delay at [cargo.marad@dot.gov](mailto:cargo.marad@dot.gov) or (202) 366–4610, so as to provide MARAD with an undiminished opportunity to assist in locating U.S.-flag service. Ideally, MARAD will be able to locate available U.S.-flag service, for the Title XI participant’s potential engagement to meet its U.S.-flag carriage requirement. Alternatively, if MARAD is unsuccessful in locating available U.S.-flag service, a determination of non-availability will be issued. With proper



planning, U.S.-flag service can generally be obtained at fair and reasonable rates. Early planning and coordination are the key factors to meeting cargo preference requirements in Title XI, as in all Federal programs.

In evaluating whether U.S.-flag vessels are available at fair and reasonable rates, MARAD may consider, at its discretion: (1) U.S.-flag rates offered in response to the shipper's solicitation; (2) U.S.-flag commercial rates being offered on the same trade route under similar circumstances taking into account, as available, information obtained from interviews with U.S.-flag carriers, historic rates, published rates, and applicable index rates; (3) As available and applicable, guideline rates calculated under 46 CFR part 382; and (4) Whether the shipper has made a demonstrably diligent effort to obtain U.S.-flag service, including evidence of advanced planning and requests for proposals for ocean transportation issued by the shipper. Vessel availability is assessed in consideration of shipper's reasonable required laycan and delivery dates.

#### Section 5: What if non-compliance with Cargo Preference requirements occurs?

At MARAD's direction, as the administrator of the Title XI program, non-compliant parties may be denied a letter commitment or, consistent with 46 U.S.C. 55305(d)(2)(B), may be required to provide make-up cargoes for carriage aboard U.S.-flag vessels to offset the lost cargo carriage supporting work under the Title XI financing application. Where knowing and willful violations occur, consistent with 46 U.S.C. 55305(d)(2)(C), MARAD may issue a civil penalty of not more than \$25,000 for each violation, with each day of a continuing violation following the date of shipment counting as a separate violation. Additionally, CPA 1954 requirements are incorporated into Title XI letter commitments; therefore, failure to properly adhere to cargo preference requirements could impact MARAD's ability to close on a Title XI guarantee because the recipient has not met its obligations under the letter commitment. However, with early planning and coordination with MARAD, no CPA 1954 violations need occur.

#### Section 6: What is the purpose of Cargo Preference?

The CPA 1954 provides cargo that helps to retain and encourage a privately-owned and operated U.S.-flag merchant fleet. The U.S.-flag fleet is a vital resource, providing essential sealift capability to globally project and sustain

the U.S. Armed Forces or support other national emergencies, maintaining a cadre of skilled seafarers available in time of national emergencies, and helping to protect U.S. economic interests. The U.S. maritime industry also supports thousands of sea-going, shore-based, and secondary, associated jobs, supporting the Nation's economic growth. It is imperative that Federal programs, such as Title XI, and beneficiary Title XI applicants and shipyards, as members of the U.S. maritime industry, support this national priority through proper adherence to cargo preference requirements. Therefore, while the use of U.S.-flag vessels to carry 50 percent of the gross tons of ocean borne cargoes is the statutory minimum, MARAD, as the agency charged with administering both Title XI and the CPA 1954, encourages the use of U.S.-flag vessels for greater than the minimum whenever possible.

**Authority:** 46 U.S.C. 55305; 46 U.S.C. Ch. 537.

By Order of the Maritime Administrator.

**T. Mitchell Hudson, Jr.,**

*Secretary, Maritime Administration.*

[FR Doc. 2016-28863 Filed 11-30-16; 8:45 am]

**BILLING CODE 4910-81-P**

## DEPARTMENT OF TRANSPORTATION

### Maritime Administration

[Docket No. MARAD-2016 0117]

#### Requested Administrative Waiver of the Coastwise Trade Laws: Vessel CRACKER JACK; Invitation for Public Comments

**AGENCY:** Maritime Administration, Department of Transportation.

**ACTION:** Notice.

**SUMMARY:** The Secretary of Transportation, as represented by the Maritime Administration (MARAD), is authorized to grant waivers of the U.S.-build requirement of the coastwise laws under certain circumstances. A request for such a waiver has been received by MARAD. The vessel, and a brief description of the proposed service, is listed below.

**DATES:** Submit comments on or before January 3, 2017.

**ADDRESSES:** Comments should refer to docket number MARAD-2016-0117. Written comments may be submitted by hand or by mail to the Docket Clerk, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590. You may also

send comments electronically via the Internet at <http://www.regulations.gov>. All comments will become part of this docket and will be available for inspection and copying at the above address between 10 a.m. and 5 p.m., E.T., Monday through Friday, except federal holidays. An electronic version of this document and all documents entered into this docket is available on the World Wide Web at <http://www.regulations.gov>.

#### FOR FURTHER INFORMATION CONTACT:

Bianca Carr, U.S. Department of Transportation, Maritime Administration, 1200 New Jersey Avenue SE., Room W23-453, Washington, DC 20590. Telephone 202-366-9309, Email [Bianca.carr@dot.gov](mailto:Bianca.carr@dot.gov).

**SUPPLEMENTARY INFORMATION:** As described by the applicant the intended service of the vessel CRACKER JACK is:

*Intended Commercial Use of Vessel:* "Charter fishing 6 passengers locally".

*Geographic Region:* "Florida, Georgia, Alabama, North Carolina".

The complete application is given in DOT docket MARAD-2016-0117 at <http://www.regulations.gov>. Interested parties may comment on the effect this action may have on U.S. vessel builders or businesses in the U.S. that use U.S.-flag vessels. If MARAD determines, in accordance with 46 U.S.C. 12121 and MARAD's regulations at 46 CFR part 388, that the issuance of the waiver will have an unduly adverse effect on a U.S.-vessel builder or a business that uses U.S.-flag vessels in that business, a waiver will not be granted. Comments should refer to the docket number of this notice and the vessel name in order for MARAD to properly consider the comments. Comments should also state the commenter's interest in the waiver application, and address the waiver criteria given in § 388.4 of MARAD's regulations at 46 CFR part 388.

#### 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 (Volume 65, Number 70; Pages 19477-78).

By Order of the Maritime Administrator.

Dated: November 10, 2016.

**T. Mitchell Hudson, Jr.,**

*Secretary, Maritime Administration.*

[FR Doc. 2016-28212 Filed 11-30-16; 8:45 am]

**BILLING CODE 4910-81-P**

**DEPARTMENT OF TRANSPORTATION****Office of the Secretary****[Docket No.: DOT-OST-2016-0206]****Advisory Committee on Transportation Equity Meeting Notice****AGENCY:** Office of the Secretary, U.S. Department of Transportation (DOT).**ACTION:** Notice of open committee meeting.

**SUMMARY:** The Department of Transportation is publishing this notice to announce the following Federal advisory committee meeting of the Advisory Committee on Transportation Equity (ACTE). The meeting is open to the public.

**DATES:** The Committee will meet from 2:30 p.m. to 5 p.m. EST on December 15, 2016.

**ADDRESSES:** The meeting will be held at 1200 New Jersey Avenue SE., Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Barbara McCann, U.S. Department of Transportation, Office of the Secretary, Office of Policy, Room W84-212, 1200 New Jersey Avenue SE., Washington, DC 20590; phone (202) 366-2234; email: [Equity@dot.gov](mailto:Equity@dot.gov).

**SUPPLEMENTARY INFORMATION:** The committee meeting is being held in accordance with the Federal Advisory Committee Act, 5 U.S.C. App.

*Purpose of the Committee:* The purpose of the Committee is to provide advice and recommendations to the Secretary of Transportation on comprehensive, interdisciplinary issues related to transportation equity from a variety of stakeholders involved in transportation planning, design, research, policy, and advocacy.

*Proposed Agenda:* This will be the first meeting of the ACTE. The committee will conduct introductions of members, discuss organizational details and logistics, and discuss equity in transportation planning, design, research, policy and advocacy. Agenda will be as follows:

—Welcome and Mission of ACTE

—Remarks by U.S. Transportation Secretary Anthony Foxx  
—Briefing on FACA Rules and Ethics  
—Discussion on Transportation Equity  
—Public Comments

*Public Accessibility to the Meeting:* Pursuant to 5 U.S.C. 552b, as amended, and 41 CFR 102-3.140 through 102-3.165, and subject to the availability of space, this meeting is open to the public. Seating is on a first to arrive basis. Because the meeting of the committee will be held in a Federal Government facility, security screening is required. Attendees are requested to register by submitting their name, affiliation, email address and daytime phone number three business days prior to the meeting to Barbara McCann, the committee Designated Federal Officer at the address listed in the **FOR FURTHER INFORMATION CONTACT** section. A photo ID is required to enter the premises. Please note that parking is limited. DOT Headquarters is fully handicap accessible. Wheelchair access is available in front at the main entrance of the building. For additional information about public access procedures, contact Ms. McCann, the committee's Designated Federal Officer, at the email address or telephone number listed in the **FOR FURTHER INFORMATION CONTACT** section.

*Written Comments or Statements:* Pursuant to 41 CFR 102-3.105(j) and 102-3.140 and section 10(a)(3) of the Federal Advisory Committee Act, the public or interested organizations may submit written comments or statements to the committee in response to the stated agenda of the meeting or in regard to the committee's mission in general. Written comments or statements should be submitted to Ms. McCann, the committee Designated Federal Officer, via electronic mail, the preferred mode of submission, at the address listed in the **FOR FURTHER INFORMATION CONTACT** section. Each page of the comment or statement must include the author's name, title or affiliation, address, email address and daytime phone number. The Designated Federal Official will review all submitted written comments or statements and provide them to

members of the committee for their consideration. Written comments or statements being submitted in response to the agenda set forth in this notice must be received by the Designated Federal Official at least three business days prior to the meeting to be considered by the committee. Written comments or statements received after this date may not be provided to the committee until its next meeting.

*Verbal Comments or Statements:* Pursuant to 41 CFR 102-3.140d, the Committee is not obligated to allow a member of the public to speak or otherwise address the Committee during the meeting. Members of the public are invited to provide verbal comments or statements during the Committee meeting only at the time and in the manner described below. All requests to speak or otherwise address the Committee during the meeting must be submitted to the committee's Designated Federal Official at least three days prior to the meeting, via electronic mail, the preferred mode of submission, at the address listed in the **FOR FURTHER INFORMATION CONTACT** section. The request should include a brief statement of the subject matter to be addressed by the comment, and should be relevant to the stated agenda of the meeting or in regard to the committee's mission in general. The Designated Federal Official will log each request in the order received. A 30-minute period will be available for verbal public comments. Members of the public who have requested to make a verbal comment will be allotted no more than two minutes, and will be invited to speak in the order in which their requests were received by Designated Federal Official.

*Minutes:* The minutes of this meeting will be available for public review and copying within 60 days at the following Web site: [www.transportation.gov/acte](http://www.transportation.gov/acte).

Issued in Washington, DC, on November 28, 2016.

**Anthony R. Foxx,**

*U.S. Department of Transportation Secretary.*

[FR Doc. 2016-28965 Filed 11-30-16; 8:45 am]

**BILLING CODE 4910-9X-P**



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## Part II

### Environmental Protection Agency

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40 CFR Part 82

Protection of Stratospheric Ozone: New Listings of Substitutes; Changes of Listing Status; and Reinterpretation of Unacceptability for Closed Cell Foam Products Under the Significant New Alternatives Policy Program; and Revision of Clean Air Act Section 608 Venting Prohibition for Propane; Final Rule

**ENVIRONMENTAL PROTECTION AGENCY****40 CFR Part 82**

[EPA-HQ-OAR-2015-0663; FRL-9952-18-OAR]

RIN 2060-AS80

**Protection of Stratospheric Ozone: New Listings of Substitutes; Changes of Listing Status; and Reinterpretation of Unacceptability for Closed Cell Foam Products Under the Significant New Alternatives Policy Program; and Revision of Clean Air Act Section 608 Venting Prohibition for Propane****AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Final rule.

**SUMMARY:** Pursuant to the U.S. Environmental Protection Agency's (EPA) Significant New Alternatives Policy program, this action lists certain substances as *acceptable, subject to use conditions*; lists several substances as *unacceptable*; and changes the listing status for certain substances from *acceptable* to *acceptable, subject to narrowed use limits*, or to *unacceptable*. This action also exempts propane in certain refrigeration end-uses from the Clean Air Act section 608 prohibition on venting, release, or disposal. In addition, this action applies unacceptability determinations for foam-blowing agents to closed cell foam products and products containing closed cell foam that are manufactured or imported using these foam blowing agents.

**DATES:** This rule is effective January 3, 2017. The incorporation by reference of certain publications listed in the rule is approved by the Director of the Federal Register as of January 3, 2017.

**ADDRESSES:** EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2015-0663. All documents in the docket are listed on the <http://www.regulations.gov> Web site. Although listed in the index, some information is not publicly available, e.g., confidential business information (CBI) or other information whose disclosure is restricted by statute. 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 electronically through <http://www.regulations.gov> or in hard copy at the Air and Radiation Docket, EPA/DC, EPA West, Room 3334, 1301 Constitution Avenue NW., Washington, DC 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 Air and Radiation Docket is (202) 566-1742.

**FOR FURTHER INFORMATION CONTACT:** Chenise Farquharson, Stratospheric Protection Division, Office of Atmospheric Programs (Mail Code 6205T), Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460; telephone number: 202-564-7768; email address: [Farquharson.chenise@epa.gov](mailto:Farquharson.chenise@epa.gov). Notices and rulemakings under EPA's Significant New Alternatives Policy program are available on EPA's Stratospheric Ozone Web site at <https://www.epa.gov/snap/snap-regulations>.

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  - A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review
  - B. Paperwork Reduction Act
  - C. Regulatory Flexibility Act

- D. Unfunded Mandates Reform Act
  - E. Executive Order 13132: Federalism
  - F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments
  - G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks
  - H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use
  - I. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51
  - J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations
  - K. Congressional Review Act
- IX. References

## I. General Information

### A. Executive Summary

Under section 612 of the Clean Air Act (CAA), EPA is required to evaluate substitutes<sup>1</sup> to ozone-depleting substances (ODS) for their risks to human health and the environment. EPA reviews substitutes within a comparative risk framework. More specifically, section 612 provides that EPA must prohibit the use of a substitute where EPA has determined that there are other available alternatives that pose less overall risk to human health and the environment. Thus, EPA's Significant New Alternatives Policy (SNAP) program, which implements section 612, does not provide a static list of alternatives. Instead, the list evolves as EPA makes decisions informed by our overall understanding of the environmental and human health impacts as well as our current knowledge about other alternatives. In the more than twenty years since the initial SNAP rule was promulgated, EPA has modified the SNAP lists many times, most often by expanding the list of acceptable substitutes. However, in some cases, EPA has modified the SNAP list by listing a substitute as unacceptable for one or more end-uses or by restricting the use of a previously listed substitute by changing its status for a particular end-use to unacceptable, acceptable subject to use conditions, or acceptable subject to narrowed use.

Over the past twenty years, the SNAP program has played an important role in assisting with a continuous smooth transition to safer alternatives. Since the first SNAP framework rule published in 1994, which provided confidence and certainty by identifying safer alternatives in key consumer and

industrial uses, the SNAP program has ensured that businesses and consumers have access to information about suitable alternatives. The SNAP program works with many stakeholders, domestically and abroad, to continuously evaluate and provide updates on safer alternatives and new technologies. Thanks to these efforts and the work of individuals, businesses, and organizations, the transitions generally have been successful.

When reviewing a substitute, EPA compares the risk posed by that substitute to the risks posed by other alternatives and determines whether that specific substitute under review poses significantly more risk than other available or potentially available alternatives for the same use. EPA recently has begun to review the lists in a broader manner to determine whether substitutes added to the lists early in the program pose significantly more risk than substitutes that have more recently been added. As with initial listing decisions, EPA bases decisions to change the status of an already listed alternative on the same comparative risk framework.

In this action, EPA is listing a number of substances as acceptable, subject to use conditions; listing several substances as unacceptable; and changing the listing status for certain substances from acceptable to acceptable, subject to narrowed use limits or to unacceptable. We performed a comparative risk analysis, based on our criteria for review, with other alternatives for the relevant end-uses. For the substances addressed in this action, EPA found significant potential differences in risk as compared to other available or potentially available substitutes with respect to one or more specific criteria, such as flammability, toxicity, or local air quality. In some cases, those risks could be addressed through use conditions and EPA is listing several substitutes as acceptable, subject to use conditions. In other cases, the risks could not be adequately mitigated through use conditions and, in those cases, EPA is listing several new substitutes and changing the status of several existing substitutes to unacceptable. In a few instances, EPA established narrowed use limits for certain substitutes over a limited period of time for specific military or space-and-aeronautics-related applications in the refrigeration and air conditioning (AC), and foam blowing sectors, on the basis that other acceptable alternatives would not be available for those specific applications within broader end-uses, but acceptable alternatives were expected to become available over time.

EPA is also applying unacceptability determinations for foam blowing agents to closed cell foam products and products containing closed cell foam. See section VI.C.4 for the details of this action. Additionally, EPA is exempting propane as a refrigerant in new self-contained commercial ice machines, in new water coolers, and in new very low temperature refrigeration equipment from the venting prohibition under CAA section 608(c)(2). See section VI.A.2.c for the details of this action.

Per the guiding principles of the SNAP program, this action does not specify that any alternative is acceptable or unacceptable across all sectors and end-uses. Instead, in all cases, EPA considered the intersection between the specific alternative and the particular end-use and the availability of substitutes for those particular end-uses. In the case of refrigeration and AC, we consider new equipment to be a separate end-use from retrofitting existing equipment with a different refrigerant from that for which the equipment was originally designed. EPA is not setting a "risk threshold" for any specific SNAP criterion, such that the only acceptable substitutes pose risk below a specified level of risk. Because the substitutes available and the types of risk they may pose vary by sector and end-use, our review focuses on the specific end-use and the alternatives for that end-use, including the other risks alternatives might pose. Thus, there is no bright line that can be established to apply to all sectors and end-uses. Also, EPA recognizes that there are a range of substitutes with various uses that include both fluorinated (*e.g.*, hydrofluorocarbons (HFCs) and hydrofluoroolefins (HFOs)) and non-fluorinated (*e.g.*, hydrocarbons (HCs) and carbon dioxide (CO<sub>2</sub>)) substitutes that may pose lower overall risk to human health and the environment. Consistent with CAA section 612 as we have historically interpreted it under the SNAP program, this rule includes both initial listings and certain modifications to the current lists based on our evaluation of the substitutes addressed in this action using the SNAP criteria for evaluation and considering the current suite of other alternatives for the specific end-use at issue.

The following is a summary of the actions taken in this rule.

#### 1. Acceptable Alternatives, With Use Conditions, by End-Use (Initial Listings)

(1) For refrigeration, EPA is listing as acceptable, subject to use conditions, as of January 3, 2017:

- Propane in new commercial ice machines, new water coolers, and new

<sup>1</sup> The terms "alternatives" and "substitutes" are used interchangeably in this document.

very low temperature refrigeration equipment.

(2) For motor vehicle air conditioning (MVAC) systems, EPA is listing, as acceptable, subject to use conditions, as of January 3, 2017:

- HFO-1234yf in newly manufactured medium-duty passenger vehicles (MDPVs), heavy-duty (HD) pickup trucks, and complete HD vans.

(3) For fire suppression and explosion protection end-uses, EPA is listing as acceptable, subject to use conditions, as of January 3, 2017:

- 2-bromo-3,3,3-trifluoroprop-1-ene (2-BTP) as a total flooding agent for use in engine nacelles and auxiliary power units (APUs) on aircraft; and
- 2-BTP as a streaming agent for use in handheld extinguishers in aircraft.

## 2. Unacceptable Alternatives by End-Use (Initial Listings)

(1) For retrofit residential and light commercial AC and heat pumps—unitary split AC systems and heat pumps, EPA is listing as unacceptable, as of January 3, 2017:

- All refrigerants identified as flammability Class 3 in American National Standards Institute (ANSI)/American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 34–2013; and

- All refrigerants meeting the criteria for flammability Class 3 in ANSI/ASHRAE Standard 34–2013. These include, but are not limited to, refrigerant products sold under the names R-22a, 22a, Blue Sky 22a refrigerant, Coolant Express 22a, DURACOOOL-22a, EC-22, Ecofreeez EF-22a, EnviroSAFE 22a, ES-22a, Frost 22a, HC-22a, Maxi-Fridge, MX-22a, Oz-Chill 22a, Priority Cool, and RED TEK 22a.

(2) For new residential and light commercial AC and heat pumps, cold storage warehouses, centrifugal chillers, and positive displacement chillers, EPA is listing as unacceptable, as of January 3, 2017:

- Propylene and R-443A.

## 3. Unacceptable Alternatives by End-Use (Change of Listing Status)

(1) For new centrifugal chillers, EPA is listing as unacceptable, except as otherwise allowed under a narrowed use limit, as of January 1, 2024:

- FOR12A, FOR12B, HFC-134a, HFC-227ea, HFC-236fa, HFC-245fa, R-125/134a/600a (28.1/70/1.9), R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-410A, R-410B, R-417A, R-421A, R-422B, R-422C, R-422D, R-423A, R-424A, R-434A, R-438A, R-507A, RS-44 (2003 composition), and THR-03.

(2) For new positive displacement chillers, EPA is listing as unacceptable,

except as otherwise allowed under a narrowed use limit, as of January 1, 2024:

- FOR12A, FOR12B, HFC-134a, HFC-227ea, KDD6, R-125/134a/600a (28.1/70/1.9), R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-410A, R-410B, R-417A, R-421A, R-422B, R-422C, R-422D, R-424A, R-434A, R-437A, R-438A, R-507A, RS-44 (2003 composition), SP34E, and THR-03.

(3) For new centrifugal chillers, EPA is listing as acceptable, subject to narrowed use limits, as of January 1, 2024:

- HFC-134a for military marine vessels and HFC-134a and R-404A for human-rated spacecraft and related support equipment

(4) For new positive displacement chillers, EPA is listing as acceptable, subject to narrowed use limits, as of January 1, 2024:

- HFC-134a for military marine vessels and HFC-134a and R-404A for human-rated spacecraft and related support equipment

(5) For new cold storage warehouses, EPA is listing as unacceptable, as of January 1, 2023:

- HFC-227ea, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407A, R-407B, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-423A, R-424A, R-428A, R-434A, R-438A, R-507A, and RS-44 (2003 composition).

(6) For new retail food refrigeration (refrigerated food processing and dispensing equipment), EPA is listing as unacceptable, as of January 1, 2021:

- HFC-227ea, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407A, R-407B, R-407C, R-407F, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-428A, R-434A, R-437A, R-438A, R-507A, RS-44 (2003 formulation).

(7) For new household refrigerators and freezers, EPA is listing as unacceptable, as of January 1, 2021:

- FOR12A, FOR12B, HFC-134a, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-407F, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-426A, R-428A, R-434A, R-437A, R-438A, R-507A, RS-24 (2002 formulation), RS-44 (2003 formulation), SP34E, and THR-03.

(8) For rigid polyurethane (PU) high-pressure two-component spray foam, EPA is listing as unacceptable for all uses, except military or space- and aeronautics-related applications, as of January 1, 2020; as acceptable, subject to narrowed use limits, for military or space- and aeronautics-related applications, as of January 1, 2020; and

as unacceptable for military or space- and aeronautics-related applications as of January 1, 2025:

- HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365mfc; and Formacel TI.<sup>2</sup>

(9) For rigid PU low-pressure two-component spray foam, EPA is listing as unacceptable for all uses, except military or space- and aeronautics-related applications, as of January 1, 2021; as acceptable, subject to narrowed use limits, for military or space- and aeronautics-related applications, as of January 1, 2021; and as unacceptable for military or space- and aeronautics-related applications as of January 1, 2025:

- HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365mfc; and Formacel TI.<sup>3</sup>

(10) For rigid PU one-component foam sealants, EPA is listing as unacceptable, as of January 1, 2020:

- HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365mfc; and Formacel TI.<sup>4</sup>

(11) For all foam blowing end-uses except for rigid PU spray foam, EPA is listing as unacceptable, as of January 1, 2025:

- HFCs and HFC blends previously listed as unacceptable as of January 1, 2022, for space- and aeronautics-related applications.

(12) For flexible PU foam applications, EPA is listing as unacceptable, as of January 3, 2017:

- Methylene chloride.

While EPA proposed and requested comments on listing certain perfluorocarbons (PFCs) as unacceptable in fire suppression total flooding uses, EPA is not finalizing that change in this rulemaking.

## 4. Other Changes

(1) For all foam blowing end-uses, EPA is prohibiting the use of closed cell

<sup>2</sup> Closed cell foam products and products containing closed cell foams manufactured on or before January 1, 2020, may be used after that date.

<sup>3</sup> Closed cell foam products and products containing closed cell foams manufactured on or before January 1, 2021, may be used after that date.

<sup>4</sup> Closed cell foam products and products containing closed cell foams manufactured on or before January 1, 2020, may be used after that date.

foam products and products that contain closed cell foam manufactured with an unacceptable foam blowing agent on or after the later of (A) December 1, 2017 or (B) the date of the unacceptability listing.

(2) For fire suppression total flooding uses, EPA is clarifying the listing for Powdered Aerosol D (Stat-X®), which was previously listed as both “acceptable” and “acceptable, subject to use conditions,” by removing the listing

as “acceptable, subject to use conditions,” as of January 3, 2017.

*B. Does this action apply to me?*

Potential entities that may be affected by this rule include:

TABLE 1—POTENTIALLY REGULATED ENTITIES BY NORTH AMERICAN INDUSTRIAL CLASSIFICATION SYSTEM (NAICS) CODE

Category	NAICS code	Description of regulated entities
Construction .....	238210	Alarm System (e.g., Fire, Burglar), Electric, Installation Only.
Industry .....	238220	Plumbing, Heating, And Air Conditioning Contractors.
Industry .....	325199	All Other Basic Organic Chemical Manufacturing.
Industry .....	325412	Pharmaceutical Preparation Manufacturing.
Industry .....	325520	Adhesive Manufacturing.
Industry .....	325998	All Other Miscellaneous Chemical Product and Preparation Manufacturing.
Industry .....	326150	Urethane and Other Foam Product (Except Polystyrene) Manufacturing.
Manufacturing ...	332919	Nozzles, Firefighting, Manufacturing.
Industry .....	333415	Manufacturers of Refrigerators, Freezers, and Other Refrigerating or Freezing Equipment, Electric or Other (NESOI); Heat Pumps Not Elsewhere Specified or Included; and Parts Thereof.
Industry .....	333415	Air Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing.
Manufacturing ...	334290	Fire Detection and Alarm Systems Manufacturing.
Industry .....	335222	Household Refrigerator and Home Freezer Manufacturing.
Industry .....	336120	Heavy-Duty Truck Manufacturing.
Industry .....	336211	Motor Vehicle Body Manufacturing.
Industry .....	3363	Motor Vehicle Parts Manufacturing.
Industry .....	3364	Aerospace Product and Parts Manufacturing.
Manufacturing ...	336411	Aircraft Manufacturing.
Manufacturing ...	336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing.
Industry .....	336992	Military Armored Vehicle, Tank, and Tank Component Manufacturing.
Industry .....	339113	Surgical Appliance and Supplies Manufacturing.
Manufacturing ...	339999	Fire Extinguishers, Portable, Manufacturing.
Retail .....	423620	Household Appliances, Electric Housewares, and Consumer Electronics Merchant Wholesalers.
Retail .....	423740	Refrigeration Equipment and Supplies Merchant Wholesalers.
Retail .....	423930	Recyclable Material Merchant Wholesalers.
Retail .....	443111	Appliance Stores: Household-Type.
Retail .....	44511	Supermarkets and Other Grocery (Except Convenience) Stores.
Retail .....	445110	Supermarkets and Other Grocery (Except Convenience) Stores.
Retail .....	445120	Convenience Stores.
Retail .....	44521	Meat Markets.
Retail .....	44522	Fish and Seafood Markets.
Retail .....	44523	Fruit and Vegetable Markets.
Retail .....	445291	Baked Goods Stores.
Retail .....	445292	Confectionary and Nut Stores.
Retail .....	445299	All Other Specialty Food Stores.
Retail .....	4453	Beer, Wine, and Liquor Stores.
Retail .....	446110	Pharmacies and Drug Stores.
Retail .....	44711	Gasoline Stations With Convenience Stores.
Retail .....	452910	Warehouse Clubs and Supercenters.
Retail .....	452990	All Other General Merchandise Stores.
Services .....	72111	Hotels (Except Casino Hotels) and Motels.
Services .....	72112	Casino Hotels.
Retail .....	72241	Drinking Places (Alcoholic Beverages).
Retail .....	722513	Limited-Service Restaurants.
Retail .....	722514	Cafeterias, Grill Buffets, and Buffets.
Retail .....	722515	Snack and Nonalcoholic Beverage Bars.
Services .....	81119	Other Automotive Repair and Maintenance.
Services .....	811412	Appliance Repair and Maintenance.
Services .....	922160	Fire Protection.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your entity is regulated by this action, you

should carefully examine the applicability criteria found in 40 CFR part 82. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

*C. What acronyms and abbreviations are used in the preamble?*

Below is a list of acronyms and abbreviations used in the preamble of this document:

AC—Air Conditioning  
 AAC—American Automotive Council  
 ACGIH—American Conference of Governmental Industrial Hygienists  
 AEGL—Acute Emergency Guideline Limits



AHIA—American Industrial Hygiene Association  
 AHRI—Air Conditioning, Heating and Refrigeration Institute  
 AIRAH—Australian Institute of Refrigeration, Air Conditioning and Heating  
 ANSI—American National Standards Institute  
 APU—Auxiliary Power Unit  
 ASHRAE—American Society of Heating, Refrigerating and Air-Conditioning Engineers  
 ASRAC—Appliance Standards and Rulemaking Federal Advisory Committee  
 ASTM—American Society for Testing and Materials  
 BTU—British Thermal Units  
 CAA—Clean Air Act  
 CAP—Climate Action Plan  
 CAS Reg. No.—Chemical Abstracts Service Registry Identification Number  
 CBI—Confidential Business Information  
 CFC—Chlorofluorocarbon  
 CFR—Code of Federal Regulations  
 CH<sub>4</sub>—Methane  
 CMAQ—Community Multiscale Air Quality  
 CO<sub>2</sub>—Carbon Dioxide  
 CO<sub>2</sub>eq—Carbon Dioxide Equivalent  
 CRP—Cooperative Research Programs  
 CSA—Canadian Standards Association  
 CUAC—Commercial Unitary Air Conditioner  
 CUHP—Commercial Unitary Heat Pump  
 DoD—United States Department of Defense  
 DOE—United States Department of Energy  
 DX—Direct Expansion  
 EEAP—Environmental Effects Assessment Panel  
 EIA—Environmental Investigation Agency  
 EO—Executive Order  
 EPA—United States Environmental Protection Agency  
 EU—European Union  
 FMEA—Failure Mode and Effects Analysis  
 FAA—Federal Aviation Administration  
 FCA—Fiat Chrysler Automobiles  
 FR—Federal Register  
 FTA—Fault Tree Analysis  
 g—Gram  
 GHG—Greenhouse Gas  
 GtCO<sub>2</sub>eq—Gigatonnes of Carbon Dioxide Equivalent  
 GWP—Global Warming Potential  
 GVWR—Gross Vehicle Weight Rating  
 HBFC—Hydrobromofluorocarbon  
 HC—Hydrocarbon  
 HCFC—Hydrochlorofluorocarbon  
 HD—Heavy-Duty  
 HD GHG—Heavy-Duty Greenhouse Gas  
 HF—Hydrogen Fluoride  
 HFC—Hydrofluorocarbon  
 HFO—Hydrofluoroolefin  
 IBC—International Building Code  
 ICAO—International Civil Aviation Organization  
 ICC—International Code Council  
 ICF—ICF International, Inc.  
 IDLH—Immediately Dangerous to Life and Health  
 IEC—International Electrochemical Commission  
 IGSD—Institute for Governance and Sustainable Development  
 IIAR—Institute of Ammonia Refrigeration  
 IPCC—Intergovernmental Panel on Climate Change  
 IPLV—Integrated Part-Load Value

IPR—Industrial Process Refrigeration  
 kPa—Kilopascal  
 kW—Kilowatt  
 LD—Light-Duty  
 LD GHG—Light-Duty Greenhouse Gas  
 LFL—Lower Flammability Limit  
 LOAEL—Lowest Observed Adverse Effect Level  
 MAC Directive—Directive on Mobile Air Conditioning  
 MACT—Maximum Achievable Technology  
 MDPV—Medium-Duty Passenger Vehicle  
 MIR—Maximum Incremental Reactivity  
 MMTCO<sub>2</sub>eq—Million Metric Tons of Carbon Dioxide Equivalent  
 MVAC—Motor Vehicle Air Conditioning  
 MY—Model Year  
 N<sub>2</sub>O—Nitrous Oxide  
 NAAQS—National Ambient Air Quality Standards  
 NAICS—North American Industrial Classification System  
 NESHA—National Emission Standards for Hazardous Air Pollutants  
 NFPA—National Fire Protection Association  
 NHTSA—National Highway Traffic Safety Administration  
 NIK—Not-In-Kind  
 NIOSH—National Institute for Occupational Safety and Health  
 NOAEL—No-Observed-Adverse-Effect-Level  
 NPRM—Notice of Proposed Rulemaking  
 NRDC—Natural Resource Defense Council  
 OEM—Original Equipment Manufacturer  
 ODP—Ozone Depletion Potential  
 ODS—Ozone-Depleting Substance  
 OMB—United States Office of Management and Budget  
 OSHA—United States Occupational Safety and Health Administration  
 PEL—Permissible Exposure Limit  
 PFC—Perfluorocarbon  
 PMS—Pantone Matching System  
 ppb—Parts Per Billion  
 PPE—Personal Protective Equipment  
 ppm—Parts Per Million  
 PSM—Process Safety Management  
 PTAC—Packaged Terminal Air Conditioners  
 PTHP—Packaged Terminal Heat Pumps  
 PU—Polyurethane  
 RCRA—Resource Conservation and Recovery Act  
 REL—Recommended Exposure Limit  
 RfC—Reference Concentration  
 RMP—Risk Management Plan  
 RSES—Refrigeration Service Engineers Society  
 RTOC—Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee  
 SARPS—Standards and Recommended Practices  
 SAE ICC—SAE International's Interior Climate Control Committee  
 SAP—Scientific Assessment Panel  
 SF<sub>6</sub>—Sulfur Hexafluoride  
 SIP—State Implementation Plan  
 SISNOSE—significant economic impact on a substantial number of small entities  
 SNAP—Significant New Alternatives Policy  
 SRES—Special Report on Emissions Scenarios  
 STEL—Short-term Exposure Limit  
 SUV—Sport Utility Vehicles  
 TEAP—Technical and Economic Assessment Panel  
 TFA—Trifluoroacetic Acid

TLV—Threshold Limit Value  
 TWA—Time Weighted Average  
 UNFCCC—United Nations Framework Convention on Climate Change  
 UL—Underwriters Laboratories, Inc.  
 UMRA—Unfunded Mandates Reform Act  
 UNEP—United Nations Environmental Programme  
 VOC—Volatile Organic Compound  
 WEEL—Workplace Environmental Exposure Limit

## II. How does the SNAP program work?

### A. What are the statutory requirements and authority for the SNAP program?

CAA section 612 requires EPA to develop a program for evaluating alternatives to ODS. This program is known as the SNAP program. The major provisions of section 612 are:

#### 1. Rulemaking

Section 612(c) requires EPA to promulgate rules making it unlawful to replace any class I (chlorofluorocarbon (CFC), halon, carbon tetrachloride, methyl chloroform, methyl bromide, hydrobromofluorocarbon (HBFC), and chlorobromomethane) or class II hydrochlorofluorocarbon (HCFC)) substance with any substitute that the Administrator determines may present adverse effects to human health or the environment where the Administrator has identified an alternative that (1) reduces the overall risk to human health and the environment and (2) is currently or potentially available.

#### 2. Listing of Unacceptable/Acceptable Substitutes

Section 612(c) requires EPA to publish a list of the substitutes that it finds to be unacceptable for specific uses and to publish a corresponding list of acceptable substitutes for specific uses. The list of "acceptable" substitutes is found at [www.epa.gov/ozone/snap/substitutes-sector](http://www.epa.gov/ozone/snap/substitutes-sector) and the lists of "unacceptable," "acceptable, subject to use conditions," and "acceptable, subject to narrowed use limits" substitutes are found in the appendices to 40 CFR part 82 subpart G.

#### 3. Petition Process

Section 612(d) grants the right to any person to petition EPA to add a substance to, or delete a substance from, the lists published in accordance with section 612(c). The Agency has 90 days to grant or deny a petition. Where the Agency grants the petition, EPA must publish the revised lists within an additional six months.

#### 4. 90-Day Notification

Section 612(e) directs EPA to require any person who produces a chemical substitute for a class I substance to

notify the Agency not less than 90 days before new or existing chemicals are introduced into interstate commerce for significant new uses as substitutes for a class I substance. The producer must also provide the Agency with the producer's unpublished health and safety studies on such substitutes.

#### 5. Outreach

Section 612(b)(1) states that the Administrator shall seek to maximize the use of federal research facilities and resources to assist users of class I and II substances in identifying and developing alternatives to the use of such substances in key commercial applications.

#### 6. Clearinghouse

Section 612(b)(4) requires the Agency to set up a public clearinghouse of alternative chemicals, product substitutes, and alternative manufacturing processes that are available for products and manufacturing processes which use class I and II substances.

#### *B. What are EPA's regulations implementing CAA section 612?*

On March 18, 1994, EPA published the initial SNAP rule (59 FR 13044) which established the process for administering the SNAP program and issued EPA's first lists identifying acceptable and unacceptable substitutes in major industrial use sectors (40 CFR part 82 subpart G). These sectors include the following: Refrigeration and AC; foam blowing; solvents cleaning; fire suppression and explosion protection; sterilants; aerosols; adhesives, coatings and inks; and tobacco expansion. These sectors comprise the principal industrial sectors that historically consumed the largest volumes of ODS.

#### *C. How do the regulations for the SNAP program work?*

Under the SNAP regulations, anyone who produces a substitute to replace a class I or II ODS in one of the eight major industrial use sectors listed previously must provide the Agency with notice and the required health and safety information on the substitute at least 90 days before introducing it into interstate commerce for significant new use as an alternative (40 CFR 82.176(a)). While this requirement typically applies to chemical manufacturers as the person likely to be planning to introduce the substitute into interstate commerce,<sup>5</sup> it

may also apply to importers, formulators, equipment manufacturers, or end users<sup>6</sup> when they are responsible for introducing a substitute into interstate commerce. The 90-day SNAP review process begins once EPA receives the submission and determines that the submission includes complete and adequate data (40 CFR 82.180(a)). The CAA and the SNAP regulations, 40 CFR 82.174(a), prohibit use of a substitute earlier than 90 days after a complete submission has been provided to the Agency.

The Agency has identified four possible decision categories for substitute submissions: Acceptable; acceptable, subject to use conditions; acceptable, subject to narrowed use limits; and unacceptable (40 CFR 82.180(b)).<sup>7</sup> Use conditions and narrowed use limits are both considered "use restrictions" and are explained later in this action. Substitutes that are deemed acceptable without use conditions can be used for all applications within the relevant sector end-uses and without limits under SNAP on how they may be used. Substitutes that are acceptable, subject to use restrictions may be used only in accordance with those restrictions. Substitutes that are found to be unacceptable may not be used after the date specified in the rulemaking adding them to the list of unacceptable substitutes.<sup>8</sup>

After reviewing a substitute, the Agency may determine that a substitute is acceptable only if certain conditions in the way that the substitute is used are met to ensure risks to human health and

state, territory, possession or the District of Columbia, or the sale, use or manufacture of any product in more than one state, territory, possession or District of Columbia. The entry points for which a product is introduced into interstate commerce are the release of a product from the facility in which the product was manufactured, the entry into a warehouse from which the domestic manufacturer releases the product for sale or distribution, and at the site of United States Customs clearance.

<sup>6</sup> As defined at 40 CFR 82.172, "end-use" means processes or classes of specific applications within major industrial sectors where a substitute is used to replace an ODS.

<sup>7</sup> The SNAP regulations also include "pending," referring to submissions for which EPA has not reached a determination, under this provision.

<sup>8</sup> As defined at 40 CFR 82.172, "use" means any use of a substitute for a class I or class II ozone-depleting compound, including but not limited to use in a manufacturing process or product, in consumption by the end-user, or in intermediate uses, such as formulation or packaging for other subsequent uses. This definition of use encompasses manufacturing process of products both for domestic use and for export. Substitutes manufactured within the United States exclusively for export are subject to SNAP requirements since the definition of use in the rule includes use in the manufacturing process, which occurs within the United States.

the environment are not significantly greater than other substitutes. EPA describes such substitutes as "acceptable, subject to use conditions." Entities that use these substitutes without meeting the associated use conditions are in violation of CAA section 612 and EPA's SNAP regulations (40 CFR 82.174(c)).

For some substitutes, the Agency may permit a narrow range of use within an end-use or sector. For example, the Agency may limit the use of a substitute to certain end-uses or specific applications within an industry sector. The Agency generally requires a user of a substitute subject to narrowed use limits to demonstrate that no other acceptable substitutes are available for their specific application.<sup>9</sup> EPA describes these substitutes as "acceptable, subject to narrowed use limits." A person using a substitute that is acceptable, subject to narrowed use limits in applications and end-uses that are not consistent with the narrowed use limit is using these substitutes in violation of CAA section 612 and EPA's SNAP regulations (40 CFR 82.174(c)).

The section 612 mandate for EPA to prohibit the use of a substitute that may present risk to human health or the environment where a lower risk alternative is available or potentially available<sup>10</sup> provides EPA with the authority to change the listing status of a particular substitute if such a change is justified by new information or changed circumstance. The Agency publishes its SNAP program decisions in the **Federal Register**. EPA uses notice and comment rulemaking to place any alternative on the list of prohibited substitutes, to list a substitute as acceptable only subject to use conditions or narrowed use limits, or to

<sup>9</sup> In the case of the July 20, 2015, final rule, EPA established narrowed use limits for certain substitutes over a limited period of time for specific MVAC and foam applications, on the basis that other acceptable alternatives would not be available for those specific applications within broader end-uses, but acceptable alternatives were expected to become available over time, e.g., after military qualification testing for foam blowing agents in military applications or after development of improved servicing infrastructure in a destination country for MVAC in vehicles destined for export.

<sup>10</sup> In addition to acceptable commercially available alternatives, the SNAP program may consider potentially available alternatives. The SNAP program's definition of "potentially available" is "any alternative for which adequate health, safety, and environmental data, as required for the SNAP notification process, exist to make a determination of acceptability, and which the Agency reasonably believes to be technically feasible, even if not all testing has yet been completed and the alternative is not yet produced or sold." (40 CFR 82.172)

<sup>5</sup> As defined at 40 CFR 82.104, "interstate commerce" means the distribution or transportation of any product between one state, territory, possession or the District of Columbia, and another

remove a substitute from either the list of prohibited or acceptable substitutes.

In contrast, EPA publishes “notices of acceptability” to notify the public of substitutes that are deemed acceptable with no restrictions. As described in the preamble to the rule initially implementing the SNAP program (59 FR 13044; March 18, 1994), rulemaking procedures are not necessary to list substitutes that are acceptable without restrictions because such listings neither impose any sanction nor prevent anyone from using a substitute.

Many SNAP listings include “comments” or “further information” to provide additional information on substitutes. Since this additional information is not part of the regulatory decision, these statements are not binding for use of the substitute under the SNAP program. However, regulatory requirements so listed are binding under other regulatory programs (e.g., worker protection regulations promulgated by the U.S. Occupational Safety and Health Administration (OSHA)). The “further information” classification does not necessarily include all other legal obligations pertaining to the use of the substitute. While the items listed are not legally binding under the SNAP program, EPA encourages users of substitutes to apply all statements in the “further information” column in their use of these substitutes. In many instances, the information simply refers to sound operating practices that have already been identified in existing industry and/or building codes or standards. Thus, many of the statements, if adopted, would not require the affected user to make significant changes in existing operating practices.

#### *D. What are the guiding principles of the SNAP Program?*

The seven guiding principles of the SNAP program, elaborated in the preamble to the initial SNAP rule and consistent with section 612, are discussed in this section.

##### **1. Evaluate Substitutes Within a Comparative Risk Framework**

The SNAP program evaluates the risk of alternative compounds compared to available or potentially available substitutes to the ozone-depleting compounds which they are intended to replace. The risk factors that are considered include ozone depletion potential (ODP) as well as flammability, toxicity, occupational health and safety, and contributions to climate change and other environmental factors.

##### **2. Do Not Require That Substitutes Be Risk Free To Be Found Acceptable**

Substitutes found to be acceptable must not pose significantly greater risk than other substitutes, but they do not have to be risk free. A key goal of the SNAP program is to promote the use of substitutes that minimize risks to human health and the environment relative to other alternatives. In some cases, this approach may involve designating a substitute acceptable even though the compound may pose a risk of some type, provided its use does not pose significantly greater risk than other alternatives.

##### **3. Restrict Those Substitutes That Are Significantly Worse**

EPA does not intend to restrict a substitute if it has only marginally greater risk. Drawing fine distinctions would be extremely difficult. The Agency also does not want to intercede in the market's choice of substitutes by listing as unacceptable all but one substitute for each end-use, and does not intend to restrict substitutes on the market unless a substitute has been proposed or is being used that is clearly more harmful to human health or the environment than other alternatives.

##### **4. Evaluate Risks by Use**

Central to SNAP's evaluations is the intersection between the characteristics of the substitute itself and its specific end-use application. Section 612 requires that substitutes be evaluated by use. Environmental and human health exposures can vary significantly depending on the particular application of a substitute. Thus, the risk characterizations must be designed to represent differences in the environmental and human health effects associated with diverse uses. This approach cannot, however, imply fundamental tradeoffs with respect to different types of risk to either the environment or to human health.

##### **5. Provide the Regulated Community With Information as Soon as Possible**

The Agency recognizes the need to provide the regulated community with information on the acceptability of various substitutes as soon as possible. To do so, EPA issues notices or determinations of acceptability and rules identifying substitutes as unacceptable; acceptable, subject to use conditions; or acceptable, subject to narrowed use limits, in the **Federal Register**. In addition, we maintain lists of acceptable and unacceptable alternatives on our Web site, [www.epa.gov/ozone/snap](http://www.epa.gov/ozone/snap).

##### **6. Do Not Endorse Products Manufactured by Specific Companies**

The Agency does not issue company-specific product endorsements. In many cases, the Agency may base its analysis on data received on individual products, but the addition of a substitute to the acceptable list based on that analysis does not represent an endorsement of that company's products.

##### **7. Defer to Other Environmental Regulations When Warranted**

In some cases, EPA and other federal agencies have developed extensive regulations under other sections of the CAA or other statutes that address potential environmental or human health effects that may result from the use of alternatives to class I and class II substances. For example, use of some substitutes may in some cases entail increased use of chemicals that contribute to tropospheric air pollution. The SNAP program takes existing regulations under other programs into account when reviewing substitutes.

#### *E. What are EPA's criteria for evaluating substitutes under the SNAP program?*

EPA applies the same criteria for determining whether a substitute is acceptable or unacceptable. These criteria, which can be found at § 82.180(a)(7), include atmospheric effects and related health and environmental effects, ecosystem risks, consumer risks, flammability, and cost and availability of the substitute. To enable EPA to assess these criteria, we require submitters to include various information including ODP, global warming potential (GWP), toxicity, flammability, and the potential for human exposure.

When evaluating potential substitutes, EPA evaluates these criteria in the following groupings:

**1. Atmospheric effects**—The SNAP program evaluates the potential contributions to both ozone depletion and climate change. The SNAP program considers the ODP and the 100-year integrated GWP of compounds to assess atmospheric effects.

**2. Exposure assessments**—The SNAP program uses exposure assessments to estimate concentration levels of substitutes to which workers, consumers, the general population, and the environment may be exposed over a determined period of time. These assessments are based on personal monitoring data or area sampling data if available. Exposure assessments may be conducted for many types of releases including:

- Releases in the workplace and in homes;
- Releases to ambient air and surface water;
- Releases from the management of solid wastes.

3. *Toxicity data*—The SNAP program uses toxicity data to assess the possible health and environmental effects of exposure to substitutes. We use broad health-based criteria such as:

- Permissible Exposure Limits (PELs) for occupational exposure;
- Inhalation reference concentrations (RfCs) for non-carcinogenic effects on the general population;
- Cancer slope factors for carcinogenic risk to members of the general population.

When considering risks in the workplace, if OSHA has not issued a PEL for a compound, EPA then considers Recommended Exposure Limits (RELs) from the National Institute for Occupational Safety and Health (NIOSH), Workplace Environmental Exposure Limits (WEELs) set by the American Industrial Hygiene Association (AIHA), or threshold limit values (TLVs) set by the American Conference of Governmental Industrial Hygienists (ACGIH). If limits for occupational exposure or exposure to the general population are not already established, then EPA derives these values following the Agency's peer review guidelines. Exposure information is combined with toxicity information to explore any basis for concern. Toxicity data are used with existing EPA guidelines to develop health-based limits for interim use in these risk characterizations.

4. *Flammability*—The SNAP program examines flammability as a safety concern for workers and consumers. EPA assesses flammability risk using data on:

- Flash point and flammability limits (e.g., ASHRAE flammability/combustibility classifications);
- Data on testing of blends with flammable components;
- Test data on flammability in consumer applications conducted by independent laboratories; and
- Information on flammability risk mitigation techniques.

5. *Other environmental impacts*—The SNAP program also examines other potential environmental impacts like ecotoxicity and local air quality impacts. A compound that is likely to be discharged to water may be evaluated for impacts on aquatic life. Some substitutes are volatile organic compounds (VOCs). EPA also notes whenever a potential substitute is considered a hazardous or toxic air

pollutant (under CAA sections 112(b) and 202(l)) or hazardous waste under the Resource Conservation and Recovery Act (RCRA) subtitle C regulations.

EPA's consideration of cost in listing decisions is limited to evaluating the cost of the substitute under review pursuant to § 82.180(a)(7)(vii). This is distinct from consideration of costs associated with the use of other alternatives to which the substitute is being compared. *See Honeywell v. EPA*, 374 F.3d 1363 (D.C. Cir. 2004) at 1,378 (J. Rogers, concurring in part and dissenting in part) ("While the SNAP regulations make the 'cost and availability of the substitute' an element of acceptability . . . that concern is limited to whether EPA 'has . . . reason to prohibit its use,' not to whether cleaner alternatives for the substance are already 'currently or potentially available'. . . . Consideration of transition costs is thus precluded by the SNAP regulations as currently written, irrespective of whether it might be permitted under CAA § 612(c) . . .").

Over the past twenty years, the menu of substitutes has become much broader and a great deal of new information has been developed on many substitutes. Because the overall goal of the SNAP program is to ensure that substitutes listed as acceptable do not pose significantly greater risk to human health and the environment than other substitutes, the SNAP criteria continue to be informed by our current overall understanding of environmental and human health impacts and our experience with and current knowledge about alternatives. Over time, the range of substitutes reviewed by SNAP has changed, and at the same time, scientific approaches have evolved to more accurately assess the potential environmental and human health impacts of these chemicals and alternative technologies.

#### *F. How are SNAP determinations updated?*

Three mechanisms exist for modifying the list of SNAP determinations. First, under section 612(d), the Agency must review and either grant or deny petitions to add or delete substances from the SNAP list of acceptable or unacceptable substitutes. That provision allows any person to petition the Administrator to add a substance to the list of acceptable or unacceptable substitutes or to remove a substance from either list. The second means is through the notifications which must be submitted to EPA 90 days before introduction of a substitute into interstate commerce for significant new

use as an alternative to a class I or class II substance. These 90-day notifications are required by CAA section 612(e) for producers of substitutes to class I substances for new uses and, in all other cases, by EPA regulations issued under sections 114 and 301 of the Act to implement section 612(c).

Finally, since the inception of the SNAP program, we have interpreted the section 612 mandate to find substitutes acceptable or unacceptable to include the authority to act on our own to add or remove a substance from the SNAP lists (59 FR 13044, 13047; March 18, 1994). In determining whether to add or remove a substance from the SNAP lists, we consider whether there are other alternatives that pose lower overall risk to human health and the environment. In determining whether to modify a listing of a substitute we undertake the same consideration, but do so in the light of new data that may not have been available at the time of our original listing decision, including information on substitutes that was not included in our comparative review at the time of our initial listing decision and new information on substitutes previously reviewed.

#### *G. What does EPA consider in deciding whether to add a substance to or remove a substance from one of the SNAP lists?*

As described in this document and elsewhere, including in the initial SNAP rule published in the **Federal Register** on March 18, 1994 (59 FR 13044), CAA section 612 requires EPA to list as unacceptable any substitute substance where it finds that there are other alternatives that reduce overall risk to human health and the environment. The initial SNAP rule included submission requirements and presented the environmental and health risk factors that the SNAP program considers in the comparative risk framework it uses to determine whether there are other alternatives that pose significantly lower risk than the substitute under review. EPA makes decisions based on the particular end-use where a substitute is to be used. EPA has, in many cases, found certain substitutes acceptable only for limited end-uses or subject to use restrictions. In the decades since ODS were first invented in the 1920s, American consumers relied on products using ODS for diverse uses including aerosols, air conditioning, insulation, solvent cleaning, and fire protection. The agreement by governments to phase out production of ODS under the *Montreal Protocol on Substances that Deplete the Ozone Layer* led to inevitable questions about whether suitable alternatives could be found in

all cases, and in the larger sense, about how to limit negative impacts on society from use of alternatives.

It has now been over twenty years since the initial SNAP rule was promulgated. When the SNAP program began, the number of substitutes available for consideration was, for many end-uses, somewhat limited. Thus, while the SNAP program's initial comparative assessments of overall risk to human health and the environment were rigorous, often there were few substitutes upon which to apply the comparative assessment. The immediacy of the class I phaseout often meant that EPA listed class II ODS (*i.e.*, HCFCs) as acceptable, recognizing that they too would be phased out and, at best, could offer an interim solution. Other Title VI provisions such as the section 610 Nonessential Products Ban and the section 605 Use Restriction made clear that a listing under the SNAP program could not convey permanence.

Since EPA issued the initial SNAP rule in 1994, the Agency has issued 20 rules and 31 notices that generally expand the menu of options for the various SNAP sectors and end-uses. Thus, comparisons today apply to a broader range of alternatives—both chemical and non-chemical—than at the inception of the SNAP program. Industry experience with these substitutes has also grown during the history of the program.

In addition to an expanding menu of substitutes, developments over the past 20 years have improved our understanding of global environmental issues. With regard to that information, our review of substitutes in this action includes comparative assessments that consider our evolving understanding of a variety of factors. For example, GWPs and climate effects are not new elements in our evaluation framework, but as is the case with all of our review criteria, the amount of information has expanded and the quality has improved.

To the extent possible, EPA's ongoing management of the SNAP program considers new information, including new substitutes, and improved understanding of the risk to the environment and human health. EPA previously has taken several actions revising listing determinations from acceptable or acceptable with use conditions to unacceptable. On January 26, 1999, EPA listed the refrigerant blend known by the trade name MT-31 as unacceptable for all refrigeration and AC end-uses for which EPA had previously listed this blend as an acceptable substitute (62 FR 30275; June 3, 1997). EPA based this decision on

new information about the toxicity of one of the chemicals in the blend.

Another example of EPA revising a listing determination occurred in 2007, when EPA listed HCFC-22 and HCFC-142b as unacceptable for use in the foam sector (72 FR 14432; March 28, 2007). These HCFCs, which are ozone-depleting and subject to a global production phaseout, were initially listed as acceptable substitutes since they had a lower ODP than the substances they were replacing and there were no other alternatives that posed lower overall risk at the time of EPA's listing decision. HCFCs offered a path forward for some sectors and end-uses at a time when the number of substitutes was far more limited. In light of the expanded availability of other alternatives with lower overall risk to human health and the environment in specific foam end-uses, and taking into account the 2010 class II ODS phase down step, EPA changed the listing for these HCFCs in relevant end-uses from acceptable to unacceptable. In that rule, EPA noted that continued use of these HCFCs would contribute to unnecessary depletion of the ozone layer and delay the transition to substitutes that pose lower overall risk to human health and the environment. EPA established a change of status date that recognized that existing users needed time to adjust their manufacturing processes to safely accommodate the use of other substitutes.

GWP is one of several criteria EPA considers in the overall evaluation of the alternatives under the SNAP program. The President's June 2013 Climate Action Plan (CAP)<sup>11</sup> states, "To reduce emissions of HFCs, the United States can and will lead both through international diplomacy as well as domestic actions." Furthermore, the CAP states that EPA will "use its authority through the Significant New Alternatives Policy Program to encourage private sector investment in low-emissions technology by identifying and approving climate-friendly chemicals while prohibiting certain uses of the most harmful chemical alternatives." On July 20, 2015 (80 FR 42870), EPA issued a final regulation that was our first effort to take a broader look at the SNAP lists, where we focused on those listed substitutes that have a high GWP relative to other alternatives in specific end-uses, while

otherwise posing comparable levels of risk.

In the July 2015 rule, various HFCs and HFC-containing blends that were previously listed as acceptable under the SNAP program were listed as unacceptable in various end-uses in the aerosols, foam blowing, and refrigeration and AC sectors where there are other alternatives that pose lower overall risk to human health and the environment for specific uses. The July 2015 rule also changed the status from acceptable to unacceptable for certain HCFCs being phased out of production under the Montreal Protocol and CAA section 605(a). Per the guiding principles of the SNAP program, the July 2015 rule did not specify that any HFCs or HCFCs are unacceptable across all sectors and end-uses. Instead, in all cases, EPA considered the intersection between the specific substitute and the particular end-use and the availability of substitutes for those particular end-uses when making its determinations.

#### *H. Where can I get additional information about the SNAP program?*

For copies of the comprehensive SNAP lists of substitutes or additional information on SNAP, refer to EPA's Web site at <https://www.epa.gov/snap>. For more information on the Agency's process for administering the SNAP program or criteria for evaluation of substitutes, refer to the initial SNAP rule published March 18, 1994 (59 FR 13044), codified at 40 CFR part 82 subpart G. A complete chronology of SNAP decisions and the appropriate citations are found at <https://www.epa.gov/snap/snap-regulations>.

### **III. What actions and information related to greenhouse gases have bearing on this action?**

GWP is one of several criteria EPA considers in the overall evaluation of alternatives under the SNAP program. During the past two decades, the general science on climate change and the potential contributions of greenhouse gases (GHGs) such as HFCs to climate change have become better understood.

On December 7, 2009, at 74 FR 66496, the Administrator issued an endangerment finding determining that, for purposes of CAA section 202(a), elevated atmospheric concentrations of the combination of six key well-mixed GHGs in the atmosphere—CO<sub>2</sub>, methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), HFCs, PFCs, and sulfur hexafluoride (SF<sub>6</sub>)—may reasonably be anticipated to endanger

<sup>11</sup> The White House, 2013. President's Climate Action Plan. This document is accessible at <https://www.whitehouse.gov/sites/default/files/image/president27climateactionplan.pdf>.

the public health and the public welfare of current and future generations.<sup>12</sup>

Like the ODS they replace, HFCs are potent GHGs.<sup>13</sup> Although they represent a small fraction of the current total volume of GHG emissions, their warming impact per kilogram is very strong. While GHGs such as CO<sub>2</sub> and CH<sub>4</sub> are unintentional byproducts from energy production, industrial and agricultural activities, and mobile sources, HFCs are intentionally produced chemicals.<sup>14</sup> The most commonly used HFC is HFC-134a. HFC-134a has a GWP of 1,430, which means it traps 1,430 times as much heat per kilogram as CO<sub>2</sub> does over 100 years. Because of their role in replacing ODS, both in the United States and globally, and because of the increasing use of refrigeration and AC, HFC emissions are projected to increase substantially and at an increasing rate over the next several decades if their production is left uncontrolled. In the United States, emissions of HFCs are increasing more quickly than those of any other GHGs, and globally they are increasing 10–15 percent annually.<sup>15</sup> At that rate, emissions are projected to double by 2020 and triple by 2030.<sup>16</sup> HFCs are also rapidly accumulating in the atmosphere. The atmospheric concentration of HFC-134a has increased by about ten percent per year from 2006 to 2012, and the concentrations of HFC-143a and HFC-125, which are components of commonly used refrigerant blends, have risen over 13 percent and 16 percent per year from 2007–2011, respectively.<sup>17</sup>

Without action, annual global emissions of HFCs are projected to rise to about 6.4 to 9.9 gigatons of CO<sub>2</sub>

equivalent (GtCO<sub>2</sub>eq) in 2050,<sup>18</sup> which is comparable to the drop in annual GHG emissions from ODS of 8.0 GtCO<sub>2</sub>eq between 1988 and 2010.<sup>19</sup> By 2050, the buildup of HFCs in the atmosphere is projected to increase radiative forcing in the range of 0.22 to 0.25 W m<sup>-2</sup>. This increase may be as much as one-fifth to one-quarter of the expected increase in radiative forcing due to the buildup of CO<sub>2</sub> since 2000, according to the Intergovernmental Panel on Climate Change's (IPCC's) Special Report on Emissions Scenarios (SRES).<sup>20</sup> To appreciate the significance of the effect of projected HFC emissions within the context of all GHGs, HFCs would be six to nine percent of the CO<sub>2</sub> emissions in 2050 based on the IPCC's highest CO<sub>2</sub> emissions scenario and equivalent to 27 to 69 percent of CO<sub>2</sub> emissions based on the IPCC's lowest CO<sub>2</sub> emissions pathway.<sup>21 22</sup> Additional information concerning the peer-reviewed scientific literature and emission scenarios is available in the docket for this rulemaking (EPA-HQ-OAR-2015-0663).

PFCs are potent GHGs and have very long atmospheric lifetimes. PFCs are produced as a byproduct of various industrial processes associated with aluminum production and the manufacturing of semiconductors, then captured for intentional use or manufactured for use in various industrial applications. PFCs have had limited use in the eight sectors regulated under SNAP. While status changes for certain PFCs in fire suppression total flooding uses were proposed, no final action on PFCs in this end-use is being taken in this action.

#### IV. How does this action relate to the Climate Action Plan and petitions received requesting a change in listing status for HFCs?

##### A. Climate Action Plan

This action is consistent with a provision in the President's CAP announced June 2013:

Moving forward, the Environmental Protection Agency will use its authority through the Significant New Alternatives Policy Program to encourage private sector investment in low-emissions technology by identifying and approving climate-friendly chemicals while prohibiting certain uses of the most harmful chemical alternatives.

The CAP further states, "To reduce emissions of HFCs, the United States can and will lead both through international diplomacy as well as domestic actions." This action is consistent with that call for leadership through domestic actions. Regarding international leadership, for the past seven years, the United States, Canada, and Mexico have proposed an amendment to the Montreal Protocol to phase down the production and consumption of HFCs. Adopting the North American proposal would reduce cumulative HFC emissions by more than 90 GtCO<sub>2</sub>eq through 2050.

Throughout our discussions with the regulated community, we have sought to convey our understanding of the role that certainty plays in enabling the robust development and uptake of alternatives. As noted above, some of the key strengths of the SNAP program, such as its substance and end-use specific consideration, its multi-criteria basis for action, and its petition process, counters measures some have advocated could provide more certainty, such as setting specific numerical criteria for environmental evaluations (e.g., all compounds with GWP greater than 150). That said, this action provides additional certainty in the specific cases addressed. In addition, we remain committed to continuing to actively seek stakeholder views and to share our thinking at the earliest moment practicable on any future actions, as part of our commitment to provide greater certainty to producers and consumers in SNAP-regulated industrial sectors.

##### B. Summary of Petitions

EPA received two petitions on October 6, 2015, requesting the Agency to modify certain acceptability listings of high-GWP substances in various end-uses. The first was submitted by the Natural Resource Defense Council (NRDC) and the Institute for Governance and Sustainable Development (IGSD) and the second by the Environmental

<sup>12</sup> EPA, 2009a. Technical Support Document for Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act. December, 2009. This document is accessible at: [http://www3.epa.gov/climatechange/Downloads/endangerment/Endangerment\\_TSD.pdf](http://www3.epa.gov/climatechange/Downloads/endangerment/Endangerment_TSD.pdf).

<sup>13</sup> IPCC/TEAP, 2005. Special Report: Safeguarding the Ozone Layer and the Global Climate System: Issues Related to Hydrofluorocarbons and Perfluorocarbons. Cambridge Univ Press, New York. This document is accessible at: [https://www.ipcc.ch/pdf/special-reports/sroc/sroc\\_full.pdf](https://www.ipcc.ch/pdf/special-reports/sroc/sroc_full.pdf).

<sup>14</sup> HFC-23 is an exception; it is produced as a byproduct during the production of HCFC-22 and other chemicals.

<sup>15</sup> UNEP, 2011. HFCs: A Critical Link in Protecting Climate and the Ozone Layer, A UNEP Synthesis Report. November, 2011. This document is accessible at: [www.unep.org/dewa/portals/67/pdf/HFC\\_report.pdf](http://www.unep.org/dewa/portals/67/pdf/HFC_report.pdf).

<sup>16</sup> Akerman, 2013. Hydrofluorocarbons and Climate Change: Summaries of Recent Scientific and Papers. 2013.

<sup>17</sup> Montzka, 2012. HFCs in the Atmosphere: Concentrations, Emissions and Impacts. ASHRAE/NIST Conference 2012. This document is accessible at: [ftp://ftp.cmdl.noaa.gov/hats/papers/montzka/2012\\_pubs/Montzka\\_ASHRAE\\_2012.pdf](ftp://ftp.cmdl.noaa.gov/hats/papers/montzka/2012_pubs/Montzka_ASHRAE_2012.pdf).

<sup>18</sup> Velders, G.J.M., D.W. Fahey, J.S. Daniel, M. McFarland, S.O. Andersen (2009). "The large contribution of projected HFC emissions to future climate forcing." Proceedings of the National Academy of Sciences USA 106: 10949–10954.

<sup>19</sup> UNEP, 2011. HFCs: A Critical Link in Protecting Climate and the Ozone Layer, A UNEP Synthesis Report. November, 2011. This document is accessible at: [www.unep.org/dewa/portals/67/pdf/HFC\\_report.pdf](http://www.unep.org/dewa/portals/67/pdf/HFC_report.pdf).

<sup>20</sup> Ibid.

<sup>21</sup> Velders, Guus JM, et al. "Future atmospheric abundances and climate forcings from scenarios of global and regional hydrofluorocarbon (HFC) emissions." *Atmospheric Environment* 123 (2015): 200–209.

<sup>22</sup> IPCC, 2013: Annex II: Climate System Scenario Tables [Prather, M., G. Flato, P. Friedlingstein, C. Jones, J.-F. Lamarque, H. Liao and P. Rasch (eds.)]. In: *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. This document is accessible at: <http://www.ipcc.ch/report/ar5/wg1/>.

Investigation Agency (EIA).<sup>23 24</sup> The NRDC/IGSD petition requests that EPA change the listing status of certain high-GWP chemicals they believe are used most frequently in the United States in various end-uses in the refrigeration and AC, foam blowing, and fire suppression and explosion protection sectors. The EIA petition requests that EPA list additional high-GWP HFCs as unacceptable or acceptable, subject to use restrictions, in a number of end-uses in the refrigeration and AC, and fire suppression and explosion protection sectors. In support of their petitions, the petitioners identified other alternatives they claim are available for use in the specified end-uses and present lower risks to human health and environment. These petitions are more fully described in the notice of proposed rulemaking (NPRM) and are available in the docket for this rulemaking. While EPA has not found these petitions complete at this time, EPA possesses sufficient information to finalize action on some of the end-uses covered by the petitions. This action is responsive to certain aspects of the petitions that relate to the refrigeration and AC, and foam blowing sectors; EPA is changing the listing from acceptable to unacceptable for:

- HFC-134a in new centrifugal chillers, new positive displacement chillers, new household refrigerators and freezers, and rigid PU spray foam;
- R-404A, R-410A, R-410B, and R-507A in new centrifugal chillers, new positive displacement chillers, new household refrigerators and freezers, and new cold storage warehouses;
- R-407A in new cold storage warehouses;
- R-421A, R-422B, R-422C, R-422D, R-424A, and R-434A in new centrifugal chillers and new positive displacement chillers;
- HFC-227ea in new cold storage warehouses, new centrifugal chillers, and new positive displacement chillers;
- HFC-245fa, HFC-365mfc, and HFC-227ea in rigid PU spray foam;
- HFC-245fa and HFC-227ea in new centrifugal chillers and new positive displacement chillers; and
- a number of refrigerant blends with higher GWPs in certain new refrigeration and AC equipment.

Parts of two other SNAP petitions previously submitted by the same three organizations are also relevant to this

rulemaking. In a petition EIA submitted to EPA on April 26, 2012, EIA stated that “in light of the comparative nature of the SNAP program’s evaluation of substitutes and given that other acceptable substitutes are on the market or soon to be available,” EPA should “remove HFC-134a and HFC-134a blends from the list of acceptable substitutes for any ozone-depleting substance in any non-essential uses under EPA’s SNAP program.” Additionally, NRDC, EIA, and IGSD filed a petition on April 27, 2012, requesting that EPA remove HFC-134a from the list of acceptable substitutes in household refrigerators and freezers, and stand-alone retail food refrigerators and freezers, among other end-uses. On August 7, 2013, EPA found both petitions to be incomplete. While EPA has not found these petitions complete at this time, EPA possesses sufficient information to finalize action on some of the end-uses covered by the petitions. Similar to the October 2015 petitions, this action is responsive to certain aspects of the petitions that relate to the refrigeration and AC and foam blowing sectors.

#### **V. How does EPA regulate substitute refrigerants under CAA section 608?**

##### *A. What are the statutory requirements concerning venting, release, or disposal of refrigerants and refrigerant substitutes under CAA section 608?*

To briefly summarize the primary requirements of CAA section 608, that section requires, among other things, that EPA establish regulations governing the use and disposal of ODS used as refrigerants, such as certain CFCs and HCFCs, during the service, repair, or disposal of appliances and industrial process refrigeration (IPR). Section 608(c)(1) provides that it is unlawful for any person, in the course of maintaining, servicing, repairing, or disposing of an appliance (or IPR), to knowingly vent, or otherwise knowingly release or dispose of any class I or class II substance used as a refrigerant in that appliance (or IPR) in a manner which permits the ODS to enter the environment.

Section 608(c)(1) exempts *de minimis* releases associated with good faith attempts to recapture and recycle or safely dispose of such a substance from this prohibition. EPA, as set forth in its regulations, interprets releases to meet the criteria for exempted *de minimis* releases if they occur when the recycling and recovery requirements of specified regulations issued under sections 608 and 609 are followed (40 CFR 82.154(a)(2)).

Section 608(c)(2) extends the prohibition in section 608(c)(1) to any substitutes for class I or class II substances used as refrigerants. This prohibition applies to all refrigerant substitutes unless the Administrator determines that the venting, releasing, or disposing of the substitute does not pose a threat to the environment. Thus, section 608(c) provides EPA authority to promulgate regulations to interpret and enforce this prohibition on venting, releasing, or disposing of class I or class II substances and their refrigerant substitutes, which this action refers to as the “venting prohibition.” EPA’s authority under section 608(c) includes authority to exempt certain refrigerant substitutes for class I or class II substances from the venting prohibition under section 608(c)(2) when the Administrator determines that such venting, release, or disposal does not pose a threat to the environment. EPA’s authority to promulgate some of the regulatory revisions in this action is thus based in part on CAA section 608.

##### *B. What are EPA’s regulations concerning venting, releasing, or disposal of refrigerant substitutes?*

Regulations issued under CAA section 608, published on May 14, 1993 (58 FR 28660), established a recycling program for ozone-depleting refrigerants recovered during the servicing and maintenance of refrigeration and AC appliances. These regulations are codified at 40 CFR part 82, subpart F. In the same 1993 rule, EPA also issued regulations implementing the section 608(c) prohibition on knowingly venting, releasing, or disposing of class I or class II substances. These regulations were designed to substantially reduce the use and emissions of ozone-depleting refrigerants.

EPA issued rules on March 12, 2004 (69 FR 11946) and April 13, 2005 (70 FR 19273) clarifying how the venting prohibition in section 608(c) applies to substitutes for CFC and HCFC refrigerants (e.g., HFCs and PFCs) during the maintenance, service, repair, or disposal of appliances. In part, they provide that no person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the environment any refrigerant or substitute from such appliances, with the exception of the specified substitutes in the specified end-uses, as provided in 40 CFR 82.154(a).

As explained in an earlier EPA rulemaking concerning refrigerant substitutes, EPA had not, at the time of that rulemaking, issued regulations

<sup>23</sup> NRDC/IGSD, 2015. Petition for Change of Status of HFCs under Clean Air Act Section 612 (Significant New Alternatives Policy). Submitted October 6, 2015.

<sup>24</sup> EIA, 2015. Petition requesting EPA to modify the status under the Significant New Alternatives Policy Program, of certain high-GWP chemicals in various end-uses. Submitted October 6, 2015.



requiring certification of refrigerant recycling/recovery equipment intended for use with substitutes to date (70 FR 19275; April 13, 2005). However, as EPA has noted, the lack of a current regulatory provision should not be considered as an exemption from the venting prohibition for substitutes that are not expressly exempted in § 82.154(a) (80 FR 69466, 69478).

The Administrator signed final regulations to require certification of refrigerant recovery and/or recycling equipment for use with refrigerants that are not exempt from the venting prohibition. For information on the final 608 rule, see the docket for the rulemaking (EPA-HQ-OAR-2015-0453).

On May 23, 2014 (79 FR 29682), EPA exempted from the venting prohibition three HC refrigerant substitutes listed as acceptable, subject to use conditions, in the following end-uses: Isobutane and R-441A in household refrigerators, freezers, and combination refrigerators and freezers; and propane in retail food refrigerators and freezers (stand-alone units only). Similarly, on April 10, 2015 (80 FR 19453), EPA exempted from the venting prohibition four HC refrigerant substitutes listed as acceptable, subject to use conditions, in the following end-uses: Isobutane and R-441A in retail food refrigerators and freezers (stand-alone units only); propane in household refrigerators, freezers, and combination refrigerators and freezers; ethane in very low temperature refrigeration equipment and equipment for non-mechanical heat transfer; R-441A, propane, and isobutane in vending machines; and propane and R-441A in self-contained room air conditioners for residential and light commercial AC and heat pumps. Those regulatory exemptions do not apply to blends of HCs with other refrigerants or containing any amount of any CFC, HCFC, HFC, or PFC.

In those 2014 and 2015 actions, EPA determined that for the purposes of CAA section 608(c)(2), the venting, release, or disposal of such HC refrigerant substitutes in the specified end-uses does not pose a threat to the environment, considering both the inherent characteristics of these substances and the limited quantities used in the relevant applications. EPA further concluded that other authorities, controls, or practices that apply to such refrigerant substitutes help to mitigate environmental risk from the release of those HC refrigerant substitutes.

## VI. What is EPA finalizing in this action?

EPA is listing certain newly submitted alternatives as acceptable, subject to use conditions, and other newly submitted alternatives as unacceptable. EPA is also modifying current listings from acceptable to acceptable, subject to narrowed use limits, or to unacceptable for certain alternatives in various end-uses in the refrigeration and AC and foam blowing sectors. In each instance where EPA is listing a newly submitted substitute as unacceptable or is changing the status of a substitute from acceptable to unacceptable, EPA has determined that there are other alternatives that pose lower overall risk to human health and the environment. In a few instances, EPA established narrowed use limits for certain substitutes for specific military or space- and aeronautics-related applications in the refrigeration and AC, and foam blowing sectors, on the basis that other acceptable alternatives would not be available for those specific applications within broader end-uses, but acceptable alternatives were expected to become available over time. This action also applies unacceptability determinations for foam blowing agents to closed cell foam products and products containing closed cell foam. Additionally, EPA is exempting propane as a refrigerant in new self-contained commercial ice machines, in new water coolers, and in new very low temperature refrigeration equipment from the venting prohibition under CAA section 608(c)(2). This action also clarifies the listing for Powdered Aerosol D (Stat-X®), which was previously listed as both *acceptable* and *acceptable, subject to use conditions*, by removing the listing as *acceptable subject to use conditions*. The emissions that will be avoided from the changes of status in this action are estimated to be up to approximately 6.6 Million Metric Tons of Carbon Dioxide Equivalent (MMTCO<sub>2</sub>eq) in 2025 and up to approximately 11.3 MMTCO<sub>2</sub>eq in 2030.<sup>25</sup>

### Change of Listing Status

In determining whether to modify the previous listing decisions for substitutes based on whether other alternatives are available that pose lower risk to human health and the environment, we considered, among other things: Comments to the proposed rule of April 18, 2016, scientific findings, information provided by the Technology and Economic Assessment Panel (TEAP) that supports the Montreal Protocol,

journal articles, submissions to the SNAP program, the regulations and supporting dockets for other EPA rulemakings, presentations and reports presented at domestic and international conferences, and materials from trade associations and professional organizations. The materials on which we have relied are in the docket for this rulemaking (EPA-HQ-OAR-2015-0663). Key references are highlighted in section VIII of this action.

### Change of Status Dates

The change of status dates are based upon EPA's understanding of the availability of alternatives, considering factors such as commercial availability and supply of alternatives, time required to work through technical challenges with using alternatives, and time required to meet other federal regulatory requirements with redesigned equipment or formulations. As discussed in previous actions, as part of our consideration of the availability of alternatives, we consider "all available information, including information provided during the public comment period, and information claimed as confidential and provided during meetings, regarding technical challenges that may affect the time at which the alternatives can be used safely and used consistent with other requirements such as testing and code compliance obligations" (80 FR 42873; July 20, 2015).

### Consideration of Costs and Benefits

Under the SNAP criteria for review in 40 CFR 82.180(a)(7), consideration of cost is limited to cost of the substitute under review, and that consideration does not include the cost of transition when a substitute is found unacceptable. EPA requires information on cost and availability of substitutes as part of SNAP submissions to judge how widely a substitute might be used and, therefore, what its potential environmental and health effects might be. The SNAP criteria do not identify other cost considerations and thus we have not historically used cost information independent of environmental and health effects to determine the acceptability of substitutes under review—that is, we have never determined a substitute under review to be unacceptable or acceptable on the basis of its cost. When considering a change of status for substitutes already listed as acceptable, the SNAP program has not considered the costs of transition away from HFCs, HFC blends, PFCs, and other alternatives affected by the changes of status as part of determining the status

<sup>25</sup> EPA, 2016a. Climate Benefits of the SNAP Program Status Change Rule. March, 2016.

of the substitute or the availability of other alternatives for the same uses.

We are not addressing in this rulemaking whether to revise the regulatory criteria to include an expanded role for the consideration of costs in SNAP listing decisions. We have simply applied the existing regulatory criteria in determining whether to change the listing status of the substitutes addressed in this action.

Nevertheless, EPA has estimated the costs of the changes of status in this action to provide information to the public and to meet various statutory and executive order requirements. We have estimated costs for applicable NAICS codes in a document titled, “Cost Analysis for Regulatory Changes to the Listing Status of High-GWP Alternatives used in Refrigeration and Air Conditioning, Foams, and Fire Suppression.”<sup>26</sup> Using a seven percent discount rate, total annualized compliance costs across the roughly 100 affected businesses are estimated to range from \$59.2 million–\$71.3 million. Using a three percent discount rate, total annualized compliance costs are estimated to range from \$58.8 million–\$70.6 million.<sup>27</sup>

In addition, we have analyzed costs and impacts on small businesses in a document titled, “Economic Impact Screening Analysis for Regulatory Changes to the Listing Status of High-GWP Alternatives used in Refrigeration and Air Conditioning, Foams, and Fire Suppression.”<sup>28</sup> The screening analysis finds that the rulemaking can be presumed to have no significant economic impact on a substantial number of small entities (SISNOSE). Roughly 89 small businesses could be subject to the rulemaking. Total annualized compliance costs across affected small businesses are estimated at approximately \$11.8–\$14.4 million at a seven percent discount rate, or \$11.5–\$14.0 million at a three percent discount rate.<sup>29</sup> Based upon these analyses, EPA

does not expect this action to have major economic impacts (greater than \$100 million per year) or to have a significant impact on a substantial number of small entities.

#### A. Refrigeration and Stationary AC

##### 1. Acceptable Listing of Propane in New Self-Contained Commercial Ice Machines, Water Coolers, and Very Low Temperature Refrigeration Equipment

###### a. Background

This section, and other “background” sections that follow in the rule, provide information on the end-uses relevant to this decision, available alternatives, and other applicable regulations relevant to these end-uses.

Commercial ice machines are used in commercial establishments, such as hotels, restaurants, and convenience stores to produce ice. Many commercial ice machines are self-contained units, while some have the condenser separated from the portion of the machine making the ice and have refrigerant lines running between the two. This action applies only to self-contained commercial ice machines.

Water coolers are self-contained units providing chilled water for drinking. They may or may not feature detachable containers of water.

Very low temperature refrigeration equipment is intended to maintain temperatures considerably lower than for refrigeration of food—generally,  $-80^{\circ}\text{C}$  ( $-170^{\circ}\text{F}$ ) or lower. In some cases, very low temperature refrigeration equipment may use a refrigeration system with two refrigerant loops containing different refrigerants or with a direct expansion (DX) refrigeration loop coupled with an alternative refrigeration technology (e.g., Stirling cycle).

The U.S. Department of Energy (DOE) has established energy conservation standards for automatic commercial ice machines which apply to the self-contained commercial ice machines in this listing.<sup>30</sup> DOE does not have an energy conservation standard that would apply to water coolers or to very low temperature refrigeration equipment. For further information on the relationship between this action and

approximately 14 percent possibly incurring costs in excess of three percent of annual sales.

<sup>30</sup> See [https://www1.eere.energy.gov/buildings/appliance\\_standards/standards\\_test\\_procedures.html](https://www1.eere.energy.gov/buildings/appliance_standards/standards_test_procedures.html). “Automatic commercial ice machines” are defined as “a factory-made assembly (not necessarily shipped in 1 package) that—(1) consists of a condensing unit and ice-making section operating as an integrated unit, with means for making and harvesting ice; and (2) may include means for storing ice, dispensing ice, or storing and dispensing ice.”

other federal rules, see section VI.A.1.f of the proposed rule (81 FR 22830; April 18, 2016).

###### b. What is EPA’s final decision?

As proposed, EPA is listing propane (R-290) as acceptable, subject to use conditions, as a refrigerant in new self-contained commercial ice machines, in new water coolers, and in new very low temperature refrigeration equipment. The use conditions include conditions requiring conformity with industry standards, limits on charge size, and requirements for warnings and markings on equipment. The use conditions are detailed in section VI.A.1.b.ii.

###### i. How does propane compare to other refrigerants for these end-uses with respect to SNAP criteria?

EPA has listed a number of alternatives as acceptable in the commercial ice machine, water cooler, and very low temperature refrigeration end-uses. In the proposed rule (81 FR at 22824; April 18, 2016), EPA provided information on the environmental and health properties of propane and the various substitutes in these end-uses. Additionally, EPA’s risk assessments for propane and a technical support document<sup>31</sup> that provides the **Federal Register** citations concerning data on the SNAP criteria (e.g., ODP, GWP, VOC, toxicity, flammability) for acceptable alternatives in the relevant end-uses are available in the docket for this rulemaking (EPA–HQ–OAR–2015–0663).

###### (a) Environmental Impacts

Propane has an ODP of zero.<sup>32</sup> The most commonly used substitutes in the commercial ice machine, water cooler, and very low temperature refrigeration end-uses also have an ODP of zero (e.g., R-404A and R-134a). Some less common alternatives for these end-uses, such as R-401A, R-403B, R-414A and other blends containing HCFC-22 or HCFC-142b,<sup>33</sup> have ODPs ranging from 0.01 to 0.047. Thus, propane has an ODP lower

<sup>26</sup> ICF, 2016a. Cost Analysis for Regulatory Changes to the Listing Status of High-GWP Alternatives used in Refrigeration and Air Conditioning, Foams, and Fire Suppression. September, 2016.

<sup>27</sup> In terms of the distribution of the estimated total annualized costs by sectors: Refrigeration and air conditioning is about 97–98 percent, foams is about two to three percent and fire suppression is about zero percent.

<sup>28</sup> ICF, 2016b. Economic Impact Screening Analysis for Regulatory Changes to the Listing Status of High-GWP Alternatives used in Refrigeration and Air Conditioning, Foams, and Fire Suppression. September, 2016.

<sup>29</sup> Of those 89 small businesses, roughly 76 percent would be expected to incur compliance costs that are estimated to be less than one percent of annual sales. Roughly 24 percent could incur costs in excess of one percent of annual sales with

<sup>31</sup> EPA, 2016b. Tables of Alternatives for End-Uses Considered in the Final Rule, Protection of Stratospheric Ozone: Listing Modifications for Certain Substitutes under the Significant New Alternatives Policy Program. September, 2016.

<sup>32</sup> We assume that substitutes containing no chlorine, bromine, or iodine have an ODP of zero.

<sup>33</sup> Under EPA’s phaseout regulations, virgin HCFC-22, HCFC-142b, and blends containing HCFC-22 or HCFC-142b may only be used to service existing appliances. Consequently, virgin HCFC-22, HCFC-142b and blends containing HCFC-22 or HCFC-142b may not be used to manufacture new pre-charged appliances or appliance components or to charge new appliances assembled onsite.

than or identical to the ODPs of other alternatives in these end-uses.<sup>34</sup>

The GWP is a means of quantifying the potential integrated climate forcing of various GHGs relative to a value of one for CO<sub>2</sub>. Propane has a low GWP of three.<sup>35</sup> For comparison, some other commonly used acceptable refrigerants in these end-uses are R-134a and R-

404A, with GWPs of about 1,430 and 3,920, respectively. As shown in Table 2, the GWPs for acceptable refrigerants in commercial ice machines ranges from zero for ammonia vapor compression, ammonia absorption, and the not-in-kind (NIK) Stirling cycle technology to approximately 3,990 for R-507A. For water coolers, acceptable substitutes

have GWPs ranging from 31 for THR-02 to approximately 3,990 for R-507A.<sup>36</sup> For very low temperature refrigeration, the GWPs for acceptable substitutes range from one for CO<sub>2</sub> to 14,800 for HFC-23. Propane's GWP is comparable to or significantly lower than those of other alternatives in these end-uses.

TABLE 2—GWP, ODP, AND VOC STATUS OF PROPANE COMPARED TO OTHER REFRIGERANTS IN NEW COMMERCIAL ICE MACHINES, WATER COOLERS, AND VERY LOW TEMPERATURE REFRIGERATION EQUIPMENT <sup>1 2</sup>

Refrigerants	GWP	ODP	VOC	Listing status
Propane .....	3	0 .....	Yes .....	Acceptable, subject to use conditions.
<b>Commercial Ice Machines</b>				
Ammonia, HFC-134a, R-404A, R-407A, R-407B, R-407C, R-407F, R-410A, R-410B, R-421A, R-421B, R-424A, R-426A, R-437A, R-448A, R-449A, R-450A, R-507A, R-513A.	0-3,990	0 .....	No .....	Acceptable.
FOR12A, FOR12B, IKON A, IKON B, R-125/R-290 /R-134a/ R-600a (55.0/1.0/ 42.5/1.5), 417A, R-422A, R-422B, R-422C, R-422D, 428A, R-434A, R-438A, RS-24 (2002 formulation), RS-44 (2003 formulation), THR-02, THR-03.	30-3,610	0—Not public <sup>3</sup> .....	Yes <sup>4</sup> .....	Acceptable.
<b>Water Coolers</b>				
HFC-134a, R-404A, R-407A, R-407C, R-410A, R-410B, R-417A, R-421A, R-426A, R-437A, R-450A, R-507A, R-513A.	0-3,990	0 .....	No .....	Acceptable.
FOR12A, FOR12B, IKON B, R-125/R-290 /R-134a /R-600a (55.0/ 1.0 /42.5/1.5), R-422B, R-422C, R-422D, R-438A, RS-24 (2002 formulation), SP34E, THR-02.	30-3,090	0—Not public <sup>3</sup> .....	Yes <sup>4</sup> .....	Acceptable.
<b>Very Low Temperature Refrigeration Equipment</b>				
CO <sub>2</sub> , HFC-23, HFC-245fa, HFE-7000, HFE-7100, HFE-7200, R-170 (ethane), R-404A, R-407C, R-410A, R-410B, R-507A, R-508A, R-508B.	1-14,800	0 .....	No .....	Acceptable.
ISCEON 89, R-125/R-290/R-134a/R-600a (55.0/1.0/42.5/1.5), R-422B, R-422C, PFC-1102HC, PFC-662HC, PFC-552HC, and FLC-15.	2,530-8,500	0 .....	Yes <sup>4</sup> .....	Acceptable.

<sup>1</sup> The table does not include not-in-kind technologies listed as acceptable for the stated end-use.

<sup>2</sup> HCFC-22 and several blends containing HCFCs are also listed as acceptable but their use is severely restricted by the phasedown in HCFC production and consumption.

<sup>3</sup> The ODP of one or more alternatives is not published here in order to avoid disclosing information that is claimed as confidential business information.

<sup>4</sup> One or more constituents of the blend are VOCs.

In assessing the overall climate impacts associated with use of these refrigerants, we focus on the “direct” emissions, which are emissions from releases of the refrigerants over the full lifecycle of refrigerant-containing products.<sup>37</sup> In contrast, “indirect” emissions are associated with electricity consumption. We do not have a practice in the SNAP program of evaluating indirect impacts in the overall risk analysis because such considerations are linked not only to the specific

alternative used but also to the design of specific pieces of equipment and equipment design changes from year-to-year. Thus, indirect impacts do not provide a reasonable metric for the SNAP evaluation, which occurs at a fixed point in time and considers other alternatives reviewed previously. Instead, our overall assessment of climate impacts considers issues such as technical needs for energy efficiency (e.g., to meet DOE conservation standards) as part of our consideration

of whether alternatives are “available.” We recognize that the energy efficiency of any given piece of equipment is in part affected by the choice of refrigerant and the particular thermodynamic and thermophysical properties of that refrigerant, as well as other factors. For example, appliances that are optimized for a specific refrigerant will operate more efficiently. While theoretical efficiency of any given Rankine cycle is not dependent on the refrigerant used, the refrigerant, the design of the

<sup>34</sup> Propane's ODP is also lower than the ODP of the ozone-depleting substances historically used in these end-uses: CFC-12 (ODP = 1.0); HCFC-22 (ODP = 0.055); R-13B1/halon 1301 (ODP = 10) and R-502 (ODP = 0.334).

<sup>35</sup> Unless otherwise stated, GWPs stated in this document are 100-year integrated time horizon

values taken from IPCC, 2007. Climate Change 2007: The Physical Science Basis.

<sup>36</sup> The GWPs of the ODS historically used in these end-uses are: CFC-12 (GWP = 10,900); HCFC-22 (GWP = 1,810); R-13B1/halon 1301; (GWP = 7,140) and R-502 (GWP = 4,660).

<sup>37</sup> RTOC, 2015. 2014 Report of the Refrigeration, Air-Conditioning and Heat Pumps Technical Options Committee. This document is accessible at: <http://ozone.unep.org/sites/ozone/files/documents/RTOC-Assessment-Report-2014.pdf>.

equipment, and other factors will affect the actual energy efficiency achieved in operation. Although we cannot know what energy efficiency will be achieved in future products using propane, or any other specific acceptable refrigerant, both actual equipment and testing results suggest that equipment optimized for propane may improve energy efficiency, and is unlikely to reduce it.<sup>38 39 40</sup> Further, testing data, peer-reviewed journal articles and other information provided by the submitters for propane in these end-uses indicate that equipment using propane is likely to require a smaller refrigerant charge, have a higher coefficient of performance, and use less energy than equipment currently being manufactured that uses other refrigerants that currently are listed as acceptable under SNAP in these end-uses. Also see section VI.A.1.f of the proposed rule (81 FR 22830) concerning the role of the DOE energy conservation standards in ensuring that overall energy efficiency of equipment will be maintained or improved over time.

In addition to ODP and GWP, EPA evaluated potential impacts of propane and other HC refrigerants on local air quality. Propane meets the definition of VOC under CAA regulations (see 40 CFR 51.100(s)) and is not excluded from that definition for the purpose of developing State Implementation Plans (SIPs) to attain and maintain the National Ambient Air Quality Standards (NAAQS). As described below, EPA estimates that potential emissions of HCs, including propane, when used as refrigerant substitutes in all end-uses in the refrigeration and AC sector, have little impact on local air quality, with the exception of unsaturated HCs such as propylene.<sup>41</sup>

EPA analyzed various scenarios to consider the potential impacts on local air quality if HC refrigerants were used widely.<sup>42</sup> The analysis considered both worst-case and more realistic scenarios. The worst-case scenario assumed that the most reactive HC listed as acceptable (isobutane) was used in all refrigeration and AC uses even though isobutane has not been listed acceptable for use in all refrigeration and AC uses,

and that all refrigerant used was emitted to the atmosphere. In that extreme scenario, the model predicted that the maximum increase in any single 8-hour average ground-level ozone concentration would be 0.72 parts per billion (ppb) in Los Angeles, which is the area with the highest level of ground-level ozone pollution in the United States. Based on this maximum projected increase, EPA determined that the incremental VOC emissions from refrigerant emissions would not cause any area that otherwise would meet the 2008 ozone NAAQS to exceed it.<sup>43</sup> Given the potential sources of uncertainty in the modeling, the conservativeness of the assumptions, and the finding that the incremental VOC emissions from refrigerant emissions would not cause any area that otherwise would meet the 2008 ozone NAAQS to exceed it,<sup>44</sup> we believe that the use of isobutane consistent with the use conditions required in EPA's regulations will not result in significantly greater risk to the environment than other alternatives. Because propane is less reactive at forming ground-level ozone than isobutane, we reach the same conclusion for propane.

In a less conservative analysis of potential impacts on ambient ozone levels, EPA looked at a set of end-uses that would be more likely to use HC refrigerants between now and 2030, including end-uses where HC refrigerants previously have been listed as acceptable and the three end-uses addressed in this rule. For example, we assumed use of propane in water coolers and commercial ice machines and in other end-uses where EPA has already listed propane as acceptable, including room air conditioners and household and retail food refrigeration equipment. We also assumed the use of other HCs in end-uses where they are already listed as acceptable such as isobutane in household and retail food refrigeration equipment and R-441A in room air conditioners and household and retail food refrigeration equipment. For further information on the specific assumptions, see the docket for this rulemaking.<sup>45</sup> Based on this still conservative but more probable assessment of refrigerant use, we found

that there would be a worst-case impact of a 0.15 ppb increase in ozone for a single 8-hour average concentration in the Los Angeles area, which is the area with the highest level of ground-level ozone in the United States.<sup>46</sup> In the other cities examined in the analysis, Houston and Atlanta, impacts were smaller (no more than 0.03 and 0.01 ppb for a single 8-hour average concentration, respectively).<sup>47</sup> For areas in the analysis that were not violating the 2008 ozone NAAQS, the impacts did not cause an exceedance of the 2008 ozone NAAQS. We updated this analysis for the final rule, extending the analysis to 2040 and considering just those uses of hydrocarbon refrigerants already listed as acceptable, subject to use conditions, and the use of propane in the end-uses in this rule. This updated analysis found worst-case impacts for a single 8-hour average concentration in the Los Angeles area of 0.05 ppb and worst-case impacts of less than 0.01 ppb in Houston and Atlanta.

Because of the relatively minimal air quality impacts of propane if it is released to the atmosphere from commercial ice machines, water coolers, and very low temperature refrigeration equipment even in a worst-case scenario, we conclude that propane does not have a significantly greater overall impact on human health and the environment based on its effects on local air quality than other refrigerants listed as acceptable in commercial ice machines, water coolers, and very low temperature refrigeration equipment.

Ecosystem effects from propane, primarily effects on aquatic life, are expected to be small as are the effects of other acceptable substitutes. Propane is highly volatile and typically evaporates or partitions to air, rather than contaminating surface waters, and thus propane's effects on aquatic life are expected to be small. Propane will pose no greater risk of aquatic or ecosystem effects than those of other alternatives for these uses.

<sup>46</sup> This less conservative analysis included some use of R-443A in room AC units because that substitute was under evaluation for that end-use. Elsewhere in this rule, we find R-443A and propylene unacceptable in residential and light-commercial AC and heat pumps, including room AC units. The propylene in R-443A, representing 12 percent of refrigerant emitted, was responsible for about 75 percent of the 0.15 ppb increase in ozone in this scenario, while all uses of propane, representing 83 percent of refrigerant emitted, was responsible for about 21 percent of the increase of ozone in this scenario. Thus, only 0.03 ppb of the 0.15 ppb observed in Los Angeles would be due to propane and other acceptable HCs.

<sup>47</sup> ICF, 2014a. Assessment of the Potential Impact of Hydrocarbon Refrigerants on Ground Level Ozone Concentrations. February, 2014.

<sup>38</sup> Eppendorf, 2015. SNAP Information Notice for R-170 and R-290 in Very Low Temperature Refrigeration. May, 2015.

<sup>39</sup> Manitowoc, 2015. SNAP Information Notice, September, 2013. EPA SNAP Submittal—Revision to Extend R-290 Use to Commercial Ice Machines, Manitowoc Ice, Inc. October, 2015.

<sup>40</sup> Blupura, 2015. SNAP Information Notice for R-290 in Water Coolers. October, 2015.

<sup>41</sup> ICF, 2014a. Assessment of the Potential Impact of Hydrocarbon Refrigerants on Ground Level Ozone Concentrations. February, 2014.

<sup>42</sup> Ibid.

<sup>43</sup> The analysis described here was conducted prior to finalization of the 2015 ozone NAAQS. EPA has not yet made ozone attainment area designations for the 2015 ozone NAAQS.

<sup>44</sup> The analysis described here was conducted prior to finalization of the 2015 ozone NAAQS. EPA has not yet made ozone attainment area designations for the 2015 ozone NAAQS.

<sup>45</sup> ICF, 2014a. Assessment of the Potential Impact of Hydrocarbon Refrigerants on Ground Level Ozone Concentrations. February, 2014.

## (b) Flammability

Propane is classified as an A3 refrigerant by ASHRAE Standard 34–2013 and subsequent addenda, indicating that it has low toxicity and high flammability. ANSI/ASHRAE Standard 34–2013 assigns a safety group classification for each refrigerant which consists of two alphanumeric characters (*e.g.*, A2 or B1). The capital letter indicates the toxicity and the numeral denotes the flammability. ASHRAE classifies Class A refrigerants as refrigerants for which toxicity has not been identified at concentrations less than or equal to 400 parts per million (ppm) by volume, based on data used to determine TLV-time weighted average (TWA) or consistent indices. Class B signifies refrigerants for which there is evidence of toxicity at concentrations

below 400 ppm by volume, based on data used to determine TLV-TWA or consistent indices. The refrigerants are also assigned a flammability classification of 1, 2, or 3. Tests are conducted in accordance with ASTM E681 using a spark ignition source at 60 °C and 101.3 kPa.<sup>48</sup> Figure 1 in ANSI/ASHRAE Standard 15–2013 uses the same safety group but limits its concentration to 3,400 ppm.<sup>49</sup>

The flammability classification “1” is given to refrigerants that, when tested, show no flame propagation. The flammability classification “2” is given to refrigerants that, when tested, exhibit flame propagation, have a heat of combustion less than 19,000 kJ/kg (8,174 British thermal units (BTU)/lb), and have a lower flammability limit (LFL) greater than 0.10 kg/m<sup>3</sup>. Refrigerants within flammability

classification 2 may optionally be designated in the LFL subclass “2L” if they have a maximum burning velocity of 10 cm/s or lower when tested at 23.0 °C and 101.3 kPa. The flammability classification “3” is given to refrigerants that, when tested, exhibit flame propagation and that either have a heat of combustion of 19,000 kJ/kg (8,174 BTU/lb) or greater or an LFL of 0.10 kg/m<sup>3</sup> or lower. Thus, refrigerants with flammability classification “3” are highly flammable while those with flammability classification “2” are less flammable and those with flammability classification “2L” are mildly flammable. For both toxicity and flammability classifications, refrigerant blends are designated based on the worst-case of fractionation determined for the blend.

Figure 1. Refrigerant Safety Group Classification

Safety Group

	Higher Flammability	A3	B3
	Lower Flammability	A2	B2
	No Flame Propagation	A1	B1
		Lower Toxicity	Higher Toxicity

Increasing Toxicity

Increasing Flammability

Propane’s flammability risks are of potential concern because commercial ice machines, water coolers, and very low temperature refrigeration equipment have traditionally used refrigerants that are not flammable. Without appropriate use conditions, the flammability risk posed by propane would be higher than non-flammable refrigerants because individuals may not be aware that their actions could potentially cause a fire.

Because of its flammability, propane could pose a significant safety concern for workers and consumers in the end-uses addressed in this proposal if it is not handled correctly. In the presence of an ignition source (*e.g.*, static electricity spark resulting from closing a door, use of a torch during service, or a short circuit in wiring that controls the motor

of a compressor), an explosion or a fire could occur when the concentration of refrigerant exceeds its LFL. Propane’s LFL is 21,000 ppm (2.1 percent). Therefore, to use propane safely, it is important to minimize the presence of potential ignition sources and to reduce the likelihood that the concentration of propane will exceed the LFL. Under the final listing decision in this action, propane is acceptable for use only in new equipment (self-contained commercial ice machines, water coolers, and very low temperature refrigeration equipment) specifically designed for this refrigerant.

To determine whether flammability would be a concern for service personnel or for consumers, EPA analyzed multiple scenarios, beginning with a plausible worst-case scenario to

model a catastrophic release of propane. Based upon the results of those analyses, we expect there would not be an unacceptable risk of fire or explosion provided that the charge size is limited to 150 g for self-contained ice machines or very low temperature refrigeration equipment or to 60 g for water coolers. EPA also reviewed the submitters’ detailed assessments of the probability of events that might create a fire and approaches to avoid sparking from the refrigeration equipment. Further information on these analyses and EPA’s risk assessments are available in the docket for this rulemaking (EPA–HQ–OAR–2015–0663) and in section VI.A.1.b.ii of the proposed rule (81 FR 22827).

Service personnel or consumers may not be familiar with refrigeration or AC

<sup>48</sup> ASHRAE, 2013a. ANSI/ASHRAE Standard 34–2013: Designation and Safety Classification of Refrigerants.

<sup>49</sup> ASHRAE, 2013b. ANSI/ASHRAE Standard 15–2013: Safety Standard for Refrigeration Systems.

equipment containing a flammable refrigerant. Therefore, use conditions are necessary to ensure people handling such equipment are aware that equipment contains a flammable refrigerant and to ensure safe handling. When used in accordance with the use conditions required by this rule, and with equipment specifically designed for its use, propane's flammability hazard is adequately mitigated and its use is not significantly greater than that of other acceptable substitutes in these end-uses.

#### (c) Toxicity

In evaluating potential toxicity impacts of propane on human health in these end-uses, EPA considered both occupational and consumer risks. In general when evaluating non-cancer toxicity risks of a substitute, we use measured exposure concentrations if available, or modeled exposure concentrations using conservative assumptions appropriate to an end-use, and compare these exposure levels to recommended or required exposure limits for a compound that are intended to protect against adverse health effects. Where measured or modeled exposure levels are below relevant exposure limits for a chemical, we consider toxicity risks to be acceptable. Other acceptable substitutes listed for these end-uses have been evaluated for toxicity in this manner, including ethane for very low temperature refrigeration, ammonia for commercial ice machines, and a number of HFC blends for all three end-uses.

To evaluate the toxicity of propane, EPA estimated the maximum TWA exposure both for a short-term exposure scenario, with a 30-minute TWA exposure, and for an 8-hour TWA that would be more typical of occupational exposure for a technician servicing the equipment or a worker disposing of appliances. The modeling results indicate that both the short-term (30-minute) and long-term (8-hour) worker exposure concentrations would be below the relevant workplace exposure limits.

A similar analysis of asphyxiation risks considered whether a worst-case release of refrigerant in the same room sizes would result in oxygen concentrations of 12 percent or less. This analysis found that impacts on oxygen concentrations were minimal, with oxygen concentrations remaining at approximately 21 percent.

For equipment with which consumers might come into contact, such as water coolers and commercial ice machines, EPA performed a consumer exposure analysis. In this analysis, we examined

potential catastrophic release of the entire charge of the substitute in one minute under a worst-case scenario. We did not examine exposure to consumers in very low temperature refrigeration, as equipment for this end-use would typically be used in the workplace, such as in laboratories, and not in a home or public space. The analysis was undertaken to determine the short term (30-minute TWA) exposure levels for the substitute, which were then compared to the toxicity limit to assess the risk to consumers. The analysis found, even under the highly conservative assumptions used in the consumer exposure modeling, the estimated 30-minute consumer exposures to propane are lower than the relevant toxicity limits.

Based upon our analysis, workplace and consumer exposure to propane when used in these end-uses according to the use conditions is not expected to exceed relevant exposure limits. Thus, propane does not pose significantly greater toxicity risks than other acceptable refrigerants in these end-uses. For further information, including EPA's risk screens and risk assessments as well as information from the submitters of propane as a substitute refrigerant, see docket EPA-HQ-OAR-2015-0663 and section VI.A.1.b.iii of the proposed rule (81 FR 22827-8).

#### ii. What are the final use conditions?

To ensure that using propane in commercial ice machines, water coolers, and very low temperature refrigeration equipment will not cause greater risk to human health or the environment than other alternatives, we have identified and are establishing use conditions to address flammability and toxicity concerns.

Propane's flammability risks are of potential concern because commercial ice machines, water coolers, and very low temperature refrigeration equipment have traditionally used refrigerants that are not flammable. Propane could pose a significant safety concern for workers and consumers in the end-uses addressed in this action if it is not handled correctly. In the presence of an ignition source (*e.g.*, static electricity spark resulting from closing a door, use of a torch during service, or a short circuit in wiring that controls the motor of a compressor), an explosion or a fire could occur when the concentration of refrigerant exceeds its LFL. Propane's LFL is 21,000 ppm (2.1 percent). Therefore, to use propane safely, it is important to minimize the presence of potential ignition sources and to reduce the likelihood that the concentration of propane will exceed

the LFL. We are establishing use conditions that focus on ensuring that these risks are addressed for both the end user and service personnel. OSHA and building code requirements generally address flammability risks in the workplace, and we presume that the original equipment manufacturers (OEMs), who would be storing large quantities of the refrigerant, are familiar with and will use proper safety precautions to minimize the risk of explosion, consistent with those requirements. Therefore, we are not establishing use conditions to address workplace risk, which would be redundant of existing requirements. We are including recommendations in the **FURTHER INFORMATION** section of the SNAP listings that these facilities be equipped with proper ventilation systems and be properly designed to reduce possible ignition sources. See section VI.A.1.b.ii in this action and section VI.A.1.b.ii of the proposed rule (81 FR 22827) for additional information on the flammability risks posed by propane. Further information on EPA's risk assessments are available in the docket for this rulemaking (EPA-HQ-OAR-2015-0663).

We are finalizing the proposed use conditions, summarized in section VI.A.1.b.ii.(a)–(e), with one change—we are lowering the charge size for water coolers. In response to public comment and for consistency with the Underwriters Laboratories (UL) 399 standard, we are finalizing a charge size of 60 g for water coolers instead of 150 g. The use conditions are consistent with industry standards, limits on charge size, and requirements for warnings and markings on equipment.

#### (a) For Use in New Equipment Only; Not for Use as a Retrofit Alternative

In the specified end-uses in this action, propane is limited to use only in new equipment<sup>50</sup> that has been designed and manufactured specifically for use with propane. Propane was not submitted under the SNAP program to be used in retrofitted equipment, and no information was provided on how to mitigate hazards of flammable refrigerants when used in equipment that was not designed for flammable refrigerants. Use of propane in equipment not designed for its use, including existing equipment designed for another refrigerant, is a violation of CAA section 612(c) and the

<sup>50</sup> This is intended to mean a completely new refrigeration circuit containing a new evaporator, condenser and refrigerant tubing.

corresponding SNAP regulations at 40 CFR part 82, subpart G.

(b) Standards

EPA is requiring that propane be used only in equipment that meets all requirements in the relevant supplements for flammable refrigerants in certain applicable UL standards for refrigeration and AC equipment. Specifically, Supplement SA to the 8th edition of UL 563 standard, dated July 31, 2009, applies to self-contained commercial ice machines using flammable refrigerants.<sup>51</sup> Supplement SB to the 7th edition of UL 399, dated August 22, 2008, applies to water coolers using flammable refrigerants.<sup>52</sup> Very low temperature refrigeration equipment is sufficiently similar to stand-alone commercial refrigerators that an appropriate standard is Supplement SB to the 10th edition of UL 471, dated November 24, 2010.<sup>53</sup>

UL has tested equipment for flammability risk in household and retail food refrigeration and in commercial freezers for very low temperature refrigeration. Further, UL has developed acceptable safety standards including requirements for construction, markings, and performance tests concerning refrigerant leakage, ignition of switching components, surface temperature of parts, and component strength after being scratched. These standards were developed in an open and consensus-based approach, with the assistance of experts in the AC and refrigeration industry as well as experts involved in assessing the safety of products. While similar standards exist from other bodies such as the International Electrotechnical Commission (IEC), we are relying on UL standards as those are the standards applicable to and recognized by the U.S. market. This approach is the same as that adopted in our previous rules on flammable refrigerants (76 FR 78832, December 20, 2011; 80 FR 19453, April 10, 2015). EPA acknowledges that international standards exist and believes that UL will likely harmonize with these standards in the future. If UL plans to update ANSI/UL399 to harmonize with IEC-60335-2-89, then referencing an IEC standard in future actions may

allow for a smoother transition. Specifically, the international standard must adequately provide guidelines for use conditions for all equipment types under SNAP review, including refrigerant charge size limits, minimum room sizes for installation, ventilation requirements, and required permanent markings on equipment, system parts, and servicing equipment.

(c) Charge Size

EPA is requiring a charge size not to exceed 150 g in each refrigerant circuit for self-contained commercial ice machines and very low temperature refrigeration equipment and not to exceed 60 g in each refrigerant circuit for water coolers.<sup>54</sup> These are the charge sizes that reflect the UL 563, UL 399, and UL 471 standards. UL Standards 563 (ice machines) and 471 (commercial stand-alone refrigeration equipment) limit the amount of refrigerant leaked to 150 g (5.29 oz). UL 399 (water coolers) limits the amount of refrigerant leaked to 60 g (2.12 oz) discussed in paragraph (b) of this section, the UL standards are applicable to and recognized by the U.S. market and are developed by a consensus of experts. We note that the charge size limit for propane of 150 g in the UL standards for ice machines and commercial stand-alone commercial refrigeration equipment is in line with the IEC 60335-2-89 standard addressing commercial ice-machines and other commercial refrigeration equipment, which also has a charge size limit of 150 g. These limits will reduce the risk to workers and consumers since under scenarios we analyzed, a leak of refrigerant of these sizes did not result in concentrations of the refrigerant that met or exceeded the LFL.

(d) Color-Coded Hoses and Piping

EPA is requiring that equipment designed for use with propane must have distinguishing color-coded hoses and piping to indicate use of a flammable refrigerant. This will help technicians immediately identify the use of a flammable refrigerant, thereby reducing the risk of using sparking equipment or otherwise having an ignition source nearby. The AC and refrigeration industry currently uses distinguishing colors as means to identify different refrigerants. Likewise, distinguishing coloring has been used elsewhere to indicate an unusual and potentially dangerous situation, for example in the use of orange insulated wires in hybrid electric vehicles. Currently, no industry standard exists

for color-coded hoses or pipes for propane. EPA is requiring that all such refrigerator tubing be colored red Pantone matching system (PMS) #185 to match the red band displayed on the container of flammable refrigerants under the Air Conditioning, Heating and Refrigeration Institute (AHRI) Guideline “N” 2014, “2014 Guideline for Assignment of Refrigerant Container Colors.”<sup>55</sup> This requirement mirrors the existing use condition for flammable refrigerants in residential and commercial refrigerator-freezers, vending machines, very low temperature refrigeration equipment, non-mechanical heat transfer equipment, and room air conditioners (76 FR 78832, December 20, 2011; 80 FR 19453, April 10, 2015). EPA wants to ensure that there is adequate notice that a flammable refrigerant is being used within a particular piece of equipment or appliance. One way to mark hoses and pipes is to add a colored plastic sleeve or cap to the service tube rather than painting or dyeing the hoses or pipes. This sleeve would be of the same red color (PMS #185) and could also be boldly marked with the flame graphic required by the UL standards to indicate the refrigerant was flammable.

EPA is particularly concerned with ensuring adequate and proper notification for servicing and disposal of appliances containing flammable refrigerants. The use of color-coded hoses, as well as the use of warning labels discussed in the next paragraph, would be consistent with other general industry practices. This approach is consistent with the approach adopted in our previous rules on flammable refrigerants (76 FR 78832, December 20, 2011; 80 FR 19453, April 10, 2015).

(e) Labeling

EPA is requiring labeling of self-contained commercial ice machines, water coolers, and very low temperature refrigeration equipment. EPA is requiring that the warning labels on the equipment contain letters at least 1/4 inch high and that they be permanently affixed to the equipment. Warning label language requirements are as follows:

(1) “DANGER—Risk of Fire or Explosion. Flammable Refrigerant Used. Do Not Use Mechanical Devices To Defrost Refrigerator. Do Not Puncture Refrigerant Tubing.” This marking must be provided on or near any evaporators that can be contacted by the consumer.

<sup>51</sup> UL, 2009. Standard 563—Standard for Ice Makers. A summary of this document is accessible at: <http://ulstandards.ul.com/standard/?id=563>.

<sup>52</sup> UL, 2008. Standard 399—Standard for Drinking-Water Coolers. A summary of this document is accessible at: <http://ulstandards.ul.com/standard/?id=399>.

<sup>53</sup> UL, 2010. Standard 471—Standard for Commercial Refrigerators and Freezers. A summary of this document is accessible at: <http://ulstandards.ul.com/standard/?id=471>.

<sup>54</sup> To place this in context, a 150 g charge is about five times the charge in a disposable lighter (30 g).

<sup>55</sup> AHRI, 2014. Guideline N-2014 for Assignment of Refrigerant Container Colors. This document is accessible online at [http://www.ahrinet.org/App\\_Content/ahri/files/Guidelines/AHRI\\_Guideline\\_N\\_2014.pdf](http://www.ahrinet.org/App_Content/ahri/files/Guidelines/AHRI_Guideline_N_2014.pdf).



(2) "DANGER—Risk of Fire or Explosion. Flammable Refrigerant Used. To Be Repaired Only By Trained Service Personnel. Do Not Puncture Refrigerant Tubing." This marking must be located near the machine compartment.

(3) "CAUTION—Risk of Fire or Explosion. Flammable Refrigerant Used. Consult Repair Manual/Owner's Guide Before Attempting To Service This Product. All Safety Precautions Must be Followed." This marking must be located near the machine compartment.

(4) "CAUTION—Risk of Fire or Explosion. Dispose of Properly In Accordance With Federal or Local Regulations. Flammable Refrigerant Used." This marking must be provided on the exterior of the refrigeration equipment.

(5) CAUTION—Risk of Fire or Explosion Due To Puncture Of Refrigerant Tubing; Follow Handling Instructions Carefully. Flammable Refrigerant Used." This marking must be provided near all exposed refrigerant tubing.

The warning label language is similar to or exactly the same as that required in UL standards: For commercial ice machines in UL 563 in section SB6.1, for water coolers in UL 399 in section SA6.1, and for commercial refrigerators and freezers, including very low temperature freezers, in UL 471 in section SB6.1.

It would be difficult to see warning labels with the minimum lettering height requirement of  $\frac{1}{8}$  inch in these UL standards. Therefore, as in the requirements in our previous HC refrigerants rules for residential and commercial refrigerator-freezers, vending machines, very low temperature refrigeration equipment, non-mechanical heat transfer equipment, and room air conditioners (76 FR 78832, December 20, 2011; 80 FR 19453, April 10, 2015), EPA is requiring the minimum height for lettering must be  $\frac{1}{4}$  inch as opposed to  $\frac{1}{8}$  inch. This will make it easier for technicians, consumers, retail storeowners, and first responders to view the warning labels.

iii. What recommendations does EPA have for the safe use of propane?

In addition to establishing regulatory use conditions, which are binding on users of this substitute, EPA is also making recommendations for the use of this substitute. EPA is recommending that only technicians specifically trained in handling flammable refrigerant dispose of or service refrigeration and AC equipment containing these substances. Trained technicians should know how to minimize the risk of fire and the

procedures for using flammable refrigerants safely. Releases of large quantities of flammable refrigerants during servicing and manufacturing, especially in enclosed, poorly ventilated spaces or in areas where large amounts of refrigerant are stored, could cause an explosion if there is an ignition source nearby. For these reasons, technicians should be properly trained to handle flammable refrigerant when maintaining, servicing, repairing, or disposing of water coolers, commercial ice machines, and very low temperature freezers. In addition, EPA recommends that if propane is vented, released, or disposed of (rather than recovered) for these specified end-uses, the release should be in a well-ventilated area, such as outside of a building. Ensuring proper ventilation and avoiding ignition sources are recommended practices, whether venting or recovering a flammable refrigerant.

The Australian Institute of Refrigeration, Air Conditioning and Heating (AIRAH) provides useful guidance on safety precautions technicians can follow when servicing equipment containing flammable refrigerants or when venting refrigerant. One of those practices is to connect a hose to the appliance to allow for venting the refrigerant outside.<sup>56</sup> This document is included in the docket for this action (EPA-HQ-OAR-2015-0663).

We are aware that at least two organizations in the United States, Refrigeration Service Engineers Society (RSES) and the ESCO Institute, have developed technician training programs in collaboration with refrigeration equipment manufacturers and users that address safe use of flammable refrigerant substitutes. In addition, EPA has reviewed several training programs provided as part of SNAP submissions from persons interested in flammable refrigerant substitutes. The Agency intends to update the test bank for technician certification under CAA section 608, and will consider including additional questions on flammable refrigerants. By adding such questions to the test bank, EPA would supplement but not replace technician training programs currently provided by non-government entities. EPA intends to seek additional information and guidance on how best to incorporate this content through a separate process outside the scope of this final rule.

<sup>56</sup> AIRAH, 2013. Australian Institute of Refrigeration, Air Conditioning and Heating. Safety Guide: Flammable Refrigerants. 2013. This document is accessible at: <http://www.unep.fr/ozoneaction/information/mmfiles/7681-e-FlammableRefrigerantsGuideAIRAH.pdf>.

iv. When will the listing apply?

EPA is establishing a listing date as of January 3, 2017, the same as the effective date of this regulation, to allow for the safe use of this substitute at the earliest opportunity.

c. How is EPA responding to comments?

EPA received comments from organizations with various interests in commercial refrigeration regarding the proposed listing of propane as acceptable, subject to use conditions, in newly manufactured self-contained commercial ice machines, water coolers, and very low temperature refrigeration equipment. Most commenters supported the proposed listing decision and effective date of 30 days after publication of the rule in the **Federal Register**. Other commenters addressed the environmental impacts of the proposed listing of propane, the proposed use conditions, training for technicians handling flammable refrigerants, and industry codes and standards.

Commenters included Filtrine Manufacturing Company (Filtrine), a manufacturer of drinking fountains, water coolers, and drinking water filtration equipment; the Flexible Packaging Association (FPA); Chemours, a chemical producer; the National Environmental Development Association's Clean Air Project (NEDA/CAP), an organization representing manufacturers of a variety of refrigeration and AC equipment among others; and UL, a safety consulting and certification company.

We have grouped comments together and responded to the issues raised by the comments in the sections that follow, or in a separate Response to Comments document which is included in the docket for this rule (EPA-HQ-OAR-2015-0663).

i. Substitute and End-Uses Proposed

*Comment:* Filtrine supported the listing of propane in water coolers. Filtrine noted that water cooler units using propane perform as efficiently or more efficiently than other commonly used HFC refrigerants, such as R-134a.

*Response:* EPA appreciates the comments supporting the decision to list propane as acceptable, subject to use conditions, in commercial ice machines, water coolers, and very low temperature refrigeration equipment. EPA agrees that HCs are already being safely and successfully used in such types of equipment around the world. New designs, along with components and technology will help optimize the performance of these systems, thus improving their efficiency.

## ii. SNAP Review Criteria

*Comment:* FPA commented on the safety concerns regarding the use of a flammable VOC in the three end-uses and expressed the need for technician certification requirements for the use of propane in these equipment. FPA is concerned that the flammability of propane in the workplace will pose both worker safety risks as well as potential environmental hazards. FPA suggested that EPA further assess the safety and health risks of using propane in new uses, and also in existing uses.

*Response:* EPA evaluated the flammability risks of propane in these three end-uses in the risk screens included in the docket for this rulemaking (EPA-HQ-OAR-2015-0663). EPA's evaluations followed the standard approach for evaluating health and environmental risks that the SNAP program has used over its 20-year history. The results found leaks of propane in commercial ice machines, water coolers, and very low temperature refrigeration equipment resulted in concentrations far below the LFL of 21,000 ppm, showing a lack of flammability risk when charge sizes at or below those established in the use conditions are used. Regarding technician certification requirements for the handling of flammable refrigerants, EPA notes that in recent years, training programs on flammable refrigerants have been developed and are currently available in the United States. The Agency intends to update the test bank for technician certification under CAA section 608 as we have done previously, and will consider including additional questions on flammable refrigerants. By adding such questions to the test bank, EPA would supplement but would not replace technician training programs currently provided by non-government entities. EPA will seek additional information and guidance on how best to incorporate this content through a separate process outside the scope of this final rule.

*Comment:* NEDA/CAP commented that propane is a VOC and that under worst-case scenarios, the use of propane in new refrigeration and cooling equipment could create an issue for local air pollution control authorities in severe and extreme ozone nonattainment areas. The commenter noted that any VOC (with any reactivity) must be reported to state/local/tribal and federal CAA regulators in biennial emissions inventories and annual permit reports under CAA Titles I and V, respectively. NEDA/CAP suggested that EPA's proposal will trigger a domino effect that will impact state/

local and tribal air permitting authorities which will require immediate planning (and, potentially, permitting) problems with the potential to snowball with each proposed new and existing use for which propane is added. FPA also claims that use of propane could interfere with NAAQS attainment.

*Response:* EPA disagrees with the commenter that under worst-case scenarios, the use of propane in new refrigeration and cooling equipment could create an issue for local air pollution control authorities in severe and extreme ozone nonattainment areas. The worst-case scenario modeled by EPA was based on use of isobutane in all refrigeration equipment, even though its use has not been approved in all refrigeration equipment. Isobutane is a more reactive VOC than is propane. While that worst-case scenario did indicate an increase up to 0.72 ppb in Los Angeles area, EPA determined that it did not accurately depict the risk of the use of propane in a limited subset of refrigeration equipment. Therefore, EPA evaluated a scenario where propane and three other HC refrigerants were used in a number of end-uses where industry submitters had proposed their use, including those in this rule; in end-uses where EPA had already listed them as acceptable, subject to use condition; or in industries where a UL standard might allow for their use in the future. This scenario considers most end-uses that EPA is likely to address in the next few years. In this scenario, we found the worst-case change in ground-level ozone concentration was 0.15 ppb in 2030 (ICF, 2014a) and 0.44 ppb in 2040 (ICF, 2016l). EPA also examined a scenario that considered only the HC refrigerants being listed as acceptable, subject to use conditions, in this action or previously listed as acceptable, subject to use conditions. This analysis found worst-case impacts of 0.05 ppb in Los Angeles and less than 0.01 ppb in Houston or in Atlanta in 2040. This modeling contained conservative assumptions, such as the assumption that all refrigerant would be released to the environment and the assumption that no refrigerants other than hydrocarbons would be used in these end-uses. When modeling decades into the future, there are many sources of uncertainty that are likely greater in magnitude than the modeled increase in ozone concentrations (e.g., changes in the market, impacts on cloud cover due to climate change). In this analysis that corresponds to the end-uses listed in this rule and previous acceptable listings, the modeled incremental

ground-level ozone concentrations are so low that they are difficult to separate from the impact of all other emissions. Given the conservativeness of the assumptions, the potential sources of uncertainty in the modeling, and the small magnitude of these modeled increases, we consider it highly likely that state and local agencies will be able to meet air quality goals without extensive or repeated new planning.

## iii. Use Conditions

*Comment:* UL suggested that EPA appears to be proposing changes that are outside of, but will have a direct impact on, industry voluntary consensus standards such as those published by UL. They asserted that the proposed rule contrasts with the requirements previously developed and recommended by the Joint Task Group that UL tasked with developing a common technical basis for addressing the safety of flammable refrigerants in various UL standards. UL recommended that EPA work within the framework of the established voluntary consensus standards process for revising and updating safety standards for the refrigeration and AC sector.

*Response:* With one exception, the use conditions established for propane in the three end-uses are consistent with the UL standards. The one use condition that differs is the condition requiring a larger print size for the warning labels. This approach is consistent with the use conditions EPA has established for use of flammable refrigerants in a variety of refrigeration end uses. EPA believes it is necessary to require a larger print size because it would be difficult to see warning labels with the minimum lettering height requirement of 1/8 inch in the UL standards. To the extent practicable, EPA attempts to rely upon the established voluntary consensus standards process.

*Comment:* UL noted that EPA misunderstood the charge limit size in the Standard for Safety for Drinking Water Coolers, ANSI/UL 399, covering drinking water coolers using propane as a refrigerant. In accordance with ANSI/UL 399, Supplement SB, Paragraph SB3.2(b), the charge limit is 2.0 oz. (60 g) for refrigerants having an ASHRAE Class 3 flammability classification. UL commented that the proposed rule specified that the charge limit was 150g (5.29 oz).

*Response:* EPA agrees with the commenter that the charge size in the proposed rule for drinking water coolers was not consistent with the charge limit size in the Standard for Safety for Drinking Water Coolers, ANSI/UL 399. In that standard the charge size limit is

currently set to 60 g. Based upon EPA's risk screen prepared for the proposed rule (EPA-HQ-OAR-2015-0663-0022), a worst-case release of an entire charge of 150 g of propane could result in exceeding the LFL in a small room, as in a small residential kitchen, while release of a charge of 60 g or propane, as per the UL standard, would not result in exceeding the LFL. In that risk screen, we analyzed larger charge sizes of up to 150 g only in the context of use in spaces such as commercial kitchens that are likely to be larger and have better ventilation than in a home; however, EPA cannot guarantee that equipment with larger charge sizes would be used in larger spaces, and 60 g is protective for all spaces in which this type of equipment may be used. EPA's intention was to reference the charge limit in ANSI/UL 399 and EPA is finalizing a charge limit of 60 g for water coolers consistent with ANSI/UL 399.

*Comment:* UL noted that EPA proposed that a "colored plastic sleeve or cap" be secured to the service tube. The sleeve would be boldly marked with a graphic to indicate that the refrigeration circuit is flammable. UL suggested that the Agency provide more information describing the securement means of the sleeve or cap to the service tube so that it will not likely be removed (or broken off) for other than a servicing operation. Additionally, they suggested EPA provide a more thorough description of the flammable refrigerant "graphic" that is required to be located on the sleeve or cap is necessary.

*Response:* The discussion of a "colored plastic sleeve or cap" was not a use condition, but rather an additional suggestion on how the use condition for colored markings on tubing could be implemented. An example of a sleeve would be a loop of plastic that completely wraps around the tube or hose at any service port and other parts of the system where service puncturing or other actions creating an opening from the refrigerant circuit to the atmosphere might be expected. The flammable refrigerant graphic referred to is the flame graphic already required by UL standards.

*Comment:* UL noted that Clause 7.5.1.2 of ANSI/ASHRAE 15-2013 does not permit refrigerated products using refrigerants other than those having a flammability classification of A1 or B1 (i.e., nonflammable refrigerants) to be installed in public corridors and lobbies. Many ice machines and drinking water coolers are currently installed in the hallways and lobbies of hotels and other commercial establishments. This installation

requirement in Clause 7.5.1.2 of ANSI/ASHRAE 15 may make it difficult for ice machines and drinking water cooler manufacturers to transition to propane as a refrigerant.

*Response:* Our listing of propane as acceptable, subject to use conditions, in self-contained ice machines and drinking water coolers does not negate the need to comply with other requirements. Thus, other requirements might prevent individual end users from choosing equipment that uses propane. EPA understands that the ANSI/ASHRAE 15-2013 is currently being reviewed and thus it is possible that in the future additional refrigerant classifications may be permitted in the areas UL noted as currently limited to A1 or B1 (nonflammable) refrigerants. Industry organizations and the U.S. government are performing additional research on flammable refrigerants with a goal of providing the results to inform and revise ANSI/ASHRAE Standard 15-2013 and other standards as soon as possible, subject to ANSI's consensus process.<sup>57</sup> For more information on ANSI/ASHRAE Standard 34-2013 and the difference between flammability classes of refrigerants, see section VI.A.3.a.

*Comment:* Chemours supported the listing of propane as acceptable, subject to use conditions, for commercial ice machines, water coolers, and very low temperature refrigeration equipment provided safe handling practices for flammable refrigerants are incorporated into those use conditions, including, but not limited to technician training, venting prohibitions, and a prohibition of topping off systems with refrigerants different from the original refrigerant. NEDA/CAP also commented on the importance of technician training requirements and certifications for technicians that service propane-filled equipment before finalizing the proposed listing. They stated that although other flammable refrigerant blends have been approved since 2014, EPA proposed to require propane in larger volumes. They stated that as EPA moves toward allowing use of propane in larger new equipment, the technician requirements for inspecting this equipment, leak repair and prevention, and recharging or emptying equipment properly must be in place. Similarly, EPA suggested that EPA address technician training requirements for propane before finalizing the proposed listing.

<sup>57</sup> AHRI, ASHRAE, DOE Partner to Fund Flammable Refrigerant Research. <http://www.ahrinet.org/News-Events/News-and-Shipping-Releases.aspx?A=1170>. June 2, 2016.

*Response:* Regarding training needs due to the handling of flammable refrigerants, EPA agrees with the commenter on the importance of such technician training, but does not agree that the training needs to be mandated. The refrigeration industry has been proactive in assuring that technicians are properly trained and, in recent years, a number of training programs on flammable refrigerants have been developed and are currently available in the United States that cover the topics suggested by the commenters. Also, millions of similar appliances around the world have been using HCs over decades with few reported incidents, even with charge sizes of 150 g in some cases. The charge limit of 150 g for self-contained commercial ice machines and very low temperature refrigeration equipment is the same as the charge limit EPA previously set for propane, isobutane, and R-441A in retail food refrigeration-stand-alone units and vending machines and for ethane in very low temperature refrigeration equipment and the charge limit of 60 g for water coolers is close to the 57 g charge limit EPA requires for propane, isobutane, and R-441A in household refrigerators and freezers. Concerning venting prohibitions, see section VI.A.2.c. Concerning Chemours' suggestion to prohibit topping off systems with refrigerants different from the original refrigerant, we proposed that propane may only be used in new equipment designed for use with that refrigerant; we did not propose its use as a retrofit refrigerant. Thus, the use condition prohibits its use to "top off" a system designed for a different refrigerant. If the commenter's concern is that technicians may add a different refrigerant on top of propane already present in equipment designed for propane, we agree that "topping off" with a different refrigerant is inappropriate for any refrigerant. The SNAP regulations for this end-use do not currently address this issue; we will consider whether to propose such a revision in a future rulemaking, and not just for propane.

## 2. Exemption for Propane From the Venting Prohibition Under CAA Section 608 for Specific End-Uses in the New SNAP Listing

### a. Background

Under section 608(c) of the CAA, it is unlawful for any person, in the course of maintaining, servicing, repairing, or disposing of an appliance to knowingly vent or otherwise knowingly release any ODS or substitute refrigerant into the environment. The Administrator may

exempt refrigerant substitutes from this general prohibition if she or he determines under section 608(c)(2) that venting, releasing, or disposing of such substance does not pose a threat to the environment.

For purposes of CAA section 608(c)(2), EPA considers two factors in determining whether or not venting, release, or disposal of a refrigerant substitute during the maintenance, servicing, repairing, or disposal of appliances poses a threat to the environment. See 69 FR 11948, March 12, 2004; 79 FR 29682, May 23, 2014; and 80 FR 19453, April 10, 2015. First, EPA analyzes the threat to the environment due to inherent characteristics of the refrigerant substitute, such as GWP. Second, EPA determines whether and to what extent venting, release, or disposal actually takes place during the maintenance, servicing, repairing, or disposing of appliances, and to what extent such actions are controlled by other authorities, regulations, or practices. To the extent that it determines such releases are adequately controlled by other authorities, EPA generally defers to those authorities.

b. What is EPA's final decision?

EPA has reviewed the potential environmental impacts of propane in the three specific end-uses in this action, as well as the authorities, controls, and practices in place for that substitute. EPA also considered the public comments on the proposal for this action. Based on this review, EPA concludes that propane in these end-uses and subject to these use conditions are not expected to pose a threat to the environment based on the inherent characteristics of these substances and the limited quantities used in the relevant applications. EPA additionally concludes that existing authorities, controls, or practices help mitigate environmental risk from the release of propane in these end-uses and subject to these use conditions.

In light of these conclusions and those described or identified above in this section, EPA is determining that based on current evidence and risk analyses, the venting, release, or disposal of propane in these end-uses during the maintenance, servicing, repairing, or disposing of the relevant appliances does not pose a threat to the environment.

EPA is therefore exempting from the venting prohibition at 40 CFR 82.154(a)(1) these additional end-uses for which propane is being listed as acceptable, subject to use conditions, under the SNAP program.

i. Inherent Characteristics of Propane

EPA evaluated the potential environmental impacts of releasing into the environment propane in water coolers, self-contained commercial ice machines, and very low temperature refrigeration equipment. In particular, we assessed the potential impact of the release of propane on local air quality and its ability to decompose in the atmosphere, its ODP, its GWP, and its potential impacts on ecosystems. EPA also considered propane's flammability and toxicity risks from the end-uses addressed in this rule.

As discussed previously, propane has an ODP of zero and a GWP of three and its effects on aquatic life are expected to be small. As to potential effects on local air quality, propane meets the definition of VOC under CAA regulations (see 40 CFR 51.100(s)) and is not excluded from that definition for the purpose of developing SIPs to attain and maintain the NAAQS. Based on the analysis and modeling results described in section VI.A.1.b.i, EPA concludes that the release of propane from the end-uses in this action, in addition to the HCs previously listed as acceptable, subject to use conditions, for their specific end-uses, is expected to have little impact on local air quality. In this regard, EPA finds particularly noteworthy that even assuming 100 percent market penetration of propane and the other acceptable HCs in the acceptable end-uses, which is a conservative assumption, the highest impact for a single 8-hour average ozone concentration based on this analysis would be 0.05 ppb in Los Angeles compared to both the 2008 ozone NAAQS at 75 ppb and the new, more stringent NAAQS at 70 ppb.

In addition, when examining all HC substitute refrigerants in those uses for which UL currently has standards in place, for which the SNAP program has already listed the uses as acceptable, subject to use conditions, or for which the SNAP program is reviewing a submission, including those in this action, we found that even if all the HC refrigerant substitutes in appliances in end-uses listed acceptable, subject to use conditions in this action and listed as acceptable in previous rules were to be emitted, there would be a worst-case impact of less than 0.15 ppb for ground-level ozone in the Los Angeles area.<sup>58</sup> The use conditions established in the SNAP listings limit the total amount of propane in each refrigerant circuit to 60 g or less or 150 g or less, depending on

the end-use. Because propane is not listed as acceptable for use in all refrigerant uses, the total amount of propane that could be emitted in the end-uses evaluated is estimated at roughly ten percent of total refrigerant emissions, or less than 16,000 metric tons annually.<sup>59</sup> Further, there are other substitute refrigerants that are not VOC that may also be used in these end-uses, so our analysis assuming complete market penetration of HCs is conservative.

In light of its evaluation of potential environmental impacts, EPA concludes that propane in the end-uses for which it is listed under SNAP as acceptable, subject to use conditions, in this action is not expected to pose a threat to the environment on the basis of the inherent characteristics of this substance and the limited quantities used in the relevant end-uses. In this regard, EPA finds particularly noteworthy that even assuming 100 percent market penetration of propane and the other acceptable HCs in the end-uses where they are listed as acceptable, subject to use conditions, which is a conservative assumption, the highest impact for a single 8-hour average ozone concentration based on this analysis would be 0.05 ppb in Los Angeles and less than 0.01 ppb in Houston and Atlanta.<sup>60</sup>

ii. Limits and Controls Under Other Authorities, Regulations, or Practices

EPA expects that existing authorities, controls, and/or practices will mitigate environmental risk from the release of propane. Analyses performed for both this rule and prior rules (59 FR 13044, March 17, 1994; 76 FR 78832, December 20, 2011; 79 FR 29682, May 23, 2014; and 80 FR 19453, April 10, 2015) indicate that existing regulatory requirements and industry practices limit and control the emission of propane, or other hydrocarbons, when used as a refrigerant in end-uses similar to this action. EPA notes that other applicable environmental regulatory requirements still apply and are not affected by the determination made in this action. This conclusion is relevant to the second factor mentioned above in the overall determination of whether venting, release, or disposal of a refrigerant substitute poses a threat to the environment.

Propane and other HCs being recovered, vented, released, or otherwise disposed of from commercial

<sup>59</sup> Ibid.

<sup>58</sup> ICF, 2014a. Assessment of the Potential Impact of Hydrocarbon Refrigerants on Ground Level Ozone Concentrations. February, 2014.

<sup>60</sup> ICF, 2016l. Additional Follow-on Assessment of the Potential Impact of Hydrocarbon Refrigerants on Ground Level Ozone Concentrations. September, 2016.

and industrial appliances are likely to be hazardous waste under RCRA (see 40 CFR parts 261 through 270). As discussed in the final rules addressing the venting of ethane, isobutane, propane, and R-441A as refrigerant substitutes in certain end-uses, incidental releases may occur during the maintenance, service, and repair of appliances subject to CAA section 608. Such incidental releases would not be subject to RCRA requirements for the disposal of hazardous waste, as such releases would not constitute disposal of the refrigerant charge as a solid waste, *per se*. Disposal or venting of propane from household appliances used in the home, such as a water cooler, is also generally not considered disposal of a hazardous waste under the existing RCRA regulations and could be vented under the household hazardous waste exemption, assuming other state or local requirements do not prohibit venting. See 40 CFR 261.4(b)(1). However, for commercial and industrial appliances such as self-contained commercial ice machines, very low temperature refrigeration equipment, or water coolers used in an industrial or office setting, it is likely that propane and other flammable HC refrigerant substitutes would be classified as hazardous waste and disposal of propane from such appliances would need to be managed as hazardous waste under the RCRA regulations (40 CFR parts 261 through 270), unless it is subject to a limited exception in those regulations if the ignitable refrigerant is to be recycled. Ignitable refrigerant that has been used and has become contaminated through use would fit the definition of a spent material under RCRA (40 CFR 261.1(c)(1)) if it must be reclaimed prior to its reuse. Spent materials that are reclaimed are solid wastes per section 261.2(c). However, if the hydrocarbon refrigerant is recovered for direct reuse (*i.e.*, no reclamation), it would not be classified as a solid or a hazardous waste (40 CFR 261.2(e)). In most cases, recycling of these materials would require cleaning (*i.e.*, reclamation) before they are reused.

As discussed in section VI.A.1.b.ii of this action and sections VI.A.1.b.ii and VI.A.1.b.iii of the proposed rule (81 FR 22827; April 18, 2016), EPA's SNAP program evaluated the flammability and toxicity risks from propane in the end-uses in this rule. Propane is classified as an A3 refrigerant by ASHRAE Standard 34–2013 and subsequent addenda, indicating that it has low toxicity and high flammability (for a further discussion on ASHRAE safety categories, see section VI.A.1.b.i.(b).

Propane has an LFL of 2.1 percent. In addition, like most refrigerants, HCs at high concentrations can displace oxygen and cause asphyxiation.

To address flammability risks, this action establishes required use conditions and provides voluntary recommendations for its safe use (see section VI.A.1.b.iii). This SNAP listing limits the amount of propane in the refrigerant loop to 150 g in self-contained commercial ice machines and in very low temperature refrigeration equipment and 60 g in water coolers. These charge size limits also reflect the UL 563, UL 399, and UL 471 industry standards, as discussed in the previous section. These use conditions mean that any potential propane emissions from any individual appliance will therefore be small. HC emissions from the three specific end-uses in this rule would be significantly smaller than those emanating from IPR systems, which are controlled by OSHA for safety reasons. Furthermore, it is the Agency's understanding that flammability risks and occupational exposures to HCs are adequately regulated by OSHA and building and fire codes at a local and national level.

The release and/or disposal of propane is also controlled by authorities established by OSHA and NIOSH guidelines, various industry standards, and state and local building codes. To the extent that release during maintaining, repairing, servicing, or disposing of appliances is controlled by regulations and standards of other authorities, these practices and controls for the use of propane are sufficiently protective. These practices and controls mitigate the risk to the environment that may be posed by the venting, release, or disposal of propane during the maintaining, servicing, repairing, or disposing of self-contained commercial ice machines, very low temperature refrigeration equipment, and water coolers.

EPA is aware of equipment that can be used to recover HC refrigerants. To the extent that propane is recovered rather than vented in specific end-uses and equipment, EPA recommends the use of recovery equipment designed specifically for flammable refrigerants in accordance with applicable safe handling practices. See section VI.A.1.b.iii for further discussion.

d. When does the exemption from the venting prohibition apply?

In the provision establishing the exemption from the venting prohibition, EPA is also establishing that the exemption will apply as of January 3, 2017, the same as the effective date of

the SNAP listing of propane in commercial ice machines, water coolers, and very low temperature refrigeration equipment.

e. How is EPA responding to comments?

EPA received comments from organizations and individuals with various interests in the refrigeration industry on the proposal to exempt propane in water coolers, commercial ice machines, and very low temperature freezers from the venting prohibition under section 608. Commenters included the Alliance for Responsible Atmospheric Policy (the Alliance), an industry organization; Chemours and Honeywell, two chemical producers; Hudson Technologies Company (Hudson), a refrigerant reclaimer; NEDA/CAP, an organization representing manufacturers of a variety of refrigeration and AC equipment; and an anonymous citizen.

We have grouped comments together and responded to the issues raised by the comments in the sections that follow, or in a separate Response to Comments document which is included in the docket for this rule (EPA–HQ–OAR–2015–0663).

*Comment:* Honeywell commented that it does not object to the proposal to exempt propane from the venting prohibition. However, Honeywell urged EPA to consider exempting HFOs in certain end-uses (HFO-1234yf in MVAC systems; HFO-1234ze(E) in centrifugal, reciprocating, screw, and scroll chillers; and HFO-1233zd(E) in centrifugal chillers) based on their zero ODP, low-GWP, and low-VOC reactivity.

*Response:* EPA interprets this comment as support for exempting propane in the three end-uses described in this rule from the venting prohibition. With regard to exempting certain HFOs in certain end-uses, the Agency takes this comment under advisement and may consider at some later date analyzing whether the release of these refrigerants poses a threat to the environment when vented, released, or disposed of, but has not done so for this rulemaking and thus is not taking final action on the commenter's suggested exemption.

*Comment:* The Alliance, Hudson, Chemours, and Arkema commented that EPA should not exempt propane from the venting prohibition. A primary concern of the Alliance and Hudson Technologies is that refrigerants should be properly managed. The Alliance was concerned that separate servicing practices for propane could cause confusion and lead to inadvertent venting of HFCs. The Alliance requested that EPA explain why propane should

be treated differently from all other fluids. Hudson commented that the intentional venting of any product to the atmosphere is poor environmental policy, poor service practice and poor product stewardship and was concerned that exempting propane perpetuates the destructive practice of increasing new production to replace vented refrigerant. Arkema stated that they believe that EPA's 608 regulations foster sustainability and good product stewardship, aside from reducing risk from SNAP substances. They indicated, however, that exemptions from the venting prohibition for propane or other HCs can foster only waste and consumption.

*Response:* EPA agrees that all refrigerants and refrigerant substitutes should be properly managed. However, EPA disagrees that proper management necessarily includes recovery in all cases. The refrigerant management practices in subpart F, including recovery, were designed with the properties of fluorinated refrigerants in mind. Requiring the recovery of refrigerants like water or nitrogen would provide no environmental benefit. For ammonia or chlorine, other regulations address the risks related to those specific compounds (for example, OSHA regulations that address risk to technician safety). Based on the analysis discussed previously, EPA has determined that venting, releasing, or disposing of propane in the end-uses in this rule does not pose a threat to the environment. The venting of propane in certain end-uses may also be the safest option in some situations, considering that such refrigerants are flammable but most existing recovery equipment is not designed and constructed for use with flammable refrigerants (e.g., with spark-proof components). Although it is true that the venting of propane allowed under the exemption may result in some additional waste and consumption, this is still preferable to unsafe recovery practices. Therefore, it is appropriate to treat propane differently from other refrigerant substitutes. EPA has also previously exempted propane from the venting prohibition when used in other specific end-uses, so this action is consistent with prior actions taken by EPA.

EPA can minimize confusion about whether the refrigerant may or may not be vented and can also make technicians and the public aware of the flammability of a refrigerant through the use of red coloration for hoses and labeling use conditions so that they can take appropriate precautions. Together these markings clearly distinguish an appliance containing propane or other

HC refrigerants which may be vented, from HFCs or other refrigerants that may not.

*Comment:* Hudson commented that EPA has been inconsistent in relying on the lack of recovery equipment designed for recovering HCs as a rationale for exempting flammable refrigerants. Despite past concern about the lack of such equipment, EPA has not exempted HFC-32 or HFO-1234yf, both flammable refrigerants, from the venting prohibition.

*Response:* The Agency has discretion to determine whether to establish an exemption from the venting prohibition under CAA section 608(c)(2). To make that determination, the Agency analyzes individual refrigerant substitutes, typically in discrete end-uses, to determine whether the venting, releasing, or disposal of that refrigerant substitute from those end-uses will pose a threat to the environment. For this rulemaking, EPA has analyzed the potential environmental threats from venting, releasing, or disposing propane from three end-uses. EPA has provided its justification for allowing the venting of propane from these three end-uses in this action. EPA did not propose to exempt HFOs, such as HFO-1234yf, or HFC-32 from the venting prohibition in this action and thus did not analyze whether the venting, release, or disposal of those substances would pose a threat to the environment for this rule. Though these refrigerants may share the characteristic of flammability with propane, they have other physical characteristics and end-uses than propane. Moreover, the mere fact that the Agency has analyzed some flammable HC refrigerants in some specific end-uses and made the necessary determination to exempt those substances in those end-uses from the venting prohibition does not necessarily mean that such a determination would be appropriate for all flammable HC refrigerant substitutes in all end-uses.

*Comment:* Hudson commented that propane's low GWP, and the small refrigerant charges involved with the approved uses, does not justify different treatment for this refrigerant, or for any of the previously approved and exempted flammable refrigerants.

*Response:* The Agency disagrees that these characteristics do not justify different treatment for this refrigerant. GWP, ODP, and total possible usage are some of the characteristics appropriate to consider in determining whether the release of propane from these three end-uses poses a threat to the environment.

*Comment:* The Alliance commented that the appropriateness of waiving the

venting prohibition for propane requires ongoing consideration and examination, particularly as applications for flammable refrigerants are expanded and charge sizes increase.

*Response:* EPA analyzes individual refrigerant substitutes, typically in discrete end-uses, to determine whether the venting, releasing, or disposal of those substances in those end-uses will pose a threat to the environment. The exemption that EPA is establishing today applies only to propane and only in three discrete end-uses that are subject to use conditions, including restrictions on charge size. Before establishing an exemption for propane in any other end-uses, EPA would analyze whether the venting, release, or disposal of propane in that end-use would pose a threat to the environment.

*Comment:* An anonymous commenter noted that due to inconsistencies among overlapping regulations, there is confusion in the regulated community regarding releases of refrigerants which are hazardous wastes but are exempt from the prohibition on venting. The commenter further notes that this issue is not addressed within the regulation itself, which is the information source most of the regulated community will reference routinely in the future. The commenter provided sample language to be added to 82.154(a) to clarify that the exemption from the prohibition on venting provided in 40 CFR part 82, subpart F does not exempt the release of the listed refrigerants and substitutes from other applicable laws and regulations which may prohibit or limit releases into the environment.

*Response:* One of the criteria EPA considers in determining whether a refrigerant poses a threat to the environment when released is whether such releases are controlled by other authorities, regulations, or practices. For example, HC refrigerant substitutes may be subject to restrictions under RCRA and ammonia may be subject to restrictions under OSHA regulations, and when those RCRA or OSHA requirements apply, they would disallow the release of these respective substances into the environment. EPA is finalizing regulatory text in 82.154(a) that clarifies that the exemption to the venting prohibition is specific to the prohibition under section 608(c).

#### f. Conclusion

EPA has reviewed the potential environmental impacts of propane in the three specific end-uses in this action, as well as the authorities, controls, and practices in place for that substitute. EPA also considered the public comments on the proposal for

this action. Based on this review, EPA concludes that propane in these end-uses and subject to these use conditions are not expected to pose a threat to the environment based on the inherent characteristics of these substances and the limited quantities used in the relevant applications. EPA additionally concludes that existing authorities, controls, or practices help mitigate environmental risk from the release of propane in these end-uses and subject to these use conditions.

In light of these conclusions and those described or identified above in this section, EPA is determining that based on current evidence and risk analyses, the venting, release, or disposal of propane in these end-uses during the maintenance, servicing, repairing, or disposing of the relevant appliances does not pose a threat to the environment.

EPA is therefore exempting from the venting prohibition at 40 CFR 82.154(a)(1) these additional end-uses for which these HCs are being listed as acceptable, subject to use conditions, under the SNAP program.

### 3. Unacceptable Listing of Certain Flammable Refrigerants for Retrofits in Unitary Split AC Systems and Heat Pumps

#### a. Background

Existing unitary split AC systems and heat pumps were not designed to use a flammable refrigerant. People and property have been harmed by the retrofit or so-called 'drop-in' use of certain flammable refrigerants in existing unitary split AC and heat pump equipment designed to use a nonflammable refrigerant. For new room AC equipment, we have listed certain flammable refrigerants as acceptable on the basis that flammability risks can be addressed in designing the equipment and mitigated through use conditions. In contrast, existing equipment has not been designed for flammable refrigerants and we have not identified appropriate use conditions that can manage the flammability risk for retrofits such that these flammable refrigerants would pose similar or lower risk than other available refrigerants in this end-use.

#### i. What is the affected end-use?

The residential and light commercial AC and heat pumps end-use includes equipment for cooling air in individual rooms, in single-family homes, and sometimes in small commercial buildings. This end-use differs from commercial comfort AC, which uses chillers that cool water that is then used

to cool air throughout a large commercial building, such as an office building or hotel. This rule specifically concerns unitary split AC systems and heat pumps, commonly called central AC. These systems include an outdoor unit with a condenser and a compressor, refrigerant lines, an indoor unit with an evaporator, and ducts to carry cooled air throughout a building. Unitary split heat pumps are similar but offer the choice to either heat or cool the indoor space. This action applies to certain flammable refrigerants for retrofit use in this type of equipment.

ii. What other types of equipment are used for similar applications pumps but are not covered by this section of the rule?

The unacceptability determination for certain flammable refrigerants in this action does not apply to other types of residential and light commercial AC and heat pump equipment, but may do so in the future. Other types of residential and light commercial AC and heat pump equipment not included in this unacceptability determination include:

- Multi-split air conditioners and heat pumps;
- Mini-split air conditioners and heat pumps;
- Packaged outdoor air conditioners and heat pumps;
- Window air conditioners and heat pumps;
- Packaged terminal air conditioners (PTACs) and packaged terminal heat pumps (PTHP); and
- Portable room air conditioners and heat pumps.

For a description of these types of equipment, see section VI.A.3.a.i in the proposed rule (81 FR 22833; April 18, 2016).

#### b. What is EPA's final decision?

As proposed, EPA is listing the following flammable refrigerants as unacceptable for retrofits in unitary split AC systems and heat pumps:

- All refrigerants identified as flammability Class 3 in ANSI/ASHRAE Standard 34–2013. These include the HCs R-1150 (ethylene), R-170 (ethane), R-1270 (propylene), R-290 (propane), R-50 (methane), R-600 (n-butane), R-600a (isobutane), R-601 (n-pentane), and R-601a (isopentane); the HC blends R-433A, R-433B, R-433C, R-436A, R-436B, R-441A, and R-443A; and the refrigerant blends R-429A, R-430A, R-431A, R-432A, R-435A, and R-511A. All of these refrigerants except R-435A contain HCs, with some also containing the flammable compounds dimethyl ether and HFC-152a.

- All refrigerants meeting the criteria for flammability Class 3 in ANSI/ASHRAE Standard 34–2013. These include, but are not limited to, refrigerant products sold under the names R-22a, 22a, Blue Sky 22a refrigerant, Coolant Express 22a, DURACOL-22a, EC-22, Ecofreeez EF-22a, Envirosafe 22a, ES-22a, Frost 22a, HC-22a, Maxi-Fridge, MX-22a, Oz-Chill 22a, Priority Cool, and RED TEK 22a.

For background on the flammability classes and their criteria in ANSI/ASHRAE Standard 34–2013, see section VI.A.1.b.i.(b).

EPA is aware of a number of situations where companies have sold highly flammable refrigerants for use in residential AC that have not been submitted to SNAP for review. EPA has conducted enforcement actions against companies that have sold such substitutes in violation of EPA's regulations. EPA is also aware of multiple instances where people and property using one of the numerous refrigerants marketed as "22a" in a residential AC system were harmed in explosions and fires, in part because the person servicing the AC system was not aware that the system contained a highly flammable refrigerant.

Considering this demonstration of the flammability risks of retrofitting residential AC systems as well as the lack of risk mitigation available for existing equipment (e.g., charge limits or design for reduced leakage), EPA is listing R-22a, 22a, and other similar liquefied petroleum gases as unacceptable, as well as refrigerants with a flammability classification of 3 in ASHRAE 34–2013 or that meet the criteria for such classification, including R-22a, 22a, and other similar liquefied petroleum gases, as unacceptable in this end use.

In addition to refrigerants specifically identified in the ASHRAE 34–2013 standard as having a flammability classification of 3, EPA is listing refrigerants meeting the criteria of that standard as unacceptable. In other words, refrigerants are unacceptable if they exhibit flame propagation and either have a heat of combustion of 19,000 kJ/kg (8,174 BTU/lb) or greater or an LFL of 0.10 kg/m<sup>3</sup> or lower, when tested in accordance with ASTM E681 using a spark ignition source at 60 °C and 101.3 kPa. Thus, refrigerants identified with a flammability classification of 3 in future editions of ASHRAE 34 would also be unacceptable if they meet those criteria. We are aware of a number of refrigerant products sold over the internet aimed at the market for retrofit usage in refrigeration and AC equipment using HCFC-22 with names



containing “22a,” such as R-22a, Blue Sky 22a refrigerant, Coolant Express 22a, DURACOL-22a, EC-22, Ecofreeez EF-22a, Envirosafe 22a, ES-22a, Frost 22a, HC-22a, Maxi-Fridge, MX-22a, Oz-Chill 22a, and RED TEK 22a. EPA has analyzed one of these refrigerants and determined that it contained propane mixed with a pine-scented odorant. These refrigerants are also identified as flammable in their Safety Data Sheets and are often identified as “liquified petroleum gases.” Although none of these liquified petroleum gas refrigerants have been submitted to SNAP for review, EPA expects that they all are comparable in their flammability to propane and other refrigerants that meet an ASHRAE flammability classification of 3. It is our

understanding these refrigerants are all of the same or similar composition, are produced by a limited number of facilities using the same process, and then are marketed under different names by different distributors.

i. How do these unacceptable refrigerants compare to other refrigerants for these end-uses with respect to SNAP criteria?

EPA has listed a number of alternatives as acceptable for retrofit usage in unitary split AC systems and heat pumps. All of the listed alternatives are HFC blends, with some containing small percentages (approximately five percent or less) of HCs. Specific blends include R-125/134a/600a (28.1/70/1.9), R-125/290/

134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-407F, R-417A, R-417C, R-421A, R-422B, R-422C, R-422D, R-424A, R-427A, R-434A, R-438A, R-507A, and RS-44 (2003 composition). These blends are all non-ozone-depleting. As shown in Table 3, they have GWPs ranging from approximately 1,770 for R-407C to 3,990 for R-507A. Knowingly venting or releasing these refrigerants is prohibited under section 608(c)(2) of the CAA, codified at 40 CFR 82.154(a)(1). The HFC components of these refrigerant blends are excluded from the definition of VOC under CAA regulations (see 40 CFR 51.100(s)) addressing the development of SIPs to attain and maintain the NAAQS, while the HC components are VOC.

TABLE 3—GWP, ODP, AND VOC STATUS OF REFRIGERANTS LISTED AS FLAMMABILITY CLASS 3 OR MEETING THE CRITERIA FOR FLAMMABILITY CLASS 3 COMPARED TO OTHER REFRIGERANTS LISTED AS ACCEPTABLE FOR RETROFIT IN EXISTING EQUIPMENT FOR RESIDENTIAL AND LIGHT COMMERCIAL AC

[Unitary split AC systems and heat pumps]<sup>1 2</sup>

Refrigerants	GWP	ODP	VOC	Listing status
All refrigerants identified as flammability Class 3 in ANSI/ASHRAE Standard 34–2013.	2–120	0 .....	Yes <sup>3</sup> .....	Unacceptable.
All refrigerants meeting the criteria for flammability Class 3 in ANSI/ASHRAE Standard 34–2013, including, but not limited to the products named R-22a, 22a, Blue Sky22a refrigerant, Coolant Express 22a, DURACOL-22a, EC-22, Ecofreeez EF-22a, Envirosafe 22a, ES-22a, Frost 22a, HC-22a, Maxi-Fridge, MX-22a, OZ-Chill 22a, Priority Cool, and RED TEK22a.	2–120	0 .....	Yes <sup>3</sup> .....	Unacceptable.
R-404A, R-407A, R-407C, R-407F, R-421A, R-427A, R-507A .....	1,770–3,990	0 .....	No .....	Acceptable.
Hot Shot 2, R-125/R-134a/R-600a (28.1/70.0/1.9), R-125/R-290/R-134a/R-600a (55.0/1.0/42.5/1.5), R-417A, R-422B, R-422C, R-422D, R-424A, R-427A, R-434A, R-437A, R-438A, RS-44 (2003 formulation) ..	1,810–3,390	0 .....	Yes <sup>4</sup> .....	Acceptable.

<sup>1</sup> The table does not include not-in-kind technologies listed as acceptable for the stated end-use.

<sup>2</sup> HCFC-22 and several blends containing HCFCs are also listed as acceptable but their use is severely restricted by the phasedown in HCFC production and consumption.

<sup>3</sup> The entire refrigerant or most of the constituents are VOC.

<sup>4</sup> One or more constituents of the refrigerant are VOC.

In the proposed rule (81 FR 22835; April 18, 2016), EPA provided information on the risk to human health and the environment presented by the alternatives that are being found unacceptable as compared with other available alternatives listed as acceptable for this end-use. In addition, a technical support document<sup>61</sup> that provides the **Federal Register** citations concerning data on the SNAP criteria (e.g., ODP, GWP, VOC, toxicity, flammability) for acceptable alternatives in the relevant end-uses may be found in the docket for this rulemaking (EPA–HQ–OAR–2015–0663). In summary, both the currently acceptable refrigerants and those we are listing as

unacceptable in this action are non-ozone depleting. The refrigerants being listed as unacceptable would result in higher VOC emissions than the acceptable refrigerants, with the saturated HCs (e.g., propane, isobutane) having a low impact and unsaturated HCs (e.g., propylene) having a significant impact (see section VI.A.1.b.i on the potential local air quality impacts of propylene and R-443A). The refrigerants being listed as unacceptable have significantly lower GWPs than the refrigerants that would remain acceptable.

As discussed in section VI.A.3.a.ii in the proposed rule (81 FR 22835–36; April 18, 2016), EPA’s SNAP program evaluated the flammability and toxicity risks from the flammable refrigerants in the end-use in this rule. EPA is providing some of that information in this section as well. All refrigerants

currently listed as acceptable in this end-use are nonflammable, resulting in no risk of fire or explosion from flammability of the refrigerant. In comparison, ASHRAE Class 3 refrigerants are highly flammable. As discussed in section VI.A.4.b.i, EPA analyzed the flammability impacts of one ASHRAE Class 3 refrigerant, R-443A, and found that a release of the entire refrigerant charge inside a building from a larger unitary split AC system or heat pump could result in surpassing the LFL.<sup>62</sup> Because of the large charge sizes required for this type of equipment and the similar LFLs for other ASHRAE Class 3 refrigerants, it is likely the LFL would also be surpassed

<sup>61</sup> EPA, 2016b. Tables of Alternatives for End-Uses Considered in the Rule, Protection of Stratospheric Ozone: Listing Modifications for Certain Substitutes under the Significant New Alternatives Policy Program. September, 2016.

<sup>62</sup> ICF, 2016f. Significant New Alternatives Policy Program. Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Residential and Light Commercial Air Conditioning and Heat Pumps. Substitute: R-443A.

for other ASHRAE Class 3 refrigerants in a similar worst-case situation. Fires and harm to people and property have already occurred in multiple cases due to retrofit or drop-in use of R-22a and similar products in existing unitary split AC systems and heat pumps. As discussed above, EPA expects that R-22a, Blue Sky 22a refrigerant, Coolant Express 22a, DURACOL-22a, EC-22, Ecofreeez EF-22a, EnviroSAFE 22a, ES-22a, Frost 22a, HC-22a, Maxi-Fridge, MX-22a, Oz-Chill 22a, and RED TEK 22a are comparable in their flammability to propane and other refrigerants that meet an ASHRAE flammability classification of 3.

Both the acceptable refrigerants and the unacceptable refrigerants are able to be used in this end-use in accordance with their respective 8-hr or 10-hr workplace exposure limits. However, acute exposure may also be of concern during use in unitary split AC systems and heat pumps because of possible exposure to consumers in the event of a sudden release. For instance, as discussed below in section VI.A.4.b.i, EPA analyzed the acute toxicity of the propylene component of one ASHRAE Class 3 refrigerant, R-443A, and found that a release of the entire refrigerant charge inside a building from a larger unitary split AC system or heat pump could result in surpassing the acute exposure limit.<sup>63</sup> Because of the large charge sizes required for this type of equipment and somewhat lower acute exposure limits for the HC components of ASHRAE Class 3 refrigerants compared to HFCs and the acceptable refrigerants in this end-use, acute exposure could be a concern for some specific Class 3 refrigerants.

For these end-uses, although use of the highly flammable refrigerants would result in a reduced climate impact, the safety risks of using these refrigerants in existing equipment that was designed for nonflammable refrigerants creates a more significant and imminent risk. In addition to flammability risk, in at least some cases, the likelihood for an exceedance of acute exposure limits of the unacceptable refrigerants also supports a determination that those refrigerants pose significantly greater risk than other available alternatives. The Agency is open to revisiting this listing decision if we receive information on how risks from the refrigerants listed as unacceptable can be sufficiently mitigated. Further information on these analyses and

EPA's risk assessments are available in the docket for this rulemaking (EPA-HQ-OAR-2015-0663).

ii. When will the listings apply?

EPA is establishing a listing date as of January 3, 2017, the same as the effective date of this regulation. To date, none of these substitutes have been submitted to EPA for this end-use for retrofit use. Under 40 CFR 82.174, manufacturers are prohibited from introducing them into interstate commerce for this end-use for retrofit use. Thus, manufacturers and service technicians should not be currently using these substitutes in the manner that would be prohibited by this listing decision.

c. How is EPA responding to comments?

EPA received several comments from individuals and organizations with various interests in residential AC. Comments were in reference to the proposed listing status of ASHRAE Class 3 flammable refrigerants, extending the proposal to other end-uses, and use of unique fittings with flammable refrigerants. Most commenters supported the proposed listing decisions and effective date of 30 days after date of publication of the rule in the **Federal Register**, while one commenter suggested a listing as unacceptable was not needed for some specific refrigerants. Commenters generally agreed that use of flammable refrigerants in equipment that was not designed for them was potentially dangerous.

Commenters included AHRI, the Japan Refrigeration and Air Conditioning Industry Association (JRAIA), and the Alliance, three industry organizations; Whitmyre Equipment Company and Whitmyre Research, consultants for A.S. Trust & Holdings; United Technologies Climate Controls & Security (UTC CCS and hereafter "UTC"); Hudson, a refrigerant reclaimer; Chemours, a chemical producer; and environmental organizations NRDC and IGSD.

We have grouped comments together and responded to the issues raised by the comments in the sections that follow, or in a separate Response to Comments document which is included in the docket for this rule (EPA-HQ-OAR-2015-0663).

i. Substitutes and End-Use Proposed

*Comment:* The Alliance, Chemours, Hudson, JRAIA, and NRDC, all supported EPA's proposal to list refrigerants classified as A3 (or meeting A3 criteria) under ASHRAE Standard 34 as unacceptable for retrofitting unitary

split AC systems and heat pumps. AHRI, JRAIA, and Chemours supported the proposed listing, stating it would mitigate demonstrated risks of serious injury and property damage. NRDC and IGSD found EPA's proposed unacceptability finding for Class 3 flammable refrigerants in retrofit applications reasonable and necessary to ensure a safe transition to low-GWP alternatives.

*Response:* EPA agrees with the commenters and is finalizing these listing decisions as proposed.

*Comment:* AHRI, JRAIA, and the Alliance requested that EPA list all refrigerants classified as A3 under ASHRAE Standard 34 as unacceptable for retrofitting in all types of residential and light commercial AC and heat pumps. JRAIA also requested similar treatment for retrofitting of flammable refrigerants to all types retail food refrigeration equipment. The commenters expressed concern that by issuing an unacceptability listing only for unitary split AC and heat pumps, some may conclude that it is currently acceptable to retrofit other, similar equipment classes with similar risks with these refrigerants.

*Response:* EPA did not propose and is not finalizing provisions to list Class 3 flammable as unacceptable for retrofitting other types of refrigeration and AC equipment besides unitary split AC systems and heat pumps. This would require an additional opportunity for public comment. We have received reports of the use of highly flammable refrigerants only in unitary split AC systems and heat pumps, so we are less concerned that such refrigerants are likely to be used in other types of residential and light commercial AC and heat pump equipment. Further, in EPA's listings of the Class 3 flammable refrigerants propane, isobutane, and R-441A in a number of end-uses, including stand-alone retail food refrigeration equipment and room AC and heat pump equipment, we have included a use condition specifying that the listing is only for new equipment specifically designed for the refrigerant. Thus, EPA does not agree that the industry is likely to perceive an unacceptable listing only for retrofit of one type of equipment as implying acceptability of retrofit for other types of equipment. Further, as EPA has received no submissions for retrofitting flammable refrigerants in any residential AC or retail food refrigeration use and has not issued a listing for any such use, both introduction into interstate commerce and use in retrofit refrigeration and AC equipment are violations of EPA's SNAP regulations.

<sup>63</sup> ICF, 2016f. Significant New Alternatives Policy Program. Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Residential and Light Commercial Air Conditioning and Heat Pumps. Substitute: R-443A.

Thus, even without an explicit listing of unacceptability, it is not allowed to retrofit with flammable refrigerants in existing equipment.

*Comment:* JRAIA commented that charging systems with refrigerants for which the equipment was not originally designed can lead to failures and malfunctions, as well as safety risks. The commenter stated that if defects occur in equipment due to improperly retrofitting with flammable refrigerant, even if no injury occurs, in most cases the equipment must be replaced with the equipment owners themselves responsible for the replacement cost.

*Response:* EPA agrees that charging systems with refrigerants for which the equipment was not originally designed can lead to failures and malfunctions. However, that type of issue is not a consideration in determining whether to list a substitute as acceptable or unacceptable, though it could be considered in establishing use conditions for an acceptable substitute. The basis of EPA's unacceptability decision is that the overall risk to human health and the environment is greater for ASHRAE Class 3 refrigerants because of the flammability risk, and in some cases the toxicity risk, than for other available substitutes for retrofitting in unitary split AC and heat pumps.

#### ii. Industry Standards and Codes

*Comment:* UTC, with Carrier, Taylor, and Kidde Fenwal as member companies, stated that EPA should list Class 3 refrigerants as unacceptable for use in unitary split AC and heat pumps but should clarify that future Class 3 refrigerants added to successive editions of ASHRAE 34 will also be unacceptable. The commenter noted that the regulatory text references ANSI/ASHRAE standard 34–2013: Designation and Safety Classification of Refrigerants, November 2013, and thus, EPA's determination of "all refrigerants" meeting the criteria in the 2013 edition of the standard might not extend to refrigerants which meet the criteria in future editions of the standard.

*Response:* To the extent that future Class 3 refrigerants meet the criteria in ANSI/ASHRAE 34–2013, they will be unacceptable. Specifically, if a refrigerant exhibits flame propagation and either has a heat of combustion of 19,000 kJ/kg (8,174 BTU/lb) or greater or an LFL of 0.10 kg/m<sup>3</sup> or lower, it is unacceptable because it is a refrigerant "meeting the criteria for flammability Class 3 in ANSI/ASHRAE Standard 34–2013." However, EPA cannot create a listing that would automatically find refrigerants unacceptable based on the

criteria for Class 3 refrigerants in future versions of ANSI/ASHRAE 34, as those criteria are not available for EPA or the public to consider. If ASHRAE changes the standard to revise those criteria, EPA could consider whether to take rulemaking action considering whether to modify the listing decision to reflect the criteria in the revised standard.

#### iii. Unique Fittings

*Comment:* AHRI supported the use of separate servicing fittings for flammable refrigerants beyond labeling and color coded hosing and piping. The commenter stated that equipment originally designed for non-flammable refrigerants will not necessarily be equipped with different fittings increasing the risk of injury during servicing. Whitmyre Equipment Company and Whitmyre Research asserted that there is no need for concern about AC or heat pump systems being retrofitted for use with R-443A or other propylene-containing refrigerants, as this will not be permitted due to use of unique hardware fittings which have already been discussed with, and approved by, EPA.

*Response:* There currently is no requirement for unique fittings on residential AC and heat pump equipment. EPA has not proposed and is not finalizing the use of separate servicing fittings for flammable refrigerants. We agree that such fittings can be useful to prevent the use of refrigerants that a piece of equipment was not designed to use and could consider whether to modify the existing acceptable listings to include such a requirement. While it is true that certain of the refrigerants EPA is listing as unacceptable in this end-use have developed unique fittings for other end-uses for which there is a unique fitting requirement, it is unclear that would prevent use as a retrofit in the end-uses at issue here since for those end-uses, there is no unique fitting requirement.

#### 4. Unacceptable Listing of Propylene and R-443A for New Residential and Light Commercial AC and Heat Pumps, Cold Storage Warehouses, and Centrifugal and Positive Displacement Chillers

##### a. Background

The refrigeration and AC end-uses addressed in this action include:

- Centrifugal chillers;
- positive displacement chillers;
- residential and light commercial AC and heat pumps, including both self-contained units (e.g., window air conditioners, PTACs and PTHPs, portable AC units) and split systems;

- cold storage warehouses.

EPA has received a submission for R-443A in new residential and light commercial AC and heat pumps and for new window air conditioners, a subset of that end-use. We have also received a submission for propylene for use in new chillers for commercial comfort AC (centrifugal and positive displacement chillers) and for cold storage warehouses. Because the two refrigerants, R-443A and propylene, have similar properties and risk profiles, we reviewed both refrigerants for all four end-uses.

Propylene, also known as propene or R-1270, is a HC with three carbons, the chemical formula C<sub>3</sub>H<sub>6</sub>, and the CAS Reg. No. 115–17–1. R-443A is a HC blend<sup>64</sup> consisting of 55 percent propylene, 40 percent propane, and five percent isobutane by weight.

DOE has indicated its intent to issue a proposed energy conservation standard for portable air conditioners, a subset of the residential and light commercial air conditioning and heat pumps end-use. For further information on the relationship between this action and other federal rules, see section VI.A.3.b.v of the proposed rule (81 FR 22841; April 18, 2016).

##### b. What is EPA's final decision?

As proposed, EPA is listing the refrigerants propylene (R-1270) and R-443A as unacceptable in new equipment in residential and light commercial AC and heat pumps, cold storage warehouses, and centrifugal and positive displacement chillers for commercial comfort AC. EPA's concerns about propylene and R-443A are primarily due to the effect of these refrigerants on local air quality, although for some equipment with higher charge sizes, flammability and toxicity are also a concern. Other acceptable refrigerants are available in the same end-uses that pose overall lower risk than R-443A and propylene.

##### i. How do these unacceptable refrigerants compare to other refrigerants for these end-uses with respect to SNAP criteria?

EPA has listed a number of alternatives as acceptable in new equipment in residential and light commercial AC and heat pumps, cold

<sup>64</sup> EPA notes that under the SNAP program, we review and list refrigerants with specific compositions (59 FR 13,044; March 18, 1994). To the extent possible, we follow ASHRAE's designations for refrigerants. Blends of refrigerants must be reviewed separately. For example, we consider each blend of propane with isobutane to be a different and unique refrigerant, and each would require separate submission, review and listing.

storage warehouses, and centrifugal and positive displacement chillers for commercial comfort AC. In the proposed rule (81 FR 22837–22841; April 18, 2016), EPA provided information on the risk to human health and the environment presented by the alternatives that are being found unacceptable as compared with other available alternatives listed as acceptable in these end-uses. In addition, a technical support document that provides the **Federal Register** citations concerning data on the SNAP criteria (e.g., ODP, GWP, VOC, toxicity, flammability) for acceptable alternatives in the relevant end-uses may be found in the docket for this rulemaking (EPA–HQ–OAR–2015–0663).

Propylene and R-443A have an ODP of zero. Many acceptable substitutes in the refrigeration and AC end-uses addressed in this rule also have an ODP

of zero (e.g., HFCs, HFOs, CO<sub>2</sub>, ammonia, HCs, and not-in-kind technologies).<sup>65</sup> Of the acceptable refrigerants having an ODP, they have ODPs ranging from 0.00024 to 0.047.<sup>66 67</sup> Thus, propylene and R-443A have ODPs comparable to or less than the ODPs of other alternatives in the end-uses in this rule.

Propylene and the components of R-443A have relatively low GWPs of less than ten. As shown in Table 4, GWPs of acceptable refrigerants in these end-uses range from zero (NIK) to 3,990 (R-507A) in new residential and light commercial AC and heat pumps; zero (ammonia and not-in-kind technologies) to 630 (R-513A) in new chillers, and zero (ammonia) to approximately 1,830 (R-407F) for new cold storage warehouses.<sup>68</sup> The GWPs of propylene and R-443A are lower than those of a number of HFCs and HFC/HFO blends,

such as R-450A and R-513A in all four end-uses; HFC-134a, R-407C and R-407F in cold storage warehouses and residential and light commercial AC and heat pumps; and R-410A in residential and light commercial AC and heat pumps. The GWPs of propylene and R-443A are comparable to or higher than those of CO<sub>2</sub>, propane, isobutane, R-441A, ammonia, HFO-1234ze(E), *trans*-1-chloro-3,3,3-trifluoroprop-1-ene, and not-in-kind technologies such as Stirling cycle, water/lithium bromide absorption, desiccant cooling, or evaporative cooling, each of which is acceptable in new equipment for one or more of the four end-uses. In addition, propylene and R-443A have lower GWPs than those of ODS historically used in these end-uses, CFC-12 (GWP = 10,900); HCFC-22 (GWP = 1,810); and R-502 (GWP = 4,660).<sup>69</sup>

TABLE 4—GWP, ODP, AND VOC STATUS OF PROPYLENE AND R-443A COMPARED TO OTHER REFRIGERANTS IN NEW EQUIPMENT FOR RESIDENTIAL AND LIGHT COMMERCIAL AC AND HEAT PUMPS, COLD STORAGE WAREHOUSES, CENTRIFUGAL CHILLERS AND POSITIVE DISPLACEMENT CHILLERS <sup>1 2</sup>

Refrigerants	GWP	ODP	VOC	Listing status
Propylene, R-443A .....	2–3	0 .....	Yes .....	Unacceptable.
<b>New Residential and Light Commercial AC and Heat Pumps</b>				
HFC-32 <sup>3</sup> , HFC-134a, R-404A, R-407A, R-407C, R-407F, R-410A, R-410B, R-417A, R-421A, R-507A.	675–3,990	0 .....	No .....	Acceptable.
R-290 <sup>3</sup> , R-441A <sup>3</sup> , THR-03 <sup>3</sup> , R-125/R-134a/R-600a (28.1/70.0/1.9), R-125/R-290/R-134a/R-600a (55.0/1.0/42.5/1.5), R-422B, R-422C, R-422D, R-424A, R-434A, R-437A, R-438A, RS-44 (2003 formulation).	3–3,390	0 .....	Yes <sup>4</sup> .....	Acceptable.
<b>New Cold Storage Warehouses</b>				
HFC-134a, R-407C, R-407F, R-450A, R-513A, R-717, R-744 .....	1–1,810	0 .....	No .....	Acceptable.
FOR12A, FOR12B, IKON A, IKON B, KDD6, R-437A, RS-24 (2002 composition), RS-44, SP34E, THR-02, THR-03.	30–1,810	0—Not public <sup>5</sup> .....	Yes <sup>4</sup> .....	Acceptable.
<b>New Centrifugal Chillers</b>				
HFO-1234ze(E), R-1233zd(E), R-450A, R-513A, R-717, R-744 .....	0–630	0–0.00034 .....	No .....	Acceptable.
HFO-1336mzz(Z), IKON A, IKON B, R-514A, THR-02 .....	7–560	0—Not public <sup>5</sup> .....	Yes <sup>4</sup> .....	Acceptable.
<b>New Positive Displacement Chillers</b>				
HFO-1234ze(E), R-450A, R-513A, R-717, R-744 .....	0–631	0 .....	No .....	Acceptable.
HFO-1336mzz(Z), IKON B, R-514A, THR-02 .....	0–560	0—Not public <sup>5</sup> .....	Yes <sup>4</sup> .....	Acceptable.

<sup>1</sup> The table does not include not-in-kind technologies listed as acceptable for the stated end-use.

<sup>2</sup> HCFC-22 and several blends containing HCFCs are also listed as acceptable but their use is severely restricted by the phasedown in HCFC production and consumption.

<sup>3</sup> Listed only for use in room AC units.

<sup>4</sup> One or more constituents of the refrigerant are VOC.

<sup>5</sup> The ODP of one or more alternatives is not published here in order to avoid disclosing information that is claimed as confidential business information.

<sup>65</sup> We assume that substitutes containing no chlorine, bromine, or iodine have an ODP of zero.

<sup>66</sup> EPA, 2016b. Tables of Alternatives for End-Uses Considered in the Final Rule, Protection of Stratospheric Ozone: Listing Modifications for Certain Substitutes under the Significant New Alternatives Policy Program. September, 2016.

<sup>67</sup> Under EPA's phaseout regulations, virgin HCFC-22, HCFC-142b, and blends containing HCFC-22 or HCFC-142b may only be used to service existing appliances. Consequently, virgin HCFC-22,

HCFC-142b, and blends containing HCFC-22 or HCFC-142b may not be used to manufacture new pre-charged appliances or appliance components or to charge new appliances assembled onsite. Substitutes containing these HCFCs have ODPs ranging from 0.01 to 0.065. Class I and II ODS historically used as refrigerants in these end-uses have ODPs that range from 0.01 to 1.0.

<sup>68</sup> At the time of proposal, the highest GWP of any acceptable alternative in each of these end-uses was 3,990.

<sup>69</sup> IPCC, 2007. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. This document is accessible at: [www.ipcc.ch/publications\\_and\\_data/ar4/wg1/en/contents.html](http://www.ipcc.ch/publications_and_data/ar4/wg1/en/contents.html).

In addition to ODP and GWP, EPA evaluated potential impacts of propylene and the components of R-443A on local air quality. Propylene and the three components of R-443A, propylene, propane, and isobutane meet the definition of VOC under CAA regulations (see 40 CFR 51.100(s)) and are not excluded from that definition for the purpose of developing SIPs to attain and maintain the NAAQS. However, there is a significant difference in the photochemical reactivity between propylene and the other two HCs. Propylene, because it has an unsaturated double bond between two carbons, is significantly more reactive in the atmosphere than propane, the saturated HC with the same number of carbon atoms, and isobutane. For example, the Maximum Incremental Reactivity (MIR) of propylene, in gram ozone per gram of the substance, is 11.57 while the MIR of propane is 0.56 g O<sub>3</sub>/g and the MIR of isobutane is 1.34 g O<sub>3</sub>/g.<sup>70</sup> Thus, propylene is roughly 21 times more reactive than propane and roughly nine times more reactive than isobutane for the same mass. Propylene is also more than 100 times more reactive than HFC-134a (MIR < 0.1) and a number of other HFCs acceptable for these end-uses and is significantly more reactive than unsaturated halogenated substitutes in these end-uses, such as HFO-1234yf (MIR = 0.28), HFO-1234ze(E) (MIR = 0.098), or *trans*-1-chloro-3,3,3-trifluoroprop-1-ene (Solstice™ 1233zd(E)) (MIR = 0.040).

EPA analyzed a number of scenarios to consider the potential impacts on local air quality if HC refrigerants were used widely. We used EPA's Vintaging Model to estimate the HC emissions from these scenarios and EPA's Community Multiscale Air Quality (CMAQ) model to assess their potential incremental contributions to ground-level ozone concentrations.<sup>71</sup> The first analysis assumed that all refrigerant used was emitted to the atmosphere, as it could be if refrigerants were exempted from the venting prohibition of CAA section 608. In that highly conservative scenario, the model predicted that the maximum increase in the 8-hour average ground-level ozone concentration would be 0.72 ppb in Los Angeles if the most reactive saturated HC, isobutane, were the only refrigerant and it was all emitted to the atmosphere. If the unsaturated HC propylene was assumed to be the only

refrigerant used in equipment and it was all emitted (if it were to be exempted from the venting prohibition under CAA section 608), the model predicted that the maximum increase in the 8-hour average ground-level ozone concentration would be 6.61 ppb in Los Angeles, which is the area with the highest level of ozone pollution in the United States. For purposes of comparison, the ground-level ozone limit under the NAAQS has been 75 ppb since 2008.<sup>72</sup> We have concerns that widespread emissions of propylene from use as a refrigerant could interfere with the ability of some nonattainment areas to reach attainment, both with the 2008 NAAQS and the new, more stringent standard.

EPA also performed less conservative analyses that considered the end-uses where these refrigerants would more likely be used, based upon submissions received and upon end-uses where there are industry standards addressing the use of flammable refrigerants. Propylene was previously listed as an acceptable substitute in industrial process refrigeration. EPA has received submissions for use of R-443A in residential and light commercial AC and heat pumps and window air conditioners. We have received a SNAP submission for use of propylene in cold storage warehouses and in commercial comfort AC in chillers, and have received inquiries about using propylene in retail food refrigeration. In addition, EPA is aware that UL has developed standards addressing use of flammable refrigerants in stand-alone retail food refrigeration equipment and coolers; vending machines; water coolers; commercial ice machines; household refrigerators and freezers; and room air conditioners; and is currently developing revisions to UL 1995 for residential AC equipment. Thus, we considered scenarios where propylene would be used and emitted (1) in all stationary AC and refrigeration end-uses, but excluding MVAC, (2) in all refrigeration end-uses and all AC end-uses except for MVAC and chillers for commercial comfort AC. For further details on the scenarios and end-uses in the analysis, see the docket for this rulemaking.<sup>73</sup>

Based on this still conservative assessment of refrigerant use, we found that if all the refrigerant in appliances in the end-uses analyzed were to be

emitted, there would be a worst-case impact of 4.47 ppb ozone in the Los Angeles area. In the other cities examined in the analysis, Houston and Atlanta, which have also had historically high levels of ambient ozone, impacts were smaller (as much as 0.67 and 0.39 ppb, respectively).<sup>74</sup> Approximately 72–73 percent of the emissions were estimated to come from the residential and light commercial AC and heat pumps end-use in those less conservative analyses, indicating that emissions from this end-use could have a particularly large impact. Both the most conservative as well as the less conservative but more probable assessments indicated there could be significant air quality impacts of these refrigerants if they are released to the atmosphere.

An analysis we performed to support the proposed rule specifically examining use of R-443A and propylene in residential and light commercial AC and heat pumps, cold storage warehouses, and commercial comfort AC (centrifugal and positive displacement chillers) found noticeable impacts from these end-uses. If propylene were the only refrigerant in these end-uses and it was emitted from residential and light commercial AC and heat pumps and cold storage warehouses,<sup>75</sup> the analysis indicated there would be a worst-case impact of 4.45 ppb ozone in the Los Angeles area, 1.21 ppb in Houston, and 0.65 in Atlanta, respectively.<sup>76 77</sup> Assuming that propylene were used in all cold storage warehouses and centrifugal and positive displacement chillers; room air conditioners could use either R-443A or the currently listed VOC refrigerants propane or R-441A; other residential and light commercial AC and heat pumps all used R-443A; and these refrigerants were all emitted from cold storage warehouses and residential and light commercial AC and heat pumps, there would be a worst-case impact of 2.57 ppm ozone in the Los Angeles area, 0.77 ppb in Houston, and 0.44 ppb in Atlanta, respectively.<sup>78 79</sup>

<sup>74</sup> Ibid.

<sup>75</sup> The analysis assumed that local and state safety regulations required recovery of refrigerant from commercial comfort air conditioning equipment.

<sup>76</sup> ICF, 2016f. Significant New Alternatives Policy Program. Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Residential and Light Commercial Air Conditioning and Heat Pumps. Substitute: R-443A.

<sup>77</sup> ICF, 2016g. Significant New Alternatives Policy Program. Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Chillers and Cold Storage Warehouses. Substitute: Propylene (R-1270).

<sup>78</sup> ICF, 2016f. Significant New Alternatives Policy Program. Refrigeration and Air Conditioning Sector

Continued

<sup>70</sup> ICF, 2014a. Assessment of the Potential Impact of Hydrocarbon Refrigerants on Ground Level Ozone Concentrations. February, 2014.

<sup>71</sup> ICF, 2014a. Assessment of the Potential Impact of Hydrocarbon Refrigerants on Ground Level Ozone Concentrations. February, 2014.

<sup>72</sup> The standard has recently been lowered to 70 ppb (80 FR 65292; October 26, 2015).

<sup>73</sup> ICF, 2016g. Significant New Alternatives Policy Program. Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Chillers and Cold Storage Warehouses. Substitute: Propylene (R-1270).

Based on these analyses, EPA estimates that potential emissions of saturated HCs, if used as refrigerant substitutes in all end-uses in the refrigeration and AC sector would have little impact on local air quality. However, emissions of propylene, an unsaturated HC, whether used as propylene or as part of the blend R-443A, could have a significant negative impact, whether for all refrigeration and AC uses or for the uses in which we are listing these refrigerants as unacceptable.<sup>80</sup>

In response to public comments, EPA reevaluated these substitutes, assuming a prohibition on venting propylene and R-443A. However, even that additional analysis showed that there was still a potential for significant negative impacts on air quality. Assuming that propylene were used in all cold storage warehouses and centrifugal and positive displacement chillers; room air conditioners could use either R-443A or the currently listed VOC refrigerants propane or R-441A; other residential and light commercial AC and heat pumps all used R-443A; and these refrigerants were subject to the venting prohibition, there would be a worst-case impact of 2.09 ppb ozone in the Los Angeles area, 0.54 ppb in Houston, and 0.28 ppb in Atlanta, respectively.<sup>81</sup> For further details on the scenarios and end-uses in the analyses, see the docket for this rulemaking.

Ecosystem effects, primarily effects on aquatic life, of the substitutes we are listing as unacceptable are expected to be small as are the effects of other acceptable substitutes. Propylene, propane and isobutane are all highly volatile and would evaporate or partition to air, rather than contaminate surface waters. Neither propylene nor R-443A pose a greater risk of aquatic or ecosystem effects than those of other substitutes for these uses.

As discussed in section VI.A.3.b.iii in the proposed rule (81 FR 22839–41; April 18, 2016), EPA's SNAP program evaluated the flammability and toxicity risks from propane in the end-uses in

this rule. Risk screens containing these evaluations are provided in the docket, but EPA is providing some of that information in this section as well. Propylene and R-443A are both designated as A3 refrigerants according to ASHRAE 34–2013 and subsequent addenda. Thus, their flammability is comparable to that of ethane, propane, isobutane, and R-441A, other refrigerants that EPA has listed as acceptable, subject to use conditions, in a number of end-uses (76 FR 78832, December 20, 2011; 80 FR 19454, April 10, 2015). Due to their flammable nature, propylene and R-443A could pose a significant safety concern for workers and consumers if they are not properly handled. In the presence of an ignition source (e.g., static electricity spark resulting from closing a door, using a torch during service, or a short circuit in wiring that controls the motor of a compressor), an explosion or a fire could occur when the concentration of refrigerant exceeds its LFL. The LFLs of the substitutes are 2.03 percent for R-443A<sup>82</sup> and 2 percent for propylene.<sup>83</sup> To determine whether flammability would be a concern for manufacturing and service personnel or for consumers, EPA analyzed a plausible worst-case scenario to model a catastrophic release of the refrigerants. Those analyses found that a release of the entire charge from equipment with smaller charge sizes, such as room air conditioners or small chillers, would not exceed the LFL. Release of larger charge sizes such as from a large residential unitary split AC system or heat pump or a large chiller could exceed the LFL under some circumstances.<sup>84</sup> Further information on these analyses and EPA's risk assessments are available in section VI.A.3.b.iii of the proposed rule (81 FR 22837; April 18, 2016) and in the docket for this rulemaking (EPA-HQ-OAR–2015–0663).

In evaluating potential toxicity impacts of propylene and R-443A on human health, EPA considered occupational risk for all end-uses, and also considered consumer risk for the residential and light commercial AC and heat pump end-use. EPA investigated

the risk of asphyxiation and of exposure to toxic levels of refrigerant for a plausible worst-case scenario and a typical use scenario for each refrigerant in each end-use.

To evaluate toxicity of both refrigerants, EPA estimated the maximum TWA exposure both for a short-term exposure scenario, with a 30-minute TWA exposure, and for an 8-hour TWA that would be more typical of occupational exposure for a technician servicing the equipment. We compared these short-term and long-term exposure values to relevant industry and government workplace exposure limits for propylene and the components of R-443A (including potential impurities). The modeling results indicate that both the short-term (30-minute) and long-term (8-hour) worker exposure concentrations would be below the relevant workplace exposure limits in cold storage warehouses, centrifugal and positive displacement chillers, and residential and light commercial AC and heat pumps.<sup>86</sup> The acceptable refrigerants in these end-uses and those we are listing as unacceptable in this action can be used in these end-uses in accordance with their respective workplace exposure limits.

For equipment with which consumers might come into contact, such as residential AC and heat pumps, EPA also performed a consumer exposure analysis. EPA considered toxicity limits for consumer exposure that reflect a short-term or acute exposure such as might occur at home or in a store or other public setting where a member of the general public could be exposed and could then escape. In EPA's initial risk screen used to support the proposal, the estimated 30-minute consumer exposures to the refrigerants exceeded the toxicity limits for the propylene component of R-443A in all cases but the least conservative, for a room air conditioner. In response to public comments on the proposal, EPA reconsidered the toxicity profile and the toxicity limit for consumer exposure for propylene and determined that its acute toxicity was not significantly different from that of propane. We reanalyzed the modeled exposures against the same exposure threshold we used for analyzing acute toxicity of propane (e.g., 6,900 ppm over 30 minutes by analogy to the 30-minute Acute Emergency Guideline Limits (AEGL)-1 for propane). Using this less conservative analysis, the propylene fraction of R-443A could meet the exposure limit in smaller room

Risk Screen on Substitutes in Residential and Light Commercial Air Conditioning and Heat Pumps. Substitute: R-443A.

<sup>79</sup> ICF, 2016g. Significant New Alternatives Policy Program. Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Chillers and Cold Storage Warehouses. Substitute: Propylene (R-1270).

<sup>80</sup> ICF, 2014a and attachment, Follow-on Assessment of the Potential Impact of Hydrocarbon Refrigerants on Ground Level Ozone Concentrations. March, 2016.

<sup>81</sup> ICF, 2016l. Additional Follow-on Assessment of the Potential Impact of Hydrocarbon Refrigerants on Ground Level Ozone Concentrations. September, 2016.

<sup>82</sup> A.S. Trust & Holdings, 2014. Response to Incompleteness Letter from A.S. Trust & Holdings to EPA—Sent March 7, 2014.

<sup>83</sup> Airgas, 2015. Safety Data Sheet for Propylene.

<sup>84</sup> ICF, 2016f. Significant New Alternatives Policy Program. Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Residential and Light Commercial Air Conditioning and Heat Pumps. Substitute: R-443A.

<sup>85</sup> ICF, 2016g. Significant New Alternatives Policy Program. Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Chillers and Cold Storage Warehouses. Substitute: Propylene (R-1270).

<sup>86</sup> Ibid.

air conditioners, but not in split AC systems with higher charges.

The currently acceptable refrigerants such as HFCs, HFC blends, or HFOs, are able to achieve their acute exposure limits, which are generally higher than that for propylene. Because of the relatively low acute exposure limit for propylene and the potential for exceedances of that limit, acute exposure may be a greater concern than for many other acceptable refrigerants in residential and light commercial AC systems and heat pumps with larger charge sizes. Further information on these analyses, EPA's risk assessments, as well as information from the submitters of the substitutes are in the docket for this rulemaking (EPA-HQ-OAR-2015-0663).

ii. When will the listings apply?

EPA is establishing a listing date as of January 3, 2017, the same as the effective date of this regulation. To our knowledge, manufacturers and service technicians are not currently using these substitutes in the end-uses in this rule. We note that EPA has only recently found submissions complete for these substitutes, and under the SNAP program regulations, a substitute may not be introduced into interstate commerce prior to 90 days after EPA receives a complete submission.

c. How is EPA responding to comments?

EPA received several comments from individuals and organizations with various interests in R-443A and propylene. Comments were in reference to the proposed listing status of R-443A and propylene and the environmental, flammability, and toxicity impacts of R-443A and propylene. Some commenters supported the proposed listing decisions and effective date of 30 days after date of publication of the rule in the **Federal Register**, while others opposed them and suggested that R-443A and/or propylene should be listed as acceptable or acceptable, subject to use conditions in one or more of the four end-uses being considered. Some commenters thought that these refrigerants could be used safely and with minimal environmental impacts with appropriate controls, while others expressed concern about the flammability and environmental impacts of these refrigerants.

Commenters included Whitmyre Research and Whitmyre Equipment Corporation, consultants for A.S. Trust & Holdings; UTC; Chemours, a chemical producer; Refrigerants, Naturally!, an industry organization supporting the use of HC refrigerants; NRDC, IGSD, and

EIA; and a number of anonymous commenters.

We have grouped comments together and responded to the issues raised by the comments in the sections that follow, or in a separate Response to Comments document which is included in the docket for this rule (EPA-HQ-OAR-2015-0663).

*Comment:* NRDC and IGSD stated that EPA's extensive tests on exposure and toxicity, as well as the effects on local air quality, show significant concern with propylene. The commenters stated that propylene and majority-propylene blends are neither ideal nor necessary for achieving EPA's climate goals, and threaten a safe, environmentally-sound transition to lower-GWP refrigerants. Chemours also supported EPA's proposal.

*Response:* EPA agrees that there are significant concerns with the use of propylene—in particular, the potential air quality impacts. Other alternatives are available for the same uses that pose lower overall risk to human health and the environment.

*Comment:* EIA commented that both academic studies and end users cite propylene as a very high performing refrigerant, offering both energy efficiency and increased volumetric cooling capacity in comparison to other alternatives, and provided links to some of this information. EIA stated that propylene's low GWP and high performance in terms of efficiency and capacity carries significant environmental benefits, its flammability risks can be mitigated, and its benefits significantly outweigh potential limited environmental impacts of a small relative contribution of propylene as a refrigerant to formation of ground level ozone.

Refrigerants, Naturally! commented that propylene has particular advantages over propane such as the same or better efficiency, a larger cooling capacity giving more compact systems, higher LFL and also a distinctive smell. The commenter claimed that combined, these lead to more compact and safer systems (in terms of lower charge sizes per kW of cooling, smaller flammable volumes in event of a leak and pre-warning to technicians working on systems). Both commenters noted that propylene is already safely used in Europe and the United States, particularly in stand-alone retail food refrigeration equipment, as well as in positive displacement chillers and remote condensing units. Refrigerants, Naturally! recommended that EPA reconsider its proposed decision and stated that it would be significantly preferable to impose a ban on venting

propylene than to introduce a ban on its use.

*Response:* EPA appreciates the additional information provided by the commenters concerning the performance of propylene as a refrigerant but does not find this information a sufficient reason for changing our proposal, given the primary basis for EPA's decision is effects on local air quality. Concerning comments that propylene is already used in Europe and the United States, we note that propylene is only listed as acceptable in industrial process refrigeration and not in the other types of equipment mentioned by the commenters. EPA disagrees with the commenters on other points concerning the SNAP criteria. Refrigerant performance, refrigerant capacity, energy efficiency, and use of odorants are not among the SNAP program's review criteria. Concerning flammability, the LFL of propylene is not significantly different from that of propane (2 percent versus 2.1 percent). We note that additional work is underway on industry standards to address flammability risks for most of the end-uses in this final rule. EPA disagrees that propylene can be assumed to have a small relative contribution to the formation of ground-level ozone, considering both the results of EPA's analyses, discussed in this section under the heading "Environmental Impacts," and the lack of a way for EPA to limit sales and use to a specific amount. Emissions from industrial process refrigeration equipment are already part of existing VOC emissions, and use in additional end-uses would result in additional, incremental VOC emissions that could result in significant impacts, depending on the amount used. As discussed in the section "Environmental Impacts," prohibiting venting of propylene (and R-443A) is not sufficient to ensure minimal impacts on local air quality or to mitigate the environmental risks of these refrigerants. Also see the previous response concerning how propane and other available low-GWP refrigerants compare to propylene in EPA's evaluation.

i. Environmental Impacts

*Comment:* Refrigerants, Naturally! and Whitmyre Research stated that there is no need for concern about R-443A being released into the air because R-443A is not exempt from the venting prohibition. The commenters stated that R-443A refrigerant will be recovered and recaptured during servicing by trained and certified technicians. Refrigerants, Naturally! and EIA



recommended that EPA perform another assessment to re-evaluate the assumptions made and to consider controls to mitigate the release and venting of propylene and R-443A.

*Response:* EPA disagrees that the CAA section 608 prohibition on venting sufficiently addresses potential risks due to impacts on air quality. There are refrigerant emissions from causes other than venting that could result in sufficient emissions of propylene to have significant impacts on local air quality. As discussed in the preamble to the proposed rule, “Other emissions could occur that are not subject to the venting prohibition and no equipment is free of refrigerant emissions. Because of the reactivity of these refrigerants, those emissions could interfere with the ability of some nonattainment areas to reach attainment, both with the 2008 NAAQS and the new, more stringent standard” (81 FR 22839). Examples of refrigerant releases that are not subject to the venting prohibition are releases during good-faith efforts to service equipment, releases at installation, leaks during the lifetime of the equipment, and any refrigerant that is not withdrawn from the equipment at its end of life.

EPA repeated its local air quality analysis assuming use of propylene in chillers for commercial air conditioning and in cold storage warehouses and use of R-443A in residential air conditioning and heat pumps.<sup>87</sup> This analysis also assumed use of propane and R-441A in room air conditioners, where they have already been listed as acceptable, as well as R-443A. In this follow-on analysis, EPA assumed that the venting prohibition remains in place for propylene and R-443A. Although emissions were reduced relative to the scenarios where all HC refrigerants were exempted from the venting prohibitions, the analysis still showed that there could still be significant impacts. For example, in the revised analysis, the incremental increase in the maximum 8-hour average ozone value estimated for Los Angeles was 2.1 ppb.

*Comment:* Whitmyre Research said all of EPA’s analyses, and particularly Scenarios 1, 2, and 3 (in which propylene is the sole refrigerant used in all refrigeration and AC; in all refrigeration and AC uses except MVAC; and in all refrigeration and AC uses except MVAC and chillers, respectively), cross the line from being overly-conservative to having no real-

world applicability because they unrealistically assume a rapid takeover of the market with propylene-based refrigerants, thereby ignoring the realities of the refrigerant market. This commenter suggested that EPA should focus upon Scenario 4, the most realistic of the scenarios analyzed, which in the commenter’s view does not justify restrictions on the use of R-443A in split system air conditioning and heat pumps, window ACs or portable room ACs. In contrast, NRDC and IGSD noted that Scenario 1 shows widespread use and venting of propylene in refrigeration and AC contributing almost seven ppb to ground-level ozone concentrations in Los Angeles, demonstrating the value of EPA’s proposed unacceptability finding.

*Response:* Concerning the three most conservative scenarios, Scenarios 1, 2, and 3 were not intended to be realistic projections of the refrigerant market, but rather, to provide screening estimates to see if there would be some level of refrigerant emissions that could result in unacceptably high increases in ground-level ozone. See our response to the same comment at 80 FR 19474 (April 10, 2015).

The scenario suggested by the first commenter, Scenario 4, would not consider impacts from use of propylene and R-443A in all of the end-uses for which they have been submitted—R-443A in residential split system AC and heat pumps and propylene in cold storage warehouses and centrifugal and positive displacement chillers for commercial comfort AC. Under the scenarios where EPA also considered the four end-uses for which R-443A and propylene were submitted result in most of the emissions, and thus, the scenario suggested by the commenter would likely underestimate the impact of emissions of these two substitutes on air quality. EPA analyzed additional Scenarios 5, 6, 7, and 8 to evaluate potential impacts of propylene and R-443A in the end-uses addressed in this action.<sup>88</sup> The analysis of Scenario 6, a scenario assuming use of R-443A for residential split system AC and heat pumps, along with some use of propane and R-441A for room air conditioners, and for propylene in cold storage warehouses and centrifugal and positive displacement chillers for commercial comfort AC, found there would be a worst-case impact of 2.57 ppm ozone in the Los Angeles area, 0.77 ppb in Houston, and 0.44 ppb in Atlanta,

respectively (see NPRM at 81 FR 22839). In response to comments that EPA should not assume that all propylene or R-443A is vented, EPA created Scenario 8, where it was assumed that intentional venting of propylene and R-443A during service, maintenance, repair, and disposal, were prohibited in those same end-uses. Under this scenario, the worst-case impacts would be 2.1 ppb ozone in the Los Angeles area, 0.54 ppb in Houston, and 0.28 ppb in Atlanta, respectively. We considered these less conservative assumptions to show that, even if the venting prohibition were observed, emissions of R-443A from residential split system AC and heat pumps and emissions of propylene from cold storage warehouses and centrifugal and positive displacement chillers could result in air quality impacts that are not significantly different from those in the analyses we relied upon in our proposal.

*Comment:* Whitmyre Research stated that EPA was inconsistent in leak profiles used in its ground-level ozone modeling and the modeling for occupational exposure impacts. The commenter stated that if EPA had used those more realistic assumptions in its ground-level ozone analysis, this would have reduced by nearly 89 percent the “disposal” emissions in the analysis.

*Response:* EPA disagrees with the commenter’s suggestion that the disposal emissions should be the same as those used in EPA’s occupational exposure analysis. The release estimates used in the occupational exposure estimates at disposal are for release in the vicinity of workers involved in disposing of the equipment and do not include releases to the environment when equipment leaks at the end of its useful life. In an additional analysis, rather than assuming the release of 100 percent of remaining charge at disposal, EPA reassessed emissions at disposal using the assumptions in EPA’s Vintaging Model—the same assumptions we use when analyzing emissions of HFC refrigerants from the same kinds of equipment. These emission rates reflect input from industry reviewers and historic information. They also reflect emissions due to leaks from equipment over the lifetime of the equipment as well as emissions at disposal. The remaining emissions were still significant, resulting in worst-case incremental ground-level ozone of 2.1 ppb.

*Comment:* Richard Maruya of A.S. Trust & Holdings commented that the proposed unacceptable listing for propylene is an abuse of EPA’s authority, since propylene is not listed

<sup>87</sup> ICF, 2016l. Additional Follow-on Assessment of the Potential Impact of Hydrocarbon Refrigerants on Ground Level Ozone Concentrations. September, 2016.

<sup>88</sup> ICF, 2016l. Additional Follow-on Assessment of the Potential Impact of Hydrocarbon Refrigerants on Ground Level Ozone Concentrations. September, 2016.

by EPA as a hazardous air pollutant under the CAA.

*Response:* It is not necessary for a substitute to be listed as a hazardous air pollutant in order for EPA to list it as unacceptable under the SNAP program established by section 612 of the CAA. Rather, EPA must determine that there are other alternatives available or potentially available for the same use that pose lower overall risk to human health and the environment.

ii. Assumptions in EPA's Analyses

*Comment:* Whitmyre Research stated that the release of any refrigerant from air-conditioning or heat pump units must be viewed probabilistically—that is, only a very small fraction of AC or heat pump units would experience leaks at any given point in time, and only a small fraction of these leaks would be sudden releases. The commenter stated that there is no basis for assuming that every possible leak in an R443A-based system would be sudden and complete, as opposed to slow and diluted. Values of 0.1 to one percent are much more realistic than 100 percent full release.

*Response:* With respect to EPA's assumptions for estimating total emissions for its air quality analysis, EPA assumed 100 percent release of refrigerant at disposal in most of the scenarios, to simulate a situation where venting would not be prohibited. As discussed previously, EPA considered scenarios where venting would be prohibited and also considered emissions from leaks. However, based upon the historical information EPA used in establishing the Vintaging Model and on reviewer input of those data, we consider the commenter's estimated probability of leaks to be low, particularly for residential split AC and heat pump equipment and for older equipment, which would be more likely to leak through extended lines. The study that was the basis for the commenter's estimates was based upon monitoring of commercial AC equipment in supermarkets of a type and age that was not described. If the equipment in the study was chiller equipment, this leak rate would be reasonable and close to the annual average leak rate EPA used in its emissions analysis for chillers, but the leak rate would be low for residential or light commercial AC and heat pump equipment, particularly for split systems.

With respect to EPA's leak assumptions in our risk screens for purposes of assessing flammability and toxicity impacts, we first conducted a worst-case analysis that assumed a release of 95 percent of the refrigerant

charge within one minute. This was an initial screen to determine whether the refrigerant would ever potentially exceed the LFL or relevant exposure limits. Since there were some potential exceedances with the most conservative assumptions, EPA then considered additional, less conservative assumptions concerning ventilation rates, charge sizes, and stratification or complete mixing of release refrigerant, and did not evaluate smaller leaks. EPA agrees with the commenter that slow, small leaks are likely to be far more common than large leaks. However, EPA must consider the possibility of a complete release because that is a possible, if less frequent, situation.

*Comment:* Whitmyre Research stated that EPA analyses incorrectly assumed air-exchange rates far lower than those allowed by ASHRAE standards incorporated in building codes (at least 0.35 ACH in typical residential structures). Based on data from Pandian et al. (1998),<sup>89</sup> the median residential air exchange rate in the United States (across all regions, all seasons) is 0.5 ACH. Therefore, the presumed exposures are unlikely and unrealistic for both the toxicity and flammability scenarios presented in this rule.

*Response:* We disagree that the air exchange rates used in the scenarios are not representative and do not represent likely scenarios. First, we note that the air-exchange value from ASHRAE is from a 2016 standard and applies only to newly constructed buildings; thus, it does not apply to existing housing stock, which is the vast majority of what is available. Second, both the value from ASHRAE and the median value from Pandian et al. fall within the range of air exchange rates that EPA analyzed of 0.11 to 0.67 ACH.

*Comment:* Whitmyre Research and Whitmyre Equipment Corporation claimed there is no need for concern about leakage because a safety valve design option already exists (per the request of EPA) that will greatly limit refrigerant loss during leak events.

*Response:* A safety valve, such as the check valve suggested by the commenter for R-443A, may reduce the size of leaks and thereby reduce risk of using the refrigerant. However, the submitter did not provide information on applying the check valve to equipment in this end-use. It is not clear, based on the information provided for the check valve in another end-use, that it would mitigate risk sufficiently to say R-443A

poses lower overall risk to human health and the environment. For instance, if the check valve works as described, it could reduce the amount of refrigerant leaked and potentially avoid exceedances of the LFL or the acute exposure limit. However, it is not clear that this check valve would be able to avoid slower leaks that over time contribute substantially to VOC emissions and to adverse air quality impacts, even if it works as designed. Further, EPA has not seen sufficient information to be confident of the performance of the safety valve.

iii. Flammability

*Comment:* Whitmyre Research and Refrigerants, Naturally! stated that EPA's discussion of flammability risk does not account for probability and therefore greatly overstates any concern for use of R-443A in both normal operation and maintenance/repair/disposal situations. Whitmyre Research stated that in order for there to be a flammability risk, there must be a co-occurrence of a *leak event* and a *spark generation* event. Subsequently, the probabilities of fire for normal operation of these devices, when charged with the specified amount of R-443A, and during maintenance, repair, and disposal, are quite low as calculated by the commenter in a fault tree analysis (FTA) included in the submission for R-443A. Refrigerants, Naturally! commented that there should be no differentiation between R-443A and other HCs in regards to flammability.

*Response:* EPA agrees that flammability risk for R-443A and propylene would not be significantly different from the risks for other HC refrigerants for the same uses. EPA's risk screen is intended to look first at reasonable worst-case scenarios and then at more typical scenarios, while remaining protective, and is not intended to discuss probability. EPA did evaluate the probability of events presented by the submitter in the FTA. As discussed in this section VI.A.4.c.i under "Assumptions in EPA's Analyses," the study that was the basis for the commenter's estimates was based upon monitoring of commercial AC equipment in supermarkets of a type and age that was not described. If the equipment in the study was chiller equipment, this leak rate would be reasonable and close to the annual average leak rate EPA used in its emissions analysis for chillers, but the leak rate would be low for residential or light commercial AC and heat pump equipment, particularly for split systems. Thus, the probabilities estimated by the commenter likely

<sup>89</sup> Pandian et al., 1998. "Correcting Errors in the Nationwide Data Base of Residential Air Exchange Rates." *Journal of Exposure Analysis and Environmental Epidemiology*, Vol. 8, No. 4, 577–585.

underestimate risks for residential and light commercial AC and heat pumps. In addition to worst-case scenarios, more typical scenarios, and FTAs, EPA also considered where there are industry standards or controls in place that can mitigate flammability risks.

*Comment:* UTC supported EPA's proposal to list both R-443A and propylene as unacceptable in residential and light commercial AC and heat pumps, cold storage warehouses, and centrifugal and positive displacement chillers for commercial comfort AC. However, the commenter believed that they also should be found unacceptable based on flammability concerns. In particular, the commenter asserted that since both propylene and R-443A are Class 3 flammable refrigerants, they should be considered unacceptable.

*Response:* EPA disagrees that flammability concerns should also provide a basis for listing R-443A and propylene as unacceptable in all the proposed end-uses. EPA previously listed two ASHRAE Class 3 refrigerants as acceptable, subject to use conditions, for use only in new room air conditioners (*i.e.*, propane and R-441A). For those refrigerants, EPA established use conditions that limited charge size and that would mitigate flammability risks. We note that the flammability risks for R-443A and propylene are similar to those for other Class A3 refrigerants.

For equipment with larger charge sizes, such as some unitary split AC systems and heat pumps or most centrifugal and positive displacement chillers, the flammability risk is a greater concern than for equipment with smaller sizes, such as self-contained room air conditioners. However, by stating the flammability risk is greater for equipment with larger charge sizes, EPA is not implying that such risks could never be mitigated. ASHRAE, AHRI, and DOE are investing \$5.2 million in research with the goal of using the results to update industry standards, subject to the ANSI consensus process, to address flammability risks. Such updates to standards would address risks in a broader range of equipment than the current UL standards.

#### iv. Toxicity and Exposure

*Comment:* Whitmyre Research stated that the Agency had "misconstrued the toxicity of propylene." The commenter stated that propylene is widely recognized as having very low toxicity by inhalation (*e.g.*, narcosis occurs at 35–46 percent by volume). Whitmyre Research stated that the Agency's concern for the toxicity of propylene is

misplaced, because (1) the Agency's modeled exposures are based on flawed methods and incorrect assumptions; (2) R-443A is only partially made of propylene; (3) propylene is simply not toxic at the modeled levels; and (4) the Agency used inappropriate toxicity benchmarks. Specific assumptions in some of EPA's scenarios that the commenter disagreed with included the length of time for the entire refrigerant charge to release, the ventilation rates, and the assumption of stratification of refrigerant (*i.e.*, pooling near the floor). The commenter also stated that the Agency must match the time-frame of exposure to catastrophic releases of R-443A (minutes) in establishing a toxicity benchmark.

*Response:* Based on this comment, EPA reconsidered the available toxicology data for propylene and agrees that it indicates lower concern for acute exposure than indicated in our risk assessment for the proposed rule. Concerning the commenter's complaint about the methods and assumptions for modeled exposures, EPA's analysis looked at a variety of scenarios. These scenarios considered ventilation rates both above and below those suggested by the commenter and both stratification of refrigerant and complete mixing of refrigerant within the space. We note that with a higher ventilation rate than that suggested by the commenter and with an assumption of no refrigerant stratification, concentrations reached 9,680 ppm over 30 minutes from release of a larger charge for a split system, exceeding both the excursion limit of 1,500 ppm and an acute exposure limit of 6,900 ppm over 30 minutes, analogous to the AEGL-1 for propane. EPA separately evaluated the propylene fraction when comparing modeled concentrations against the guideline for propylene, and thus, considered that it is only part of R-443A's composition.

We agree that the modeled exposure levels are below the level at which toxicity has actually been observed. However, it is standard practice to use more conservative values in evaluating toxicity risk than the no observed adverse effect level (NOAEL) seen in studies to account for uncertainty, such as variability within the general population or differences between species. Concerning the toxicity benchmark used by EPA—an excursion limit of three times the ACGIH TLV—EPA agrees that there could be other, less conservative benchmarks that could be used. We reviewed the available toxicity data for propylene and also considered how the toxicity profile of propylene differs from that of propane

to determine what might be an appropriate, less conservative benchmark. We concluded that there were not major differences between the two HCs that warranted using a much lower acute exposure limit for propylene than for propane.<sup>90</sup> Therefore, we reevaluated consumer exposure to propylene using an acute exposure limit of 6,900 ppm over 30 minutes for propylene, analogous to the AEGL-1 of 6,900 ppm for propane. In that revised evaluation, releases of the propylene fraction of R-443A from smaller room air conditioners could meet this acute exposure limit, but releases from split AC systems and heat pumps with higher charges could exceed the acute exposure limit. Thus, we still consider toxicity of propylene in R-443A to potentially be of concern for residential and light commercial AC and heat pump equipment with large charge sizes such as split AC systems, but it is not a concern for room air conditioners with limited charge sizes.

*Comment:* Whitmyre Research stated that there is no asphyxiation risk at the Immediately Dangerous to Life and Health (IDLH) limit; it is not an indicator of asphyxiation risk.

*Response:* EPA agrees that the IDHL is not an indicator of asphyxiation risk; however, EPA used a minimum oxygen concentration of 12 percent in assessing asphyxiation risk and did not use the IDLH.

*Comment:* Whitmyre Research stated that the TLV of 500 ppm for propylene that was established by ACGIH is a chronic exposure limit to be applied only to repeated exposures at least 40 hours per week over an occupational lifetime. ACGIH based the TLV of 500 ppm for propylene on nasal irritation effects occurring in treated animals exposed 6 hours per day, five days per week, for 103 weeks (2 years). No such nasal effects were observed in rats or mice exposed acutely (*i.e.*, single inhalation dose) or when exposed to up to 10,000 ppm propylene for 6 hours per day, 5 days per week for 14 days (ACGIH 2006).

*Response:* EPA agrees that the ACGIH's TLV for propylene, like other TLVs, is intended to be a chronic exposure limit and is based on longer term exposure. However, the ACGIH also recommends that short term excursions over a TLV should be no more than three times the TLV, on a regular basis, and in no case should exceed five times the TLV. The commenter has not suggested a specific

<sup>90</sup> Abt Associates, 2016. Review of propylene acute toxicity for R-443A risk screen. Prepared for EPA. July 6, 2016.

value that they propose EPA should use instead to assess risks of short-term exposure.

#### 5. Change of Listing Status for Certain HFC Refrigerants for New Centrifugal Chillers and for New Positive Displacement Chillers

##### a. Background

##### i. What are the affected end-uses?

In the proposed rule, EPA described two chiller end-uses, specifically centrifugal chillers and positive displacement chillers. We draw attention to the fact that, as discussed there, in some cases the same refrigerant is used in both end-uses. Of note is the fact that HFC-134a is used for some centrifugal chillers, namely “high-pressure” centrifugal chillers, as well as in some positive displacement chillers, such as screw chillers. In addition, as discussed below, at least two alternatives—HFO-1234ze(E) and R-513A—have been used in both types of chillers. EPA received many comments concerning chillers that did not specifically say whether the comment was referencing centrifugal chillers, positive displacement chillers, or both. Therefore, in today’s rule, we are addressing both end-uses in this section.

Centrifugal chillers are equipment that utilize a centrifugal compressor in a vapor-compression refrigeration cycle. They are typically used for commercial comfort AC although other uses do exist. Centrifugal chillers tend to be used in larger buildings, such as office buildings, hotels, arenas, convention halls, airport terminals, and other buildings.

For commercial comfort and some other applications, centrifugal chillers typically cool water that is then pumped to fan coil units or other air handlers to cool the air that is supplied to the occupied spaces transferring the heat to the water. The heat absorbed by the water can then be used for heating purposes, and/or can be transferred directly to the air (“air-cooled”), to a cooling tower or body of water (“water-cooled”) or through evaporative coolers (“evaporative-cooled”). See section VI.A.4.a.i of the proposed rule for additional information on the centrifugal chiller end-use (81 FR 22841–42; April 18, 2016).

Positive displacement chillers are vapor compression cycle chillers that utilize positive displacement compressors, such as reciprocating, screw, scroll or rotary types. Positive displacement chillers are applied in similar situations as centrifugal chillers, primarily for commercial comfort AC, except that positive displacement

chillers tend to be used for smaller capacity needs such as in mid- and low-rise buildings. See section VI.A.4.b.i of the proposed rule for additional information on the positive displacement chiller end-use (81 FR 22841–42; April 18, 2016).

##### ii. What other types of equipment are used for similar applications but are not covered by this section of the rule?

Other equipment including packaged rooftop units and split system air conditioners, both of which fall under the SNAP end-use “residential and light commercial air conditioning,” can also be used for commercial comfort AC, typically for even smaller capacity needs than positive displacement chillers. These equipment types are not centrifugal or positive displacement chillers and hence are not covered under this section of the rule. EPA responds to comments regarding the scope of chillers—both centrifugal and positive displacement—end-uses in section VI.A.5.c.i.

##### iii. What refrigerants are used in centrifugal and positive displacement chillers?

EPA discussed historical and recent use of refrigerants in centrifugal chillers in section VI.A.4.a.i.(c) of the proposed rule (81 FR 22842; April 18, 2016). Since then, EPA has become aware of numerous additional demonstrations, availability, and announcements regarding alternative refrigerants for use in centrifugal chillers. For example, Honeywell stated in their comments that “[s]everal manufacturers currently offer high-efficiency chillers, air-cooled (outdoor) and water-cooled (indoor), using HFO-1234ze(E) in sizes ranging from tens of tons to hundreds of tons” and listed some examples, including some centrifugal chillers. Multiple companies have introduced chillers using HFO-1234ze(E), including Star Refrigeration,<sup>91</sup> Klima-Therm,<sup>92</sup> Airedale,<sup>93</sup> Geoclima,<sup>94</sup> Mitsubishi

Heavy Industries,<sup>95</sup> Smardt Chiller Group,<sup>96</sup> RC Group,<sup>97</sup> Engie Refrigeration,<sup>98</sup> and Climaveneta.<sup>99</sup>

Centrifugal chillers using the alternative R-1233zd(E) have also been offered, from at least three manufacturers: Trane (a brand of Ingersoll Rand),<sup>100</sup> Carrier (a brand of UTC)<sup>101</sup> and Mitsubishi Heavy Industries.<sup>102</sup> Ingersoll Rand confirmed in their comment that they have R-1233zd(E) centrifugal chillers available now and further stated that they will have centrifugal chillers under their Trane brand using R-514A available in 2017.

A fourth alternative that is already available for some centrifugal chillers is R-513A. For instance, Johnson Controls announced this year that the centrifugal (and screw) chillers they offer, originally designed for HFC-134a, are compatible with R-513A.<sup>103</sup>

EPA discussed historical and recent use of refrigerants in positive

<sup>95</sup> Mitsubishi, 2012. “Deployment to New Series of ‘eco Turbo chiller ETI series.’” This document is accessible at <http://www.mhi.co.jp/technology/review/pdf/491/491058.pdf>.

<sup>96</sup> SMARDT, 2016. “Revolutionary Energy Savings for the Built Environment”, “Trendsetting Technologies for Centrifugal Chillers.” These documents are available at <http://climatecontrolme.com/2013/12/trendsetting-technologies-for-centrifugal-chillers/> and <http://www.smaridt.com/docs/SMART%20BROCHURE%20ENGLISH%20JAN%202016.pdf>.

<sup>97</sup> RC Group, 2016. “Unico Turbo Air Cooled Liquid Chiller.” This document is accessible at <http://www.rcgroup.it/EN/Prodotti/?idP=1563>.

<sup>98</sup> Engie Refrigeration, 2016. “Quantum: Series and features of the energy-efficient chiller series.” This document is accessible at [https://www.engie-refrigeration.de/export/sites/cofelyrefrigeration/content/documents/ENG/Produkte/Quantum/ENG\\_Quantum\\_Folder.pdf](https://www.engie-refrigeration.de/export/sites/cofelyrefrigeration/content/documents/ENG/Produkte/Quantum/ENG_Quantum_Folder.pdf).

<sup>99</sup> Climaveneta, 2015. “Against Global Warming with the NEW TECs2 HFO Chillers.” January 12, 2015. This document is accessible at <http://www.climaveneta.com/EN/Media/Press-Releases/112.html>.

<sup>100</sup> Trane, 2016. “Trane Announces Significant Centrifugal Chiller Line Expansion and Services for the United States and Canada.” June 15, 2016. This document is accessible at <http://www.trane.com/commercial/north-america/us/en/about-us/newsroom/press-releases/centrifugal-chiller-line-expansion.html>.

<sup>101</sup> Carrier, 2016. “Carrier China Showcases latest Innovations at China Refrigeration Expo.” April 7, 2016. This document is accessible at [http://www.carrier.com/carrier/en/us/news/news-article/carrier\\_china\\_showcases\\_latest\\_innovations\\_at\\_china\\_refrigeration\\_expo.aspx](http://www.carrier.com/carrier/en/us/news/news-article/carrier_china_showcases_latest_innovations_at_china_refrigeration_expo.aspx).

<sup>102</sup> MHI, 2015. “MHI Develops ‘ETI-Z Series’ of Next-generation Centrifugal Chiller—Adopt New Non-ozone-depleting Refrigeration to Minimize Greenhouse Gas Emissions.” June 10, 2015. This document is accessible at [www.mhi-global.com/news/story/1506101900.html](http://www.mhi-global.com/news/story/1506101900.html).

<sup>103</sup> Johnson Controls, 2016. “Johnson Controls Advances Environmental Sustainability with Chiller Platforms Compatible with Low GWP Refrigerants.” January 20, 2016. <http://www.johnsoncontrols.com/media-center/news/press-releases/2016/01/20/advanced-environmental-sustainability-with-chiller-platforms-compatible-with-low-gwp-refrigerants>.

<sup>91</sup> Star Refrigeration, 2012. “Star’s Three-Way Development Test for R-1234ze(E).” July 2012. This document is accessible at <http://www.star-ref.co.uk/star/images/stories/pdf/Case%20Study%20No%2082%20-%20Refrigerant%20R-1234ze.pdf>.

<sup>92</sup> RAC, 2012. “Klima-Therm discusses world’s first HFO chiller for Waitrose.” January 10, 2012. This document is accessible online at <http://www.racplus.com/features/klima-therm-discusses-worlds-first-hfo-chiller-for-waitrose/8624689.article>.

<sup>93</sup> The NEWS, 2014. “Airedale Chiller with Low-GWP HFO Refrigerant to Cool New John Lewis Store.” June 9, 2014. This document is accessible at <http://www.achnews.com/articles/126828-airedale-chiller-with-low-gwp-hfo-refrigerant-to-cool-new-john-lewis-store>.

<sup>94</sup> Geoclima, 2014. Geoclima Brochure. This document is accessible at [http://www.benndorf-hildebrand.eu/sites/default/files/fabrikate/pdf/geoclima\\_broschure.pdf](http://www.benndorf-hildebrand.eu/sites/default/files/fabrikate/pdf/geoclima_broschure.pdf).

displacement chillers in section VI.A.4.b.i.(c) of the proposed rule (81 FR 22846; April 18, 2016), noting for instance that Trane introduced a series of positive displacement chillers offered with R-513A and that UTC had installed a screw chiller using HFO-1234ze(E).

Since then, EPA has become aware of additional demonstrations, availability and announcements regarding alternative refrigerants for use in positive displacement chillers. For example, in their comments, Ingersoll Rand noted their commitment to transition its entire chiller portfolio, including positive displacement screw and scroll chillers, before the end of 2018. They separately announced their

intention to use R-452B in “small chillers” as well as other products.<sup>104</sup> Johnson Controls also announced that they were offering multiple positive displacement chillers, covering their entire line of screw chillers, with the choice of R-513A refrigerant.<sup>105</sup> It was reported that UTC chose HFO-1234ze(E) for their global line of screw chillers.<sup>106</sup> Blue Box has designed its Kappa Rev range of screw chillers specifically for HFO-1234ze(E).<sup>107</sup> This refrigerant is also available in positive displacement chillers from Geoclima.<sup>108</sup>

b. What is EPA’s final decision?

For new centrifugal chillers, EPA proposed to change the status as of January 1, 2024, of the following

refrigerants from acceptable to unacceptable: FOR12A, FOR12B, HFC-134a, HFC-227ea, HFC-236fa, HFC-245fa, R-125/134a/600a (28.1/70/1.9), R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-410A, R-410B, R-417A, R-421A, R-422B, R-422C, R-422D, R-423A, R-424A, R-434A, R-438A, R-507A, RS-44 (2003 composition), and THR-03. We also proposed narrowed use limits for HFC-134a and R-404A for certain centrifugal chillers. In this action, we are finalizing the status changes and narrowed use limits that we proposed with no changes. The change of status determinations for new centrifugal chillers are summarized in Table 5.

TABLE 5—CHANGE OF STATUS DECISIONS FOR NEW CENTRIFUGAL CHILLERS

End-use	Substitutes	Listing status
Centrifugal Chillers (new only).	FOR12A, FOR12B, HFC-134a, HFC-227ea, HFC-236fa, HFC-245fa, R-125/134a/600a (28.1/70/1.9), R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-410A, R-410B, R-417A, R-421A, R-422B, R-422C, R-422D, R-423A, R-424A, R-434A, R-438A, R-507A, RS-44 (2003 composition), and THR-03.	Unacceptable as of January 1, 2024, except where allowed under a narrowed use limit.
Centrifugal Chillers (new only).	HFC-134a .....	Acceptable, subject to narrowed use limits, for military marine vessels, as of January 1, 2024.
Centrifugal Chillers (new only).	HFC-134a and R-404A .....	Acceptable, subject to narrowed use limits, for human-rated spacecraft and related support equipment, as of January 1, 2024.

For new positive displacement chillers, EPA proposed to change as of January 1, 2024 the status of the following refrigerants from acceptable to unacceptable: FOR12A, FOR12B, HFC-134a, HFC-227ea, KDD6, R-125/134a/600a (28.1/70/1.9), R-125/290/134a/

600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-410A, R-410B, R-417A, R-421A, R-422B, R-422C, R-422D, R-424A, R-434A, R-437A, R-438A, R-507A, RS-44 (2003 composition), SP34E, and THR-03. We also proposed narrowed use limits for HFC-134a and R-404A for

certain positive displacement chillers. In this action, we are finalizing the status changes and narrowed use limits that we proposed with no changes. The change of status determinations for new positive displacement chillers are summarized in Table 6.

TABLE 6—CHANGE OF STATUS DECISIONS FOR NEW POSITIVE DISPLACEMENT CHILLERS

End-use	Substitutes	Listing status
Positive Displacement Chillers (new only).	FOR12A, FOR12B, HFC-134a, HFC-227ea, KDD6, R-125/134a/600a (28.1/70/1.9), R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-410A, R-410B, R-417A, R-421A, R-422B, R-422C, R-422D, R-424A, R-434A, R-437A, R-438A, R-507A, RS-44 (2003 composition), SP34E, and THR-03.	Unacceptable as of January 1, 2024, except where allowed under a narrowed use limit.
Positive Displacement Chillers (new only).	HFC-134a .....	Acceptable, subject to narrowed use limits, for military marine vessels, as of January 1, 2024.
Positive Displacement Chillers (new only).	HFC-134a and R-404A .....	Acceptable, subject to narrowed use limits, for human-rated spacecraft and related support equipment, as of January 1, 2024.

<sup>104</sup> Ingersoll Rand, undated. “Ingersoll Rand Innovates HVAC Portfolio Using

Next Generation, Low Global Warming Refrigerant, R-452B.” This document is accessible at <http://company.ingersollrand.com/content/dam/ir-corp/documents/pdf/2016-DR55-Update-Release-FINAL.pdf>.

<sup>105</sup> Johnson Controls, 2016. “Johnson Controls Advances Environmental Sustainability with Chiller Platforms Compatible with Low GWP

Refrigerants.” January 20, 2016. This document is accessible at <http://www.johnsoncontrols.com/media-center/news/press-releases/2016/01/20/advanced-environmental-sustainability-with-chiller-platforms-compatible-with-low-gwp-refrigerants>.

<sup>106</sup> RAC, 2016. “Carrier opts for HFO 1234ze refrigerants for global chiller range.” February 26, 2016. This document is accessible at <http://www.racplus.com/news/carrier-opts-for-hfo-1234ze>.

[refrigerants-for-global-chiller-range/10003440.article?blocktitle=News&contentID=15773](http://www.benndorf-hilbrand.eu/sites/default/files/fabrikate/pdf/refrigerants-for-global-chiller-range/10003440.article?blocktitle=News&contentID=15773).

<sup>107</sup> Cooling Post, 2015. “Blue Box offers R1234ze chiller option.” April 29, 2015. This document is accessible at <http://www.coolingpost.com/world-news/blue-box-offers-r1234ze-chiller-option/>.

<sup>108</sup> Geoclima, 2014. Geoclima Brochure. This document is accessible at [http://www.benndorf-hilbrand.eu/sites/default/files/fabrikate/pdf/geoclima\\_broschure.pdf](http://www.benndorf-hilbrand.eu/sites/default/files/fabrikate/pdf/geoclima_broschure.pdf).

i. How do these unacceptable refrigerants compare to other refrigerants for these end-uses with respect to SNAP criteria?

Other refrigerants for new centrifugal chillers not subject to this action are HFO-1234ze(E), HFO-1336mzz(Z), IKON A, IKON B, R-450A, R-513A, R-514A,<sup>109</sup> R-717 (ammonia), R-744 (carbon dioxide), THR-02, and *trans*-1-chloro-3,3,3-trifluoroprop-1-ene.<sup>110</sup> In the proposed rule and SNAP Acceptability Determination 31, EPA provided information on the environmental and health risks presented by the alternatives that are being found unacceptable compared with alternatives listed as acceptable (81 FR 22842, April 18, 2016; and 81 FR 32242–45, May 23, 2016). In addition, a technical support document<sup>111</sup> that provides the **Federal Register** citations

concerning data on the SNAP criteria (e.g., ODP, GWP, VOC, toxicity, flammability) for acceptable alternatives as well as those we are finding unacceptable for new centrifugal chillers may be found in the docket for this rulemaking (EPA–HQ–OAR–2015–0663).

For new centrifugal chillers, the refrigerants we are listing as unacceptable have an insignificant ODP. Acceptable refrigerants HFO-1234ze(E), HFO-1336mzz(Z), IKON A, IKON B, R-1233zd(E), R-450A, R-513A, R-514A, R-717 (ammonia), R-744 (carbon dioxide), and THR-02 also have an insignificant ODP. The alternative refrigerant R-1233zd(E) has an ODP of 0.00024 to 0.00034.<sup>112 113</sup> Estimates of this compound's potential to deplete the ozone layer indicate that even with worst-case estimates of emissions, which assume that this compound

would substitute for all compounds it could replace, the impact on global atmospheric ozone abundance would be statistically insignificant.<sup>114</sup> R-514A has an ODP of approximately 0.00006, lower than that of R-1233zd(E) and comparable to HFC-134a's calculated ODP of less than 0.000015,<sup>115</sup> which has generally been described as zero by EPA and in common practice. Thus, the acceptable alternatives have ODPs lower than or of the same practical effect to the ODPs of the alternatives which EPA is listing as unacceptable, and lower than the ODPs of ODS historically used in this end-use.

The refrigerants we are listing as unacceptable through this action have GWPs ranging from about 920 to 9,810. As shown in Table 7, alternatives acceptable for this end-use not subject to this action have GWPs ranging from zero to 630.

TABLE 7—GWP, ODP, AND VOC STATUS OF REFRIGERANTS IN NEW CENTRIFUGAL CHILLERS<sup>1 2</sup>

Refrigerants	GWP	ODP	VOC	Listing status
HFO-1234ze(E), R-1233zd(E), R-450A, R-513A, R-717, R-744 ....	0–630	0–0.00034 .....	No .....	Acceptable.
HFO-1336mzz(Z), IKON A, IKON B, R-514A, THR-02 .....	7–560	0—Not public <sup>3</sup> .....	Yes <sup>4</sup> .....	Acceptable.
HFC-134a, HFC-245fa .....	1,030–1,430	0 .....	No .....	Unacceptable.
FOR12A, FOR12B, THR-03 .....	920–1,220	Not public <sup>3</sup> .....	Yes <sup>4</sup> .....	Unacceptable.
R-407C, R-410A, R-410B, R-421A, R-423A, HFC-227ea .....	1,770–3,220	0 .....	No .....	Unacceptable.
R-125/134a/600a (28.1/70/1.9), R-125/290/134a/600a (55/1/42.5/1.5), R-417A, R-422B, R-422C, R-422D, R-424A, R-434A, R-438A, RS-44 (2003 composition).	1,985–3,250	0 .....	Yes <sup>4</sup> .....	Unacceptable.
HFC-236fa, R-404A, R-507A .....	3,920–9,810	0 .....	No .....	Unacceptable.

<sup>1</sup> The table does not include not-in-kind technologies listed as acceptable for the stated end-use.

<sup>2</sup> HCFC-22, HCFC-123, HCFC-124, and several blends containing HCFCs are also listed as acceptable but their use is severely restricted by the phasedown in HCFC production and consumption.

<sup>3</sup> The ODP of one or more alternatives is not published here in order to avoid disclosing information that is claimed as confidential business information.

<sup>4</sup> One or more constituents of the refrigerant are VOC.

One of the refrigerant blends not subject to this action (THR-02), as well as several of the substitutes for which we are changing the listing from acceptable to unacceptable, include small amounts of R-290 (propane), R-600 (n-butane), or other substances that are VOCs. These amounts are small and for this end-use are not expected to contribute significantly to ground level ozone formation.<sup>116</sup> HFO-1336mzz(Z) and *trans*-1,2-dichloroethylene (constituents of R-514A) are considered

VOCs; the producer has petitioned EPA to exempt HFO-1336mzz(Z) from the definition of VOC. In the actions where EPA listed these refrigerants as acceptable, EPA concluded none of these refrigerants in this end-use pose significantly greater risk to ground-level ozone formation than other alternative refrigerants that do not meet the definition of VOC under CAA regulations (see 40 CFR 51.100(s)) or that are specifically excluded from that

definition for the purpose of developing SIPs to attain and maintain the NAAQS.

The refrigerants listed as acceptable and not subject to this action are highly volatile and typically evaporate or partition to air, rather than contaminating surface waters. Their effects on aquatic life are expected to be small and pose no greater risk of aquatic or ecosystem effects than those of the refrigerants for which we are changing the listing from acceptable to unacceptable for this end-use.

<sup>109</sup> In SNAP Determination 31 (81 FR 32241; May 23, 2016), EPA found acceptable a blend of 74.7 percent by weight HFO-1336mzz(Z) and 25.3 percent by weight *trans*-1,2-dichloroethylene. The Standing Standard Project Committee updating ASHRAE Standard 34–2013 has proposed assigning this blend a designation of R-514A, which is how we refer to it throughout section VI.A.5 of this rule.

<sup>110</sup> ASHRAE Standard 34–2013 designates this chemical as R-1233zd(E), which is how we refer to it throughout section VI.A.5 of this rule.

<sup>111</sup> EPA, 2016b. Tables of Alternatives for End-Uses Considered in the Final Rule, Protection of Stratospheric Ozone: Listing Modifications for

Certain Substitutes under the Significant New Alternatives Policy Program. September, 2016.

<sup>112</sup> Wang D., Olsen S., Wuebbles D. 2011. "Preliminary Report: Analyses of tCFP's Potential Impact on Atmospheric Ozone." Department of Atmospheric Sciences. University of Illinois, Urbana, IL. September 26, 2011.

<sup>113</sup> Patten and Wuebbles, 2010. "Atmospheric Lifetimes and Ozone Depletion Potentials of *trans*-1-chloro-3,3,3-trichloropropylene and *trans*-1,2-dichloroethylene in a three-dimensional model." Atmos. Chem. Phys., 10, 10867–10874, 2010.

<sup>114</sup> Wang D., Olsen S., Wuebbles D. 2011. "Preliminary Report: Analyses of tCFP's Potential

Impact on Atmospheric Ozone." Department of Atmospheric Sciences. University of Illinois, Urbana, IL. September 26, 2011.

<sup>115</sup> The ODP of HFC-134a was estimated to be less than  $1.5 \times 10^{-5}$  using a theoretical 2-dimensional model. Ravishankara, A. R., A. A. Turnipseed, N. R. Jensen, S. Barone, M. Mills, C. J. Howard, and S. Solomon. 1994. Do hydrofluorocarbons destroy stratospheric ozone? *Science* 263: 71–75. Available online at <http://www.ciesin.org/docs/011-552/011-552.html>.

<sup>116</sup> ICF, 2014a. Assessment of the Potential Impact of Hydrocarbon Refrigerants on Ground Level Ozone Concentrations. February, 2014.

With the exceptions of HFO-1234ze(E) and R-717, all other refrigerants listed as acceptable and those we are listing as unacceptable, are not flammable. HFO-1234ze(E) is nonflammable at standard temperature and pressure using the standard test method ASTM E681; however, at higher temperatures it is mildly flammable. It is classified as a Class 2L (mild flammability, low burning velocity) refrigerant under the standard ASHRAE 34 (2013). Our assessment and listing decision (77 FR 47768; August 10, 2012) found that the overall risk, including the risk due to this mild flammability at elevated temperature, is not significantly greater than for other refrigerants or for the refrigerants we are listing as unacceptable.

The toxicity of the refrigerants we are listing as unacceptable is comparable to that of other alternatives that are acceptable in this end-use, with the exception of R-717 and R-514A. R-717 is of a higher toxicity than the other acceptable refrigerants and is classified as a B refrigerant under ASHRAE 34 (2013). See section VI.A.4.a.iii.(b) of the proposed rule (81 FR 22843; April 18, 2016) for a discussion on the long history of use of R-717 and our original decision finding it acceptable in new centrifugal chillers. The use of R-717, also known as ammonia, and the risks it might present are controlled through industry standards, code requirements and other regulations. In the original SNAP rule, EPA noted “[a]mmonia [R-717] has been used as a medium to low temperature refrigerant in vapor compression cycles for more than 100 years. Ammonia [R-717] has excellent refrigerant properties, a characteristic pungent odor, no long-term atmospheric risks, and low cost. It is, however, mildly flammable and toxic, although it is not a cumulative poison. OSHA standards specify a 15 minute short-term exposure limit of 35 ppm for ammonia [R-717].” (53 FR 13072; March 18, 1994). In that rule, we found R-717 acceptable for use in centrifugal chillers, concluding that its overall risk to

human health and the environment was not significantly greater than the other alternatives found acceptable. This conclusion was based on the assumption that the regulated community adheres to OSHA regulations on such use as well as standard refrigeration practices, such as the adherence to ASHRAE Standard 15 and the International Institute of Ammonia Refrigeration (IIAR) Standard 2,<sup>117</sup> which are utilized by local authorities when setting their own building and safety requirements.

R-514A is designed for use in low-pressure centrifugal chillers and has the same toxicity rating as HCFC-123, which has and continues to be used safely in such chillers. Because these refrigerants operate in low-pressure chillers only, any leaks are more likely to cause air to enter the chiller, rather than refrigerant to escape. Exposure is further reduced by requirements set forth in ASHRAE Standard 15, which is often cited in building codes. Specifically, Occupant Exposure Limits and Refrigerant Concentration Limits for B1 refrigerants—specified in ASHRAE Standard 34—2013 and mandated by ASHRAE Standard 15 and building codes—are lower than for A1 refrigerants, and these limits must be observed in chiller operations. EPA’s risk screen<sup>118</sup> found that for a typical-size chiller using R-514A, even under conservative assumptions, the estimated 15-minute time-weighted average exposure would be well below (less than 12 percent of) the corresponding limit. The other acceptable alternatives listed previously that are included in ASHRAE 34 (2013) are classified as A (lower toxicity) refrigerants. For further information, including EPA’s risk screens and risk assessments as well as information from the submitters of the substitutes, see docket EPA-HQ-OAR-2015-0663.

In summary, for new centrifugal chillers, because the risks other than GWP are not significantly different for the other available alternatives than for those we proposed to list as

unacceptable, and because the GWPs for the refrigerants we proposed to list as unacceptable are significantly higher and thus pose significantly greater risk, we are listing the following refrigerants as unacceptable: FOR12A, FOR12B, HFC-134a, HFC-227ea, KDD6, R-125/134a/600a (28.1/70/1.9), R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-410A, R-410B, R-417A, R-421A, R-422B, R-422C, R-422D, R-424A, R-434A, R-437A, R-438A, R-507A, RS-44 (2003 composition), SP34E, and THR-03.

For new positive displacement chillers, other alternatives that are listed as acceptable and not subject to this action pose lower overall risk to human health and the environment than the refrigerants we are listing as unacceptable. Acceptable refrigerants for new positive displacement chillers include: HFO-1234ze(E), HFO-1336mzz(Z), IKON B, R-450A, R-513A, R-514A, R-717, R-744, and THR-02. In the proposed rule and SNAP Acceptability Determination 31, EPA provided information on the environmental and health risks presented by the alternatives that are being found unacceptable compared with other available alternatives listed as acceptable (81 FR 22846; April 18, 2016 and 81 FR 32242–32245; May 23, 2016). In addition, a technical support document<sup>119</sup> that provides the **Federal Register** citations of actions in which we provide information on the SNAP criteria (e.g., ODP, GWP, VOC, toxicity, flammability) for acceptable alternatives for new positive displacement chillers, as well as those we are finding unacceptable, may be found in the docket for this rulemaking (EPA-HQ-OAR-2015-0663).

For new positive displacement chillers, the refrigerants that we are listing as unacceptable have insignificant ODPs and have GWPs ranging from about 920 to 3,990. As shown in Table 8, other alternatives that we are not listing as unacceptable in this end-use have GWPs ranging from zero to 630.

TABLE 8—GWP, ODP, AND VOC STATUS OF REFRIGERANTS IN NEW POSITIVE DISPLACEMENT CHILLERS<sup>1 2</sup>

Refrigerants	GWP	ODP	VOC	Listing status
HFO-1234ze(E), R-450A, R-513A, R-717, R-744 .....	0–630	0 .....	No .....	Acceptable.
HFO-1336mzz(Z), IKON B, R-514A, THR-02 .....	7–560	0—Not public <sup>3</sup> .....	Yes <sup>4</sup> .....	Acceptable.
HFC-134a .....	1,430	0 .....	No .....	Unacceptable.
FOR12A, FOR12B, SP34E, THR-03 .....	920–1,410	0—Not public <sup>3</sup> .....	Yes <sup>4</sup> .....	Unacceptable.
HFC-227ea, R-407C, R-410A, R-410B, R-421A .....	1,770–3,220	0 .....	No .....	Unacceptable.

<sup>117</sup> ANSI/International Institute of Ammonia Refrigeration (IIAR) Standard 2–2008 (Addendum B)—American National Standard for Equipment, Design, & Installation of Closed Circuit Ammonia Mechanical Refrigerating Systems.

<sup>118</sup> ICF, 2016m. Risk Screen on Substitutes in Chillers Substitute: HFO-1336mzz(Z)/trans-1,2-dichloroethylene blend (74.7/25.3) (Opteon™ XP30).

<sup>119</sup> EPA, 2016b. Tables of Alternatives for End-Uses Considered in the Final Rule, Protection of Stratospheric Ozone: Listing Modifications for Certain Substitutes under the Significant New Alternatives Policy Program. September, 2016.



TABLE 8—GWP, ODP, AND VOC STATUS OF REFRIGERANTS IN NEW POSITIVE DISPLACEMENT CHILLERS<sup>1 2</sup>—Continued

Refrigerants	GWP	ODP	VOC	Listing status
KDD6, R-125/134a/600a (28.1/70/1.9), R-125/290/134a/600a (55/1/42.5/1.5), R-417A, R-422B, R-422C, R-422D, R-424A, R-434A, R-437A, R-438A, RS-44 (2003 composition).	1,810–3,250	0 .....	Yes <sup>4</sup> .....	Unacceptable.
R-404A, R-507A .....	3,920–3,990	0 .....	No .....	Unacceptable.

<sup>1</sup> The table does not include not-in-kind technologies listed as acceptable for the stated end-uses.

<sup>2</sup> HCFC-22 and several blends containing HCFCs are also listed as acceptable but their use is severely restricted by the phasedown in HCFC production and consumption.

<sup>3</sup> The ODP of one or more alternatives is not published here in order to avoid disclosing information that is claimed as confidential business information.

<sup>4</sup> One or more constituents of the refrigerant are VOC.

One of the refrigerant blends not subject to this action (THR-02), as well as several of the substitutes for which we are changing the listing from acceptable to unacceptable, include small amounts of R-290 (propane), R-600 (butane), or other substances that are VOCs. These amounts are small and for this end-use are not expected to contribute significantly to ground level ozone formation.<sup>120</sup> HFO-1336mzz(Z) and *trans*-1,2-dichloroethylene (constituents of R-514A) are considered VOCs; the producer has petitioned EPA to exclude HFO-1336mzz(Z) from the definition of VOC. In the actions where EPA listed these refrigerants as acceptable, EPA concluded that none of the refrigerants in this end-use pose significantly greater risk to ground-level ozone formation than other alternative refrigerants that are not VOCs or that are specifically excluded from the definition of VOC under CAA regulations (see 40 CFR 51.100(s)) addressing the development of SIPs to attain and maintain the NAAQS.

The refrigerants not subject to this action are highly volatile and typically evaporate or partition to air, rather than contaminating surface waters. Their effects on aquatic life are expected to be small and pose no greater risk of aquatic or ecosystem effects than those of the refrigerants that are subject to the status change for this end-use.

With the exception of HFO-1234ze(E) and R-717, all other refrigerants that have been listed as acceptable, including those for which we are now changing the status to unacceptable, are not flammable. HFO-1234ze(E) is nonflammable at standard temperature and pressure using the standard test method ASTM E681; however, at higher temperatures it is mildly flammable. It is classified as a Class 2L (mild flammability, low burning velocity) refrigerant under the standard ASHRAE 34 (2013). Our assessment and listing

decision (77 FR 47768; August 10, 2012) found that the overall risk, including the risk due to this mild flammability at elevated temperature, is not significantly greater than for other refrigerants or for the refrigerants we are listing as unacceptable.

R-717 (ammonia) is mildly flammable with a low flame speed; it is classified as a 2L refrigerant under ASHRAE 34 (2013). R-717 has a long history of use as a refrigerant in positive displacement chillers, especially in water-cooled screw chillers, and other applications. In our evaluation finding R-717 acceptable in this end-use, EPA noted “[a]mmonia [R-717] has been used as a medium to low temperature refrigerant in vapor compression cycles for more than 100 years. Ammonia [R-717] has excellent refrigerant properties, a characteristic pungent odor, no long-term atmospheric risks, and low cost. It is, however, mildly flammable and toxic, although it is not a cumulative poison. Ammonia [R-717] may be used safely if existing OSHA and ASHRAE standards are followed” (61 FR 47015).

With the exception of R-717, the toxicity of the refrigerants we are listing as unacceptable is comparable to that of other alternatives that are acceptable in this end-use. R-717, a refrigerant we are not listing as unacceptable, is of a higher toxicity than some other refrigerants and is classified as a B refrigerant under ASHRAE 34 (2013). See section VI.A.4.b.iii.(b) of the proposed rule (81 FR 22847; April 18, 2016) for a discussion on the long history of use of R-717 and our original decision finding it acceptable in new positive displacement chillers. However, as we provided in listing it as acceptable, if used consistent with OSHA regulations, as well as standard refrigeration practices, such as the adherence to ASHRAE Standard 15 and the International Institute of Ammonia Refrigeration (IIAR) Standard 2, which are utilized by local authorities when setting their own building and safety requirements, it does not pose significantly greater risk than other

available refrigerants in this end-use. For further information, including EPA’s risk screens and risk assessments as well as information from the submitters of the substitutes, see docket EPA-HQ-OAR-2015-0663.

In summary, for positive displacement chillers, because the risks other than GWP are not significantly different for the other available alternatives than for those we proposed to list as unacceptable, and because the GWPs for the refrigerants we proposed to list as unacceptable are significantly higher and thus pose significantly greater risk, we are listing the following refrigerants as unacceptable: FOR12A, FOR12B, HFC-134a, HFC-227ea, KDD6, R-125/134a/600a (28.1/70/1.9), R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-410A, R-410B, R-417A, R-421A, R-422B, R-422C, R-422D, R-424A, R-434A, R-437A, R-438A, R-507A, RS-44 (2003 composition), SP34E, and THR-03.

#### ii. Narrowed Use Limits for Military Marine Vessels and Human-Rated Spacecraft and Related Support Equipment

EPA is establishing a narrowed use limit that would allow continued use of HFC-134a in centrifugal and positive displacement chillers for military marine vessels as of January 1, 2024. EPA is also establishing a narrowed use limit that would allow continued use of HFC-134a and R-404A in centrifugal and positive displacement chillers for human-rated spacecraft and related support equipment applications as of January 1, 2024. See section VI.A.4.a.iv and VI.A.4.b.iv of the proposed rule (81 FR 22844; April 18, 2016) for a discussion of the reasons for these narrowed use limits. EPA responds to comments regarding the narrowed use limits in section VI.A.5.c.v.

Under these narrowed use limits, the end users will need to ascertain that other alternatives are not technically feasible due to performance or safety requirements, and they would also need to document the results of their

<sup>120</sup> ICF, 2014a. Assessment of the Potential Impact of Hydrocarbon Refrigerants on Ground Level Ozone Concentrations. February, 2014.

analysis. See 40 CFR 82.180(b)(3). Users are expected to undertake a thorough technical investigation of alternatives to the otherwise restricted substitute. Although users are not required to report the results of their investigations to EPA, users must document these results and retain them in their files for the purpose of demonstrating compliance. This information includes descriptions of:

- Process or product in which the substitute is needed;
- Substitutes examined and rejected;
- Reason for rejection of other alternatives, *e.g.*, performance, technical or safety standards; and/or
- Anticipated date other substitutes will be available and projected time for switching.

### iii. When will the status change?

EPA proposed and is finalizing a status change date of January 1, 2024, for new centrifugal chillers and new positive displacement chillers, except as otherwise allowed under a narrowed use limit. The status change date is based on comments and our understanding of the needs for industry standards, model codes, and adoption of those items to allow for a range of alternatives, including flammable alternatives, in both types of chillers addressed. As pointed out by AHRI and NRDC in their joint comment on the proposed rule, for chillers with alternatives not subject to a status change to be used “effectively and safely, the appropriate mitigation must be developed, proven, and finally adopted by safety standards. Only then can states and municipalities adopt building codes reflecting the updated safety standards.” The Agency understands that relevant industry standards and model building codes are likely to change in the 2017 to 2021 timeframe, and that such changes will be a necessary step for the acceptable alternatives feasibly to be used in the chiller market. These standards and codes include ASHRAE 15, UL 1995, UL 60335–2–40, and the International Building Code (IBC). EPA also recognizes that even once standards and model building codes are changed, time will be required for locations to adopt such codes allowing for the use of chillers using the alternative refrigerants, many of which may not currently be allowed to be used based on existing codes. While some non-flammable, code-acceptable refrigerants are available for some of the chiller market, the use of other acceptable alternatives would require code changes or exceptions made by code officials. Comments indicated that there is a

progression from the release of a model code until adoption by State authorities, and that the majority of States are currently using either the most recent (2015) model code or are only one cycle behind (2012). While EPA does not believe the status change date must occur after all such authorities have adopted a new model code, we are allowing a reasonable time to provide that opportunity where such code adoption would facilitate the introduction of chillers with alternative refrigerants. Comments also indicate that, if the appropriate codes are not adopted, there are alternative means and measures that may be taken to allow the use of alternatives otherwise not allowed. A change of status date of January 1, 2024, is necessary to provide an expeditious yet reasonable time for this process to occur. The status change date is also necessary to allow continued development of designs of new centrifugal and positive displacement chillers using an acceptable alternative, covering the wide range of capacity and design types (low/medium pressure, indoor/outdoor, etc.) that exist in the market, and allow those chillers to be tested and certified. EPA is aware that some equipment has been introduced with acceptable alternatives, as discussed above in section VI.A.5.a.ii, and that additional research and development is underway with these and other possible alternatives. EPA responds to comments regarding the status change date in section VI.A.5.c.ii.

Some commenters suggested an earlier date for all or parts of the centrifugal and positive displacement chiller market, suggesting status change dates as early as 2019. While EPA noted that multiple chillers with alternative refrigerants are already available on the market now, and we expect more to become so by that date, we did not find evidence that a significant portion of the chiller market could transition at an earlier date than the date we are finalizing. Further, EPA did not receive enough technical detail to support dividing the centrifugal chiller end-use or the positive displacement chiller end-use so that different change of status dates could apply to different portions of the end-uses.

Commenters who suggested a later status change date had concerns regarding their ability to maintain current energy efficiency levels with alternative refrigerants. The data provided by commenters, however, showed only minor theoretical losses of efficiency for some alternatives, up to about four percent. These commenters suggested more time is needed to

recover these losses by redesigning and recertifying centrifugal chillers. These losses are considered small and only pertain to “drop-in” conditions; it is expected that any losses can be recovered by designing new chillers to utilize those refrigerants, as commenters indicate they expect to do. Furthermore, several alternatives were found to exceed current efficiency levels even in these theoretical conditions. While some commenters provided a general description of the steps that must be taken in this redesign process, none provided a detailed timeline of how long each step would take and how multiple models can be redesigned in parallel during the proposed timeframe. Therefore, we disagree that efficiency concerns would support a later change of status date.

Commenters who suggested a later status change date were also concerned about the need to update industry standards and building codes, and adoption of those codes, specifically for flammable alternatives. For centrifugal chillers, they stated such changes must take place for HFO-1234ze(E), a mildly flammable A2L refrigerant, to be used. They also identified that refrigerant and several other A2L refrigerants for positive displacement chillers, and likewise indicated that standards and codes actions hindered the availability of chillers with those alternatives. EPA found several examples where acceptable alternatives have been used in both centrifugal and positive displacement chillers, and received information that indicates that industry standards are expected to be updated as early as 2017 and that model building codes would be updated possibly in the 2018 cycle or most likely the 2021 cycle. By establishing a 2024 status change, we allow time for adoption of those model codes by States and other jurisdictional authorities. In addition, commenters noted that there are other alternative means and measures by which the use of a flammable refrigerant, if so chosen by the manufacturer, in a centrifugal or positive displacement chiller may be permitted, even if that refrigerant were not otherwise allowed under a particular State or locality’s existing code requirements.

### c. How is EPA responding to comments?

EPA received several comments from individuals and organizations with various interests in the refrigerants industry. Comments addressed EPA’s proposed status change date of January 1, 2024, for new centrifugal chillers and new positive displacement chillers. Some commenters, including Chemours, EIA, Honeywell, and Ingersoll Rand

supported EPA's proposed status change date. These commenters identified a range of potential alternatives but generally agreed that new centrifugal chillers using these alternatives needed some time to be brought to the market. Other commenters opposed the proposed status changes or suggested different change of status dates from the one EPA proposed, such as 2021 and 2025. Other comments we received related to energy efficiency, industry standards and codes, and the narrowed use limits for military and spacecraft uses.

Commenters included Boeing, Eastman Chemical Company, Honeywell, Chemours, Johnson Controls, Ingersoll Rand, UTC, PSEG Services Corporation, Arkema, the Alliance, National Association of Manufacturers (NAM), AHRI, EIA, NRDC, IGSD, NASA, and DoD.

As stated above, EPA received many comments discussing "chillers" or "HFC-134a alternatives" that did not specify whether the comments applied specifically to centrifugal chillers, positive displacement chillers, or both. We have grouped comments together and responded to the issues raised by the comments in the sections that follow, or in a separate Response to Comments document which is included in the docket for this rule (EPA-HQ-OAR-2015-0663). Our responses should be considered as equally applicable to both end-uses unless otherwise specified.

#### i. Substitutes and End-Use Proposed

*Comment:* Eastman requested that EPA clarify whether the status changes under the chiller end-uses apply to the IPR end-use. Eastman pointed out that since the inception of the SNAP program, EPA has separated these into different end-uses.

*Response:* EPA confirms that this action will change the status of refrigerants for new positive displacement chillers and new centrifugal chillers and does not affect refrigerants listed under the separate IPR end-use.

*Comment:* Eastman raised concerns about retrofits to existing equipment, specifically for "any of these systems with remaining useful life [that] are scheduled for retrofits due to previous phase-outs of refrigerants such as R-22," and pointed out issues related to using certain refrigerants listed as acceptable for the chiller end-uses "to replace the one the [IPR] system was originally designed to use." PSEG submitted similar comments, requesting that EPA "clarify its intent that the prohibition of HFC-134a in chillers applies to new

chillers installed on or after January 1, 2024," and did not require "units that are newly installed with HFC-134a after the final rule becomes effective, but prior to January 1, 2024, to retrofit those 'existing' units by January 1, 2024." PSEG stated that "there are few viable zero or low GWP refrigerants available for use in HFC-134a large tonnage equipment" and that highly flammable refrigerants and both R-717 and R-744 are not viable for nuclear applications, noting that "the equipment must be designed specifically for the gas."

*Response:* The status changes to the centrifugal and positive displacement chiller end-uses in this rule apply to "new" equipment installed on or after the status change date of January 1, 2024. EPA has historically issued separate decisions under the SNAP program for new equipment in a given end-use and retrofit (*i.e.*, the replacement of the refrigerant with an alternate refrigerant) in the same end-use. This action changes the status of refrigerants for new chillers created on or after the status change date; it does not change the status of refrigerants currently acceptable for retrofitting chillers. Thus, concerns about retrofitting "HFC-134a" equipment are not pertinent for this action.

*Comment:* EIA supported EPA's proposal to change the status of high-GWP refrigerants to unacceptable for centrifugal and positive displacement chillers, mentioning specifically refrigerants HFC-134a, R-404A, R-407C, R-410A and R-507A. Chemours also supported EPA's proposed status changes for both chiller end-uses, and identified several alternatives and what they would replace, including R-513A (HFC-134a replacement), R-452B (R-410A replacement), R-449A (R-404A replacement) and HFO-1234yf (HFC-134a replacement).

*Response:* EPA thanks the commenters for their support of the proposed rule. Regarding the alternatives identified by Chemours, EPA agrees that R-513A is an acceptable alternative for centrifugal and positive displacement chillers. EPA has received submissions for R-449A and R-452B for both centrifugal and positive displacement chillers and the Agency is reviewing them for these and other end-uses. We have not received a submission specifically for HFO-1234yf in chillers.

*Comment:* UTC provided information regarding various refrigerants that are listed as acceptable or that may be under research for use in centrifugal chillers, specifically HFO-1234ze(E), R-290, R-450A, R-513A, R-452B, R-718, R-744, R-1233zd(E) and R-515A. They

likewise provided information on the first six of these refrigerants in positive displacement chillers. Additional information regarding the compressor displacement to utilize these alternatives was also provided. UTC noted the flammability of R-290 and felt that R-718 and R-744 "do not provide a long-term solution or require additional work to make such refrigerants feasible in chillers." UTC provided information regarding the application and efficiency of the other refrigerants and said some of these that could be used "are short-term, but less efficient" options. They also indicated others are "longer-term," and identified HFO-1234ze(E) as a specific example but also noted its flammability. They stated that R-452B was not a viable option to replace HFC-134a but did indicate it was under consideration as one of several R-410A alternatives, all of which are flammable.

*Response:* EPA interprets this comment to apply to both centrifugal and positive displacement chillers. EPA thanks the commenter for this information. This information shows that much is known about these refrigerants and how they could be employed in chillers. UTC indicates a desire to transition to what it considered "longer-term" solutions, but did not provide adequate information to indicate why their recommended status change date of January 1, 2025, would provide such time but the proposed status change date of January 1, 2024, would not. As discussed in section VI.A.5.b.iii above, EPA has established a change of status date that considers the need for standards and model codes to change to incorporate requirements for flammable refrigerants as well as additional time for States and localities to adopt such codes as part of their requirements.

*Comment:* UTC indicated that HFO-1234ze(E) is flammable and therefore mitigation is required and "appropriate safety standards and approved building codes must be in place before it can be used." Comments submitted as CBI indicate that a chiller using HFO-1234ze(E) has been introduced in Europe and that the potential flammability of the refrigerant was addressed through added mitigation requirements sufficient for A2 (and hence A2L) refrigerants. As noted in section VI.A.5.a.iii above, Honeywell stated that "[s]everal manufacturers currently offer high-efficiency chillers, air-cooled (outdoor) and water-cooled (indoor), using HFO-1234ze(E) in sizes ranging from tens of tons to hundreds of tons" and listed some examples, including some centrifugal chillers and some positive displacement chillers.

*Response:* EPA interprets these comments as applying to both centrifugal and positive displacement chillers. This information indicates that manufacturers and installers have been successful in introducing chillers with alternative flammable refrigerants in some instances, and that building codes allow for such installations under certain circumstances. However, as discussed in section VI.A.5.b.iii above, EPA agrees that for flammable refrigerants to become more widely used across the multiple applications and configurations where centrifugal and positive displacement chillers are deployed, standards and model codes need to be revised and the States and localities must adopt such codes. Our status change date of January 1, 2024, provides the time necessary for this to occur. As discussed above in section VI.A.5.a.iii, multiple companies have introduced chillers using HFO-1234ze(E). Comments indicate that this refrigerant is already being employed in chillers and that steps to address the flammability of the refrigerant in some applications are known. Thus, this refrigerant is one of the many options that can be utilized by manufacturers to develop chillers using acceptable refrigerants by the January 1, 2024, status change date. In addition to HFO-1234ze(E), other flammable refrigerants have been used, especially in positive displacement chillers. For instance, in the proposed rule (81 FR 22847; April 18, 2016), EPA noted that “R-717 has a long history of use as a refrigerant in positive displacement chillers, especially in water-cooled screw chillers, and other applications.”

*Comment:* Honeywell stated that “HFO-1233zd(E), has a GWP of one, is non-flammable and more energy efficient than HFC-134a, and chillers utilizing HFO-1233zd(E) are available from at least three manufacturers,” identifying Trane (a brand of Ingersoll Rand), Carrier (a brand of UTC), and Mitsubishi Heavy Industries.

*Response:* EPA thanks the commenter for this information regarding R-1233zd(E). The proposed rule (81 FR 22842; April 18, 2016) noted that one manufacturer had introduced a chiller using this refrigerant.<sup>121</sup> That same company now offers all of their large tonnage low-pressure centrifugal chillers using this refrigerant.<sup>122</sup> As

Honeywell notes, and as we cite in section VI.A.5.a.iii above, other manufacturers have also produced centrifugal chillers using R-1233zd(E). These will serve part of the chiller market but do not satisfy the full market, for instance where a smaller tonnage, positive displacement chiller is required.

*Comment:* Ingersoll Rand stated that they will have small tonnage low-pressure centrifugal chillers under their Trane brand using R-514A available in 2017.

*Response:* EPA thanks the commenter for this comment indicating the development of small tonnage low-pressure centrifugal chillers using R-514A, which we cite in section VI.A.5.a.iii.

*Comment:* EIA suggested that EPA “signal the likelihood” of finding alternatives with GWPs above 600 unacceptable, including R-450A and R-513A.

*Response:* EPA cannot, at this time, project what actions it may take in the future. Moreover, any proposal to change the status of R-450A and R-513A in the chiller end-uses would need to occur through a separate notice and comment rulemaking in which EPA performs a full comparative assessment using the SNAP criteria.

#### ii. Change of Status Date

*Comment:* Honeywell supported a January 1, 2024, status change date for chillers but felt that certain types could transition sooner. They noted that the discussion regarding the need for building codes to change to accept 2L flammable refrigerants was most applicable to water-cooled indoor chiller installations and that “for the most part this issue does not impact the installation of air-cooled chillers that are installed outdoors.” Based on that, Honeywell believed that EPA could adopt an earlier transition date for air-cooled (outdoor) chillers. EIA suggested a staged transition with a change of status date of January 1, 2019, for air-cooled chillers and January 1, 2021, for water-cooled chillers. The California Air Resources Board (CARB) recommended that all chillers be subject to a January 1, 2021, status change date. Arkema suggested a 2021 transition date for R-407A, R-407B, R-407C, R-407D, R-407E, and R-407F.

*Response:* EPA interprets these comments as applying to both centrifugal and positive displacement chillers. The commenters supporting

one or more earlier change of status dates for all or portions of the chiller end use did not provide enough technical detail to conclude that such dates are achievable for the chillers that would be subject to such dates. Further, EPA did not receive enough information regarding how extensive code changes would (or would not) be specifically for air-cooled outdoor chillers and thus we do not believe that an earlier status change date for that portion of the chiller market as suggested by Honeywell and EIA is supported. EPA notes that nonflammable (A1) and flammable (A2L and B2L) alternatives are acceptable for both centrifugal and positive displacement chillers.

We also recognize that it is important under the SNAP program to not limit end users to a single choice. EPA has identified several alternatives that are acceptable for centrifugal chillers and likewise positive displacement chillers. By establishing the same change of status date for all chillers, manufacturers will be able to choose from the full list of acceptable alternatives the refrigerant(s) and chiller type(s) that best meet their specific needs, and customers will be able to apply the particular type(s) of chillers using the particular acceptable alternative that best meet their needs. Individual manufacturers may determine for themselves which alternative(s) to use in their particular equipment and given the variety of alternatives available there may not be a single “widely-accepted” replacement, even for a specific type of chiller; there may be several refrigerants and chiller types competing in the market. For additional comments regarding building codes and standards, please see section VI.A.c.iv.

*Comment:* UTC argued for a status change date no earlier than January 1, 2025. One factor that they cited was that HFO-1234ze(E) “is a new HFO.” Regarding this chemical, UTC stated that it has “approximately equal performance” to HFC-134a and indicated that changes to equipment designs are required to use it. UTC also stated that “typical development projects require 2–3 years to complete,” but indicated that HFO-1234ze(E) “require[s] major redesign work.” Commenting on positive displacement chillers, EIA stated that “[t]he first HFO-1234ze chillers were installed back in 2011 and production uptake of HFO-1234ze chillers has been increasing rapidly” noting two major manufacturers—Carrier (a brand of UTC) and Trane (a brand of Ingersoll Rand)—using that refrigerant in chillers.

<sup>121</sup> Cooling Post, 2014. “Trane first with 1233zd chiller.” June 30, 2014. This document is accessible at <http://www.coolingpost.com/world-news/trane-first-with-1233zd-chiller/>.

<sup>122</sup> Trane, 2016. “Trane Announces Significant Centrifugal Chiller Line Expansion and Services for the United States and Canada.” June 15, 2016. This document is accessible at <http://www.trane.com/>

[commercial/north-america/us/en/about-us/newsroom/press-releases/centrifugal-chiller-line-expansion.html](http://commercial/north-america/us/en/about-us/newsroom/press-releases/centrifugal-chiller-line-expansion.html).

*Response:* EPA interprets UTC's comment as applying to both centrifugal and positive displacement chillers while EIA's comment was specific to positive displacement chillers. HFO-1234ze(E) is not a "new" refrigerant—it was added to ASHRAE Standard 34–2010 via addendum i, which was approved by the ASHRAE Standards Committee on June 25, 2011, by the ASHRAE Board of Directors on June 29, 2011, and by the ANSI on June 30, 2011. EPA listed it acceptable for centrifugal and positive displacement chillers on August 10, 2012. As discussed previously in section VI.A.5.b.iii and as EIA noted, multiple companies have utilized HFO-1234ze(E) in chillers to date. Finally, we note that Carrier Corporation, a brand of UTC, has at least six HFO-1234ze(E) chiller installations in Switzerland.<sup>123</sup>

*Comment:* UTC, Johnson Controls and AHRI stated that any status change date earlier than January 1, 2025, would not provide the time necessary to transition to alternatives that remain acceptable. UTC stated that "EPA must take into account certain properties, including flammability, for refrigerants for which EPA does *not* propose to change status" (emphasis in the original), such as HFO-1234ze(E), R-1233zd(E), R-450A and R-513A. UTC commented that the substitutes that remain acceptable for centrifugal chillers and for positive displacement chillers currently utilizing HFC-134a are not "drop-in" refrigerants and will require substantial equipment redesign to account for displacement changes and changes in cycle efficiency and heat transfer. For positive displacement chillers currently utilizing R-410A, UTC and Johnson Controls said system changes must be made for A2L refrigerants, and concluded that all the alternatives being investigated for such use are or would be classified as A2L. UTC provided further information on the steps required during redesign. These included steps for "each chiller type" as well as additional steps for 2L flammable refrigerants. To redesign equipment, UTC said one necessary step was the development of oils and new materials to be used in the new equipment. They also indicated that new components and overall systems would need to be requalified by test laboratories. More generally, UTC indicated that "different equipment redesign, requalification and equipment

sensor and alarms will be required along with state and local adoption of building and fire code changes" to transition positive displacement chillers.

UTC said that typical development projects would require two to three years to complete but also indicated that this time frame could be delayed due to the availability of manufacturer and test labs for certification, Johnson Controls indicated a project duration of two to nine years for low-pressure and medium-pressure chillers. AHRI also estimated it would take two to nine years to commercialize including time to reengineer and re-optimize chillers to use alternative refrigerants. Ingersoll Rand noted their commitment to transition its entire chiller portfolio, including positive displacement screw and scroll chillers, before the end of 2018.

*Response:* EPA interprets these comments as applying (regarding the development process) to both centrifugal and positive displacement chillers. Although EPA prefers not to use the term "drop-in," it is sometimes used by various parties to refer to the circumstance where one refrigerant can be used in place of another without any modification to the relevant piece of refrigeration equipment. EPA recognizes that in many cases designs will need to be modified to use different refrigerants. This is expected and was evidenced when centrifugal chillers transitioned from CFC-11 and CFC-12 to HCFC-123 and HFC-134a and when positive displacement chillers transitioned from CFC-12 and HCFC-22 to HFC-134a, R-407C and R-410A. Past experiences show that such redesigns offer the opportunity for manufacturers to integrate other changes to improve performance of their products and could offer them competitive advantages in the market. EPA realizes that the degree of design changes may vary by the refrigerant chosen and more so from decisions by the manufacturers in adopting designs for those refrigerants and including other design changes during the process.

The information from these commenters did not provide sufficient detail to determine the time it would take to transition all chillers to acceptable alternatives to serve its current market. For instance, UTC did not indicate whether the two to three year product development timeframe applied to just one or multiple products, and if the latter, whether those development projects could overlap and occur simultaneously. Johnson Controls and AHRI did not address these situations either. However, the January

1, 2024, change of status date for both centrifugal and positive displacement chillers that EPA is establishing in the final rule should provide sufficient time for the activities described by the commenters to occur in order to meet that date.

*Comment:* In addition to the argument for a change of status date no earlier than January 1, 2025, UTC suggested that HFC-134a in chillers should remain acceptable until states and localities adopted the "relevant building, fire and mechanical codes that may be necessary." The commenter suggested a narrowed use limit could apply. UTC also provided a table indicating the number of states adopting various editions of the IBC, the International Fire Code, and the International Mechanical Code. UTC indicated a desire for "regulatory certainty" and an avoidance of "balkanization of the market."

*Response:* UTC did not indicate specifically which codes, and specifically which provisions in any codes, would need to be modified. Although EPA recognizes that in general standards and model codes need to be developed to allow for the use of A2L refrigerants, and that States and localities need to adopt those model codes or similar requirements, it is not reasonable to condition the entire market by such actions. As stated above in section VI.A.5.b.iii, a status change date of January 1, 2024, provides a reasonable amount of time for these actions to take place for most if not all States and localities. Where such actions have not fully occurred, manufacturers have the option to offer nonflammable refrigerants for some chiller types, and alternative means and methods exist to allow for the use of A2L refrigerants if needed.

Further, as the table of approvals provided showed, various states are adopting different cycles of codes, some dating back to 2003 and others adopting the latest 2015 codes. In section VI.A.5.c.iv below, EPA points to the concerted effort by DOE, AHRI, and ASHRAE to fund vital research that will establish a more robust fact base about the properties and uses of flammable refrigerants. The results from this work will help provide the technical knowledge needed to facilitate and accelerate the safe use of flammable refrigerants. EPA finds that conditioning a status change on code adoption would not only be unnecessary, but would create the "balkanization" or patchwork of regulations that UTC said it wanted to avoid.

*Comment:* AHRI and NRDC jointly stated that "[t]he forthcoming redesign

<sup>123</sup> RAC, 2016. "Carrier opts for HFO 1234ze refrigerants for global chiller range." February 26, 2016. This document is accessible at <http://www.racplus.com/news/carrier-opts-for-hfo-1234ze-refrigerants-for-global-chiller-range/10003440.article?blocktitle=News&contentID=15773>.

will require modification not only to the equipment itself, but also to the manufacturing environment, servicing practices and shipping logistics, and most importantly, to the equipment rooms and buildings in which these equipment may be installed.” AHRI and NRDC recommended a January 1, 2025, change of status date to allow time for these modifications to occur.

*Response:* EPA interprets these comments as applying to both centrifugal and positive displacement chillers. As discussed in the previous response, EPA recognizes that equipment modification and redesigns will be required to use alternatives. The commenters did not indicate specifically why the other modifications were required, did not provide any detail regarding the time needed for the identified modifications, whether the various steps could be addressed in parallel or only one after the other in series and why these steps cannot take place in time to meet a January 1, 2024, change of status date. Thus, these comments do not support a claim that the change of status date should be January 1, 2025, instead of January 1, 2024, for either centrifugal or positive displacement chillers.

*Comment:* Arguing for a January 1, 2025, status change date, Johnson Controls stated that the alternatives not subject to status change are not “drop-ins” for HCFC-123 in low-pressure centrifugal chillers and likewise that to transition HFC-134a chillers to low-pressure alternatives would require redesign of heat exchangers and compressors and take two to nine years or longer.

*Response:* As noted above, although EPA prefers not to use the term “drop-in,” it is sometimes used by various parties to refer to the circumstance where one refrigerant can be used in place of another without any modification to the relevant piece of refrigeration equipment. We recognize that manufacturers typically redesign products to varying extents when transitioning refrigerants in most cases to address the unique properties of the new refrigerant that will be used. As an initial matter, EPA’s change of status rule does not limit manufacturers currently using HFC-134a to convert to low-pressure alternatives. Higher-pressure alternatives that are not subject to status change may also be considered, including HFO-1234ze(E), R-450A and R-513A. In addition, manufacturers may develop and submit to SNAP other alternatives for evaluation. Regardless, the commenter has suggested a wide timeframe for the time in which it would take manufacturers to convert

equipment, but has provided no detail as to the actual expected timeframe. We note that a January 1, 2024, change of status date will provide the manufacturer slightly more than seven years in which to achieve a conversion, which is on the later side of the time they suggest might be needed. In addition, we note that the commenter has already announced that the centrifugal and screw chillers they offer, originally designed for HFC-134a, are compatible with R-513A, which is not subject to the status change in this action.<sup>124</sup>

*Comment:* AHRI stated that the flammability of new refrigerants will require safety upgrades for manufacturing and reclamation facilities. AHRI also indicated that transition to flammable refrigerants involves capital investments that need to be planned well in advance.

*Response:* AHRI did not provide any specific information on the time required to prepare these facilities for flammable refrigerants and how that might affect the proposed change of status date. We note that neither of the two certified reclaimers that commented on the proposed rule indicated that safety upgrades were needed and that a later change of status date should be established to allow for such upgrades.

*Comment:* Johnson Controls stated that the AHRI/NRDC proposal called for a tremendously aggressive transition away from HFCs in just over eight years and compared that time period to what they indicated was over 20 years to transition chillers from CFCs and HCFCs. They stated that after more than 25 years from the signing of the Montreal Protocol, there are manufacturers still using HCFCs in chillers. AHRI also stated that the last refrigerant transition from ODS has taken 20 years and is still in process.

*Response:* EPA disagrees that a 2024 status change date is overly aggressive or that the transition away from CFCs and HCFCs provides support that an over seven-year period for moving away from the use of many HFCs and HFC blends is insufficient. It is important to note that the transition away from CFCs and HCFCs in the earlier years was due to a phasedown, not a phaseout, of CFCs. While based on later regulations CFCs were phased out of production in 1995, a phaseout in production of

HCFCs has only more recently started. Thus, during the first 15 years of the SNAP program, there was no obligation and no incentive for manufacturers to transition from HCFCs. Therefore, the pace of transition away from HCFCs does not reflect the time needed to transition away from the substitutes subject to the change of status. As provided in more detail in section VI.A.5.b.iii, we evaluated the steps it would take for manufacturers to transition chillers away from the substitutes that we are changing the listing status to unacceptability, examining the technical challenges for that transition and considering the use of flammable alternatives and the related need for changes to industry standards and model building codes and the adoption of those codes. For the reasons provided there, we have determined that January 1, 2024, is a reasonable, but expeditious date for such a transition.

*Comment:* The Alliance asked EPA to explain in more detail what technical analysis or timelines would be needed to justify a change of status later than our lead proposal of January 1, 2024.

*Response:* EPA interprets this comment as applying to both centrifugal and positive displacement chillers. EPA has not established a specific list of items that are needed to justify a later change of status date. In establishing a change of status date, EPA examined the technical challenges in order to determine a reasonable, but expeditious change of status date. Thus, to support a later change of status date, EPA would need additional information indicating that the information it relied on to support a January 1, 2024, change of status date was flawed and that additional time was needed to meet the technical challenges of a transition.

*Comment:* Arkema provided a list of steps needed for “product line development” including “researching options, risk assessment, analyzing existing manufacturing capabilities, working with component suppliers, building test units, testing beta units, updating manufacturing processes (including employee training), building pre-production units, field testing, completing the customer approval process, phasing in production, disposing of trapped inventory, and training installation and maintenance personnel” and ensuring “products conform to local building codes.” For new chillers specifically, Arkema suggested a change of status date of 2025 for HFC-134a and R-410A, stating as their “[r]ationale” that “HFC-134a is used in screw and centrifugal chillers;

<sup>124</sup> Johnson Controls, 2016. “Johnson Controls Advances Environmental Sustainability with Chiller Platforms Compatible with Low GWP Refrigerants.” January 20, 2016. <http://www.johnsoncontrols.com/media-center/news/press-releases/2016/01/20/advanced-environmental-sustainability-with-chiller-platforms-compatible-with-low-gwp-refrigerants>.

[R-410A is used in smaller chillers, especially scroll chillers.”

*Response:* EPA interprets this comment as applying to both centrifugal and positive displacement chillers. EPA agrees with the commenter’s indication of which types of chillers HFC-134a and R-410A are currently used, but this does not provide any rationale for their proposed change of status date for these refrigerants. Further, the commenter did not provide any indication of how the product line development tasks apply specifically to chillers and how they relate to the change of status date proposed. The commenter did not provide any justification to support a 2025 status change date instead of a change of status date of January 1, 2024.

### iii. Energy Efficiency

*Comment:* Information submitted and claimed as CBI compared the full load efficiency and the integrated part-load value (IPLV), another measure of efficiency, of several alternatives relative to HFC-134a. Similar information was included for eight alternatives relative to R-410A. Given the number of alternatives shown, this information appears to be based on theoretical calculations (e.g. “cycle calculations”) or tests of non-optimized equipment rather than a sample of equipment in operation. The estimates showed that R-450A, R-513A, and R-515A had lower full load efficiencies than HFC-134a (up to 3.3 percent below) and that R-1233zd(E) and HFO-1234ze(E) had higher full load efficiencies and IPLVs than HFC-134a (up to 3.1 percent above). The information provided and claimed as CBI also indicated that some refrigerants have better IPLVs (up to 2.3 percent higher) and some have worse IPLVs (up to 2.5 percent lower) than HFC-134a in chillers. Of the eight alternatives compared to R-410A, including for example HFC-32 and R-452B, seven had higher IPLVs (up to 0.7 percent) and all eight had higher full load efficiencies (up to 3.2 percent).

UTC stated that “the primary environmental impact (~95 percent) of HVAC systems stems from the electric power needed to operate them, not from refrigerant leaks (which constitute about five percent of the overall impact).” Johnson Controls and AHRI both stated that 98 percent of the CO<sub>2</sub>-equivalent emissions from chillers are the result of the power. Johnson Controls claimed that medium-pressure options to replace HFC-134a in chillers are two to four percent less efficient in “drop-in” conditions while AHRI stated that some acceptable alternatives “may be two to three percent less efficient.” Johnson

Controls stated that “the minimum efficiency of chillers is mandated” and indicated that it is unacceptable to offer lower-efficiency equipment to their customers. They suggested that any loss in efficiency might be possibly regained by increasing the surface area of the heat exchangers and from modifying the aerodynamics of compressors.

*Response:* EPA interprets these comments as applying to both centrifugal and positive displacement chillers. As discussed in section VII.D.3 below, energy efficiency is not a specific criterion under SNAP; however, manufacturers indicated the desire to maintain or improve efficiency with alternative refrigerants, and EPA is supportive of that as well. The information provided shows that some options offer better energy efficiency than refrigerants such as HFC-134a and R-410A currently used in many chillers.

While we agree with the commenters who suggest that certain refrigerants may have a lower energy efficiency if used as “drop-ins,” (i.e., without equipment modification), energy efficiency could be addressed, as some commenters recognize, by adjusting design. The change of status date allows time for such redesign to occur.

It is unclear what the commenter is referencing when it states that “minimum efficiency of chillers is mandated.” EPA does not mandate energy efficiency and, as we noted in the proposal (81 FR 22845; April 18, 2016), there are no specific DOE requirements for minimum energy efficiency for chillers apart from those used in federal government-owned buildings.<sup>125</sup> It is reasonable to assume that Johnson Controls’ line of “over 40 chiller product families” already comes with varying degrees of energy efficiency and that as they move forward to develop systems that comply with the status change there will still be a range of energy efficient products available.

EPA also addresses energy efficiency in section VII.D.3 in this action and in sections V.B.6.a, V.C.7, V.D.3.c, and VII.C.3 of the preamble to the July 2015 rule (80 FR 42870; July 20, 2015).

*Comment:* UTC indicated generally that while it would not face any code barriers, “an A1 [i.e., nonflammable] refrigerant may result in reduced energy

efficiency that may limit customer demand and drive decisions to repair, and not replace, existing equipment.”

*Response:* EPA interprets these comments as applying to both centrifugal and positive displacement chillers. EPA recognizes that the energy efficiency is a significant factor when choosing equipment. We also recognize that the energy efficiency of any given piece of equipment is in part affected by the choice of refrigerant and the particular thermodynamic and thermophysical properties that refrigerant possesses. We also do not believe that the evidence supports that the change of status will result in end users needing to choose lower efficiency equipment. As detailed in the previous comment and response, the substitutes that will remain available provide both higher and lower energy efficiencies than HFC-134a. Also, as noted by the commenter in the previous comment and response, there are strategies that manufacturers may pursue to mitigate against any losses in energy efficiency.

With respect to UTC’s comment that reduced energy efficiency may drive decisions to repair rather than replace existing equipment, EPA does not dictate through the SNAP program when a chiller must be replaced rather than repaired. Instead, EPA allows the user to determine when to repair and when to replace their system.

### iv. Industry Standards and Codes

*Comment:* UTC stated that flammability is “a new risk for comfort cooling” and that “[s]afety cannot be compromised by setting requirements ahead of the [ASHRAE] and [UL] standards.” UTC, AHRI, and Johnson Controls indicated that these standards would need to change to allow for the safe use of alternatives, and that such changes would only be a first step in that process. After that, model building codes would need to incorporate the revised standards and then State and local jurisdictions would adopt those codes, thereby making the use of new alternatives viable in those locations. Commenters noted that HFO-1234ze(E) is flammable and UTC listed eight options under consideration to replace R-410A in positive displacement chillers and stated that “[a]ll of these refrigerants are A2L and will require and [sic] update of state and local codes.” AHRI and NRDC jointly said “[m]any promising alternative refrigerants are mildly flammable (especially for R-410A) and currently restricted under product safety standards and building codes.” The Alliance indicated “[t]here has been notable progress this year on the

<sup>125</sup> EPA stated in section VI.A.4.a.vi of the proposed rule (81 FR 22845; April 18, 2016) that DOE has established efficiency requirements, based on ANSI/ASHRAE/IES Standard 90.1–2010, for chillers used in federal buildings and provided our understanding of that standard. Since that time, EPA has become aware that such chiller efficiency requirements are now based on the 2013 version of that standard (80 FR 68749; November 6, 2015).



challenge of incorporating the use of mildly flammable and flammable low-GWP alternatives into the relevant codes and standards.” Ingersoll Rand stated that “ASHRAE 15 and UL 60335–2–40 are being updated to accommodate A2L refrigerants in chillers and are on track to be complete by the end of 2017” while EIA said “ASHRAE Standards and International Code Council (ICC) code changes required for adopting A2L refrigerants . . . are already proposed and are expected to be completed by 2018.” AHRI pointed to an “unprecedented effort”—a \$5.2 million program jointly funded by AHRI, ASHRAE and DOE—to undertake independent research to allow flammable refrigerants to be used safely in air conditioning and refrigeration equipment.

*Response:* EPA interprets these comments as applying to both centrifugal chillers and positive displacement chillers. These comments indicate that the process of updating standards for flammable refrigerants is underway and expected to be completed shortly. The results of this research announced by DOE, ASHRAE, and AHRI will immediately be transmitted to the committees responsible for ANSI/ASHRAE Standard 15–2013, “Safety Standard for Refrigeration Systems,” and ANSI/ASHRAE Standard 34–2013, “Designation and Safety Classification of Refrigerants,” with a goal of using the results to update the standards as soon as possible, subject to full compliance with the ANSI consensus process. EPA is encouraged by this \$5.2 million program as part of the ongoing global effort to identify appropriate climate-friendly alternatives and the announcement that another \$500,000 has been pledged for this work.<sup>126</sup> While EPA acknowledges that additional time may be needed to adopt such standards in codes, or provide other means for approval of the use of chillers with flammable refrigerants by authorities having jurisdiction, such time is provided through our January 1, 2024, status change date. Furthermore, EPA has noted that nonflammable alternatives are available for both centrifugal and positive displacement chillers, especially for designs currently using HCFC-123 or HFC-134a. While commenters stated that the alternatives for positive displacement chillers currently using R-410A—such as those listed by UTC—are flammable, this does not preclude the possibility of designing

a chiller using a nonflammable alternative nor as mentioned the revision of standards to allow the use of flammable refrigerants, the incorporation of those standards into model building codes, and the adoption of these building codes.

*Comment:* AHRI and NRDC maintained that “appropriate mitigation must be developed, proven, and finally adopted by safety standards” before they can be used. They said that “product and safety standards will not be updated until 2018 at the earliest” and that model building codes reflecting those updates were expected in 2021. NAM and UTC likewise indicated that state and local adoption of building and fire codes was necessary for chillers to use 2L refrigerants, including HFO-1234ze(E) and alternatives for R-410A positive displacement chillers. UTC provided an undated table that showed the number of states that had adopted various editions (from 2003 to 2015) of three different codes. UTC said the process for adoption typically takes 8–10 years. They stated that they “do not expect model codes to be completely updated until 2021.” Johnson Controls and AHRI also provided information on code adoption by states. AHRI claimed that historically it has taken on average up to 10 years to adopt updated building codes and listed the four states using the 2006 or older IBC. AHRI stated that a January 1, 2025, transition date is reasonable “based on the assumption that the HVAC industry would work together with the Federal government to accelerate the adoption of the standards and codes necessary to allow for commercialization of the products.” A private citizen pointed out that codes produced by the ICC, including the IBC, “allows the jurisdiction to accept new methods and materials, so long as that acceptance doesn’t reduce the level of safety provided by a code compliant material or method.” This would indicate that a manufacturer or other interested party could develop chillers using those refrigerants and provide additional risk mitigation techniques that could then be deemed as acceptable under the codes, even if the codes did not specifically address the requirements to use 2L refrigerants in such equipment. The citizen indicated that a subsidiary company to the ICC can provide manufacturers with reports of its assessment of such new products or methods, and that manufacturers in turn can share that report with jurisdictions to demonstrate the product meets the intent of the code. This would then allow the use of that chiller, and possibly others, using 2L refrigerants in

that particular jurisdiction. Finally, the citizen noted two examples where code changes are being undertaken that would “more appropriately address” the use of A2L refrigerants. NRDC and IGSD pointed to “several mechanisms” by which individual building codes may be modified by 2018 to allow for A2L refrigerants to be used. They further pointed out that even without such measures building codes are expected to allow the use of A2L refrigerants if a “very high level of ventilation and explosion-proof electronics are used.” They concluded that “states with old codes will not truly be off limits to manufacturers using mildly flammable refrigerants in their chillers.”

*Response:* EPA interprets these comments as applying to both centrifugal chillers and positive displacement chillers. The comments provided indicated that some changes could be incorporated into the model codes 2018 cycle. Nonetheless, EPA agrees with other commenters that the integration of appropriate changes to the model codes may not occur until the 2021 cycle, and as explained in section VI.A.5.b.iii above, finds that a January 1, 2024, change of status date, which allows three years for State and local adoption of the 2021 model code, is appropriate under such circumstances. AHRI is one of three entities that announced a new research program between the HVAC industry and the Federal government that “will provide the technical knowledge needed to facilitate and accelerate the safe use of these refrigerants.”<sup>127</sup> As the table provided by UTC shows, some states were already using the most recent (2015) codes and the majority were just one cycle (*i.e.*, 2012) behind as of early 2016. This would imply that many states will be able to adopt the 2021 codes by the 2024 status change date. UTC, Johnson Controls, AHRI, and NRDC did not address whether amendments could be made, either to the codes themselves or to state and local adoptions of the codes, without full adoption of a specific cycle of building codes, providing the necessary changes, if any, to allow chillers with acceptable alternatives to be used after the status change date, but other comment provide evidence of such possibility. UTC, Johnson Controls, and AHRI also did not address whether alternative means and measures, such as those discussed by the private citizen

<sup>126</sup> EPA, 2016c. A “Cool” Way to Combat Climate Change under the Montreal Protocol. July 20, 2016. Available online at <https://blog.epa.gov/blog/2016/07/a-cool-way-to-combat-climate-change/>.

<sup>127</sup> AHRI, 2016. “AHRI, ASHRAE, DOE Partner to Fund Flammable Refrigerant Research.” June 2, 2016. This document is accessible at <http://www.ahrinet.org/News-Events/News-and-Shipping-Releases.aspx?A=1170>.

and NRDC jointly with IGSD, could be taken to obtain approval from the authority having jurisdiction to approve the use of such chillers where a state or locality had not otherwise adopted the building codes suggested as needed. Finally, considering UTC, Johnson Controls, and AHRI are aware that some state adoptions lag the most recent codes by up to 12 years, it is logical to assume there would be plans to address such adoptions if they were to persist past their proposed status change date of 2025, which is only four years after the code cycle that their comments presume will allow for implementation of A2L options. UTC, Johnson Controls, and AHRI, did not provide any details on such plans, or why they could not equally be implemented by the 2024 status change date, apart from AHRI's assumption of Federal government assistance and further announcements of such. EPA is not aware that any part of the Federal government was represented or consulted when the AHRI Chiller Section and NRDC agreed to recommend a January 1, 2025, transition date; however, we do note subsequent to the AHRI Chiller Section and NRDC letter announcing this agreement, DOE along with AHRI and ASHRAE, announced the \$5.2 million effort "that will establish a more robust fact base about the properties and the use of flammable refrigerants" with an intent to update standards.<sup>128</sup>

*Comment:* UTC maintained that where codes did not allow the use of A2L refrigerants after the status change date, businesses' only option would be to repair a less efficient system. Elsewhere UTC stated that another possibility would be for customers to use a packaged product or variable refrigerant flow system.

*Response:* EPA interprets these comments as applying to both centrifugal chillers and positive displacement chillers. As previously noted, EPA believes that the change of status date of January 1, 2024, allows sufficient time for adoption of industry standards and changes to relevant codes. In determining a change of status date, EPA does not simply pick the latest date by which the Agency can be certain that all codes will be updated. To the extent there may be codes that have not been modified by the change of status date, users will have several options in addition to the option of repair of an existing system or use of a non-chiller system. As noted in the

preamble and in information in the docket to this rule, multiple chillers using nonflammable refrigerants are available today and others have been announced for release by 2017. Both Ingersoll Rand and Johnson Controls have indicated a full line of centrifugal chillers using nonflammable options. These two companies also have nonflammable options for positive displacement chillers. Although commenters indicated the only options currently being investigated for positive displacement chillers currently using R-410A are flammable refrigerants, there is sufficient time to develop, certify and release such chillers prior to the change of status date.

#### v. Narrowed Use Limits for Military Marine Vessels, Human-Rated Spacecraft, and Related Support Equipment

*Comment:* Boeing, Chemours, and the Department of Defense (DoD) supported EPA's proposal to find HFC-134a acceptable, subject to narrowed use limits for centrifugal and positive displacement chillers on military marine vessels. In addition to the reasons discussed in the proposed rule (81 FR 22844; April 18, 2016), comments submitted by the Department of the Navy on behalf of DoD addressed several alternatives that are acceptable for chillers and not subject to status change that have been found to not meet the stringent requirements for military marine vessels. For instance, DoD pointed out that certain alternatives that are flammable, such as HFO-1234ze(E) and R-717, would not meet the DoD's requirements. While in stationary applications the flammability may be handled, for instance, by increased ventilation, this is not a practical solution for submarines or surface-going ships under warfare conditions. DoD also discussed R-1233zd(E), noting that it would be used in low-pressure chillers that are not acceptable for narrow military uses due to reliability and maintenance issues. Boeing also reiterated that "testing of alternate refrigerants or blowing agents for these niche markets may require more time than for mass-market commercial items, due to customer and regulatory agency approval requirements."

*Response:* EPA interprets these comments as applying to both centrifugal and positive displacement chillers. EPA agrees with the assessment made by DoD of specific technical issues in transitioning for military marine vessels and is finalizing the narrowed use limit. Because EPA is finalizing a status change date of January 1, 2024 for this refrigerant in

other chillers, the narrowed use limit would likewise start on January 1, 2024.

*Comment:* Boeing, Chemours, and NASA supported EPA's proposal to find HFC-134a and R-404A acceptable subject to narrowed use limits for centrifugal and positive displacement chillers for human-rated spacecraft and related support equipment. Although NASA anticipates using this narrowed use limit for only a small number of chillers, they indicated that critical properties of the chiller system were required for such applications that include ground-based assembly, integration and test operations, and launch of the spacecraft.

*Response:* EPA interprets these comments as applying to both centrifugal and positive displacement chillers. EPA agrees with the assessment made by NASA and is finalizing the narrowed use limit. Because EPA is finalizing a status change date of January 1, 2024 for these refrigerants in other chillers, the narrowed use limit would likewise start on January 1, 2024.

#### 6. Change of Status Listing for Certain HFC Refrigerants for New Cold Storage Warehouses

##### a. Background

##### i. What is the affected end-use?

Cold storage warehouses are temperature-controlled facilities used to store meat, produce, dairy and other products that are delivered to other locations for sale to the ultimate consumer. This end-use within the SNAP program describes an application of refrigeration equipment for an intended purpose, and hence the listings of acceptable and unacceptable refrigerants for this end-use apply regardless of the type of refrigeration system used.

As explained in the proposed rule (81 FR 22849; April 18, 2016), cold storage warehouses are usually deemed "private" or "public," and some may be both, describing the relationship between the owner or operator of the cold storage warehouse and the owner of the products stored within.

Cold storage warehouses are also often divided into two general uses: "coolers" that store products at temperatures above 32 °F (0 °C) and "freezers" that store products below this temperature. Some subdivisions of these types were also provided in the proposed rule (81 FR 22849; April 18, 2016).

We explained that several other end-uses under the SNAP program cover other parts of the food (and product) cold chain and are distinct from the cold storage warehouse end-use. We

<sup>128</sup> ASHRAE, 2016. "ASHRAE, AHRI, DOE Partner to Fund Flammable Refrigerant Research." June 2, 2016. This document is accessible at <https://www.ashrae.org/news/2016/ashrae-ahri-doe-partner-to-fund-flammable-refrigerant-research>.

drew distinctions between the “cold storage warehouse” end-use which is subject to this action and the IPR end-use while noting that many facilities may have operations and refrigeration equipment for both end-uses. We also discussed “refrigerated food processing and dispensing equipment,” which is a category of the “retail food refrigeration” end-use and is subject to separate decisions in this action (see section VI.A.7). Finally, we discussed “cold rooms” and “walk-in” coolers and freezers, noting that many used for storage of food and beverages at a retail food location (e.g., a supermarket or restaurant) are considered to fall within other retail food refrigeration end-use categories that were covered by a previous rule (80 FR 42870; July 20, 2015). See section VI.A.4.c.i of the proposed rule for background on the cold storage warehouse end-use (81 FR 22849–51; April 18, 2016).

EPA understands that existing cold storage warehouses may undergo expansion to handle needs such as increased production, consolidation of distribution points, or increased population or other reasons for increased demands of the products stored. Such expansions could include a physical expansion of the storage space or using racking techniques to increase the amount of product within a given facility. The owner of cold storage warehouses undergoing such expansions (or the owner's designer) may determine that a new system needs to be added. That new system could be a complete newly manufactured system separate from the existing system, or it could be equipment and refrigerant added to the existing system increasing the capacity of the existing system. In both cases, EPA considers these actions as the manufacturing of a new system and hence that equipment is affected by the changes of status in this final rule.

A commenter stated that cold storage warehouses are “typically designed with planned expansions” and that the change of status should not apply to any future expansion of such warehouses. EPA addressed the definition of a “new” system as used in the SNAP program in a previous rule (80 FR 42902–03; July 20, 2015). As explained there, consistent with the definition in 40 CFR part 82, subparts A and I, EPA considers a system to be new for purposes of these SNAP determinations as of the date upon which the refrigerant circuit is complete, the system can function, the system holds a full refrigerant charge, and the system is ready for use for its intended purposes. Therefore, as used in the SNAP program, “new” refers to the

manufacture and often installation of a refrigeration system for an intended purpose, which may occur on a newly manufactured or an existing cold storage warehouse. The status changes in this action would apply to the expansion of the refrigeration system in an existing cold storage warehouse if the capacity of that existing refrigeration system is increased to handle the expansion. Because the existing system capacity was inadequate to provide the necessary cooling for the expanded load, the existing system did not meet the intended purpose of the expanded capacity, and therefore if it were expanded to handle that load it would be considered “new” with respect to SNAP. On the other hand, if an existing refrigeration system is extended (for instance, by adding additional refrigerant lines and evaporators to a newly manufactured or newly commissioned building, to a portion of the existing facility previously not used for cold storage, or to an extension of the previous building), without requiring an increase in capacity and while only needing the same full refrigerant charge as before, the system is not considered “new” and hence may continue its operations with the existing refrigerant. Likewise, a facility may increase the amount of products it handles while at the same time providing better sealing around infiltration points and/or increasing the insulation on walls and roofs, and thereby avoid the need to increase the refrigeration capacity of the equipment serving the cold storage warehouse.

Commenters suggested divisions in the cold storage warehouse market by which EPA should finalize separate decisions. One suggestion was to distinguish between indirect and direct systems. In today's action, EPA is not subdividing the cold storage warehouse end-use based on whether a direct or indirect system is used. As addressed below, the commenter suggesting this subdivision, and different change of status decisions for the two subdivisions, did not provide evidence how any of the SNAP criteria varied between the two subdivisions, instead only addressing energy efficiency and economic burden.

Another comment suggested a distinction between those cold storage warehouses with a footprint of 3,000 square feet (279 square meters) or less, noting they are covered by DOE energy conservation standards for walk-in coolers and freezers, a point brought out in the proposed rule (81 FR 22853; April 18, 2016). A commenter stated that EPA should consider all such cold storage warehouses to be part of the retail food

refrigeration end-use because manufacturers make equipment that could be used for retail food refrigeration or could be used in a manner that would be classified as a cold storage warehouse within SNAP. In today's action, EPA is not changing the definition of the cold storage warehouse end-use such that some types are considered a different end-use by virtue of their size. As addressed below, comments suggesting this subdivision did not provide evidence how any of the SNAP criteria varied between these two subdivisions. Although comments as well as the proposed rule noted that such types of cold storage warehouses are subject to DOE energy conservation regulations, the comments did not indicate how this fact would change the availability of acceptable alternatives by the change of status date proposed.

An equipment manufacturer commented that many industrial processors have multiple cold storage warehouses on the same campus and that these may be cooled from a system that also provides cooling to other applications, such as an industrial process refrigeration system. The manufacturer stated that EPA should “treat campuses with multiple building and processing areas as one complete industrial process.” EPA notes, however, that SNAP decisions are on an end-use basis, and therefore any cold storage warehouse may only use a refrigerant listed as acceptable for that end-use. While through today's action EPA is not changing the status of refrigerants in the industrial process refrigeration end-use, we are doing so for new cold storage warehouses, and as such some refrigerants in this end-use will be listed as unacceptable as of the change of status date.

EPA is not aware of other federal rules applying to efficiency of cold storage warehouses (i.e., the buildings), but we find that some federal rules apply to equipment that could be used in this specified end-use. Specifically, EPA noted in the proposed rule (81 FR 22853; April 18, 2016) that air-cooled commercial unitary air conditioners and heat pumps (“CUACs” and “CUHPs”) might be applied at cold storage warehouses, and such equipment is subject to DOE energy conservation standards. Comment from NRDC and IGSD confirmed that cold storage warehouses, among other types of designs, could be outfitted with rooftop units that must comply with the DOE rule, and that “[m]anufacturers are expecting to begin using HFC-32, R-452B, and other A2L-class refrigerants in rooftop units in 2023 at the latest.” For further information on the

relationship between this action and other federal rules, see section VI.A.4.c.v of the proposed rule (81 FR 22853; April 18, 2016).

ii. What other types of equipment are used for similar application but are not covered by this section of the rule?

EPA has found several not-in-kind systems (*i.e.*, systems that operate using thermodynamic cycles other than vapor-compression) acceptable for this end-use, including ammonia absorption, evaporative cooling, desiccant cooling, and Stirling cycle systems, which are not subject to this action.

iii. What refrigerants are used in cold storage warehouses?

In section VI.A.4.c.i of the proposed rule, EPA indicated that R-717 is believed to be the most common refrigerant used in cold storage warehouses and provided information on equipment types and system designs that facilitate the use of that refrigerant (81 FR 22850–22851; April 18, 2016).

We noted that limitations on the use of R-717 do exist. For example, it is reported that charge sizes exceeding 10,000 pounds of R-717 “may require

government-mandated process safety management (PSM) and [a] risk management plan (RMP).”<sup>129</sup> Various state and local building codes could also apply, and adherence to such codes might hinder or even eliminate the use of R-717 in some cold storage warehouses. Likewise, regulations may require employing operators with special levels of expertise, reporting of use or accidental releases, and other actions not typically required for other alternatives, increasing the operating cost compared to facilities using other refrigerants. These increased costs however are often offset by the high energy efficiencies typically achieved with R-717 systems. We also pointed to equipment designs, such as low charge packaged R-717 systems, R-717/R-744 cascade systems, and indirect secondary-loop systems using R-717 as the primary refrigerant in a machine room separated from the cooled interior, that can overcome some limitations on the use of R-717. These systems are described in market characterizations found in the docket to this rule (EPA–HQ–OAR–2015–0663).<sup>130</sup> While R-717 is the most common refrigerant used in cold storage warehouses, others have

used CFC-12, R-502 and HCFC-22 and more recently R-404A, R-407C, R-407F, R-410A, or R-507A.

One commenter, AHRI, indicated manufacturers are developing R-407A condensing units that could be used in cold storage warehouses, particularly those less than 3,000 square feet which, as noted in section VI.A.4.c.v of the proposed rule (81 FR 22853; April 18, 2016), are subject to DOE energy conservation standards for walk-in coolers and freezers.

b. What is EPA’s final decision?

For new cold storage warehouses, EPA proposed to change as of January 1, 2023, the status of the following refrigerants from acceptable to unacceptable: HFC-227ea, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407A, R-407B, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-423A, R-424A, R-428A, R-434A, R-438A, R-507A, and RS-44 (2003 composition). In this action, we are finalizing the status changes that we proposed with no changes. The change of status determinations for new cold storage warehouses are summarized in Table 9.

TABLE 9—CHANGE OF STATUS DECISIONS FOR NEW COLD STORAGE WAREHOUSES

End-use	Substitutes	Listing Status
Cold Storage Warehouses (new).	HFC-227ea, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407A, R-407B, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-423A, R-424A, R-428A, R-434A, R-438A, R-507A, and RS-44 (2003 composition).	Unacceptable as of January 1, 2023.

i. How do these unacceptable refrigerants compare to other refrigerants for this end-use with respect to SNAP criteria?

Other refrigerants for new cold storage warehouse not subject to this action are FOR12A, FOR12B, HFC-134a, IKON A, IKON B, KDD6, R-407C, R-407F, R-437A, R-450A, R-513A, R-717, R-744, RS-24 (2002 composition), SP34E, THR-02, and THR-03. In the proposed rule, EPA provided information on the environmental and health risks presented by the alternatives that are being found unacceptable compared with other available alternatives that are listed as acceptable (81 FR 22851–52; April 18, 2016). In addition, a technical support document<sup>131</sup> that provides the

**Federal Register** citations concerning data on the SNAP criteria (*e.g.*, ODP, GWP, VOC, toxicity, flammability) for acceptable alternatives, as well as those we are finding unacceptable, for new cold storage warehouses may be found in the docket for this rulemaking (EPA–HQ–OAR–2015–0663).

One commenter requested that EPA clarify which refrigerants in the R-407 series were subject to a change in status, while others specifically requested that we not change the status of R-407A and R-407B in cold storage warehouses. We are finalizing a change of status for the refrigerants we proposed. With respect to the R-407 series refrigerants in this end-use, EPA only proposed a change of status for R-407A and R-407B based on

our analysis that these two blends posed a higher overall risk to human health and the environment than other available refrigerants for this end use. EPA did not propose and is not taking action in this rule to change the status of R-407C and R-407F in cold storage warehouses; those refrigerants remain acceptable in this end-use. EPA has not listed others in the R-407 series, including R-407D, R-407E and R-407G, and R-407H, acceptable in this end-use.

For cold storage warehouses, the refrigerants we are listing as unacceptable have insignificant ODPs, but they have GWPs ranging from 2,090 to 3,990. As shown in Table 10, acceptable alternatives have GWPs ranging from zero to 1,820.

<sup>129</sup> ASHRAE, 2014. 2014 Handbook—Refrigeration. The American Society of Heating, Refrigerating, and Air-conditioning Engineers, Inc. Atlanta, Georgia, USA. ISBN 978–1–936504–71–8; ISSN 1930–7195.

<sup>130</sup> ICF, 2016h. Market Characterization for Fire Suppression, Comfort Cooling, Cold Storage, and Household Refrigeration Industries in the United States. Prepared for the U.S. Environmental Protection Agency. October 2015.

<sup>131</sup> EPA, 2016b. Tables of Alternatives for End-Uses Considered in the Final Rule, Protection of Stratospheric Ozone: Listing Modifications for Certain Substitutes under the Significant New Alternatives Policy Program. September, 2016.

TABLE 10—GWP, ODP, AND VOC STATUS OF REFRIGERANTS IN NEW COLD STORAGE WAREHOUSES <sup>1 2</sup>

Refrigerants	GWP	ODP	VOC	Listing status
R-450A, R-513A, R-717, R-744 .....	0–630	0 .....	No .....	Acceptable.
IKON A, IKON B, THR-02 .....	30–560	0—Not public <sup>3</sup> ..	Yes <sup>4</sup> .....	Acceptable.
HFC-134a, R-407C, R-407F .....	1,430–1,820	0 .....	No .....	Acceptable.
FOR12A, FOR12B, KDD6, R-437A, RS-24 (2002 composition), SP34E, THR-03.	920–1,810	0—Not public <sup>3</sup> ..	Yes <sup>4</sup> .....	Acceptable.
R-407A, R-407B, R-410A, R-410B, R-421A, R-423A .....	2,090–2,800	0 .....	No .....	Unacceptable.
R-125/290/134a/600a (55/1/42.5/1.5), R-417A, R-422B, R-422D, R-424A, R-438A, RS-44 (2003 composition).	2,260–2,730	0 .....	Yes <sup>4</sup> .....	Unacceptable.
HFC-227ea, R-421B, R-404A, R-507A .....	3,190–3,990	0 .....	No .....	Unacceptable.
R-422A, R-422C, R-428A, R-434A .....	3,080–3,610	0 .....	Yes <sup>4</sup> .....	Unacceptable.

<sup>1</sup> The table does not include not-in-kind technologies listed as acceptable for the stated end-uses.

<sup>2</sup> HCFC-22 and several blends containing HCFCs are also listed as acceptable but their use is severely restricted by the phasedown in HCFC production and consumption.

<sup>3</sup> The ODP of one or more alternatives is not published here in order to avoid disclosing information that is claimed as confidential business information.

<sup>4</sup> One or more constituents of the refrigerant are VOC.

Some of the refrigerant blends not subject to this action, as well as several of the substitutes for which we are changing the listing from acceptable to unacceptable, include small amounts of R-290, R-600, or other substances that are VOCs. These amounts are small and for this end-use, are not expected to contribute significantly to ground-level ozone formation.<sup>132</sup> In the actions where EPA listed these refrigerants as acceptable or acceptable subject to use conditions, EPA concluded none of these refrigerants in this end-use pose significantly greater risk to ground-level ozone formation than other alternative refrigerants that do not meet the definition of VOC under CAA regulations (see 40 CFR 51.100(s)) or that are specifically excluded from that definition for the purpose of developing SIPs to attain and maintain the NAAQS.

The refrigerants listed as acceptable and not subject to this action are highly volatile and typically evaporate or partition to air, rather than contaminating surface waters. Their effects on aquatic life are expected to be small and pose no greater risk of aquatic or ecosystem effects than those of the refrigerants that are subject to the status change for this end-use.

With the exception of R-717, all other acceptable refrigerants, as well as those that we are listing as unacceptable, are not flammable and are of low toxicity (e.g., those listed under ASHRAE Standard 34–2013 are Class A toxicity and Class 1 nonflammable). R-717 is mildly flammable with a low flame speed; it is classified as a B2L refrigerant under ASHRAE 34 (2013). R-717 has a long history of use as a refrigerant in cold storage warehouses and other applications. In the original

SNAP rule, EPA noted “[R-717] has been used as a medium to low temperature refrigerant in vapor compression cycles for more than 100 years. Ammonia [R-717] has excellent refrigerant properties, a characteristic pungent odor, no long-term atmospheric risks, and low cost. It is, however, mildly flammable and toxic, although it is not a cumulative poison. OSHA standards specify a 15 minute short-term exposure limit of 35 ppm for ammonia [R-717].” (53 FR 13072; March 18, 1994). We further noted its use in various food and beverage processing and storage applications as well as other industrial applications. In that rule, we found R-717 acceptable for use in new cold storage warehouses, concluding that its overall risk to human health and the environment was not significantly greater than the other alternatives found acceptable. This conclusion was based on the assumption that the regulated community adheres to OSHA regulations on such use as well as standard refrigeration practices, such as ASHRAE Standard 15 and the IAR Standard 2,<sup>133</sup> which are often utilized by local authorities when setting their own building and safety requirements. See section VI.A.4.c.iii.(b) of the proposed rule (81 FR 22852; April 18, 2016) for a discussion on the long history of use of R-717 and our original decision finding it acceptable in new cold storage warehouses.

In summary, because the risks other than GWP are not significantly different for the other available alternatives than for those we proposed to list as unacceptable, and because the GWPs for the refrigerants we proposed to list as unacceptable are significantly higher

and thus pose significantly greater risk, we are listing the following refrigerants as unacceptable: HFC-227ea, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407A, R-407B, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-423A, R-424A, R-428A, R-434A, R-438A, R-507A, and RS-44 (2003 composition).

ii. When will the status change?

EPA is establishing a change of status date for the above-listed refrigerants new cold storage warehouses of January 1, 2023, which the Agency finds is a reasonable yet expeditious date by which the technical challenges can be met for a safe and smooth transition to alternatives. This amount of time is needed particularly considering the various equipment types that could be employed to provide the cooling necessary for new cold storage warehouses and the requirement for many of these equipment types to meet energy conservation standards while undergoing such a transition. Although acceptable alternatives, particularly R-717, are widely used, EPA recognizes based on comment that R-717 is not an option due to technical or compliance constraints at some facilities. For these facilities, the user would need the time to investigate the use of other alternatives and to design, and possibly certify to DOE energy conservation standards, equipment using the chosen alternative. As discussed in the proposed rule (81 FR 22850; April 18, 2016), in some cases, R-717 may not have been chosen based on building code and regulatory restrictions that might have eliminated its use. As also discussed there, and as supported by comment, technologies are under development that can overcome some such limitations; for example, newly-developed low-charge R-717 systems

<sup>132</sup> ICF, 2014a. Assessment of the Potential Impact of Hydrocarbon Refrigerants on Ground Level Ozone Concentrations. February, 2014.

<sup>133</sup> ANSI/IAR Standard 2–2008 (Addendum B)—American National Standard for Equipment, Design, & Installation of Closed Circuit Ammonia Mechanical Refrigerating Systems.

can overcome building code and regulatory challenges that arise when large charge sizes would otherwise be required, although we recognize that such equipment may not be allowed in certain jurisdictions or may not be practical in certain situations. EPA is establishing a January 1, 2023, status change date in part to allow these technologies to more fully mature and become more fully available in the market. In addition to these technologies, because a wide variety of other equipment types can be applied at a cold storage warehouse, and some such equipment is subject to DOE energy conservation requirements, EPA expects that this period of time will allow acceptable alternatives to become more fully available for cold storage warehouses. For locations and applications that would otherwise use HFC blends subject to status change, primarily R-404A, R-410A and R-507A, time is needed to develop equipment with other alternative refrigerants or address the technical challenges of using R-717 or other alternatives that are not subject to the proposed change in status. As explained in section VI.A.4.c.v of the proposed rule (81 FR 22853; April 18, 2016), certain types of equipment potentially applied in cold storage warehouses are subject to energy conservation standards, and hence time will be required to design, test and certify equipment for those standards, while at the same time using acceptable alternatives.

c. How is EPA responding to comments?

EPA received comments on various topics including, the proposed status change date of January 1, 2023, the refrigerants proposed for status change, the acceptability of other refrigerants, and requests for subdividing the category and limiting the status changes based on those subdivisions.

Commenters included AHRI, an industry organization; CARB, a state agency; Daikin and Zero Zone, equipment manufacturers; Chemours, Honeywell, and National Refrigerants, three chemical producers; and NRDC, IGSD, and EIA, three environmental organizations.

We have grouped comments together and responded to the issues raised by the comments in the sections that follow, or in a separate Response to Comments document which is included in the docket for this rule (EPA-HQ-OAR-2015-0663).

i. Substitutes and End-Use Proposed

*Comment:* Daikin suggested that EPA subdivide the cold storage warehouse end-use into “Indirect Expansion

Refrigeration System[s]” and “Direct Expansion Refrigeration System[s].” They did not suggest any different decisions for the former. For the latter, they recommended that R-410A remain acceptable, noting that it (along with R-407C and R-407F) is also used in direct systems. Daikin commented that both direct and indirect systems may be used, even at the same facility. Daikin said that customer requirements will typically determine the refrigeration system and that these requirements depend on “the use conditions, structure of the building and climatic considerations among other factors.”

*Response:* EPA is not subdividing the end-use as suggested. For direct systems, two of the three refrigerants they mentioned as being typically used—R-407C and R-407F—remain acceptable as proposed. Daikin did not provide any indication of why in direct systems R-410A would be required as opposed to these refrigerants not subject to status change. The commenter did not indicate specifically what use conditions, building structures, climates or other technical barriers warranted subdividing the end-use as suggested, nor did the commenter offer reasons for not changing the status of one particular refrigerant in one of those subdivisions.

*Comment:* Zero Zone agreed with EPA’s explanation of the distinction between cold storage warehouses and IPR.

*Response:* EPA thanks the commenter for this comment.

*Comment:* Zero Zone claimed that EPA should consider small cold storage warehouses—those with a footprint of 3,000 square feet (279 square meters) or less—as fitting in the retail food refrigeration end-use. They noted that DOE and California regulations cover such items, whether they are cold storage warehouses or they are used for retail food refrigeration, as walk-in coolers or freezers. They felt that equipment manufacturers supplying equipment that meets such definitions of walk-in coolers or freezers “need to be able to supply the same equipment” regardless of whether they would be classified as a cold storage warehouse or retail food refrigeration under SNAP. They said that equipment manufacturers should not have to “ascertain what product will be in the building.” Zero Zone stated that both R-407A and R-407B should remain acceptable, especially if EPA did not treat small cold storage warehouses as part of the retail food refrigeration end use. AHRI also stated that R-407A and R-407B should be acceptable in cold storage warehouses because the same unit cooler equipment, whether used in a

cold storage warehouse or in retail food refrigeration, would need to comply with DOE energy efficiency standards for walk-in coolers and freezers. They stated manufacturers are preparing systems that use R-407A for small cold storage warehouses. Daikin, NRDC, and IGSD indicated that R-407C and R-407F are also used in cold storage warehouses. National Refrigerants asked EPA to list all R-407 series refrigerants acceptable for cold storage warehouses to provide additional options and to “eliminate confusion in the industry” and “ease compliance for technicians and equipment owners by giving them the flexibility to utilize their R-407 preferred refrigerant.”

*Response:* EPA disagrees that certain cold storage warehouses should be included as part of the retail food refrigeration end-use. EPA established status changes for three retail food refrigeration end-use categories in a previous rule and stated that equipment in these categories of the SNAP end-use could also be subject to DOE’s energy conservation standards for Walk-In Coolers and Freezers (80 FR 82902; July 20, 2015). Likewise, we noted in our proposed rule (81 FR 22853; April 18, 2016) that small cold storage warehouses could also be covered by these DOE standards. We disagree that R-407A and R-407B should remain acceptable despite the indication that some products are being designed using the former or for a manufacturer’s preference to use the same refrigerant in different end-uses. We are particularly confused by the inclusion of R-407B in the comments from Zero Zone and AHRI requesting we find it acceptable, as we changed the status of that refrigerant for all categories of new retail food refrigeration addressed in a previous rule (80 FR 42870; July 20, 2015). If we were to treat small cold storage warehouses as retail food refrigeration, as these commenters also suggest, R-407B would be subject to status change. Several alternatives that remain acceptable for cold storage warehouses are also acceptable for various retail food refrigeration end-use categories. For instance, R-407C and R-407F, which as noted are being used in some cold storage warehouses, are also acceptable for the retail food refrigeration remote condensing unit end-use category. Manufacturers who wish to use only one refrigerant may do so and to the extent they are already using a refrigerant that is subject to status change in the cold storage warehouse end-use, EPA finds no evidence that these or other acceptable alternatives cannot be adopted by the

2023 status change date while continuing to meet DOE energy conservation standards.

Further, we disagree that to eliminate confusion, ease compliance, or provide flexibility we should list all R-407 series refrigerants as acceptable. EPA reviews refrigerants individually and is aware that manufacturers, users, and owners make it their business to know the exact refrigerant they are using, since they currently are aware that not all R-407 series refrigerants are acceptable in this or any other end-use. Just because two or more refrigerants are made up of the same components<sup>134</sup> does not mean they present the same overall risk to human health and the environment. Indeed, R-407 and other series refrigerants are made up of components having different flammability, toxicity, GWP, and other characteristics considered by SNAP, making a knowledge of specific composition critical to evaluating associated risk.

*Comment:* EIA, NRDC, IGSD, Chemours, and CARB supported EPA changing the status to unacceptable of those refrigerants we proposed for such change in new cold storage warehouses.

*Response:* EPA thanks the commenters for these comments.

*Comment:* Chemours felt that R-407C and R-407F should also be listed as unacceptable stating there are multiple alternatives. Daikin compared R-410A to R-448A and R-449A, arguing that because R-410A can reduce the amount of refrigerant needed by 30 percent, the total GWP-weighted emissions would be similar to that of R-448A and R-449A. CARB stated that R-717, especially in low-charge units, and R-744 could be used. EIA suggested that EPA continue to evaluate additional refrigerants and consider those for status change, mentioning HFC-134a, R-407C, R-407F, R-450A, and R-513A.

*Response:* EPA's proposal was limited to determinations for the specific refrigerants proposed which pose significantly greater risk than other available refrigerants. We cannot take final action changing the status of additional refrigerants without first performing the necessary analysis of the SNAP criteria and providing notice and an opportunity for comment.

In response to the suggestion that we list additional specific refrigerants as unacceptable, we note that at least two—R-407C and R-407F—are currently used in cold storage warehouses. In addition to considering the SNAP criteria in determining whether to propose action to change the status of an

acceptable substitute, we also need to consider whether there are other alternatives available. Although we recognize that alternatives such as R-717 and R-744 are available for certain types of equipment in certain applications in the cold storage warehouses end-use, the information available at this time does not indicate that there are available alternatives for all types of equipment in all types of applications.

*Comment:* AHRI, Zero Zone, and Honeywell all supported an EPA action to list R-448A and R-449A as acceptable for cold storage warehouses. Honeywell noted that they are already being implemented in similar equipment for the supermarket systems end-use category. On the other hand, NRDC and IGSD urged EPA to find these two refrigerants unacceptable, while EIA asked EPA to “[r]equest advance comments on changing the listing status” of these two HFC/HFO blends as well as R-450A and R-513A for new cold storage warehouses.

*Response:* These comments suggesting that EPA take action to list additional substitutes as acceptable or to change the listing status of already-listed substitutes go beyond the scope of this rulemaking. As noted previously, EPA may in the future issue a new proposal to change the status of additional refrigerants in this end use after considering what other alternatives are available and performing an analysis using the SNAP criteria. Regarding the request that EPA substitutes not already on one of the lists as acceptable or unacceptable, EPA notes that R-448A and R-449A have been submitted to the SNAP Program for review, but EPA has not yet issued a proposed decision for these refrigerants or issued a Notice of Acceptability.

#### ii. Change of Status Date

*Comment:* EIA, NRDC, IGSD, and Chemours supported EPA's proposed 2023 status change date for new cold storage warehouses.

*Response:* EPA thanks the commenters for these comments.

*Comment:* Honeywell suggested a status change date of January 1, 2019, based on the fact that several options, including R-407F, R-717, and R-744, are acceptable for new cold storage warehouses. They also indicated R-448A and R-449A are potential options that could be implemented by January 1, 2019.

*Response:* EPA agrees that many of the acceptable refrigerants not subject to status change have been and can continue to be used in many types of equipment for many of the applications for new cold storage warehouses. EPA

established a status change date of 2023 based on the time required to address the number of different equipment types and system designs used for cold storage warehouse and to redesign, and if required recertify as compliant with DOE energy conservation standards. EPA has determined that a change of status date of January 1, 2023, is reasonable and expeditious in light of the various DOE energy conservation standards that must be met (and for which equipment needs to be designed and manufactured), the need to further assess currently acceptable nonflammable and low toxicity alternatives in specific applications, and the need to develop safe practices and institute State and local code changes if required for flammable and higher toxicity alternatives for certain equipment where the application and/or the location limits the use of flammable or higher toxicity refrigerants at this time. The commenter did not provide a discussion of these equipment design and application issues or an indication of how those can be addressed by 2019.

*Comment:* CARB suggested a status change date of 2020, noting that low-charge R-717 systems address issues with that refrigerant's use in cold storage warehouses and where it cannot be used, R-744 or other non-toxic, low-GWP refrigerants could be used.

*Response:* The commenter did not provide technical support that a change of status date of January 1, 2020, was feasible. The commenter does not provide any detail on the use of R-744 in those applications where R-717 is not an option, and we are not aware that its use has been demonstrated for all of those applications. We are aware that R-744 is being used for new cold storage warehouses in cascade and secondary loop systems with R-717. However, we did not see similar evidence it can be used in a direct system (*i.e.*, not in a cascade or secondary loop system with R-717) in the various equipment types and designs used for this end-use.

*Comment:* Zero Zone stated that the change of status for R-404A and R-507A should be January 1, 2025, because those refrigerants offer the low-glide properties desired for flooded or liquid overfeed systems. They compared these to R-450A and R-513A—both of which are acceptable in new cold storage warehouses and are not subject to the change in status—which they described as also having low glide but low volumetric efficiency. They felt the time was necessary “to allow technology and chemical companies to come up with a solution to this design issue.”

*Response:* The commenter did not provide any information that it was not

<sup>134</sup> All R-407 series refrigerants are composed of HFC-32, HFC-125 and HFC-134a.



technically feasible to transition away from R-404A and R-507A until January 1, 2025. No explanatory timeline or past experience was provided that indicated how long it might take to resolve the issues they described. Other commenters have noted that R-407C and R-407F, which are also high-glide blends, are used in cold storage warehouses. Although they did not mention whether those were specifically used in the flooded evaporator systems described, we are not aware and Zero Zone has not provided any information on why they could not be used. Zero Zone also did not discuss why single-component (no glide) refrigerants including R-717 and R-744 could not be used in the types of systems with which they are concerned. Finally, the commenter noted that there are some low-glide blends available, but did not provide the detail on the steps needed to redesign equipment to account for the low volumetric efficiency they indicated for those available alternatives and why those steps could not be completed before January 1, 2025.

### iii. SNAP Review Criteria

*Comment:* Daikin believed that “it is important to note the equipment’s potential total environmental impact (i.e. refrigerant quantity multiplied with GWP), not only the refrigerant’s GWP value.” As such, they stated that R-410A could reduce the total charge size up to 30 percent compared to R-404A.

*Response:* EPA interprets this comment to be based on the SNAP review criteria of “atmospheric effects,” which is discussed above in section II.E.1. In a previous proposed rule and in the response to comments document for the associated final rule, we discussed the possibility of allowing refrigerants with a higher GWP in low-charge systems. In particular, we stated “given the high GWP of these refrigerants compared to other refrigerants that are available in [supermarket systems], we do not believe that use with a small charge size adequately addresses the greater risk they pose.” (79 FR 46148; August 6, 2014). The same consideration is applicable here for R-410A, even if systems were designed to reduce the total charge size as Daikin says is possible. Use in a lower-charge system does not guarantee lower overall emissions. If catastrophic losses occurred in a system employing R-410A or other high-GWP refrigerants, the

emissions in CO<sub>2</sub>-equivalent terms could be more than if a lower-GWP refrigerant were used in the same or a similarly low-charge design. For instance, an acceptable alternative could be used in a secondary loop design, reducing the amount of that refrigerant used for the given application.

### 7. Change of Status for Certain HFC Refrigerants for New Retail Food Refrigeration (Refrigerated Food Processing and Dispensing Equipment)

#### a. Background

##### i. What is the affected end-use?

In the SNAP July 2015 rule (80 FR 42902), EPA clarified that “equipment designed to make or process cold food and beverages that are dispensed via a nozzle, including soft-serve ice cream machines, ‘slushy’ iced beverage dispensers, and soft-drink dispensers” was not included as part of the retail food refrigeration end-use categories specifically identified in that final rule. EPA clarified that this equipment is part of a separate end-use category within the retail food refrigeration end-use. This end-use category, “refrigerated food processing and dispensing equipment,” is covered in this section of the final rule. For an overview of this end-use category, please refer to section VI.A.4.d.i of the proposed rule (81 FR 22854–55; April 18, 2016).

One commenter, UTC, pointed out that certain soft-serve and other frozen dairy treats may not fall within the technical definition of ice-cream due to milk fat content, but that such products “are handled like ice-cream and shake products from an operational point of view.” UTC also stated that a creamer dispenser (refrigerated unit dispensing creamer in a dosed amount) and bulk milk dispensers (refrigerated unit holding a container of milk that dispenses through a small nozzle when the handle is lifted) would fit in this category as well. EPA’s use of “including” in its description of the type of equipment that falls under this end use indicates that the list was not intended to be exclusive. EPA considers the types of equipment identified by UTC, which dispense products through a nozzle, to fit within the end-use.

##### ii. What other types of equipment are used for similar applications but are not covered by this section of the rule?

As noted in section VI.A.4.d.i of the proposed rule (81 FR 22854; April 18,

2016) certain types of equipment, including water coolers and stand-alone retail food refrigeration units, do not fall within this end-use category.

### iii. What Refrigerants Are Used in Retail Food Refrigeration (Refrigerated Food Processing and Dispensing Equipment)

EPA discussed which refrigerants were acceptable in the refrigerated food processing and dispensing equipment end-use category in section VI.A.4.d.i of the proposed rule (81 FR 22855; April 18, 2016). While numerous refrigerants are acceptable in this end use, as noted by the comments from UTC, R-404A is typically used for freezing applications and HFC-134a for refrigerated applications.

In comments submitted on the proposal, AHRI and UTC discussed the potential use of R-448A and R-449A in this end-use category, and AHRI urged EPA to find these blends acceptable. Other information claimed as CBI indicated the potential to transition R-404A applications within this end-use category to those refrigerants. Tecumseh also urged EPA to list these two refrigerants acceptable as well as R-452A. EPA has received submissions for these three refrigerants. Concurrent with this rule, EPA is listing R-448A, R-449A, and R-449B as acceptable without use conditions for new refrigerated food processing and dispensing equipment. We are currently reviewing R-452A for this end-use.

#### b. What is EPA’s final decision?

For new refrigerated food processing and dispensing equipment, EPA proposed to change as of January 1, 2021, the status of the following refrigerants from acceptable to unacceptable: HFC-227ea, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407A, R-407B, R-407C, R-407F, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-428A, R-434A, R-437A, R-438A, R-507A, RS-44 (2003 formulation). In this action, we are finalizing the status changes we proposed with no changes. The change of status determinations for new refrigerated food processing and dispensing equipment are summarized in Table 11.

TABLE 11—CHANGE OF STATUS DECISIONS FOR NEW RETAIL FOOD REFRIGERATION  
[Refrigerated food processing and dispensing equipment]

End-use	Substitutes	Listing status
Retail food refrigeration (refrigerated food processing and dispensing equipment) (new only).	HFC-227ea, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407A, R-407B, R-407C, R-407F, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-428A, R-434A, R-437A, R-438A, R-507A, RS-44 (2003 formulation).	Unacceptable as of January 1, 2021.

i. How do these unacceptable refrigerants compare to other refrigerants for this end-use with respect to SNAP criteria?

For new refrigerated food processing and dispensing equipment, the substitutes that will remain listed as acceptable pose lower overall risk to human health and the environment than the refrigerants we are listing as unacceptable. Acceptable refrigerants include: FOR12A, FOR12B, HFC-134a, IKON A, IKON B, R-426A, RS-24 (2002 formulation), R-450A, R-513A, R-744,

SP34E, THR-02 and THR-03. In the proposed rule (81 FR 22855–22856; April 18, 2016) and SNAP Notice 31 (81 FR 32241; May 23, 2016), EPA provided information on the environmental and health risks presented by the alternatives that are being found unacceptable compared with other available alternatives that are listed as acceptable. Also, concurrent with this rule, EPA is listing R-448A, R-449A and R-449B acceptable for new refrigerated food processing and dispensing equipment. A technical support document<sup>135</sup> that provides the **Federal**

**Register** citations concerning data on the SNAP criteria (*e.g.*, ODP, GWP, VOC, toxicity, flammability) for acceptable alternatives, as well as those we are finding unacceptable, for new refrigerated food processing and dispensing equipment may be found in the docket for this rulemaking (EPA–HQ–OAR–2015–0663).

The refrigerants we are listing as unacceptable have GWPs ranging from 1,770 to 3,990. As shown in Table 12, acceptable alternatives have GWPs ranging from one to 1,510.

TABLE 12—GWP, ODP, AND VOC STATUS OF REFRIGERANTS IN NEW RETAIL FOOD REFRIGERATION  
[Refrigerated food processing and dispensing equipment]<sup>1 2</sup>

Refrigerants	GWP	ODP	VOC	Listing status
HFC-134a, R-448A, R-449A, R-449B, R-450A, R-513A, R-744 .....	1–1,430	0 .....	No .....	Acceptable.
FOR12A, FOR12B, IKON A, IKON B, R-426A, RS-24 (2002 composition), SP34E, THR-02, THR-03.	30–1,510	0—Not public <sup>3</sup> .....	Yes <sup>4</sup> .....	Acceptable.
R-407A, R-407B, R-407C, R-407F, R-410A, R-410B, R-421A .....	1,770–2,800	0 .....	No .....	Unacceptable.
KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-417A, R-422B, R-422D, R-424A, R-437A, R-438A, RS-44 (2003 composition).	1,810–2,730	0 .....	Yes <sup>4</sup> .....	Unacceptable.
HFC-227ea, R-404A, R-421B, R-507A .....	3,190–3,990	0 .....	No .....	Unacceptable.
R-422A, R-422C, R-428A, R-434A .....	3,080–3,610	0 .....	Yes <sup>4</sup> .....	Unacceptable.

<sup>1</sup> The table does not include not-in-kind technologies listed as acceptable for the stated end-uses.

<sup>2</sup> HCFC-22 and several blends containing HCFCs are also listed as acceptable but their use is severely restricted by the phasedown in HCFC production and consumption.

<sup>3</sup> The ODP of one or more alternatives is not published here in order to avoid disclosing information that is claimed as confidential business information.

<sup>4</sup> One or more constituents of the refrigerant are VOC.

Some of the refrigerant blends not subject to this action, as well as several of the substitutes for which we are changing the listing from acceptable to unacceptable, include small amounts of VOC such as R-290 (propane) and R-600 (n-butane). These amounts are small, and for this end-use category are not expected to contribute significantly to ground-level ozone formation.<sup>136</sup> In the actions where EPA listed these refrigerants as acceptable, EPA concluded none of these refrigerants in this end-use pose significantly greater risk to ground-level ozone formation than other alternative refrigerants that do not meet the definition of VOC under CAA regulations (see 40 CFR 51.100(s)) or that are specifically excluded from

that definition for the purpose of developing SIPs to attain and maintain the NAAQS.

The refrigerants not subject to this action are highly volatile and typically evaporate or partition to air, rather than contaminating surface waters. Their effects on aquatic life are expected to be small and pose no greater risk of aquatic or ecosystem effects than those of the refrigerants that are subject to the proposed status change for this end-use.

For this end-use category, all of the refrigerants, including those which we are listing as unacceptable, are not flammable (*e.g.*, those listed under ASHRAE Standard 34–2013 are class 1 flammability). Additionally, as discussed at section VI.A.4.d.iii.(c) of

the proposed rule (81 FR 22856; April 18, 2016) and in SNAP Notice 31 (81 FR 32245–46; May 23, 2016), the toxicity of the refrigerants we are listing as unacceptable is comparable to that of other alternatives that are acceptable in this end-use.

In summary, because the risks other than GWP are not significantly different for the other available alternatives than for those we proposed to list as unacceptable, and because the GWPs for the refrigerants we proposed to list as unacceptable are significantly higher and thus pose significantly greater risk, we are listing the following refrigerants as unacceptable: HFC-227ea, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407A, R-407B, R-407C, R-

<sup>135</sup> EPA, 2016b. Tables of Alternatives for End-Uses Considered in the Final Rule, Protection of Stratospheric Ozone: Listing Modifications for

Certain Substitutes under the Significant New Alternatives Policy Program. September, 2016.

<sup>136</sup> ICF, 2014a. Assessment of the Potential Impact of Hydrocarbon Refrigerants on Ground Level Ozone Concentrations. February, 2014.

407F, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-428A, R-434A, R-437A, R-438A, R-507A, RS-44 (2003 formulation).

i. When will the status change?

EPA proposed and is establishing a change of status date for refrigerated food processing and dispensing equipment of January 1, 2021, which the Agency finds is a reasonable yet expeditious date by which the technical challenges can be met for a safe and smooth transition to alternatives particularly considering the need for equipment to comply with any sanitation and safety standards while continuing to maintain the properties, characteristics and quality of the food or beverage provided by the equipment. As discussed below and in our response to comments, EPA relied on information from an equipment manufacturer claimed as CBI that estimated different conversion periods based on two refrigerants—specifically three years for R-448A and five years for R-744—and the technical hurdles posed by those refrigerants. While current efforts are focused on using those two refrigerants, there are a number of other refrigerants listed as acceptable for this end-use that manufacturers may also choose to use. However, there is no information that suggests that a conversion period for these other refrigerants would be any quicker than that for R-448A and R-744.

To address what alternatives might be available and when, comments were provided by manufacturers and an association representing manufacturers regarding certain refrigerants not currently acceptable in this end-use category. Information was provided for R-448A and R-449A, two HFC/HFO blends designed to mimic the properties of R-404A, and one manufacturer and an association representing manufacturers requested we find them acceptable for this end-use category. As noted above, concurrent with this rule EPA is listing R-448A, R-449A, and R-449B acceptable in this end-use. EPA views the interest expressed by comments to be indicative of the progress being made in this end-use category and the likely future use of R-448A, R-449A, or R-449B. As noted above, information claimed as CBI indicates a transition to one of these refrigerants could occur by January 1, 2021, and was being planned by a manufacturer of equipment for this end-use category. EPA discussed the status of these HFC/HFO blends and the availability of their HFO components in a previous action (80 FR 42870; July 20, 2015). For instance, we concluded then that there was ample supply of these

refrigerants and we pointed out that Emerson, a major supplier of compressors and other components, was qualifying these refrigerants for use in its products. Others have followed suit. For instance, Tecumseh has approved R-449A as an acceptable alternative to R-404A and was in the process of releasing R-449A compressors for use in remote condensing units.<sup>137</sup> This technology and know-how could then likely translate into the refrigerated food processing and dispensing equipment market, thereby allowing a transition by the January 1, 2021, change of status date.

Information was also supplied by equipment manufacturers regarding the use of R-290 specifically or HCs generically in this equipment. An environmental organization indicated that equipment using R-290 is already being used in markets outside the United States and recommended finding R-290 and R-600a acceptable subject to use conditions. EPA has not received a submission for these refrigerants specifically for the refrigerated food processing and dispensing equipment end-use category. If in the future we decide to list these as acceptable, they would be included in a Notice of Acceptability published in the **Federal Register**, or, if we were to propose finding them acceptable subject to use restrictions or unacceptable, we would publish a separate proposed rule.

Equipment manufacturers also submitted comments on some but not all of the acceptable refrigerants not proposed for status change. One manufacturer deemed HFC-134a as not appropriate for their equipment while a second manufacturer indicated that refrigerant is typically used for refrigerated (as opposed to freezing) applications in this end-use category. Based on these comments, EPA recognizes that HFC-134a is available for a portion of this end-use category, but additional time would be required for it, or other acceptable alternatives, to be considered available for all of this end-use category.

One manufacturer provided technical information regarding the challenges with using R-744 although as mentioned above information claimed as CBI indicated at least one equipment manufacturer was planning to transition to that refrigerant. A state agency indicated that low-GWP refrigerants including R-744 “are currently available for refrigeration in retail food.” Also, a

group of companies, Refrigerants, Naturally!, stated that “there are natural refrigerant alternatives available on the market” for dispensing equipment. The former comment discussed retail food refrigeration generally, rather than the refrigerated food processing and dispensing equipment category specifically. The latter comment only mentioned “dispensing equipment” and did not mention equipment that may also process food and beverages as well as dispensing it. As such EPA views these statements as indicative of the availability of alternatives for a portion but not necessarily all of the equipment within this end-use category.

EPA finds however that the progress using R-744 is far enough along to consider that it will be available for the vast majority, if not all, of the equipment in this end-use category that are using refrigerants subject to status change by January 1, 2021. As noted in the proposal (81 FR 22856; April 18, 2016), the Coca-Cola Company, which purchases equipment in this and other retail food refrigeration end-use categories, has announced their plans to convert to non-HFC technologies for all new cold-drink equipment by 2015, and selected R-744 as its refrigerant of choice.<sup>138</sup> The Coca-Cola Company has already placed over 1.4 million HFC-free units globally (80 FR 42919–42920; July 20, 2015) and it was reported that the company would only “narrowly miss” its 2015 target to be HFC-free.<sup>139</sup> The demand created by this company for R-744 in this end-use category (as well as for commercial refrigeration equipment in other end use categories addressed in a previous rule) is expected to increase the availability of R-744 components over the next several years. The time provided by the status change date will allow other components to be developed, for example to provide R-744 compressors designed for this end-use category rather than the “continuous, longer run systems” as mentioned by an equipment manufacturer. Further, as this company purchases equipment from other suppliers, EPA expects that similar equipment, and the components used by such equipment, will become more

<sup>138</sup> Coca-Cola, 2014. “Coca-Cola Installs 1 Millionth HFC-Free Cooler Globally, Preventing 5.25MM Metrics Tons of CO<sub>2</sub>.” January 22, 2014. This document is accessible at <http://www.coca-colacompany.com/press-center/press-releases/coca-cola-installs-1-millionth-hfc-free-cooler-globally-preventing-525mm-metrics-tons-of-co2>.

<sup>139</sup> Refrigeration and Air Conditioning Magazine, 2015. “Coca Cola to narrowly miss HFC-free global refrigeration target.” March 20, 2015. This document is accessible at [www.racplus.com/news/cocacola-to-narrowly-miss-hfc-free-global-refrigerationtarget/8680290.article](http://www.racplus.com/news/cocacola-to-narrowly-miss-hfc-free-global-refrigerationtarget/8680290.article).

<sup>137</sup> Tecumseh, 2016. “Tecumseh Outlines Position on Refrigerant Transition.” January 25, 2016. This document is accessible at <http://www.tecumseh.com/en/North-America/Newsroom/Press-Releases/2016/2016-AHR-Press-Release>.

widely available in the market. While today's action allows less time than the five-year transition time estimated by a manufacturer in information claimed as CBI for a full transition of R-404A equipment to R-744, EPA believes based on experience to date and the market built by the demand created by the Coca-Cola Company will allow for a faster transition than the commenter estimated.

Based on this information claimed as CBI and other comments as discussed above, we find that a January 1, 2021, change of status date is necessary to provide a reasonable yet expeditious time for the transition to acceptable alternatives to occur.

c. How is EPA responding to comments?

EPA received several comments from individuals and organizations with various interests in the refrigerants industry. Comments addressed the proposed status change date of January 1, 2021, the refrigerants proposed for status change, the technical challenges of using refrigerants remaining acceptable and other refrigerants that may be listed as acceptable in the future, energy efficiency, and other rules and standards that may apply to equipment in this end-use category.

Commenters included AHRI, an industry organization; Arkema and Chemours, chemical producers; CARB, a state agency; EIA, NRDC and IGSD, environmental organizations; and Stoelting, Tecumseh and UTC, equipment and component manufacturers. Additional comments claimed as CBI were submitted.

We have grouped comments together and responded to the issues raised by the comments in the sections that follow, or in a separate Response to Comments document which is included in the docket for this rule (EPA-HQ-OAR-2015-0663).

i. Substitutes and End-Use Proposed

*Comment:* UTC was in general agreement with how EPA defined this end-use category, but pointed out that "soft-serve and other frozen dairy treats may not fall within the technical definition of ice-cream due to milk fat content." They also stated that "it appears a creamer dispenser (refrigerated unit dispensing creamer in a dosed amount) and bulk milk dispensers (refrigerated unit holding a container of milk that dispenses through a small nozzle when the handle is lifted) would fit in this category as well."

*Response:* As noted previously in section VI.A.7.a.i, EPA agrees that the type of equipment identified by the commenter falls within this end-use.

*Comment:* UTC, Refrigerants Naturally!, Chemours, EIA, NRDC, and IGSD agreed with EPA's proposal to change the status of refrigerants for this end-use category.

*Response:* EPA thanks the commenters for the comments.

*Comment:* AHRI and UTC both claimed that the number of currently listed acceptable substitutes is limited and that EPA should list R-448A and R-449A as acceptable for this end-use category. Tecumseh suggested listing those two refrigerants and R-452A as acceptable.

*Response:* As shown in Table 12, multiple refrigerants are acceptable for this end-use category. After the proposal was published, but before the comment period closed, EPA added another alternative to the list of acceptable refrigerants in this end-use category, specifically R-513A. R-448A, R-449A, R-449B, and R-452A have been submitted to the SNAP Program for review. Concurrent with this rule, EPA is finding R-448A, R-449A, and R-449B acceptable for new refrigerated food processing and dispensing equipment. EPA has not proposed or made a final listing decision for R-452A in the refrigerated food processing and dispensing equipment end-use category. If in the future we decide to list this as acceptable, it would be included in a Notice of Acceptability published in the **Federal Register**. Likewise, if we were to propose finding it acceptable, subject to use restrictions or unacceptable, we would publish a separate proposed rule.

*Comment:* Responding to EPA's statement in the preamble to the proposed rule that currently HCs such as R-290, R-600a and R-443A are not listed as acceptable in this end-use category, UTC and Stoelting identified technical challenges affecting the potential use of these refrigerants in this end-use category. EIA recommended that EPA find R-290 and R-600a acceptable, subject to use conditions as soon as possible. They indicated that manufacturers are already making R-290 refrigerated dispensing systems abroad pointing to equipment offered by several companies, and felt this demonstrates a change in status is feasible.

*Response:* EPA did not propose and is not taking action regarding the use of HCs in this end-use category at this time. In any future action EPA may take addressing the use of HCs in this end-use, EPA would consider relevant technical information such as the availability of equipment operating on R-290 in markets outside the United States.

*Comment:* An initiative of a group of companies encouraged EPA to find

HFC-134a unacceptable "for systems where there are environmentally safe, low GWP alternatives." Information claimed as CBI indicated that a manufacturer plans to transition from HFC-134a after converting its R-404A equipment.

*Response:* EPA did not propose to change the status of HFC-134a for this end-use category and we are not taking such action today. While we recognize that there are plans to transition from HFC-134a by at least one manufacturer, the information provided did not offer sufficient basis to determine when alternatives would be available for the limited applications within this end-use category that rely on HFC-134a.

ii. Change of Status Date

*Comment:* Three commenters submitted information regarding the technical challenges of using certain refrigerants that have been submitted to EPA for review but for which EPA has not made a listing decision. UTC stated that the time to transition different products "may vary based on technical challenges with product sensory characteristics and differences in dispense rate requirements." They indicated that a challenge for using R-448A, which they proposed should be found acceptable, existed with the compressor discharge temperature which might reduce the compressor reliability. Stoelting requested an extension (of unspecified time) or exemption to continue to use R-404A. They stated that "R-448 or R-449 have an inherent temperature glide of 8 °F [4.4 °C] or more" that causes two issues. They stated that they could not "account for the fractionation" of such refrigerants in equipment with flooded evaporators. They also stated that meeting the temperature variances required (+/- 1 °F [0.56 °C]) would be difficult and lead to a "too cold/firm" region and a "too warm/soft" region. Information submitted and claimed as CBI estimated that at least three years was needed to transition to R-448A, if it is found acceptable.

*Response:* EPA recognizes that challenges exist with any transition and based on the technical information provided for this end-use EPA is establishing a change of status date of January 1, 2021. EPA notes that there are refrigerants currently listed as acceptable that would alleviate or eliminate the concern regarding temperature glide that Stoelting mentioned. For instance, R-744 as a pure substance does not have a temperature glide, although separate limitations were discussed by UTC as explained in the following comment.

Also, while R-450A is zeotropic, it has a low temperature glide that presumably can be addressed based on past experience with R-404A, another low-glide zeotropic blend. In addition, R-513A is an azeotrope with no temperature glide.

With respect to the other issues concerning R-448A discussed by UTC, concurrent with this rule, EPA is listing R-448A as acceptable in this end-use. As noted above, information provided and claimed as CBI indicates a transition to R-448A is feasible by the change of status date established.

*Comment:* UTC emphasized that sufficient time is needed to transition equipment to refrigerants not subject to status change. They described multiple challenges with using R-744, which is currently listed as acceptable. One challenge they described is the additional space required in the heat exchangers and that this additional space requirement must be balanced with the need to minimize increases in footprints which would be difficult to accommodate in many foodservice settings that utilize this equipment. The commenter further indicated the challenges with “compressor availability, compressor operating envelope, refrigerant controls availability (in our capacity range), footprint, and cost.” Another challenge with R-744 noted was the need to design for higher operating pressures and a more complex cooling cycle. The commenter also stated that additional work on the compressor designs was needed to develop models that are suited for the varying cooling demands of this type of equipment as opposed to other applications where R-744 compressors are used. For example, UTC stated that “R-744 compressors have been traditionally designed for continuous, longer run system.” CARB however stated that R-744 is currently available for retail food refrigeration, arguing for a 2020 status change date, while information claimed as CBI indicated at least one equipment manufacturer was already planning to convert to R-744 in the future. This information claimed as CBI by an equipment manufacturer estimated that they would need at least a five-year timeframe to transition to R-744.

*Response:* EPA agrees that some challenges exist when converting to R-744, but the technical progress to date in using this refrigerant in various applications indicates these challenges can be met by the change of status date. Although some components are available, R-744 components have not yet become widely available and could not currently satisfy the entire market

for this end-use category by CARB’s suggested January 1, 2020 date. Nonetheless, although specific comments suggesting the solutions to the technical concerns raised were not provided, the transition by the Coca-Cola Company and other comments indicate that such solutions exist and can be implemented. As discussed in section VI.A.7.b.ii above, EPA finds that R-744 will be available for most if not all of the equipment in this end-use category by the change of status date, and sees various paths forward in the case that it is not fully available for all such equipment.

#### iii. Relationship With Other Rules

*Comment:* In response to EPA’s request for comment on applicable DOE energy conservation standards for equipment in this end-use category, UTC indicated that there are currently no DOE directives or requirements for this equipment. They also indicated the American Society for Testing and Materials (ASTM International) was developing a test standard for this equipment, implying such a standard might form the basis of future DOE rulemaking. They also indicated that European rules covering ice-cream and shake machines are being drafted.

*Response:* EPA thanks the commenter for this information regarding the development of testing standards and the current status of DOE and European requirements for this equipment. We did not consider possible future action by ASTM or DOE in establishing a change of status date for this end-use category, but if one or both those actions occur, EPA could consider it at that time.

#### iv. Industry Standards and Codes

*Comment:* UTC provided a list of multiple industry standards, including ones from the Canadian Standards Association (CSA,) UL, and IEC that apply to this equipment. The commenter did not indicate how the information was related to the proposal.

*Response:* EPA thanks the commenter for the information regarding standards.

#### 8. Change of Listing Status for Certain HFC Refrigerants for New Household Refrigerators and Freezers

##### a. Background

##### i. What is the affected end-use?

Household refrigerators, freezers and combination refrigerator/freezers are intended primarily for residential use, although they may be used outside the home. The designs and refrigeration capacities of equipment vary widely. Household refrigerators and freezers are

composed of three main categories of equipment. Household freezers only offer storage space at freezing temperatures, while household refrigerators only offer storage space at non-freezing temperatures. Products with both a refrigerator and freezer in a single unit are most common. In addition to the three main categories of equipment, other small refrigerated household appliances exist (*i.e.*, chilled kitchen drawers, wine coolers, and mini-fridges) that are also within this end use. Household refrigerators and freezers have all refrigeration components integrated, and for the smallest types, the refrigeration circuit is entirely brazed or welded. These systems are charged with refrigerant at the factory and typically require only an electricity supply to begin operation.

The 2014 ASHRAE Handbook of Refrigeration provides an overview of food preservation in regards to household refrigerators and freezers. Generally, a storage temperature between 32 and 39 °F (0 to 3.9 °C) is desirable for preserving fresh food. Humidity and higher or lower temperatures are more suitable for certain foods and beverages. Wine chillers, for example, are frequently used for storing wine, and have slightly higher optimal temperatures from 45 to 65 °F (7.2 to 18.3 °C). Freezers and combination refrigerator-freezers that are designed to store food for long durations have temperatures below 8 °F (–13.3 °C) and are designed to hold temperatures near 0 to 5 °F (–17.7 to –15 °C). In single-door refrigerators, the optimum conditions for food preservation are typically warmer than this due to the fact that food storage is not intended for long-term storage.

DOE energy conservation standards apply to household refrigerators and freezers, as discussed in section VI.A.9.b.ii.

##### i. What refrigerants are used in household refrigerators and freezers?

The following alternatives are currently acceptable for new household refrigerators and freezers: FOR12A, FOR12B, HFC-134a, HFC-152a, IKON A, IKON B, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-290, R-404A, R-407C, R-407F, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-426A, R-427A, R-428A, R-434A, R-437A, R-438A, R-441A, R-450A, R-513A, R-507A, R-600a, RS-24 (2002 formulation), RS-44 (2003 formulation), SP34E, THR-02 and THR-03. Of those, R-290, R-441A and R-600a are acceptable, subject to use conditions.

Currently, the most commonly used refrigerant in the United States for household refrigerators and freezers is R-134a, an HFC with a GWP of 1,430. However, throughout many parts of the world, R-600a with a GWP of approximately four is the most commonly used refrigerant and there are ongoing efforts to help facilitate the adoption and continued use of R-600a in this industry globally.<sup>140</sup> The European Union (EU) banned the use of HFCs with a GWP greater than 150 (which includes R-134a) for household refrigerators and freezers as of January 1, 2015.<sup>141</sup> R-600a has been used in Europe for approximately two decades. Throughout parts of Asia, Africa, and South America, R-600a is the dominant refrigerant for this end-use. In its 2014 assessment report,<sup>142</sup> the TEAP's

Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee (RTOC) projects that by 2020 about 75 percent of new household refrigerators globally will use R-600a, a small percentage will use HFOs, and the rest will use HFC-134a. There are other alternatives that may be determined to work well in this end use. For example, R-450A and R-513A, which EPA has listed as acceptable for use in this end-use (79 FR 62863, October 21, 2014; 80 FR 42053, July 16, 2015, respectively), were designed to match the characteristics and performance of HFC-134a.

In addition to R-600a, EPA previously found a number of other flammable HC refrigerants including R-290 and R-441A and R-600a as acceptable, subject to use conditions in household refrigerators

and freezers (76 FR 78832, December 20, 2011; 80 FR 19454, April 10, 2015).

b. What is EPA's final decision?

For new household refrigerators and freezers, EPA proposed to change as of January 1, 2021, the status of the following refrigerants from acceptable to unacceptable: FOR12A, FOR12B, HFC-134a, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-407F, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-426A, R-428A, R-434A, R-437A, R-438A, R-507A, RS-24 (2002 formulation), RS-44 (2003 formulation), SP34E, and THR-03. In this action, we are finalizing the status changes as proposed. The change of status determinations for new household refrigerators and freezers:

TABLE 13—CHANGE OF STATUS DECISIONS FOR HOUSEHOLD REFRIGERATORS AND FREEZERS

End-use	Substitutes	Listing status
Household refrigerators and freezers (new only).	FOR12A, FOR12B, HFC-134a, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-407F, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-426A, R-428A, R-434A, R-437A, R-438A, R-507A, RS-24 (2002 formulation), RS-44 (2003 formulation), SP34E, and THR-03.	Unacceptable as of January 1, 2021.

i. How do these unacceptable refrigerants compare to other refrigerants for this end-use with respect to SNAP criteria?

Other refrigerants for new household refrigerators and freezers are HFC-152a, IKON A, IKON B, THR-02; R-513A, R-450A, R-290, R-441A and R-600a. In the proposed rule, EPA provided information on the environmental and health risks presented by the

alternatives that are being found unacceptable compared with other alternatives listed as acceptable (81 FR 22858; April 18, 2016). In addition, a technical support document<sup>143</sup> that provides the **Federal Register** citations concerning data on the SNAP criteria (e.g., ODP, GWP, VOC, toxicity, flammability) for acceptable alternatives as well as those we are finding unacceptable for new household

refrigerators and freezers may be found in the docket for this rulemaking (EPA-HQ-OAR-2015-0663).

The refrigerants we are listing as unacceptable through this action have insignificant ODP and they have GWPs ranging from 920 to 3,990. As shown in Table 14, the other alternatives, listed as acceptable or as acceptable, subject to use conditions, have GWP ranging from three to 630.

TABLE 14—GWP, ODP, AND VOC STATUS OF REFRIGERANTS IN NEW HOUSEHOLD REFRIGERATORS AND FREEZERS<sup>1 2</sup>

Refrigerants	GWP	ODP	VOC	Listing status
IKON A, IKON B, R-290, R-441A, R-600a, THR-02	3–560	0—Not public <sup>3</sup>	Yes <sup>4</sup>	Acceptable.
HFC-152a	124	0	No	Acceptable.
R-450A, R-513A	600–630	0	No	Acceptable.
HFC-134a	1,430	0	No	Unacceptable.
FOR12A, FOR12B, R-426A, RS-24 (2002 composition), SP34E, THR-03	920–1,510	0—Not public <sup>3</sup>	Yes <sup>4</sup>	Unacceptable.
R-407C, R-407F, R-410A, R-410B, R-421A	1,770–2,630	0	No	Unacceptable.
KDD6, R-125/290/134a/600a (55/1/42.5/1.5), R-417A, R-422B, R-422D, R-424A, R-437A, R-438A, RS-44 (2003 composition).	1,810–2,730	0	Yes <sup>4</sup>	Unacceptable.
R-404A, R-421B, R-507A	3,190–3,990	0	No	Unacceptable.
R-422A, R-422C, R-428A, R-434A	3,080–3,610	0	Yes <sup>4</sup>	Unacceptable.

<sup>1</sup> The table does not include not-in-kind technologies listed as acceptable for the stated end-uses.

<sup>2</sup> HCFC-22 and several blends containing HCFCs are also listed as acceptable but their use is severely restricted by the phasedown in HCFC production and consumption.

<sup>3</sup> The ODP of one or more alternatives is not published here in order to avoid disclosing information that is claimed as confidential business information.

<sup>4</sup> One or more constituents of the refrigerant are VOC.

<sup>140</sup> ORNL, 2015. ORNL's JUMP Challenge: JUMP in to Advance Tech Innovation! Presented by Brian Fricke, Oak Ridge National Laboratory. November 17, 2015.

<sup>141</sup> EU, 2014. Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006. Available online at:

[http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\\_.2014.150.01.0195.01.ENG](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2014.150.01.0195.01.ENG).

<sup>142</sup> RTOC, 2015. 2014 Report of the Refrigeration, Air-Conditioning and Heat Pumps Technical Options Committee. Available at: <http://conf.montreal-protocol.org/meeting/mop/mop-27/presession/Background%20Documents%20are%20>

<available%20in%20English%20only/RTOC-Assessment-Report-2014.pdf>.

<sup>143</sup> EPA, 2016b. Tables of Alternatives for End-Uses Considered in the Final Rule, Protection of Stratospheric Ozone: Listing Modifications for Certain Substitutes under the Significant New Alternatives Policy Program. September, 2016.

Three substitutes that remain acceptable, subject to use conditions, R-290, R-600a, and R-441A, are HCs or a blend of HCs. R-290 and R-600a are VOCs while R-441A is a blend composed primarily of compounds that are VOC. EPA's analysis indicates that their use as refrigerants in this end-use is not expected to contribute significantly to ground level ozone formation.<sup>144</sup> In the action in which EPA listed these refrigerants as acceptable, subject to use conditions (80 FR 19454; April 10, 2015), EPA concluded none of these refrigerants as used in this end-use pose significantly greater risk to ground-level ozone formation than other alternative refrigerants that are not VOCs or that are specifically excluded from the definition of VOC under CAA regulations (see 40 CFR 51.100(s)) addressing the development of SIPs to attain and maintain the NAAQS.

The refrigerants not subject to this action are highly volatile and typically evaporate or partition to air, rather than contaminating surface waters. Their effects on aquatic life are expected to be small and pose no greater risk of aquatic or ecosystem effects than those of the refrigerants that are subject to the status change for this end-use.

With the exception of HFC-152a, R-290, R-600a and R-441A, all other refrigerants listed as acceptable, including those we are listing as unacceptable, are not flammable. R-290 and R-600a, which are HCs, and R-441A, which is a blend of HCs, are classified as A3 refrigerants by ASHRAE Standard 34–2013, indicating that they have low toxicity and high flammability, while HFC-152a is classified as an A2 refrigerant, indicating that it has low toxicity and low flammability. To address flammability, EPA listed these R-290, R-441A and R-600a as acceptable, subject to use conditions. The use conditions include conditions consistent with industry standards, limits on charge size, and requirements for warnings and markings on equipment to inform consumers and technicians of potential flammability hazards. Our assessment and listing decisions (76 FR 78832; December 20, 2011 and FR 80 19454; April 10, 2015) found that the overall risk, including the risk due to flammability with the use conditions, is not significantly greater than for other refrigerants listed as acceptable at that time. EPA found HFC-152a acceptable for new household refrigerators and

freezers in the original SNAP rule indicating “[a]lthough HFC-152a is flammable, a risk assessment demonstrated it could be used safely in this end-use” (59 FR 13081; March 18, 1994). Toxicity is not a significant concern for the refrigerants we are listing as unacceptable. Their toxicity is comparable to that of other alternatives that are acceptable in this end-use. The refrigerants subject to the status change and the refrigerants not subject to the status change, if listed under ASHRAE 34 (2013), are classified as Class A refrigerants (lower toxicity).

In summary, because the risks other than GWP are not significantly different for the other available alternatives than for those we proposed to list as unacceptable, and because the GWPs for the refrigerants we proposed to list as unacceptable are significantly higher and thus pose significantly greater risk, we are listing the following refrigerants as unacceptable: FOR12A, FOR12B, HFC-134a, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-407F, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-426A, R-428A, R-434A, R-437A, R-438A, R-507A, RS-24 (2002 formulation), RS-44 (2003 formulation), SP34E, and THR-03.

#### ii. When will the status change?

As proposed, EPA is establishing a change of status date for new household refrigerators and freezers of January 1, 2021. There are technical challenges that must be met for a safe and smooth transition to alternatives, particularly considering the likely use of one or more of the flammable alternatives. The primary step that must occur for a transition is product design work for alternative refrigerants, drawing from current models used both in the United States and elsewhere. For those designing with flammable refrigerants, this would include complying with the use conditions EPA established when listing those refrigerants as acceptable (76 FR 78832; December 20, 2011, and FR 80 1954; April 10, 2015). Although some models have recently and others are currently transitioning,

EPA recognizes that manufacturers will need time to continue product design work for alternative refrigerants, drawing from current models used both in the United States and elsewhere.

Household refrigerators are subject to DOE energy conservation standards and will need to be tested to demonstrate compliance with those standards.<sup>145</sup>

EPA noted in a previous action that “we do not have a practice in the SNAP program of including energy efficiency in the overall risk analysis” but also pointed out that “[w]e do, however, consider issues such as technical needs for energy efficiency (e.g., to meet DOE standards) in determining whether alternatives are ‘available.’” (80 FR 42921; July 20, 2015). Hence, we find that the need for household refrigerator and freezers to meet DOE energy efficiency standards plays a part in determining the availability of alternatives and factors into our decision on the applicable change of status date.

With a change of status date of 2021, the evidence presented indicates that current models—already meeting the current DOE standards—when redesigned for alternative refrigerants are expected to continue to meet those existing standards. In fact, comments indicate an increase in energy efficiency with some of the acceptable alternatives, some of which have been implemented in products both in the U.S. market and globally. See for example comments from Electrolux and NRDC.

Furthermore, as the typical compliance period for DOE energy efficiency regulations is three years from the date issued, a status change date over four years from today gives manufacturers should provide a more than adequate period of time to redesign models to meet such standards with an alternative refrigerant. This time frame also allows manufacturers time to redesign models considering the use conditions that must be met if a flammable acceptable alternative is chosen, as discussed above.

We understand however that there may be limitations with regard to the availability of testing facilities in the event that, in the midst of this implementation of new models with alternative refrigerants, the energy efficiency requirements were to change in a manner that required redesigning models to meet the new efficiency standards DOE has not initiated the process under which new energy efficiency standards would be promulgated. Commenters have suggested that this process could begin as early as 2017 with an eventual compliance date of 2024 or 2025. Therefore, at this point in time it is not evident that there will be any constraint on laboratory availability to meet the January 1, 2021, status change date in this rule. Should DOE finalize new energy efficiency standards for household refrigerators-freezers in the next few years, EPA could consider at that time whether laboratory availability

<sup>144</sup> ICF, 2014a. Assessment of the Potential Impact of Hydrocarbon Refrigerants on Ground Level Ozone Concentrations. February, 2014.

<sup>145</sup> DOE's previous energy conservation rulemaking for this end-use was finalized in 2011 with a compliance date of September 15, 2014 (76 FR 57516; September 15, 2011).



issues might affect the transition to alternative refrigerants by the 2021 change of status date.

c. How is EPA responding to comments?

EPA received several comments from organizations with various interests in the household refrigerators and freezers end-use. Several commenters commented on the proposed January 1, 2021, change of status date. Other comments focused on substitutes and end-use proposed, industry standards and codes, and general comments such as the need for technician training.

Commenters included AHAM, a trade association; and three equipment manufacturers, Whirlpool, Sub Zero, and Electrolux. EPA also received comments from Arkema and Chemours, chemical producers; NRDC, IGSD and EIA, environmental organizations; UL, a safety consulting and certification company; and CARB, a state agency.

We have grouped comments together and responded to the issues raised by the comments in the sections that follow, or in a separate Response to Comments document which is included in the docket for this rule (EPA-HQ-OAR-2015-0663).

i. Substitutes and End-Use Proposed

*Comment:* AHAM noted that although alternatives have been approved for and can be used in refrigerators and freezers, the only viable alternative is R-600a and there are no available “drop-ins.” AHAM also noted that while the appliance industry is moving to replace HFC refrigerants in their products and has produced and sold hundreds of millions of units safely around the world using HC alternatives, factories must be reengineered, and education, logistics and disposal systems would need to be established to manage the safe transportation, servicing and disposal of flammable refrigerants in North America. Whirlpool also commented that major manufacturing changes are required across the industry to achieve widespread use of flammable refrigerants. Three environmental organizations, NRDC, IGSD, and EIA, along with a state government agency, CARB, and a chemical producer, Chemours, supported EPA’s proposal to change the status of HFC-134a in this end-use.

*Response:* EPA appreciates comments submitted in support of the proposed rule and thanks commenters. As to AHAM’s comments that there are no “drop-in” substitutes for this end use, although EPA prefers not to use the term “drop-in,” it is sometimes used by various parties to refer to the circumstance where one refrigerant can

be used in place of another without any modification to the relevant piece of refrigeration equipment. While equipment manufacturers may prefer to use HC refrigerants as they do in other markets, EPA believes that R-450A and R-513A may meet the characteristics that AHAM uses to define “drop-in” replacements. These are non-flammable and were developed to have characteristics similar to R-134a. That said, EPA finds that the change of status date provides sufficient time for redesigning to use HC refrigerants if so preferred by equipment manufacturers.

ii. Change of Status Date

*Comment:* Chemours, a chemical producer, supported the change of status for the refrigerants proposed to be listed as unacceptable, noting that it has sufficient supply of commercial replacement solutions with comparable or improved energy efficiency compared to the substitutes subject to the proposed status change. UL commented on the proposed change of status for HFC-134a for use in this end-use, stating it did not expect to be adversely impacted by any testing or retesting of refrigerators and freezers due to proposed provision.

*Response:* EPA acknowledges UL’s statement that under the proposed timeline for the change of status of R-134a they do not anticipate any difficulty in providing laboratory capacity to perform any testing needed for newly designed refrigerators and freezers and we have considered this information in determining an appropriate change of status date. In addition, we considered whether there was sufficient manufacturing capacity for substitutes by Chemours and other chemical producers in order to meet the established change of status date and determined that production would be more than sufficient for a January 1, 2021, change of status date.

*Comment:* Several commenters commented on the proposed January 1, 2021, change of status date for household refrigerators and freezers. AHAM and Sub Zero suggested that a complete transition date should be no earlier than 2024. AHAM noted that, while the industry is moving to replace HFC refrigerants in products, this transition process is expensive, time consuming, and industry faces technical challenges. AHAM and Whirlpool suggested that the proposed change of status date would create significant difficulties in designing products with flammable refrigerants while also meeting DOE energy conservation standards and charge size limitations for flammable refrigerants in the UL

refrigerators and freezers safety standard. AHAM and Sub Zero suggested there would be a small environmental impact from moving the change of status date to 2024. Whirlpool also recommended a transition date of 2024 due to the design and engineering changes that would be necessary. Electrolux noted that they could transition out of HFC based refrigerants by January 1, 2021, if the charge size limit on HC refrigerants could be increased. NRDC, IGSD, and EIA urged EPA to maintain the proposed status change date of January 1, 2021, and noted requests for extended delays are completely unwarranted given that refrigerator manufacturers have offered models with R-600a for over a decade outside the United States.

*Response:* EPA appreciates points raised by AHAM, Sub Zero, and Whirlpool and understands that challenges exist; however we do not agree that additional time beyond what was proposed is needed. We understand that time is needed for adapting certain model designs to the U.S. market but do not believe the commenters have provided sufficient information to indicate that more time than what EPA proposed would be needed. Although the comments did not provide a detailed analysis of what steps are required to complete a transition and how long each step takes, and whether steps can occur simultaneously or must occur in series, we find that much component equipment development can occur at the same time as other product design work. In other words, as certain components become available, appropriate units could be redesigned using those components, prototypes could be built and tested, and final designs could be manufactured. While redesigns and prototypes are developed, additional components can be developed as needed for other designs. Indeed, once product models are designed, testing and certification could take place while additional models are designed.

We agree with NRDC, IGSD, and EIA that a status change date of January 1, 2021, can be met, and will allow sufficient time for manufacturers to redesign any products that require additional engineering to meet this rule. EPA notes that R-600a is currently being used in more than 500 million household refrigerator and freezer units worldwide, including some units in the United States.<sup>146</sup> Additionally, although changing the charge size limit for hydrocarbon refrigerants as mentioned by Electrolux is beyond the scope of this

<sup>146</sup> (TEAP, 2015).

rule, many manufacturers have already identified a portion of their products that they could redesign using R-290 under the existing limit. EPA notes that refrigeration and AC equipment manufacturers are not required to use any of the flammable refrigerants listed as acceptable, subject to use conditions in this action; we expect that those who choose to do so will plan accordingly for any changes required at the factory and in the designs of the products they manufacture. We note that R-450A and R-513A, which are not subject to status change, will not require as many changes to the equipment design particularly since these are nonflammable and operate with similar characteristics to HFC-134a.

Regarding the comment that there would be little environmental impact by delaying the change of status date until 2024, we do not consider that as part of the analysis for determining the appropriate change of status date. We consider environmental effects, as part of the SNAP review criteria for determining whether safer alternatives are available. Once we have determined that other alternatives can be used that pose less risk we look at the technical challenges of a transition and the availability of alternatives to identify a reasonable but expeditious change of status date that reflects when alternatives can be used broadly within the end-use. Regarding Arkema's specific suggestion for a change of status date of 2025, EPA does not agree that equipment being hermetically sealed justifies a later change of status date. As noted, EPA has determined that other alternatives pose less risk than those for which the status is being changed can reasonably be used earlier than 2025. Even assuming that the commenter is correct that alternatives may be used in a manner that would pose even less risk at a later date, such an assumption would not justify delaying the change of status date. Manufacturers could still choose to manufacture new equipment that is hermetically sealed in 2025 and beyond.

### iii. Industry Standards and Codes

*Comment:* AHAM, Whirlpool, NRDC, IGSD, and EIA discussed charge size limitations for flammable refrigerants in the UL refrigerators and freezers safety standard. Whirlpool and Electrolux noted the need for a new safety standard that would replace the current UL standard that has established the charge size limit of HC-based refrigerants to 57 g. Electrolux suggested that this charge size limit should be harmonized with the IEC 60335-2-40 standard in place in the European Market at 150 g. Arkema

stated that building codes do not yet support use of flammable materials at a sufficient charge size. CARB mentioned the \$5.2 million commitment announced on June 2, 2016, by DOE, AHRI, and ASHRAE discussed previously to fund vital research that will establish a more robust fact base about the properties and uses of flammable refrigerants. This new research program will help provide the technical knowledge needed to facilitate and accelerate the safe use of these refrigerants. NRDC and IGSD commented that, in addition to finalizing the change of status date for HFC-134a in new household refrigerators and freezers, EPA should revisit the charge size limit of 57 g for HC refrigerants used in any refrigerator, freezer, or combination refrigerator and freezer for each circuit. NRDC and IGSD also recommended that UL and AHAM "review the technical justification for such a wide gulf between U.S. and international safety standards and close it as soon as possible." Similarly, EIA commented that "the current UL 250 charge size limit of 57 g of R-600a is effectively and unnecessarily prohibiting market penetration of low-GWP hydrocarbon systems in the U.S. . . . Even with the current overly restrictive UL standard in place, manufacturers have R-600a based systems on the U.S. market, though the charge size is a major restriction to refrigerator volume, or substantially increases the price if dual compressor systems are used to make a standard sized U.S. refrigerator." EIA recommended that, while the UL 471 harmonization process to replace UL 250 continues, EPA should recognize the 150 g charge size limit under the currently recognized International Electrochemical Commission (IEC) standard (IEC 60335-2-89) as an acceptable use condition for the sale of household refrigerators and freezers using HCs in the United States. EIA believes this will help support the proposed change of status date of January 1, 2021, for HFC-134a. EIA referenced their October 2015 petition to the Agency requesting that EPA incorporate by reference the IEC standard 60335-2-89 as the basis for charge size limitations as use conditions for R-290 and R-600a in household refrigerators and freezers.

*Response:* EPA understands the interest in reconsidering safe charge limits and the potential for UL and IEC standards to be harmonized. EPA understands that there are efforts in this direction underway. EPA is encouraged by the June 2016 announcement by

DOE, ASHRAE and AHRI and understands that other stakeholders have been invited to join this effort. While there may be opportunities to make changes to applicable standards, and subsequently change the use conditions that currently apply, such changes are beyond the scope of this rule. If and when those standards are harmonized, EPA could consider whether to revise the SNAP listing consistent with the new standards. This action is based on the Agency's view that the other alternatives including those acceptable to use conditions are feasible for use, as demonstrated by several manufacturers, including GE and BOSCH. We understand that other manufacturers are earlier in the process of designing equipment using alternatives that remain acceptable and EPA has established a change of status date of January 1, 2021 to allow time for manufacturers to address the technical challenges.

### iv. Other Suggestions or Requests

*Comment:* AHAM recommended that service personnel must be trained to adequately protect themselves and consumers from activities that may be routine for handling equipment with non-flammable refrigerants but that are not protective when servicing equipment with flammable HC refrigerants. AHAM commented that repairing leaks or replacing/filling refrigerant lines will involve new training techniques that must be developed and communicated.

*Response:* EPA is not taking action in this rulemaking regarding the use of flammable refrigerants for this end-use and thus this comment is outside the scope of this rulemaking. However, we note that we are aware that at least two organizations—RSES and the ESCO Institute—have developed technician training programs in collaboration with refrigeration equipment manufacturers and users that address safe use of flammable refrigerant substitutes. In addition, EPA has reviewed several training programs provided as part of SNAP submissions from persons interested in flammable refrigerant substitutes. The Agency intends to update the test bank for technician certification under CAA section 608 as we have done previously, and will consider including additional questions on flammable refrigerants. By adding such questions to the test bank, EPA would supplement but would not replace technician training programs currently provided by non-government entities. EPA will seek additional information and guidance on how best to incorporate this content through a

separate process outside the scope of this final rule.

### B. Motor Vehicle Air Conditioning

#### 1. Background

The vehicle types that are addressed in this action include limited types of HD vehicles, specifically, MDPVs,<sup>147</sup> HD trucks, and complete HD vans.<sup>148</sup> EPA has previously listed HFO-1234yf as acceptable, subject to use conditions, in light-duty (LD) motor vehicles and trucks (76 FR 17490; March 29, 2011).

The types of HD vehicles addressed in this action are in many ways more similar to LD vehicles than they are to the HD vehicles with a higher gross

vehicle weight rating (GVWR), which is a measure of the combined curb (empty) weight and cargo carrying capacity of the truck. Table 15 outlines the HD vehicle weight classifications commonly used. MDPVs,<sup>149</sup> HD pickup trucks, and HD vans are Class 2b and 3 vehicles with GVWRs between 8,501 and 14,000 lb. These vehicle types are similar to LD vehicles technologically and most are manufactured in a similar manner to LD vehicles by companies with major light-duty markets in the United States.<sup>150</sup> Ford, General Motors, and Fiat Chrysler Automobiles (FCA) produce approximately 100 percent of HD pickup trucks and approximately 95 percent of

HD vans, with Daimler and Nissan producing the remaining approximately five percent of HD vans.<sup>151</sup> In many cases, these types of HD vehicles are versions of their LD counterparts.<sup>152</sup> For example, the Silverado 1500, Ram 1500, and Ford F-150 are the LD counterparts of the HD Silverado 2500/3500, Ram 2500/3500, and Ford F-250/F-350/F-450 pickup trucks.<sup>153</sup> The primary difference between HD pickup trucks and vans and their LD counterpart vehicles is that HD pickups and vans are occupational or work vehicles that are designed for much higher towing and payload capabilities compared to LD pickups and vans.

TABLE 15—VEHICLE WEIGHT CLASSIFICATION

Class	2b	3	4	5	6	7	8
GVWR (lb) .....	8,501–10,000	10,001–14,000	14,001–16,000	16,001–19,500	19,501–26,000	26,001–33,000	>33,000

All types of HD vehicles can be sold as “complete” or “incomplete” vehicles (76 FR 57259–60; September 15, 2011). Complete vehicles are sold by vehicle manufacturers to end-users with no secondary manufacturer making substantial modifications prior to registration and use. Incomplete vehicles are sold by vehicle manufacturers to secondary manufacturers without the primary load-carrying device or container attached. See section VI.B.1 of the proposed rule for additional information on HD vehicles and the vehicle types within the MVAC end-use that are addressed in this action.

Section 608(c) of the CAA prohibits the knowing venting, release or disposal of all refrigerants by any person maintaining, servicing, repairing or disposing of an appliance or IPR in a manner which permits the refrigerant to enter the environment, except for certain substitute refrigerants that have been specifically exempted from this venting prohibition under CAA section 608(c)(2). MVAC end-of-life disposal and recycling specifications are also covered under section 608 of the CAA and our regulations issued under that

section of the Act, which are codified at subpart F of 40 CFR part 82.

Additionally, CAA section 609 establishes standards and requirements regarding servicing of MVAC systems. Under section 609, no person repairing or servicing motor vehicles for consideration<sup>154</sup> may perform any service on an MVAC that involves the refrigerant without properly using approved refrigerant recovery or recovery and recycling equipment and no such person may perform such service unless such person has been properly trained and certified. This action will not have a direct impact on EPA’s regulations under section 609. For further information on the relationship between this action and other federal rules, see section VI.B.6 of the proposed rule (81 FR 22866–67; April 18, 2016).

#### 2. What is EPA’s final decision?

As proposed, EPA is listing HFO-1234yf as acceptable, subject to use conditions, in MVAC systems for newly manufactured MDPVs, HD pickup trucks, and complete HD vans. The use conditions are detailed in section VI.B.2.b, “What are the final use conditions?”. EPA sought comment and

information on listing HFO-1234yf as acceptable subject to use conditions for some incomplete HD vans. One commenter provided information to EPA and EPA will consider that information to determine whether to take further action regarding the listing of HFO-1234yf for use in incomplete HD vans.

As explained in section VI.B.1, section 608 of the CAA prohibits the knowing venting, release or disposal of all refrigerants by any person maintaining, servicing, repairing or disposing of an appliance or IPR in a manner which permits the refrigerant to enter the environment, except for certain substitute refrigerants that have been specifically exempted from this venting prohibition. Because HFO-1234yf has not been exempted from the venting prohibition in any end use, such knowing releases of HFO-1234yf in the course of maintaining, servicing, repairing or disposing of MVAC systems of MDPVs, HD pickup trucks, and complete HD vans addressed in this action is prohibited.

<sup>147</sup> Defined at 40 CFR 86.1801–03.

<sup>148</sup> MVAC systems provide passenger comfort cooling for LD cars and trucks, HD vehicles (large pick-ups, delivery trucks, recreational vehicles, and semi-trucks), off-road vehicles, buses, and rail vehicles. EPA is not addressing other types of HD vehicles, off-road vehicles, buses, or trains in this action.

<sup>149</sup> MDPVs are classified as HD vehicles based on their GVWR, but due to their similarities to LD vehicles they are subject to the GHG emissions standards established for LD trucks.

<sup>150</sup> This is more broadly true for HD pickup trucks than vans because every manufacturer of HD pickup trucks also makes LD pickup trucks, while only some heavy-duty van manufacturers also make light-duty vans (80 FR 40148; July 13, 2015).

<sup>151</sup> EPA, 2015. Draft Regulatory Impact Analysis: Proposed Rulemaking for Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2. EPA-420-D-15-900. June 2015. Available at <http://www3.epa.gov/otaq/climate/documents/420d15900.pdf>.

<sup>152</sup> ICCT, 2015. International Council on Clean Transportation: Regulatory Considerations for Advancing Commercial Pickup and Van Efficiency Technology in the United States. Available online at: <http://www.theicct.org/us-commercial-pickups-vans-efficiency-technology>.

<sup>153</sup> ICF, 2015. Market Characterization of the U.S. Motor Vehicle Air Conditioning Industry, U.S. Foams Industry, U.S. Aerosols Industry, and U.S. Commercial Refrigeration Industry. July, 2015.

<sup>154</sup> Service for consideration means receiving something of worth or value to perform service, whether in money, credit, goods, or services.

a. How does HFO-1234yf compare to other refrigerants for these MVAC applications with respect to SNAP criteria?

Available refrigerants for newly manufactured MDPVs, HD pickup trucks, and complete HD vans include HFC-134a, HFC-152a,<sup>155</sup> and CO<sub>2</sub>.<sup>156</sup> There are also several blend refrigerants that are listed as acceptable for new HD MVAC systems, subject to use conditions, including the HFC blends SP34E and R-426A (also known as RS-24) and the HCFC blends, R-416A (also known as HCFC Blend Beta or FRIGC FR12), R-406A, R-414A (also known as HCFC Blend Xi or GHG-X4), R-414B (also known as HCFC Blend Omicron), HCFC Blend Delta (also known as Free Zone), Freeze 12, GHG-X5, and HCFC Blend Lambda (also known as GHG-HP). HFC-134a is the refrigerant most widely

used today in HD MVAC systems; however, given the change of status for HFC-134a for LD vehicles, it is likely that the manufacturers of these similar vehicle types will also consider transitioning to another alternative which is listed as acceptable for LD vehicles. All MVAC refrigerants that are acceptable for use are listed as acceptable subject to use conditions. For each listed refrigerant, the use conditions require labeling and the use of unique fittings and are subject to additional use conditions mitigating flammability and toxicity as appropriate to the alternative.

In section VI.B.3 of the proposed rule (81 FR at 22860–65; April 18, 2016), EPA provided information on the environmental and health properties of HFO-1234yf and the available alternative in this end-use in this action. In addition, EPA's risk assessments for

HFO-1234yf and a technical support document<sup>157</sup> that provides the **Federal Register** citations concerning data on the SNAP criteria (e.g., ODP, GWP, VOC, toxicity, flammability) for acceptable alternatives in the relevant end-uses may be found in the docket for this rulemaking (EPA–HQ–OAR–2015–0663). In summary, HFO-1234yf has a GWP of one to four. HFO-1234yf has a GWP similar to or lower than the GWP of other alternatives for the HD vehicle types addressed in this action. For example, its GWP is significantly lower than that of HFC-134a, the refrigerant most widely used in these vehicles today, which has a GWP of 1,430. HFC-152a,<sup>158</sup> and CO<sub>2</sub><sup>159</sup> have GWPs of 124 and one, respectively. The refrigerant blends acceptable for use in MVAC systems for the HD vehicle types addressed in this action have GWPs ranging from 1 to 1,510.

TABLE 16—GWP, ODP, AND VOC STATUS OF HFO-1234yf COMPARED TO OTHER REFRIGERANTS IN MVAC SYSTEMS OF NEWLY MANUFACTURED MDPVs, HD PICKUP TRUCKS, AND COMPLETE HD VANS<sup>1 2</sup>

Refrigerants	GWP	ODP	VOC status	Listing status
HFO-1234yf .....	1–4	0 .....	No .....	Acceptable, subject to use conditions.
CO <sub>2</sub> , HFC-152a, HFC-134a .....	1–1,430	0 .....	No .....	Acceptable.
IKON A, R-416A, R-426A, SP34E .....	30–1,510	0-Not public <sup>3</sup> .....	Yes <sup>4</sup> .....	Acceptable.

<sup>1</sup> The table does not include not-in-kind technologies listed as acceptable for the stated end-use.

<sup>2</sup> HCFC-22 and several blends containing HCFCs are also listed as acceptable but their use is severely restricted by the phasedown in HCFC production and consumption.

<sup>3</sup> The ODP of one or more alternatives is not published here in order to avoid disclosing information that is claimed as confidential business information.

<sup>4</sup> One or more constituents of the blend are VOC.

HFO-1234yf does not deplete the ozone layer. Likewise, HFC-134a, HFC-152a, CO<sub>2</sub> and the HFC blends SP34E and R-426A do not deplete the ozone layer; the HCFC blends have ODPs ranging from 0.012 to 0.056. HFO-1234yf, HFC-134a, HFC-152a, and CO<sub>2</sub> are exempt from the definition of VOC under CAA regulations (see 40 CFR 51.100(s)) addressing the development of SIPs to attain and maintain the NAAQS. The HFC blends and some of the HCFC blends have one or more components that are VOCs and that are

not exempt from the definition in 40 CFR 51.100(s).

A potential environmental impact of HFO-1234yf is its atmospheric decomposition to trifluoroacetic acid (TFA, CF<sub>3</sub>COOH). TFA is a strong acid that may accumulate on soil, on plants, and in aquatic ecosystems over time and that may have the potential to adversely impact plants, animals, and ecosystems.<sup>160</sup> Simulations have found that the amount of TFA in rainfall produced from a transition of all mobile air conditioners in the continental United States to HFO-1234yf has been

estimated to be double or more the values observed in the United States in 2009 from all sources, natural and artificial (*i.e.*, HFC-134a) sources.<sup>161</sup> In comparison, the amount of TFA produced from HFO-1234yf is expected to be higher than that of other fluorinated refrigerants in this end-use.

In support of the 2011 listing decision for HFO-1234yf in LD vehicles, EPA analyzed potential TFA concentrations from a full transition to HFO-1234yf in all MVAC applications, not limited to LD vehicles.<sup>162 163 164 165 166</sup> The analysis

<sup>155</sup> HFC-152a is listed as acceptable, subject to use conditions, for new vehicles only at 40 CFR part 82 subpart G; final rule published June 12, 2008 (73 FR 33304).

<sup>156</sup> CO<sub>2</sub> is listed as acceptable, subject to use conditions, for new vehicles only at 40 CFR part 82 subpart G; final rule published June 6, 2012 (77 FR 33315).

<sup>157</sup> EPA, 2016b. Tables of Alternatives for End-Uses Considered in the Final Rule, Protection of Stratospheric Ozone: Listing Modifications for Certain Substitutes under the Significant New Alternatives Policy Program. September, 2016.

<sup>158</sup> HFC-152a is listed as acceptable, subject to use conditions, for new vehicles only at 40 CFR part 82 subpart G; final rule published June 12, 2008 (73 FR 33304).

<sup>159</sup> CO<sub>2</sub> is listed as acceptable, subject to use conditions, for new vehicles only at 40 CFR part 82 subpart G; final rule published June 6, 2012 (77 FR 33315).

<sup>160</sup> Other fluorinated compounds also decompose into TFA, including HFC-134a.

<sup>161</sup> Luecken et al., 2009. Ozone and TFA impacts in North America from degradation of 2, 3, 3, 3-tetrafluoropropene (HFO-1234yf), a potential greenhouse gas replacement. Environmental Science & Technology 2009. The document is accessible at: [http://www.researchgate.net/profile/Robert\\_Waterland/publication/40481734\\_Ozone\\_and\\_TFA\\_impacts\\_in\\_North\\_America\\_from\\_degradation\\_of\\_2333-Tetrafluoropropene\\_\(HFO-1234yf\)\\_a\\_potential\\_greenhouse\\_gas\\_replacement/links/00b7d514ca9595bf5e000000.pdf](http://www.researchgate.net/profile/Robert_Waterland/publication/40481734_Ozone_and_TFA_impacts_in_North_America_from_degradation_of_2333-Tetrafluoropropene_(HFO-1234yf)_a_potential_greenhouse_gas_replacement/links/00b7d514ca9595bf5e000000.pdf).

<sup>162</sup> ICF, 2009a. Revised Final Draft Assessment of the Potential Impacts of HFO-1234yf and the Associated Production of TFA on Aquatic Communities and Local Air Quality.

<sup>163</sup> ICF, 2010a. Summary of HFO-1234yf Emissions Assumptions.

<sup>164</sup> ICF, 2010b. Summary of Updates to the Venting Model that Impacted HFO-1234yf Emissions Estimates.

<sup>165</sup> ICF, 2010c. Revised Assessment of the Potential Impacts of HFO-1234yf and the Associated Production of TFA on Aquatic Communities, Soil and Plants, and Local Air Quality.

Continued

found a maximum projected concentration of TFA in rainwater of approximately 1,700 ng/L. This maximum projected concentration identified in EPA's analysis, 1700 ng/L,<sup>167</sup> was roughly 34 percent higher than that projected in a 2009 peer reviewed article.<sup>168</sup> The differences in projected TFA concentrations in water is a reflection of EPA's reliance on higher emission estimates.<sup>169</sup> Even when relying on more conservative emission estimates, a concentration of 1700 ng/L corresponds to roughly  $\frac{1}{6000}$ th of the No-Observed-Adverse-Effect-Level (NOAEL) for the most sensitive algae species, which is also well below the NOAEL for the most sensitive aquatic animal species.<sup>170</sup>

Taking into consideration the analysis conducted in support of the 2011 listing decision, which was based on conservative emissions assumptions and a transition from HFC-134a to HFO-1234yf for all MVAC systems (not limited to LD vehicles), and the research that has been conducted since, EPA concludes that the use of HFO-1234yf in the HD vehicle types addressed in this action will not pose a significant risk to the environment from atmospheric decomposition to TFA.

HFO-1234yf is a flammable refrigerant classified as A2L under ASHRAE 34–2013. HFC-134a and CO<sub>2</sub> are nonflammable refrigerants, while HFC-152a is slightly more flammable than HFO-1234yf with an ASHRAE classification of A2. The blends listed as acceptable are not flammable.

EPA compared worker exposures to a workplace exposure limit of 250 ppm<sup>171</sup>

over an 8-hour time-weighted average for long-term occupational exposure to HFO-1234yf. For short-term occupational exposure to HFO-1234yf, we compared worker exposure to an acute exposure limit of 98,211 ppm, divided by a margin of exposure of 30, for a value of 3,270 ppm over 30 minutes.<sup>172 173</sup> Concerning workplace exposure, we expect that professional technicians have proper training and certification and have the proper equipment and knowledge to minimize their risks due to exposure to refrigerant from an MVAC system. Thus, worker exposure to HFO-1234yf is expected to be low. If workers service MVAC systems using certified refrigerant recovery equipment after receiving training and testing, exposure levels to HFO-1234yf are estimated to be on the order of 4 to 8.5 ppm on an 8-hour time-weighted average (as compared with a 250 ppm workplace exposure limit<sup>174</sup>)

2008–0664–0041. We used a factor of 1.9 to account for differences in blood concentrations between animals and humans, and a margin of exposure or collective uncertainty factor of 30. Uncertainty factors of 3 were assigned for animal to human extrapolation, and 10 for variability within the human population. The long-term workplace exposure limit was calculated as follows: 4000 ppm (animal exposure)  $\times$  1.9 (ratio of estimated human exposure/animal exposure)  $\times$   $\frac{1}{3}$  (UF for animal to human extrapolation)  $\times$   $\frac{1}{10}$  (UF for variability within the human population) exposure) = 250 ppm. This value was compared against 8-hour average concentrations. See EPA–HQ–OAR–2008–0664–0036 and EPA–HQ–OAR–2008–0664–0038.

<sup>172</sup> This was based on a NOAEL of 51,690 ppm from the study, “Sub-acute (2-week) Inhalation Toxicity Study with HFO-1234yf in rats,” EPA–HQ–OAR–2008–0664–0020 through-0020.4, a factor of 1.9 to account for differences in blood concentrations between animals and humans and a margin of exposure or collective uncertainty factor of 30. Uncertainty factors of 3 were assigned for animal to human extrapolation, and 10 for variability within the human population. The short-term workplace exposure value was calculated as follows: 51,690 ppm (animal exposure)  $\times$  1.9 (ratio of estimated human exposure/animal exposure) = 98,211 ppm. This value was then divided by the expected exposure in each scenario, and compared against the target margin of exposure of 30. See EPA–HQ–OAR–2008–0664–0036 and EPA–HQ–OAR–2008–0664–0038.

<sup>173</sup> For comparison, the SAE CRP used exposure limits of 500 ppm over 8 hours and 115,000 ppm over 30 minutes to evaluate risks for these same time periods. These are based on the 8-hr Workplace Environmental Exposure Limit (WEEL) for HFO-1234yf and for short-term exposure, assuming a NOAEL of approximately 405,800 ppm from the study, “Acute (4-hour) inhalation toxicity study with HFO-1234yf in rats.” Note that EPA disagrees with the finding that the acute inhalation toxicity study found a NOAEL. We consider this study to show adverse effects at all levels because of the presence of grey discoloration in the lungs of the test animals. In order to ensure sufficient protection, EPA's risk assessment used a NOAEL from a subacute study instead of a LOAEL from an acute study.

<sup>174</sup> This was based on a NOAEL of 4000 ppm from the study, “An Inhalation Prenatal Developmental Toxicity Study of HFO-1234yf (2,3,3,3-Tetrafluoropropene) in Rabbits,” EPA–HQ–OAR–

and 122 ppm on a 30-minute average (as compared with a short-term exposure level of 98,211 ppm divided by a margin of exposure of 30, for a value of 3270 ppm over 30 minutes<sup>175 176</sup>).<sup>177 178</sup> We also analyzed exposure levels during manufacture and final disposition at vehicle end-of-life, and found that they would be no higher than 28 ppm on a 15-minute average or 8.5 ppm on an 8-hour time-weighted average.<sup>179</sup> The manufacture, use, and disposal or recycling of HFO-1234yf MVAC systems are not expected to present a toxicity risk to workers. Other alternatives such as HFC-134a and HFC-152a also do not present a toxicity risk to workers in the same scenarios; therefore, HFO-1234yf

2008–0664–0041. We used a factor of 1.9 to account for differences in blood concentrations between animals and humans, and a margin of exposure or collective uncertainty factor of 30. Uncertainty factors of 3 were assigned for animal to human extrapolation, and 10 for variability within the human population. The long-term workplace exposure limit was calculated as follows: 4000 ppm (animal exposure)  $\times$  1.9 (ratio of estimated human exposure/animal exposure)  $\times$   $\frac{1}{3}$  (UF for animal to human extrapolation)  $\times$   $\frac{1}{10}$  (UF for variability within the human population) exposure) = 250 ppm. This value was compared against 8-hour average concentrations. See EPA–HQ–OAR–2008–0664–0036 and EPA–HQ–OAR–2008–0664–0038.

<sup>175</sup> This was based on a NOAEL of 51,690 ppm from the study, “Sub-acute (2-week) Inhalation Toxicity Study with HFO-1234yf in rats,” EPA–HQ–OAR–2008–0664–0020 through-0020.4, a factor of 1.9 to account for differences in blood concentrations between animals and humans and a margin of exposure or collective uncertainty factor of 30. Uncertainty factors of 3 were assigned for animal to human extrapolation, and 10 for variability within the human population. The short-term workplace exposure value was calculated as follows: 51,690 ppm (animal exposure)  $\times$  1.9 (ratio of estimated human exposure/animal exposure) = 98,211 ppm. This value was then divided by the expected exposure in each scenario, and compared against the target margin of exposure of 30. See EPA–HQ–OAR–2008–0664–0036 and EPA–HQ–OAR–2008–0664–0038.

<sup>176</sup> For comparison, the SAE CRP used exposure limits of 500 ppm over 8 hours and 115,000 ppm over 30 minutes to evaluate risks for these same time periods. These are based on the 8-hr Workplace Environmental Exposure Limit (WEEL) for HFO-1234yf and for short-term exposure, assuming a NOAEL of approximately 405,800 ppm from the study, “Acute (4-hour) inhalation toxicity study with HFO-1234yf in rats.” Note that EPA disagrees with the finding that the acute inhalation toxicity study found a NOAEL. We consider this study to show adverse effects at all levels because of the presence of grey discoloration in the lungs of the test animals. In order to ensure sufficient protection, EPA's risk assessment used a NOAEL from a subacute study instead of a LOAEL from an acute study.

<sup>177</sup> EPA, 2009b. Risk Assessment: PMN 07–0601. Available at: <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2008-0664-0036>.

<sup>178</sup> ICF International, 2009b. Risk Screen on Substitutes for CFC–12 in Motor Vehicle Air Conditioning: Substitute: HFO-1234yf. Available online at: <http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2008-0664-0038>.

<sup>179</sup> Ibid.

<sup>166</sup> ICF, 2010d. Sensitivity Analysis CMAQ results on projected maximum TFA rainwater concentrations and maximum 8-hr ozone concentrations.

<sup>167</sup> ICF, 2010d. Sensitivity Analysis CMAQ results on projected maximum TFA rainwater concentrations and maximum 8-hr ozone concentrations.

<sup>168</sup> Luecken et al., 2009. Ozone and TFA impacts in North America from degradation of 2, 3, 3, 3-tetrafluoropropene (HFO-1234yf), a potential greenhouse gas replacement. Environmental Science & Technology 2009. The document is accessible at: [http://www.researchgate.net/profile/Robert\\_Waterland/publication/40481734\\_Ozone\\_and\\_TFA\\_impacts\\_in\\_North\\_America\\_from\\_degradation\\_of\\_2333-Tetrafluoropropene\\_\(HFO-1234yf\)\\_a\\_potential\\_greenhouse\\_gas\\_replacement/links/00b7d514ca9595bf5e000000.pdf](http://www.researchgate.net/profile/Robert_Waterland/publication/40481734_Ozone_and_TFA_impacts_in_North_America_from_degradation_of_2333-Tetrafluoropropene_(HFO-1234yf)_a_potential_greenhouse_gas_replacement/links/00b7d514ca9595bf5e000000.pdf).

<sup>169</sup> ICF, 2010d. Sensitivity Analysis CMAQ results on projected maximum TFA rainwater concentrations and maximum 8-hr ozone concentrations.

<sup>170</sup> ICF, 2009a. Revised Final Draft Assessment of the Potential Impacts of HFO-1234yf and the Associated Production of TFA on Aquatic Communities and Local Air Quality.

<sup>171</sup> This was based on a NOAEL of 4000 ppm from the study, “An Inhalation Prenatal Developmental Toxicity Study of HFO-1234yf (2,3,3,3-Tetrafluoropropene) in Rabbits,” EPA–HQ–OAR–

poses the same or less risk than other alternatives.

As explained in section VI.B.3 of the proposed rule (81 FR at 22860–65; April 18, 2016), to evaluate environmental, flammability, and toxicity risks resulting from the use of HFO-1234yf in new MDPVs, HD pickup trucks, and complete HD vans, the Agency relied on EPA's analysis conducted in support of the 2011 listing decision for HFO-1234yf for LD vehicles. EPA was able to rely on the 2011 analysis of HFO-1234yf in LD vehicles in support of this rule because the MVAC systems, vehicle designs, and the potential for exposure for the HD vehicle types for which EPA is listing HFO-1234yf as acceptable, subject to use conditions, in this action are identical or very similar to those of LD vehicles. In addition, we considered risk assessments performed by OEMs and independent consultants on the use of HFO-1234yf in LD vehicles through SAE Cooperative Research Programs (CRPs) and found these were consistent with our analysis. Based on that analysis, at proposal, EPA concluded HFO-1234yf did not pose a significantly greater due to environmental effects, flammability or toxicity than the other alternatives when used in accordance with use conditions established as part of the listing decision. The refrigerants to which HFO-1234yf was compared in the 2011 action for LD vehicles are the same refrigerants available for use in the vehicle types included in this action.

Based on the consideration of all of SNAP criteria, EPA has determined that HFO-1234yf does not pose significantly greater risk than the other alternatives, when used in accordance with use conditions, for use in newly manufactured MDPVs, HD pickup trucks, and complete HD vans. Further information on these analyses and EPA's risk assessments are available in the docket for this rulemaking (EPA–HQ–OAR–2015–0663).

#### b. What are the final use conditions?

All MVAC refrigerants listed as acceptable are subject to use conditions requiring labeling and the use of unique fittings. EPA is listing HFO-1234yf as acceptable, subject to use conditions, because the use conditions are necessary to ensure that use of HFO-1234yf will not have a significantly greater overall impact on human health and the environment than other alternatives for use in MDPVs, HD pickup trucks, and complete HD vans. EPA is requiring the same use conditions for HFO-1234yf in these HD vehicle types as are required for the use of HFO-1234yf in newly manufactured LD vehicles. Because of the similarities

in the MVAC systems used for these vehicles, these use conditions will ensure use of HFO-1234yf in MDPVs, HD pickup trucks, and complete HD vans does not pose significantly greater risk than use of other alternatives.

The first use condition requires that MVAC systems designed to use HFO-1234yf must meet the requirements of SAE J639, "Safety Standards for Motor Vehicle Refrigerant Vapor Compression Systems." This standard sets safety standards that include unique fittings; a warning label indicating the refrigerant's identity and that it is a flammable refrigerant; and requirements for engineering design strategies that include a high-pressure compressor cutoff switch and pressure relief devices. This use condition also requires that for connections with refrigerant containers for use in professional servicing, use fittings must be consistent with SAE J2844 (revised January 2013), which specifies quick-connect fittings that are different from those for any other refrigerant. The low-side service port and connections will have an outside diameter of 14 mm (0.551 inches) and the high-side service port will have an outside diameter of 17 mm (0.669 inches), both accurate to within 2 mm. Under SAE J2844 (revised January 2013), containers of HFO-1234yf for use in professional servicing of MVAC systems must have a left-handed screw valve with a diameter of 0.5 inches and Acme (trapezoidal) thread with 16 threads per inch. The SAE standards did not include and EPA did not receive a submission for unique fittings for small containers of HFO-1234yf refrigerant prior to the publication of the proposed rule.

Based on EPA's analysis of the safety study and consistent with the conclusion EPA drew at the time of EPA's listing decision for HFO-1234yf in LD vehicles, EPA believes that the safety requirements that are included in SAE J639 sufficiently mitigate risks of both HF generation and refrigerant ignition (*e.g.*, flammability and toxicity) (March 29, 2011; 76 FR 17488) for MDPVs, HD pickup trucks, and complete HD vans subject to this action. HFO-1234yf is mildly flammable (class 2L) and, like other fluorinated refrigerants, can decompose to form the toxic compound HF when exposed to flame or to sufficient heat. For example, SAE J639 provides for a pressure relief device designed to minimize direct impingement of the refrigerant and oil on hot surfaces and for design of the refrigerant circuit and connections to avoid refrigerant entering the passenger cabin. The pressure release device ensures that pressure in the system will

not reach an unsafe level that might cause an uncontrolled leak of refrigerant, such as if the AC system is overcharged. The pressure release device will reduce the likelihood that refrigerant leaks would reach hot surfaces that might lead to either ignition or formation of HF. Designing the refrigerant circuit and connections to avoid refrigerant entering the passenger cabin ensures that if there is a leak, the refrigerant is unlikely to enter the passenger cabin. Keeping refrigerant out of the passenger cabin minimizes the possibility that there would be sufficient levels of refrigerant to reach flammable concentrations or that HF would be formed and transported where passengers might be exposed.

The second use condition requires the manufacturer of MVAC systems and vehicles to conduct Failure Mode and Effects Analysis (FMEA) as provided in SAE J1739 (adopted 2009) and keep records of the FMEA on file for three years from the date of creation. SAE J1739 (adopted 2009) describes a FMEA as "a systematic group of activities intended to: (a) Recognize and evaluate the potential failure of a product/process and the effects and causes of that failure, (b) identify actions that could eliminate or reduce the change of the potential failure occurring, and (c) document the process." Through the FMEA, OEMs determine the appropriate protective strategies necessary to ensure the safe use of HFO-1234yf across their vehicle fleet. It is standard industry practice to perform the FMEA and to keep it on file while the vehicle is in production and for several years afterwards. As with the previous use condition, this use condition is intended to ensure that new MDPVs, HD pickup trucks, and complete HD vans manufactured with HFO-1234yf MVAC systems are specifically designed to minimize release of the refrigerant into the passenger cabin or onto hot surfaces that might result in ignition or in generation of HF.

#### c. When will the listing apply?

EPA is establishing a listing date as of January 3, 2017. Based on information the Agency possessed at the time of the proposal and additional information submitted during the comment period regarding the technical feasibility of transitioning the fleet of HD vehicles and refrigerant supply, we conclude that this date, the same as the effective date of this regulation, allows for the safe use of this substitute at the earliest opportunity.

## 3. How is EPA responding to comments?

EPA received comments from organizations with various interests in the MVAC industry on the proposed listing of HFO-1234yf as acceptable, subject to use conditions, in newly manufactured MDPVs, HD pickup trucks, and complete HD vans. All commenters supported the proposed listing decision and effective date of 30 days after date of publication of the rule in the **Federal Register**. However, EIA raised concerns about continued growth of the use of HFO-1234yf as an MVAC refrigerant based on environmental impacts. Some commenters indicated that the industry is already in the process of transitioning to HFO-1234yf in response to EPA's Light-Duty Greenhouse Gas (LD GHG) Rule and policy incentives. One commenter also indicated that production capacity of HFO-1234yf is sufficient to meet the increased demand under this rule. Other comments were in reference to the environmental impacts of the proposed listing of HFO-1234yf, the relationship of the proposed rule with other federal rules, and status changes for R-134a in end uses beyond LD vehicles.

The Alliance of Automobile Manufacturers (AAM), a trade association, submitted comments on behalf of twelve car and light truck manufacturers including BMW Group (BMW), FCA, Ford Motor Company, General Motors Company, Jaguar Land Rover, Mazda, Mercedes-Benz USA, Mitsubishi Motors, Porsche Cars, Toyota, Volkswagen Group and Volvo Cars. EPA also received comments from two chemical producers, Chemours and Honeywell; three environmental organizations, NRDC, IGSD, and EIA; and a state agency, CARB.

We have grouped comments together and responded to the issues raised by the comments in the sections that follow, or in a separate Response to Comments document which is included in the docket for this rule (EPA-HQ-OAR-2015-0663).

## a. Substitute and End-Uses Proposed

*Comment:* AAM, Chemours, Honeywell, NRDC, IGSD, EIA, and CARB supported the listing of HFO-1234yf as acceptable, subject to use conditions, in MDPVs, HD pickup trucks, and complete HD vans. AAM commented that their member companies have been adopting HFO-1234yf for passenger cars and light duty trucks and would like to make use of HFO-1234yf for other vehicle types.

*Response:* EPA appreciates the support for finding HFO-1234yf as

acceptable, subject to use conditions, as proposed.

*Comment:* EIA and NRDC commented that EPA should list HFO-1234yf in all types of on-road and off-road vehicles, rather than only in MDPVs, HD pickup trucks, and complete HD vans. To support their argument, the commenters stated that these additional vehicle types are not materially different.

*Response:* EPA appreciates EIA's suggestions regarding the listing of HFO-1234yf for use in HD vehicle types not covered in this rule and will take them into consideration as the Agency considers any additional listing changes under the SNAP program.

## b. SNAP Review Criteria

*Comment:* AAM and Chemours supported EPA's use of the 2011 analysis of HFO-1234yf in LD vehicles to support the listing of HFO-1234yf in the HD vehicles in this action. AMM commented that it is "appropriate for EPA to have applied the HFO-1234yf risk analysis performed for light duty vehicles to these additional categories of vehicles, which do not pose significantly higher risks." Additionally, Chemours commented that EPA's use of the 2011 analysis was reasonable because the systems evaluated are very similar to light duty systems.

*Response:* EPA appreciates the support.

*Comment:* EIA commented on the environmental impacts of the atmospheric decomposition of HFO-1234yf to TFA. EIA commented that the studies EPA relied upon to support the proposed listing of HFO-1234yf "projected maximum rainwater concentrations of TFA from certain emission assumptions, but did not "take into account the much higher potential for high levels of accumulation of TFA in urban surface and landscape waters, particularly those bodies where inflows of water accumulate but have little or no outlet other than evaporation." EIA cited a 2015 Peking University<sup>180</sup> study showing increases in TFA concentrations between 2002 and 2012 in urban landscape waters, other water bodies, and snow samples in the region in and around Beijing. EIA stated that "more research is needed to understand whether continued growth in automobile and HFC consumption and the transition of this sector and others to HFO-1234yf would lead to concentrations of TFA that could pose a significant risk to aquatic ecosystems."

<sup>180</sup> Zhai Z., J. Wu, X. Hu, L. Li, L. Guo, B. Zhang, J. Hu, and J. Zhang: A 17-fold increase of trifluoroacetic acid in landscape waters of Beijing, China during the last decade, *Chemosphere*, 129, 110–117, 2015.

EIA also recommended that EPA conduct similar studies on TFA concentrations in bodies of water (e.g., vernal pools) in the United States, given that they are critical to the life cycle of amphibians, reptiles, insects, and other aquatic animals, and to contact the authors of the Peking University study.

*Response:* EPA appreciates the additional information provided by EIA on the atmospheric decomposition of HFO-1234yf to TFA. EPA's analysis was based on conservative emissions assumptions and a transition from HFC-134a to HFO-1234yf for all MVAC systems. As mentioned previously, even when relying on these conservative emission estimates, a concentration of 1700 ng/L corresponds to roughly 1/600th of the NOAEL for the most sensitive algae species, which is also well below the NOAEL for the most sensitive aquatic animal species.

Research on TFA has been conducted since the 2011 final rule listing HFO-1234yf as acceptable for LD vehicles and the information shows no greater risk than our earlier analysis. As EPA indicated in their comments, the 2015 study by Zhai et al. reported a 17-fold increase in TFA concentration in landscape waters in Beijing, China, over the period 2002–2012. The authors associated the increase of TFA concentrations with the increased HFC-134a emissions in China (factor of 5.5 from 2005 to 2015) although no model evaluation was conducted. In an earlier combined observation and modeling study in China, only 14 percent of annual total TFA deposition flux was attributable to HFC-134a, with the balance from unknown sources.<sup>181</sup> This value is an upper limit because it was obtained using the upper limit of the TFA yield from HFC-134a.<sup>182</sup> Despite the observed 17-fold increase, the TFA concentrations measured by Zhai et al. in surface waters (up to 0.828  $\mu\text{g L}^{-1}$ ) and in tap water (0.155  $\mu\text{g L}^{-1}$ ) in 2012 are comparable to TFA concentrations measured in other countries (e.g., 0.012–0.328  $\mu\text{g L}^{-1}$  in rivers, 0.037–0.36  $\mu\text{g L}^{-1}$  in lakes, and 0.016–0.123  $\mu\text{g L}^{-1}$  in drinking water in Switzerland in 1996–1997.<sup>183</sup> The study by Zhai et al. shows

<sup>181</sup> Wu, J., J. Martin, Z. Zhai, K. Lu, L. Li, X. Fang, H. Jin, J. Hu, and J. Zhang. Airborne trifluoroacetic acid and its fraction from the degradation of HFC-134a in Beijing, China. *Environ. Sci. Technol.*, 10.1021/es4050264, 2014.

<sup>182</sup> Wallington, T. J., J. J. Orlando and G. S. Tyndall, O. J. Nielsen: Comment on "Airborne Trifluoroacetic Acid and Its Fraction from the Degradation of HFC-134a in Beijing, China", *Environ. Sci. Technol.*, 48, 9948–9948, DOI: 10.1021/es502485w, 2014.

<sup>183</sup> Berg, M., S.R. Muller, J. Muhlemann, A. Wiedmer, and R.P. Schwarzenbach: Concentrations and mass fluxes of chloroacetic acids and



that the emissive use of HFC-134a and emissions of unknown anthropogenic TFA precursors<sup>184</sup> have increased TFA concentrations in surface bodies of water. Since HFO-1234yf has a shorter atmospheric lifetime (several days) and higher TFA yield (100%) than HFC-134a, its substitution for HFC-134a is expected to further increase TFA concentrations in precipitation and in bodies of water near large sources.

Additionally, a 2014 study by Kazil, et al. analyzed TFA deposition in the United States assuming 100 percent of all MVAC systems use HFO-1234yf. The results indicated that rainwater TFA concentrations, while varying strongly geographically, will on average be low compared to the levels at which toxic effects are observed in aquatic systems. The UNEP Ozone Secretariat also provided a summary of key information pertaining to TFA based on the 2014 Assessment Reports of the Environmental Effects Assessment Panel (EEAP) and the Scientific Assessment Panel (SAP) of the Montreal Protocol. The brief states, “While it is well established that TFA is a ubiquitous natural component in rivers, lakes, and other surface water bodies, uncertainties remain regarding anthropogenic sources, long-term fate and abundances as these are linked to current and future use and emissions of HFCs, HCFCs, and HFOs. Based on estimates to 2040, increases are predicted to remain relatively low and are therefore not expected to be a significant risk to human health or detrimental to the environment. Projected future increased loadings of TFA to playas, land-locked lakes, and the oceans due to continued use of HCFCs, HFCs, and replacement products such as HFOs are still judged to present negligible risks for aquatic organisms and humans.” The UNEP background document also states that TFA and its salts “do not bioconcentrate in aquatic organisms, and do not biomagnify in the food chain. Thus they present negligible risk to organisms higher on the food chain, including humans.” See the docket for this rulemaking for additional information on TFA projections in the environment.

#### c. Relationship With Other Rules

*Comment:* AAM and Chemours commented that EPA should use incentives similar to the LD GHG Rule

to encourage transition to low-GWP solutions in medium and heavy-duty vehicles. Chemours indicated that automakers in the United States, Canada, Mexico, EU, Japan, and South Korea are deploying HFO-1234yf in a range of models, largely in response to policy incentives including the US light-duty vehicle tailpipe GHG standards and the EU Mobile Air Conditioning Directive. To support their argument, AAM provided comments submitted by the American Automotive Council’s (AAC) on EPA’s Heavy-Duty Greenhouse Gas (HD GHG) Phase 2 proposed rule and encouraged the Agency to adopt a credit allowance mechanism to “incentivize the quicker adoption of HFO-1234yf and leakage improvements for HD pickup trucks and complete HD vans.” AAM stated that “the opportunities for fuel savings and GHG emission reductions on these medium and heavy duty vehicles are even greater, per vehicle, than on light duty vehicles given the larger refrigerant charge sizes, higher fuel consumption engines, longer vehicle lifetimes and greater lifetime VMT in these heavier vehicle categories.”

*Response:* This comment is outside the scope of this rulemaking. We note that as part of the Model Year (MY) 2017–2025 LD GHG rule,<sup>185</sup> EPA established the availability of credits for the use of alternative refrigerants with lower GWPs than that of HFC-134a. In this action, EPA is listing HFO-1234yf as acceptable, subject to use conditions, for MDPVs which are included in the MY 2017–2025 LD GHG rule; therefore, vehicle manufacturers will be able to obtain credits for the use of HFO-1234yf in these vehicles as allowed for in the MY 2017–2025 LD GHG rule. The LD GHG standards do not require any specific means of compliance, so manufacturers have the flexibility to either switch refrigerants or to comply with the standards by other means.<sup>186</sup>

#### d. Status Change for Other Refrigerants

*Comment:* CARB, Honeywell, NRDC, and IGSD suggested that EPA change the status of HFC-134a and other high-GWP alternatives to unacceptable in MVAC systems for newly manufactured MDPVs, HD pickup trucks, and HD vans. These commenters indicated that HFC-134a is unacceptable for LD vehicles and changing the status of HFC-134a for HD vehicles could result in significant reductions in carbon equivalent emissions. NRDC and IGSD

commented that similar to the listing of HFC-134a as unacceptable for newly manufactured light-duty vehicles beginning in Model Year 2021, EPA should establish a similar status change date for HFC-134a in MDPVs, HD pickup trucks, and complete HD vans to secure additional climate benefit at negligible additional risk. Honeywell commented that if EPA were to change the status of HFC-134a to unacceptable for these HD vehicle types, avoided emissions could be approximately one million MtCO<sub>2</sub>eq annually. CARB and Honeywell suggested that EPA should change the status of HFC-134a for these applications and also suggested a change of status date of MY 2021. In support, these commenters claimed it is feasible for the industry can transition to low-GWP alternatives by MY 2021 based on the following: Stakeholder input suggest OEMs need two to three years to evaluate safe and effective implementation of low-GWP alternatives and another two to three years to adopt necessary changes; substitutes exist for mobile air conditioning systems, including HFO-1234yf; international policy is driving global auto manufacturers to transition to alternatives other than HFC-134a by the end of 2016 and U.S. car manufacturing can apply the lessons learned from global manufactures to transition U.S. vehicles to non-HFC-134a alternatives; several U.S. car manufactures are already selling vehicle models that use HFO-1234yf systems; and commercial scale HFO-1234yf production plants are operating and supply will continue to increase.

*Response:* EPA did not propose to change the status of HFC-134a in MVAC systems for newly manufactured HD vehicles; therefore, the Agency is not establishing a change of status date as part of the final rule. EPA appreciates the comments submitted and will take them into consideration when the Agency considers any additional changes of status under the SNAP program.

*Comment:* NRDC and IGSD commented that EPA should take steps to ensure that new vehicles designed for HFO-1234yf are not serviced or recharged with HFC-134a. The commenters stated that HFC-134a will remain approved to service existing motor vehicles and, therefore, it is possible to modify new vehicles to recharge with HFC-134a. NRDC and IGSD recommended that EPA enact “stronger, more comprehensive and enforceable rules to discourage and prohibit” the modification of new HFO-1234yf systems with HFC-134a. Specifically, the commenters

trifluoroacetic acid in rain and natural waters in Switzerland. *Environ. Sci. Technol.* 34, 2675–2683, 2000.

<sup>184</sup> Wu, J., J. Martin, Z. Zhai, K. Lu, L. Li, X. Fang, H. Jin, J. Hu, and J. Zhang. Airborne trifluoroacetic acid and its fraction from the degradation of HFC-134a in Beijing, China. *Environ. Sci. Technol.*, 10.1021/es4050264, 2014.

<sup>185</sup> 77 FR 62624, 62807–810 (October 15, 2012); see also 75 FR 25325, 25431–32 (May 7, 2010) (discussing the same issue for MY 2012–2016 light-duty vehicles).

<sup>186</sup> 77 FR 62804–809

recommended that the Agency “classify refrigerant-containing components as part of the emission control system, which would make it illegal to substitute refrigerants or unqualified replacement parts.” They also suggested that EPA require OEMs to apply tamper-proof seals to refrigerant charge ports, similar to the plastic seals used on pharmaceutical products, to identify tampering and alert service technicians, owners, or potential buyers to the possibility that a refrigerant other than HFO-1234yf is in the system.

*Response:* The SNAP listings for all MVAC refrigerants require the use of unique fittings for each alternative refrigerant. These fittings are found at attachment points on the car itself, on all recovery and recycling equipment, on can taps and other charging equipment, and on all refrigerant containers. The purpose of these fittings is to prevent cross-contamination. Using an adapter or deliberately modifying a fitting to use a different refrigerant is a violation of these use conditions. The commenter did not identify other methods to discourage and prohibit use of HFC-134a in systems designed from HFO-1234yf or how EPA could otherwise strengthen the current conditions that discourage cross-contamination of refrigerants in MVAC. See section VI.B.6.e of the July 2015 final rule for a response to several comments on servicing CFC-12, HFC-134a, and the lower-GWP alternative refrigerant MVAC systems. EPA will consider updating the information on our Web site, as appropriate.

#### e. Other Suggestions or Requests

*Comment:* Honeywell recommended that EPA consider listing high-GWP substances as unacceptable for use in refrigerated transport, as early as January 1, 2019, in a future rulemaking. Honeywell stated that two leading manufacturers of mobile refrigeration systems have introduced systems that utilize refrigerants with GWPs below 2,200 and have been selling these systems for more than a year. They also commented that there are commercially available refrigerant options with a GWP of less than 1,500, including R-448A, R-449A, R-134a, R-450A, R-513A and CO<sub>2</sub>.

*Response:* EPA appreciates receiving this information and will consider the comments as it evaluates possible future actions.

*Comment:* EIA commented that CO<sub>2</sub> is listed as an acceptable substitute in HD vehicles and should also be listed as acceptable in the end-uses covered in this action as well.

*Response:* EPA notes that CO<sub>2</sub> is currently listed as acceptable, subject to

use conditions, for use in all MVAC applications for new equipment, including newly manufactured MDPVs, HD pickup trucks, and complete HD vans.

*Comment:* CARB commented that they are aware of Chemours’ SNAP application for the use of HFO-1234yf in various heavy-duty vehicle classifications and encouraged EPA to expedite the review and determination process upon receiving the application.

*Response:* EPA appreciates the commenter’s suggestion. EPA is reviewing the submission from Chemours regarding the use of HFO-1234yf in other heavy duty vehicle classes.

#### C. Foam Blowing Agents

##### 1. Change of Listing Status for Certain HFC Foam Blowing Agents for Rigid PU Spray Foam

###### a. Background

In the NPRM published on August 6, 2014, EPA proposed to change the listings from acceptable to unacceptable for HFC-134a and blends thereof, and the HFC blend Formacel TI for spray foam as of January 1, 2017 (79 FR 46149). After considering the comments received on the proposed rule, EPA deferred taking final action on spray foam in the final rule. See sections V.D.2.a and V.D.3.b of the preamble to the final rule (80 FR 42870; July 20, 2015).

In the past, EPA combined spray foam, commercial refrigeration foam, sandwich panels, and marine flotation foam within a single end-use: Rigid PU commercial refrigeration, spray, and sandwich panels. However, because of differences in the exposure and fire safety characteristics of these uses as well as the fact that different alternatives are generally used for each of these applications, EPA more recently created separate end-use listings for each of these applications. See 80 FR 42870; July 20, 2015. Commercial refrigeration and sandwich panels include insulation for walls, pipes (including “pipe-in-pipe”), metal doors, vending machines, refrigerated and unrefrigerated coolers, refrigerated transport vehicles, and other laboratory and commercial refrigeration equipment, as well as foam for taxidermy. These foams may be injected or applied using “pour-in-place” equipment, depending on the agent used and on whether the formulation is pressurized. Marine flotation foam includes buoyancy or flotation foam used in construction of boats and ships. These foams typically are injected into a cavity in the boat wall from a two-

canister (A- and B-side) system under lower pressures and they provide structure as well as buoyancy. The end-use affected here, rigid PU spray foam, hereafter called “spray foam,” includes insulation for roofing, walls, doors, and other construction uses, as well as foam for building breakers for pipelines. These foams are rigid with closed cells that still contain the foam blowing agent, which can contribute to the foam’s ability to insulate. Spray foam may have similar chemistry to other rigid PU end-uses, but it differs by being sprayed onto a surface in the location where it is to be used, either when constructing a new building or when adding insulation to an existing building, rather than being injected or poured or being produced in a manufacturing facility. As a result, it may be more difficult to provide engineered ventilation during application of spray foam than for other foam end-uses. In addition to federal rules and guidance applying to the application of spray foam, insulation foam used in construction (e.g., high-pressure two-component spray foam) must meet insulation value requirements in state and local building codes.

We have identified three distinct and separate spray foam applications for this end-use: (1) High-pressure two-component, (2) low-pressure two-component, and (3) one-component foam sealants.

High-pressure two-component spray foam products are pressurized 800–1600 psi during manufacture, are sold in pressurized containers as two parts (i.e., A-side and B-side), and are sprayed in the field for thermal insulation and air sealing of buildings and in roofing applications. High-pressure two-component spray foam is blown and applied *in situ* using high-pressure pumps to propel the foam components, and thus, may use liquid blowing agents without an additional propellant. Common liquid foam blowing agents used in high-pressure two-component spray foam include HFC-245fa; blends of HFC-365mfc with at least four percent HFC-245fa; and commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365mfc. This type of spray foam is applied by professionals who wear personal protective equipment (PPE) while applying high-density foam insulation for roofing or walls. High-pressure two-component spray foam comprises the largest portion of the spray foam market.

Low-pressure two-component spray foam products are pressurized to less than 250 psi during manufacture, are

sold in pressurized containers as two parts (*i.e.*, A-side & B-side), and are also sprayed in the field for thermal insulation and air sealing of buildings. Low-pressure two-component spray foams are typically applied *in situ* relying upon a gaseous foam blowing agent that also serves as a propellant; pumps typically are not needed. This type of spray foam has primarily used the gaseous blowing agent HFC-134a; the Foams Technical Options Committee has also identified CO<sub>2</sub> and water as options. Low-pressure two-component spray foam is usually applied by home improvement

contractors to fill in cracks and gaps in a residence using kits that are available for sale.<sup>187</sup>

One-component foam sealants are packaged in aerosol cans and are applied *in situ* using a gaseous foam blowing agent that is also the propellant for the aerosol formulation. This end-use category primarily uses light saturated HCs as the blowing agent, as well as HFCs such as HFC-134a and HFC-152a. This type of spray foam may be used by consumers and by home improvement contractors in order to seal cracks and leaks in a residence, as well as used for pest management.

b. What is EPA's final decision?

EPA proposed to change the status of the following HFCs and HFC blends that have previously been listed as acceptable foam blowing agents for use in spray foam: HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa; commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365mfc; and Formacel TI.<sup>188</sup> In this action, we are finalizing the status changes that we proposed with no changes. The change of status determinations for rigid PU spray foam are summarized in Table 17.

TABLE 17—CHANGE OF STATUS DECISIONS FOR FOAM BLOWING AGENTS IN RIGID PU SPRAY FOAM

End-use	Substitutes	Listing status
Rigid PU: Spray foam—high-pressure two-component.	HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365mfc; and Formacel TI.	Acceptable subject to narrowed use limits for military or space- and aeronautics-related applications* as of January 1, 2020. Unacceptable for all applications other than military or space- and aeronautics-related applications as of January 1, 2020.
Rigid PU: Spray foam—low-pressure two-component.	HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365mfc; and Formacel TI.	Unacceptable for all uses as of January 1, 2025. Acceptable subject to narrowed use limits for military or space- and aeronautics-related applications* as of January 1, 2021. Unacceptable for all applications other than military or space- and aeronautics-related applications as of January 1, 2021.
Rigid PU: Spray foam—one component foam sealants.	HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365mfc; and Formacel TI.	Unacceptable for all uses as of January 1, 2025. Unacceptable as of January 1, 2020.

\* Under the narrowed use limit, an end user must make reasonable efforts to ascertain that other alternatives are not technically feasible due to performance or safety requirements.

i. How do these unacceptable blowing agents compare to other blowing agents for these end-uses with respect to SNAP criteria?

Over the past ten years, the number of available alternative blowing agents for spray foam has increased. A number of new foam blowing agents with low GWPs, both fluorinated and non-fluorinated, have been introduced during the past several years.

In the proposed rule, EPA provided information on the environmental and health risks presented by the alternatives that are being found unacceptable compared with other available alternatives that are listed as acceptable (81 FR 22869–71; April 18, 2016). In addition, a technical support document<sup>189</sup> that provides the **Federal Register** citations concerning data on the SNAP criteria (*e.g.*, ODP, GWP,

VOC, toxicity, flammability) for acceptable alternatives, as well as those we are finding unacceptable in the relevant end-uses, may be found in the docket for this rulemaking (EPA–HQ–OAR–2015–0663). In summary, the risks other than GWP for the acceptable alternatives are not significantly different from the risks for the alternatives than for the blowing agents we are proposing to list as unacceptable, and the GWPs for the blowing agents we are proposing to list as unacceptable are significantly higher and thus pose significantly greater risk. The HFCs that we are listing as unacceptable for rigid PU spray foam have GWPs ranging from 1,030 for HFC-245fa to 1,430 for HFC-134a. The HFC blends that we are listing as unacceptable have GWPs that vary depending on the specific composition; the range of GWPs for blends is 740 to

1,030 for blends of HFC-365mfc with at least four percent HFC-245fa, 900 to 1,100 for commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365mfc, and 1,330 to approximately 1,500 for Formacel TI.

Acceptable alternatives for all three spray foam applications include CO<sub>2</sub>, water, Exxsol blowing agents, ecomate, HFC-152a, HFO-1234ze(E), and *trans*-1-chloro-3,3,3-trifluoroprop-1-ene. As shown in Table 18, these alternatives have GWPs ranging from zero to 124. In addition, for one-component foam sealants only, light saturated HCs are acceptable, with GWPs in the range of three to 15. For high-pressure two-component spray foam only, HFO-1336mzz(Z) is acceptable, with a GWP of approximately nine. These GWPs are significantly lower than the GWPs of 740 to 1,500 for the HFC and HFC blend

<sup>187</sup> Low-pressure two-component spray foam kits should only be used by trained professionals. The polyurethanes industry has guidance on how to use low pressure kits available at: <http://spraypolyurethane.org/spf-chemical-health-and-safety->

[training and at http://spraypolyurethane.org/Main-Menu-Category/Weatherization-Contractors/Installing-SPF](http://spraypolyurethane.org/Main-Menu-Category/Weatherization-Contractors/Installing-SPF).

<sup>188</sup> We note that neat HFC-365mfc has never been listed as acceptable for use in spray foam.

<sup>189</sup> EPA, 2016b. Tables of Alternatives for End-Uses Considered in the Final Rule, Protection of Stratospheric Ozone: Listing Modifications for Certain Substitutes under the Significant New Alternatives Policy Program. September, 2016.

substitutes subject to the proposed change of status.

TABLE 18—GWP, ODP, AND VOC STATUS OF FOAM BLOWING AGENTS IN RIGID POLYURETHANE HIGH-PRESSURE TWO-COMPONENT SPRAY FOAM, LOW-PRESSURE TWO-COMPONENT SPRAY FOAM, AND RIGID PU ONE-COMPONENT FOAM SEALANTS <sup>1 2</sup>

Blowing agents	GWP	ODP	VOC	Listing status
<b>Rigid PU High-Pressure Two-Component Spray Foam</b>				
HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365 mfc; and Formacel® TI.	740–1,500	0 .....	No .....	Acceptable, subject to narrow use limits <sup>2</sup> or unacceptable.
CO <sub>2</sub> ; Ecomate; Formic Acid; HFC-152a; HFO-1234ze; <i>trans</i> -1-chloro-3,3,3-trifluoroprop-1-ene (Solstice™ 1233ze(E)) <sup>1</sup> ; Water.	0–124	0–0.00034 .....	No .....	Acceptable.
Formic Acid; HFO-1336mzz(Z) .....	>1–9	0 .....	Yes .....	Acceptable.
<b>Rigid PU Low-Pressure Two-Component Spray Foam</b>				
HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365mfc; and Formacel® TI.	740–1,500	0 .....	No .....	Acceptable, subject to narrow use limits <sup>2</sup> or unacceptable.
CO <sub>2</sub> ; Ecomate; HFC-152a; HFO-1234ze; <i>trans</i> -1-chloro-3,3,3-trifluoroprop-1-ene; Water.	0–124	0–0.00034 .....	No .....	Acceptable.
Formic Acid; HFO-1336mzz(Z) .....	>1–9	0 .....	Yes .....	Acceptable.
<b>Rigid PU One-Component Foam Sealants</b>				
HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365mfc; and Formacel® TI.	740–1,500	0 .....	No .....	Unacceptable.
CO <sub>2</sub> ; Ecomate; HFC-152a; HFO-1234ze; Methyl Formate; <i>trans</i> -1-chloro-3,3,3-trifluoroprop-1-ene; Water.	0–124	0–0.00034 .....	No .....	Acceptable.
Formic Acid; HFO-1336mzz(Z); Saturated Light HCs C3–C6 .....	>1–9	0 .....	Yes .....	Acceptable.

<sup>1</sup> The table does not include not-in-kind technologies listed as acceptable for the stated end-uses or additives combined with other acceptable blowing agents.

<sup>2</sup> For military or space- and aeronautics-related applications.

All of the HFCs and HFC blends we are listing as unacceptable consist of compounds that are non-ozone-depleting. Only one of the alternatives in these three spray foam applications—*trans*-1-chloro-3,3,3-trifluoroprop-1-ene—contains chlorine and has an ODP, which is 0.00024 to 0.00034. Estimates of its maximum potential impact on the ozone layer indicate a statistically insignificant impact, comparable to that of other substitutes in the same end-use that are considered to be non-ozone-depleting.<sup>190 191</sup>

All of the HFCs and HFC blends we are listing as unacceptable consist of compounds that are excluded from the definition of VOC under CAA regulations (see 40 CFR 51.100(s))

addressing the development of SIPs to attain and maintain the NAAQS. The other alternatives, with the exception of light saturated HCs (for one-component foam sealants only),<sup>192</sup> and HFO-1336mzz(Z) (for high-pressure two-component spray foam only), contain compounds that are not VOC (*i.e.*, water) or are excluded from the definition of VOC under CAA regulations (see 40 CFR 51.100(s)) addressing the development of SIPs to attain and maintain the NAAQS (*e.g.*, CO<sub>2</sub>, component of ecomate, HFO-1234ze(E), *trans*-1-chloro-3,3,3-trifluoroprop-1-ene). Based on the small anticipated usage of HCs, and due to existing state regulations under SIPs affecting aerosol products that may include HCs as the blowing agent in one-component foam sealants, we do not expect this alternative to have a significantly greater impact on local air

quality than other available alternatives in these applications. The manufacturer of HFO-1336mzz(Z) has petitioned EPA to exempt HFO-1336mzz(Z) from the definition of VOC under those regulations. As provided in our decisions listing these substitutes as acceptable, we determined that emissions of these alternatives in this end-use would not pose a significantly greater risk than that posed by other available alternatives.

All of the HFCs and HFC blends with specific compositions that we are listing as unacceptable are nonflammable. There has been use of blends of HFC-134a and HFC-152a, composition unspecified, in the past; those blends may be flammable depending on the exact composition. Such blends are unacceptable under this final rule as blends of HFC-134a.

Of the other alternatives, ecomate is the only one that is flammable. The manufacturers of ecomate™ have developed training to teach users of high-pressure two-component spray foam about the flammability hazards of

<sup>190</sup> Wang D., Olsen S., Wuebbles D. 2011. "Preliminary Report: Analyses of tCFP's Potential Impact on Atmospheric Ozone." Department of Atmospheric Sciences, University of Illinois, Urbana, IL, September 26, 2011.

<sup>191</sup> Patten and Wuebbles, 2010. "Atmospheric Lifetimes and Ozone Depletion Potentials of *trans*-1-chloro-3,3,3-trichloropropylene and *trans*-1,2-dichloroethylene in a three-dimensional model." *Atmos. Chem. Phys.*, 10, 10867–10874, 2010.

<sup>192</sup> EPA has also listed the hydrocarbon blowing agent brand Exxsol blowing agents as acceptable for all rigid PU spray foam applications. However, the manufacturer of that blowing agent has withdrawn this agent from the market.

these flammable foam blowing agents in this end-use and how to minimize flammability risks.<sup>193</sup> <sup>194</sup> As we determined at the time that we listed ecomate as acceptable, it can be used in these spray foam applications in a manner that ensures it would not pose significantly greater risk than other available substitutes.

Toxicity must be considered and addressed with all of the alternatives in this end-use, with the possible exception of water. Both the HFC substitutes we are listing as unacceptable and the other alternatives have workplace exposure limits, either as regulatory requirements (*i.e.*, OSHA PEL) or as a recommendation (*e.g.*, AIHA WEEL, ACGIH TLV or manufacturer recommended workplace exposure limits). Proper training, use of PPE, and use of ventilation should be adhered to when applying spray foam. As we determined at the time that we listed each of these substitutes as acceptable, they can be used in these spray foam applications consistent with the relevant workplace exposure limits. For further information, see docket EPA-HQ-OAR-2015-0663.

#### ii. Narrowed Use Limits for Military or Space- and Aeronautics-Related Applications

EPA is establishing a time-limited exception to the unacceptability determination for military or space- and aeronautics-related applications when used in low pressure two-component and high pressure two-component spray foam. Specifically, EPA is finalizing a narrowed use limit that expires on January 1, 2025. As provided in section VI.C.1.b.iii, the vast majority of applications for spray foams are anticipated to be able to transition to acceptable alternatives by January 1, 2020, for high-pressure two-component spray foam and as of January 1, 2021, for low-pressure two-component spray foam. However, for the military, there are several unique performance requirements related to weapon systems that require extensive testing and qualification prior to adoption of alternatives for the currently used foams. The same is true for other specialty applications with unique military requirements such as undersea; aerospace; and chemical, biological, and

radiological warfare systems. In the case of space- and aeronautics-related applications, the challenging operational environment and the lengthy requalification process associated with human-rated space flight systems require a longer transition time than would otherwise apply.

Users of a restricted agent within the narrowed use limits category must make a reasonable effort to ascertain that other substitutes or alternatives are not technically feasible. Users are expected to undertake a thorough technical investigation of alternatives to the otherwise restricted substitute. Although users are not required to report the results of their investigations to EPA, users must document these results, and retain them in their files for the purpose of demonstrating compliance.

Users should include the following documentation to demonstrate compliance with the narrowed use applications. This information includes descriptions of:

- Process or product in which the substitute is needed;
- Substitutes examined and rejected;
- Reason for rejection of other alternatives, *e.g.*, performance, technical or safety standards; and/or
- Anticipated date other substitutes will be available and projected time for switching.

#### iii. When will the status change?

Except for the narrow use limits addressed above, EPA is changing the listings from acceptable to unacceptable (1) in high-pressure two-component spray foam and in one-component foam sealants as of January 1, 2020, and (2) in low-pressure two-component spray foam as of January 1, 2021. The change of status applies to the following blowing agents: HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365mfc and Formacel TI. The Agency is aware of several companies that have begun to transition.<sup>195</sup> However, a change of status date of January 1, 2020, is necessary for high-pressure two-component spray foam to allow sufficient opportunity for affected entities to address the technical issues associated with using a different foam blowing agent, including the time

required for reformulation (about one year), and the time required for testing and certification of the final commercial product (one to one and a half years). Part of the process of testing and certification for high-pressure two-component and low-pressure two-component spray foam used for building insulation includes verifying sufficient insulation value to meet building code requirements. Some studies have indicated that CO<sub>2</sub> may provide less insulation value to an insulation foam, pound for pound, than HFCs. Recent information on some of the newer fluorinated foam blowing agents with low GWPs, such as HFO-1234ze(E), HFO-1336mzz(Z), and *trans*-1-chloro-3,3,3-trifluoroprop-1-ene, indicates these foam blowing agents provide comparable or greater insulation value than their HCFC and HFC predecessors. Thus, requirements to meeting building code requirements for insulation value will not impede a transition to alternatives.

To allow sufficient time for manufacturers of low-pressure two-component spray foam kits to complete working through the technical challenges of alternatives, as well as time for existing kits to be distributed, purchased, and used by the end user, we are establishing a change of status date of January 1, 2021. A change of status date of January 1, 2021, is necessary for low-pressure two-component to address the technical issues associated with using a different foam blowing agent. Based on information from several companies developing low-pressure two-component spray foam products, the process of reformulation has been more difficult than for high-pressure two-component spray, because it must have a significantly longer shelf life. The product manufacturer must have time to determine a workable reformulation, a process that is expected to last up to two years. The products then need to be tested, which is expected to take approximately one to one and a half years. This includes testing both the formulation in separate containers (A- and B-side) and ensuring the long-term stability of the final blown foam once the two parts are mixed to blow the foam. Based on those technical hurdles, we are establishing a reasonable but expeditious change of status date of January 1, 2021 for low-pressure two-component spray foam.

For one-component foam sealants, we believe a reasonable time for reformulation is one year and for testing is one to two years. Testing for this application should be shorter than that required for low-pressure two-

<sup>193</sup> UNEP, 2013. Report of the Technology and Economic Assessment Panel, Volume 2: Decision XXIV/7 Task Force Report, Additional Information on Alternatives to ODS. September, 2013.

<sup>194</sup> FTOC, 2011. Report of the Rigid and Flexible Foams Technical Options Committee, 2010 Assessment. This document is accessible at: [http://ozone.unep.org/Assessment\\_Panels/TEAP/Reports/FTOC/FTOC-2010-Assessment-Report.pdf](http://ozone.unep.org/Assessment_Panels/TEAP/Reports/FTOC/FTOC-2010-Assessment-Report.pdf).

<sup>195</sup> Public and private sector commitments made at the White House Roundtable on October 15, 2015 is available at: <https://www.whitehouse.gov/the-press-office/2015/10/15/fact-sheet-obama-administration-and-private-sector-leaders-announce>.

component spray foam because testing is required only for a final formulation in an aerosol can for one-component foam sealants and because no certification testing would be required for the one-component foam sealant, unlike for high-pressure two-component foam. We are establishing a change of status date of January 1, 2020, after which date, no more one-component foam sealants (cans) may be manufactured using the specified HFC blowing agents; the manufacturer may sell and the end user may continue to use cans that were manufactured prior to January 1, 2020. We limit the applicability of the use prohibition on closed cell foam products (discussed in section VI.C.3), so that it does not apply to closed cell foam products produced through the use of a one-component spray foam manufactured prior to the status change date.

c. How is EPA responding to comments?

EPA received several comments from individuals and organizations with various interests in foam blowing agents and spray foam in particular. Comments were in reference to the descriptions of the applications in the preamble to the proposed rule, the proposed change of status dates, and the narrowed use limits for military and space- and aeronautics uses of certain HFC blowing agents. Most commenters supported the proposed listing decisions, with some opposing or suggesting different change of status dates. Commenters supported the narrowed use exemption for military and space- or aeronautics-related uses. Some commenters suggested a similar narrowed use limit for a polyurethane preformed composites, and suggested either providing a separate listing for this specific use or as including it under the low pressure two-component spray foam application.

Commenters included the American Chemistry Council's Center for the Polyurethanes Industry (CPI) and Spray Foam Coalition (SFC), organizations representing the foam industry; BASF and Dow, two major systems houses; Foam Supplies, Honeywell and Chemours, suppliers of alternative foam blowing agents; Clayton Corporation, a manufacturer of low-pressure two-component spray polyurethane foam kits; Structural Composites and Compsys, manufacturers of a specialized composite foam product for boats and refrigerated trailers; the National Marine Manufacturing Association (NMMA), an organization representing manufacturers of boats; the National Aeronautics and Space Administration (NASA); and

environmental organizations, NRDC and IGSD.

We have grouped comments together and responded to the issues raised by the comments in the sections that follow, or in a separate Response to Comments document which is included in the docket for this rule (EPA-HQ-OAR-2015-0663).

i. Substitutes and End-Uses Proposed

*Comment:* BASF and Dow supported EPA's distinctions between different types of rigid PU spray foam, including low-pressure two-component spray PU foams, high-pressure two-component spray PU foams, and one-component spray foam. They stated that the distinctions are important because the different applications require different chemistries and result in different challenges for formulators. BASF gave a variety of examples of formulation challenges for specific blowing agents and applications.

*Response:* EPA appreciates the support for the distinctions between these three applications.

ii. Change of Status Dates

*Comment:* CPI, SFC, Clayton Corporation, and Dow Chemical Company all stated that EPA should clearly state that the end-use change of status decisions apply to the act of a manufacturer combining the component chemicals (*i.e.*, polyol, blowing agent, catalyst) in their plant to form the polyol resin blends and packaging the blends into a drum, canister, or can that is sold to end users. Clayton Corporation noted that advantages to this approach include greater transparency for enforcement, efficient raw material management by the manufacturers, improved production planning for compliance with the regulatory control, avoidance of "abandoned" inventories in the supply chain, and clarity to the marketplace that resin blends made prior to the change of status dates can still be used without restrictions.

*Response:* EPA proposed that for high pressure two-component spray foam kits and for low pressure two-component spray foam kits, the change of status date would apply to both the manufacture of the kits and the use of those kits by the end user. For one-component foam, EPA proposed that the change of status date would apply to the manufacture of the one-component foam canisters but that end users could still purchase and use one-component foam canisters manufactured before the change of status date to apply the foam sealant. EPA adopted a different approach for one-component foams

because such products are often manufactured well-before their "use-by" dates; they are manufactured in bulk and marketed to consumers at hardware and other stores where they may have a fairly long shelf-life (up to a year); and are typically purchased by the general public and may be used by the purchaser well after the purchase date. Thus, for the one-component canisters it would be much more difficult to plan for and avoid stranded inventory, which would then need to be disposed of, for this end-use. Moreover, because these products are widely used by the general public and may not be used at or near the time of purchase because of their longer shelf-life, it is significantly more difficult to ensure that users are aware of the regulations and also to ensure compliance by the end user. EPA has taken a similar approach for aerosol products that are largely purchased by individual consumers rather than businesses. See, *e.g.*, 79 FR 46139, August 6, 2014; 80 FR 42884, July 20, 2015. Similar issues apply to low pressure two-component foam kits, such as extended shelf lives. In contrast, high pressure two-component spray foam kits are primarily marketed to businesses; high pressure two-component spray foam kits are frequently formulated on-demand, are typically used much closer to their purchase date, and typically do not have a long shelf-life. In this final rule, the change of status date applies to the manufacture of the one-component foam canisters or low pressure two-part spray foam kit, and end users may still purchase and use one-component foam canisters or low pressure two-part spray foam kits manufactured after the change of status dates.

*Comment:* Clayton Corporation suggested making the change of status date January 1, 2021, after which low-pressure two-component spray polyurethane foam kits containing HFCs cannot be manufactured. This commenter stated that this change of status date is necessary for low pressure two-component spray foam manufacturers, based on when the HFO stability research and certification listings would be completed. Dow stated that a January 1, 2021 change of status date for low pressure two-component spray foams is a target that will be difficult to achieve. BASF supported EPA's proposed change of status date for low pressure spray foam. Chemours strongly encouraged EPA to establish a change of status date of January 1, 2023 or later for low pressure two-component spray foams. They claimed such date should not be until multiple low-GWP alternatives with appropriate technical

performance qualities become commercially available and they noted that there were stability issues and uncertainties about the only low-GWP alternative currently commercially available. Honeywell expressed concern that if the change of status date is later than January 1, 2019, EPA's action could slow down the momentum that is already supporting adoption of low-GWP alternatives. NRDC and IGSD supported EPA's decision to establish change of status dates of January 1, 2020, for one-component foam sealants and high pressure two-component spray foam and January 1, 2021, for low pressure two-component spray foam.

*Response:* EPA disagrees with those commenters who claim a status change date later than January 1, 2021, for low pressure two-component spray is necessary. One manufacturer of low pressure two-component spray foam kits has successfully used HFO-1234ze(E) as a blowing agent for at least one of its products, demonstrating that the technical challenges with stability of that HFO are surmountable with sufficient research and development.<sup>196</sup> We also note that there are other commercially available alternatives for this end-use in addition to HFO-1234ze(E); as mentioned in the preamble to the NPRM, the Foams Technical Option Committee has also identified CO<sub>2</sub> and water as options (81 FR 22869), and both are acceptable substitutes. The approximate four-year period before the change of status date will allow sufficient time for manufacturers of low-pressure two-component spray foam kits to complete working through the technical challenges of alternatives, allowing for two years for reformulation and one to one and a half years for testing. Setting a change of status date of January 1, 2019, would not allow sufficient time for identifying, reformulating and testing alternatives for the various product types being manufactured.

*Comment:* Dow Chemical Company and BASF commented that the proposed change of status date for high pressure two-component spray foam of January 1, 2020, is appropriate. Chemours Company stated that the change of status date for high-pressure two-component spray foam systems should be January 1, 2021, to allow for additional supply of alternatives and to allow foam manufacturers sufficient time for conversion to lower GWP alternatives. Honeywell stated the transition for high pressure two-component spray foam can occur a year earlier, by January 1, 2019, asserting that

this was the quickest and easiest application, taking six to 18 months. NRDC and IGSD supported EPA's decision to ban manufacture of rigid polyurethane spray foams between 2020 and 2021.

*Response:* To date, a number of foam supply houses and spray foam applicators have successfully used *trans*-1-chloro-3,3,3-trifluoroprop-1-ene as a blowing agent in high pressure two-component spray foam and they have generally had lead times of one to two years to work through the transition. A change of status date approximately three years from now should provide sufficient lead time to transition other products, including both reformulation of products (one-half to one and a half years) and certification testing (one to one and a half years). Another alternative, HFO-1336mzz(Z), is expected to become commercially available in mid-2017; we expect that a change of status date of January 1, 2019, would not provide enough time for both reformulation of products with alternatives and testing. January 1, 2020, will allow more than two years to develop foam blowing formulations using HFO-1336mzz(Z) and test them, and will allow for additional supply of blowing agent. In addition, there are other acceptable alternatives available for this end-use, e.g., ecomate.

*Comment:* BASF supported the proposed change of status date for one-component spray foam of January 1, 2020.

*Response:* EPA appreciates the support for the proposed change of status date and we are adopting it in the final rule.

*Comment:* NAFEM commented that the change of status date for the blowing agent HFC-134a does not provide manufacturers with sufficient time to integrate new blowing agents into their products. The transition away from HFC-134a requires additional capital investments, dedicated research and development resources, employee training, product testing and certification. Therefore, NAFEM requests that HFC-134a be listed as an acceptable alternative for ten years after the rule is finalized, and under no circumstances should the change of status date be earlier than 2022.

*Response:* NAFEM does not specify the end-use for which it submitted this comment. While the commenter lists actions they claim would be needed in order to transition from HFC-134a to another alternative, they have not provided any detail regarding the time it would take for the various actions. Moreover, as noted in our response to comment above regarding the change of

status date for low pressure two-component spray foam, a manufacturer has successfully transitioned to other alternatives. For one component spray foam, one manufacturer has committed to converting 95 percent of its one component spray foam products from HFCs to HFOs and hydrocarbons by summer 2016 and a second manufacturer has committed to transitioning to use of hydrocarbons as a blowing agent in one to two years from now.<sup>197</sup> HFC-134a is not currently used in high-pressure two-component spray foam systems.

### iii. SNAP Review Criteria

*Comment:* Foam Supplies, Inc., the supplier of the alternative ecomate, supported EPA's proposal to change the listing status of HFC blowing agents in the spray foam applications in the proposed rule from acceptable to unacceptable. The commenter mentioned a number of potential advantages of using ecomate in spray foam, including thermal efficiencies comparable to or better than foam blown with HFCs; ability to use with existing spray foam dispensing equipment; competitive pricing; shipping and handling requirements the same as for HFC foam systems; availability of systems that meet fire resistance and other safety specifications for various industry and building codes; and recent increases in production capacity. Foam Supplies, Inc. described ecomate as an environmentally benign blowing agent (no GWP, no ozone depletion potential and VOC exempt) that is readily available to replace HFC blowing agents in polyurethane spray foam.

*Response:* We appreciate the support for the proposed rule and for the update about the recent increases in manufacturing capacity of ecomate and other features of this substitute that allow it to be available for use in rigid PU spray foam.

*Comment:* NAFEM commented that EPA has failed to recognize important complications with the blowing agents that it now proposes as acceptable alternatives. NAFEM member Unified Brands describes such complications in their comments on the August 2014 proposal for a different rule, specifically mentioning the alternatives pentane, water-based blowing agents and methyl formate:

<sup>197</sup> FACT SHEET: Obama Administration and Private-Sector Leaders Announce Ambitious Commitments and Robust Progress to Address Potent Greenhouse Gases. October 15, 2015. Accessible online at: <https://www.whitehouse.gov/the-press-office/2015/10/15/fact-sheet-obama-administration-and-private-sector-leaders-announce>.

<sup>196</sup> Kline et al., 2015.



Pentane based blowing agents are strong candidates due to their insulation performance, but require all foam fixtures and processes to be redeveloped due to the flammable nature of the refrigerant. Water-based blowing agents are environmentally friendly, but suffer from poorer insulation performance and also are more affected by processing temperature which requires improved control of fixture temperatures. Methyl formate is also environmentally friendly, but has had significant shrinkage issues once units have been placed in the field. This agent requires very specific foaming processes to be developed to ensure proper stability of the foam over time. While viable alternatives do exist, the amount of testing and factory/process upgrades required make it impossible to transition to any replacement by January 1, 2017.

*Response:* We note that these comments submitted by Unified Brands on this action are the same comments it submitted on a different rule, which addressed commercial refrigeration foam. It is difficult to determine how these comments relate to the specific action in this proposal regarding spray foam. As an initial matter, EPA is not taking action listing the mentioned foam blowing alternatives for these three foam blowing applications. We note that

pentane is not currently listed as an acceptable blowing agent for use in two-component spray foams and the concerns raised by the commenter all relate to its use in a refrigerated system and not to spray foam primarily used for building construction. Methyl formate has not been listed as acceptable in the three applications addressed in this rule; the blowing agent ecomate, which contains methyl formate, is listed as acceptable. Water-based blowing agents are listed as acceptable in the three applications addressed in this rule. The concerns raised by the commenter can be taken into consideration by the manufacturer in determining the appropriate alternative to use for any specific foam-blowing kit or canister.

## 2. Revision to Change of Status Date of Certain HFCS and HFC Blends for Space- and Aeronautics-Related Foam Applications

### a. Background

In the July 2015 final rule, EPA established narrowed use limits for certain HFCs and HFC blends for military and space- and aeronautics-related uses in all end-uses except for

rigid PU spray foam, allowing continued use of those blowing agents until January 1, 2022. The specific foam blowing agents and end-uses are codified in appendix U to subpart G of 40 CFR part 82. Based on recent discussions with other government agencies, the most recent U.S. space flight program is still being developed, and it now appears that it may not be possible to qualify all foams needed with alternative foam blowing agents by the January 1, 2022, change of status date established in the July 2015 final rule. The qualification process is necessary to ensure the safety of space vehicles.

### b. What is EPA's final decision?

As proposed, EPA is revising the date upon which certain HFCs and HFC blend foam blowing agents for space- and aeronautics-related applications change status from acceptable, subject to narrowed use limits, to unacceptable. EPA is revising the change of status date to January 1, 2025, for space- and aeronautics-related applications. Military uses will continue to have a January 1, 2022, change of status date.

TABLE 19—REVISIONS TO CHANGE OF STATUS DATES FOR FOAM BLOWING AGENTS

End-use	Substitutes	Listing status*
Rigid Polyurethane: Appliance.	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel TI, and Formacel Z-6.	Acceptable subject to narrowed use limits for military or space- and aeronautics-related applications* and unacceptable for all other uses as of January 1, 2020. Unacceptable for military uses as of January 1, 2022 and unacceptable for space- and aeronautics-related applications as of January 1, 2025.
Rigid Polyurethane: Commercial Refrigeration and Sandwich Panels.	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6.	Acceptable subject to narrowed use limits for military or space- and aeronautics-related applications* and unacceptable for all other uses as of January 1, 2020. Unacceptable for military uses as of January 1, 2022 and unacceptable for space- and aeronautics-related applications as of January 1, 2025.
Rigid Polyurethane: Marine Flotation Foam.	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel TI, and Formacel Z-6.	Acceptable subject to narrowed use limits for military or space- and aeronautics-related applications* and unacceptable for all other uses as of January 1, 2020. Unacceptable for military uses as of January 1, 2022 and unacceptable for space- and aeronautics-related applications as of January 1, 2025.
Rigid Polyurethane: Slabstock and Other.	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel TI, and Formacel Z-6.	Acceptable subject to narrowed use limits for military or space- and aeronautics-related applications* and unacceptable for all other uses as of January 1, 2019. Unacceptable for military uses as of January 1, 2022 and unacceptable for space- and aeronautics-related applications as of January 1, 2025.
Rigid Polyurethane and Polyisocyanurate Laminated Boardstock.	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof.	Acceptable subject to narrowed use limits for military or space- and aeronautics-related applications* and unacceptable for all other uses as of January 1, 2017. Unacceptable for military uses as of January 1, 2022 and unacceptable for space- and aeronautics-related applications as of January 1, 2025.
Flexible Polyurethane .....	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof.	Acceptable subject to narrowed use limits for military or space- and aeronautics-related applications* and unacceptable for all other uses as of January 1, 2017. Unacceptable for military uses as of January 1, 2022 and unacceptable for space- and aeronautics-related applications as of January 1, 2025.

TABLE 19—REVISIONS TO CHANGE OF STATUS DATES FOR FOAM BLOWING AGENTS—Continued

End-use	Substitutes	Listing status *
Integral Skin Polyurethane ...	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6.	Acceptable subject to narrowed use limits for military or space- and aeronautics-related applications* and unacceptable for all other uses as of January 1, 2017. Unacceptable for military uses as of January 1, 2022 and unacceptable for space- and aeronautics-related applications as of January 1, 2025.
Polystyrene: Extruded Sheet	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6.	Acceptable subject to narrowed use limits for military or space- and aeronautics-related applications* and unacceptable for all other uses as of January 1, 2017. Unacceptable for military uses as of January 1, 2022 and unacceptable for space- and aeronautics-related applications as of January 1, 2025.
Polystyrene: Extruded Boardstock and Billet (XPS).	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel B, and Formacel Z-6.	Acceptable subject to narrowed use limits for military or space- and aeronautics-related applications* and unacceptable for all other uses as of January 1, 2021. Unacceptable for military uses as of January 1, 2022 and unacceptable for space- and aeronautics-related applications as of January 1, 2025.
Polyolefin .....	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6.	Acceptable subject to narrowed use limits for military or space- and aeronautics-related applications* and unacceptable for all other uses as of January 1, 2020. Unacceptable for military uses as of January 1, 2022 and unacceptable for space- and aeronautics-related applications as of January 1, 2025.
Phenolic Insulation Board and Bunstock.	HFC-143a, HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof.	Acceptable subject to narrowed use limits for military or space- and aeronautics-related applications* and unacceptable for all other uses as of January 1, 2017. Unacceptable for military uses as of January 1, 2022 and unacceptable for space- and aeronautics-related applications as of January 1, 2025.

\* Under the narrowed use limit, use is limited to military or space- and aeronautics-related applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements.

#### c. How is EPA responding to comment?

EPA received comments from NASA and Boeing, two end-users of foams used in space- and aeronautics uses, addressing the descriptions of the applications in the preamble to the proposed rule, the proposed change of status dates, and the narrowed use limits for military and space- and aeronautics uses of certain HFC blowing agents. Both commenters supported the proposed modification to the change of status date for space and aeronautics.

We have grouped comments together and responded to the issues raised by the comments in the sections that follow, or in a separate Response to Comments document which is included in the docket for this rule (EPA-HQ-OAR-2015-0663).

*Comment:* NASA and Boeing supported EPA's proposed modification of the date on which the status of acceptable subject to narrowed use limits would change to unacceptable. NASA stated that being able to use HFC-blown foams in space- and aeronautics-related applications through 2024 will help ensure crew safety and vehicle reliability while providing additional time to seek and qualify substitute foams in technologically-challenging applications such as space vehicle

thermal protection and cryoinsulation. Boeing stated that suppliers of foams used in military or aerospace hardware may face significant obstacles meeting a host of performance and safety requirements imposed by Boeing, the military services, NASA or FAA and agreed that testing of blowing agents for these niche markets may require more time than for mass-market commercial items, due to customer and regulatory agency approval requirements.

*Response:* EPA appreciates the support.

#### 3. Change of Listing Status for Methylene Chloride in Foams

##### a. Background

Methylene chloride, also known as dichloromethane, has the chemical formula  $\text{CH}_2\text{Cl}_2$  and the CAS Reg. No. 75-09-2. EPA initially listed this substitute as acceptable for flexible PU foam in the initial SNAP rule (79 FR 13044; March 18, 1994). In the April 18, 2016, proposed rule, EPA proposed to change the listing status of methylene chloride from acceptable to unacceptable in flexible PU foam, integral skin PU foam, and polyolefin foam. Flexible PU includes foam in furniture, bedding, chair cushions, and shoe soles. Integral skin PU includes car

steering wheels, dashboards, and shoe soles. Polyolefin includes foam sheets and tubes.

Since EPA's initial listing decision for methylene chloride in flexible PU foam, the Agency has separately issued a residual risk standard under section 112 of the CAA for flexible PU foam production. (*National Emission Standards for Hazardous Air Pollutants Residual Risk and Technology Review for Flexible Polyurethane Foam Production*, (79 FR 48073; August 15, 2014). In that regulation, EPA examined the risk posed by emissions from source regulated under a maximum achievable technology (MACT) standard for flexible polyurethane foam manufacturing. EPA determined that it was necessary to tighten the MACT standard to reduce the level of risk posed by emissions of methylene chloride from the regulated sources. In the residual risk standard, EPA prohibited the use of methylene chloride as an auxiliary blowing agent in flexible PU slabstock foam production operations at major sources. Relying on the risk analysis performed for the MACT risk review, EPA proposed to change the status of methylene chloride from acceptable to unacceptable in flexible PU foam. In addition, because methylene chloride is

the only blowing agent in the integral skin PU foam and polyolefin foam end-uses that is carcinogenic, EPA proposed that it posed greater overall risk to human health and the environment and proposed to change the status of	methylene chloride from acceptable to unacceptable in those end-uses. b. What is EPA's final decision? As provided in Table 20, EPA is changing the status of methylene	chloride from acceptable to unacceptable when used as a blowing agent in the production of flexible PU foam. At this time, we are not finalizing a change of status for integral skin PU foam and polyolefin foam.
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TABLE 20—CHANGE OF STATUS DECISIONS FOR FLEXIBLE PU, INTEGRAL SKIN PU, AND POLYOLEFIN FOAM BLOWING AGENTS

End-use	Substitute	Listing status
Flexible PU .....	Methylene chloride .....	Unacceptable as of 30 days after date of publication of a final rule.
Integral Skin PU .....	Methylene chloride .....	Acceptable.
Polyolefin .....	Methylene chloride .....	Acceptable.

EPA initially proposed to change the listing status of methylene chloride from acceptable to unacceptable in flexible PU foam in order to be consistent with the revisions to the MACT that prohibited the use of HAP in slabstock flexible PU foam production operations at major sources. EPA is relying on the risk analysis performed as part of the risk review for the MACT, and which served as the basis for its decision to revise the MACT, to support its determination in this rule that the toxicity risk from methylene chloride in this end-use is significant and that there are other alternatives that pose an overall lower risk based on our analysis under the SNAP review criteria. See 81 FR at 22876, April 18, 2016. As a policy matter, the Agency considers it inappropriate to continue to list as acceptable a substitute that is prohibited in this end-use under other environmental regulations. At best, continuing to list a prohibited substance as acceptable is misleading to the public as to whether the substitute is available and may be used; it also may lead to a misallocation of resources if there are any users of HFCs in this end-use that are transitioning away by January 1, 2017, as required under appendix U to 40 CFR part 82 subpart G.

For integral skin PU and polyolefin foams, we also proposed to change the listing status of methylene chloride from

acceptable to unacceptable on the basis that methylene chloride poses significantly greater risks than the other alternatives available for this end-use because it is the only acceptable alternative in these end-uses that is a carcinogen and thus poses a significantly greater toxicity risk. Based on public comments urging EPA to do additional risk assessment before reaching such a conclusion for these two end-uses that are not subject to the MACT standard and were not part of the risk review of the MACT standard, we are not finalizing a change of status for methylene chloride in integral skin PU and polyolefin foams in this action.

i. How does methylene chloride compare to other blowing agents for the flexible PU end-use with respect to SNAP criteria?

In the proposed rule, EPA provided information on environmental and health risks of methylene chloride and other available alternatives (81 FR 22875–76; April 18, 2016). In addition, a technical support document<sup>198</sup> that provides the **Federal Register** citations concerning data on the SNAP criteria (e.g., ODP, GWP, VOC, toxicity, flammability) for methylene chloride and for these other, acceptable alternatives may be found in the docket for this rulemaking (EPA–HQ–OAR–2015–0663).

Methylene chloride contains chlorine and thus could have an ODP. We are unaware of a calculated ODP for methylene chloride in the peer-reviewed literature, but it has historically been considered negligibly small.<sup>199</sup> Recent research indicates that emissions of methylene chloride from multiple industrial sources have been increasing and could have a detectable impact on the ozone layer,<sup>200</sup> despite the historical assumption of negligible ODP. For flexible PU, available substitutes include acetone, CO<sub>2</sub>, ecomate™, HFC-152a, HFO-1336mzz(Z), methylal, saturated light HCs (C3–C6),<sup>201</sup> *trans*-1-chloro-3,3,3-trifluoroprop-1-ene, and water. Of the other available alternatives for flexible PU, only *trans*-1-chloro-3,3,3-trifluoroprop-1ene contains chlorine has an ODP, which is 0.00024 to 0.00034. Estimates of its maximum potential impact on the ozone layer indicate a statistically insignificant impact, comparable to that of other substitutes in the same end-use that are considered to be non-ozone-depleting.<sup>202 203</sup>

Methylene chloride has a GWP of approximately nine. As shown in Table 21, other acceptable alternatives have GWPs that are comparable or lower than methylene chloride's GWP of nine except for HFC-152a, which has a GWP of 124.

<sup>198</sup> EPA, 2016b. Tables of Alternatives for End-Uses Considered in the Final Rule, Protection of Stratospheric Ozone: Listing Modifications for Certain Substitutes under the Significant New Alternatives Policy Program. September, 2016.  
<sup>199</sup> INCHEM, 1996. International Programme on Chemical Safety. Environmental Health Criteria 164. Methylene chloride, second edition. World Health Organization, 1996. This document is accessible online at <http://www.inchem.org/documents/ehc/ehc/ehc164.htm>.  
<sup>200</sup> Hossaini, et al., 2015. R. Hossaini, M. P. Chipperfield, S. A. Montzka, A. Rap, S. Dhomse, W.

Feng. Efficiency of short-lived halogens at influencing climate through depletion of stratospheric ozone. *Nature Geoscience*, 2015. This document is accessible online at <http://DOI:10.1038/ngeo2363> and is reported in “New ozone-destroying gases on the rise; not controlled by treaty.” *ScienceDaily*. 16 February 2015. This document is accessible online at <http://www.sciencedaily.com/releases/2015/02/150216130241.htm>.  
<sup>201</sup> EPA has also listed the hydrocarbon blowing agent brand Exxsol blowing agents as acceptable for flexible PU foam. However, the manufacturer of that

blowing agent has withdrawn this agent from the market.  
<sup>202</sup> Wang D., Olsen S., Wuebbles D. 2011. “Preliminary Report: Analyses of tCFCP’s Potential Impact on Atmospheric Ozone.” Department of Atmospheric Sciences. University of Illinois, Urbana, IL. September 26, 2011.  
<sup>203</sup> Patten and Wuebbles, 2010. “Atmospheric Lifetimes and Ozone Depletion Potentials of *trans*-1-chloro-3,3,3-trichloropropylene and *trans*-1,2-dichloroethylene in a three-dimensional model.” *Atmos. Chem. Phys.*, 10, 10867–10874, 2010.

TABLE 21—GWP, ODP, AND VOC STATUS OF METHYLENE CHLORIDE COMPARED TO OTHER FOAM BLOWING AGENTS IN FLEXIBLE PU FOAMS<sup>1</sup>

Blowing agents	GWP	ODP	VOC	Listing status
Methylene Chloride .....	9	unknown .....	No .....	Unacceptable.
Acetone; CO <sub>2</sub> Ecomate; HFC-152a; Methylal; <i>trans</i> -1-chloro-3,3,3-trifluoroprop-1-ene; Water.	0–124	0–0.00034 .....	No .....	Acceptable.
AB Technology; HFO-1336mzz(Z); Methylal; Saturated Light HCs C3–C6 <sup>1</sup> ....	>1–9	0 .....	Yes .....	Acceptable.

<sup>1</sup> The table does not include not-in-kind technologies listed as acceptable for the stated end-uses or additives combined with other acceptable blowing agents.

Methylene chloride does not meet the definition of VOC under CAA regulations (see 40 CFR 51.100(s)) and is excluded from that definition for the purpose of developing SIPs to attain and maintain the NAAQS. With the exception of HCs, HFO-1336mzz(Z), and methylal, the other alternatives also contain compounds that are excluded from the definition of VOC. The manufacturer of HFO-1336mzz(Z) has petitioned EPA to exclude HFO-1336mzz(Z) from the definition of VOC under those regulations. As provided in our decisions listing these substitutes as acceptable, we determined that emissions of these alternatives in this end-use would not pose a significantly greater risk than that posed by other available alternatives.

Methylene chloride exhibits no flash point under standard testing conditions and thus is considered nonflammable, although it does exhibit lower and upper flammability limits of 13 percent and 23 percent, respectively. Of the various alternatives, ecomate, HFC-152a, HCs, and methylal are flammable, and the others are nonflammable. The flammability hazards of the flammable compounds in this end-use can be adequately addressed in the process of meeting OSHA regulations and fire codes.

Health effects of concern with methylene chloride include cancer, liver, and kidney effects (longer-term exposure) and neurotoxic effects (acute exposure), in addition to irritation to the skin, eyes, and respiratory tract. Other alternatives for this end-use have potential health effects such as impacts on body weight, mononuclear infiltration of heart tissue, neurotoxic effects, and irritation to the skin, eyes, and respiratory tract; no other alternatives in this end-use have evidence of cancer as a health effect. Toxicity is not a significant concern in the workplace for methylene chloride or for the other available alternatives because they may be used for blowing flexible PU foam consistent with required or recommended workplace exposure limits. In the initial SNAP rulemaking, EPA listed methylene

chloride as acceptable in this end-use, citing the presence of the OSHA regulations as sufficient to address workplace risk.

Information regarding general population risk indicated the highest cancer risk for methylene chloride of all the alternatives for this end-use and provided no summary information on non-cancer risks for methylene chloride. Since that time, as part of the CAA section 112 HAP program, EPA performed a risk analysis for the flexible polyurethane foam production source category to determine the risk from emissions of hazardous air pollutants, primarily methylene chloride. Based on that risk analysis, EPA determined that although methylene chloride emissions did not pose an unacceptable health risk within the meaning of section 112(f) for the general population, there was a both a cancer and a non-cancer health risk that could be reduced at low cost. Specifically, EPA determined to ban the use of HAP blowing agents containing methylene chloride in order to protect public health with an ample margin of safety. 79 FR 48073; August 15, 2014. None of the other alternative blowing agents are regulated as hazardous air pollutants under the CAA. Based on the analysis and the conclusions from the section 112 HAP program analysis and in light of the toxicity information for other available substitutes, EPA has determined that methylene chloride poses significantly greater risk than other available substitutes in this end use. We note that we are not aware of any use of this blowing agent in this end-use and no commenters indicated that it was currently being used in this end-use.

#### ii. When will the status change?

The status of methylene chloride in flexible PU foam is changing to unacceptable as of 30 days after this final rule is published in the **Federal Register**, January 3, 2017. This blowing agent has already been prohibited in flexible PU foam manufacturing operations for major sources by EPA's *National Emission Standards for Hazardous Air Pollutants (NESHAP)*

*Residual Risk and Technology Review for Flexible Polyurethane Foam Production* (79 FR 48073; August 15, 2014). Moreover, we received no comments indicating current use of methylene chloride in this end-use. Thus, we expect that the industry has already transitioned away from this substitute in that end-use.

#### c. How is EPA responding to comments?

EPA received comments from the Halogenated Solvents Industry Alliance (HSIA), a trade group representing the chlorinated solvents industry. Comments were in reference to EPA's authority generally for the changing the status of a substitute (responded to in section VII.B in this document) and the significance of the risk of methylene chloride. HSIA opposed EPA's proposed changes of status for methylene chloride in three foam end-uses.

We have grouped comments together and responded to the issues raised by the comments in the sections that follow, or in a separate Response to Comments document which is included in the docket for this rule (EPA-HQ-OAR-2015-0663).

#### i. SNAP Review Criteria

*Comment:* HSIA commented that changing the listing status of methylene chloride on the basis that it is an animal carcinogen is incompatible with the SNAP program principles and with all previous EPA regulation of toxic air contaminants. The commenter stated that under all relevant federal programs, before an agency can regulate on the basis of carcinogenicity, it must make a finding that the substance poses a significant risk that can be eliminated by the restriction.

*Response:* We disagree that this action is inconsistent with the SNAP program principles. Under section 612 of the Act, EPA is required to list a substitute as unacceptable where there are other "available" alternatives that pose less overall "risk to human health and the environment." Under sections 612 of the Act, it is not necessary to eliminate or have zero risk in order to regulate; rather risk is assessed based on

comparison to other alternatives and an alternative must be listed as unacceptable if there are other alternatives that “reduce the overall risk.” The SNAP principles reflect this statutory mandate. However, by prohibiting the use of methylene chloride in flexible polyurethane under this rule, we are eliminating the identified toxicity risk posed by that substitute in this end-use where other alternatives do not pose such a risk and where other risks are similar for both methylene chloride and other available substitutes. As to the commenter’s statement that Concerning the commenter’s statement referring to methylene chloride as an animal carcinogen, we note that the Agency considers methylene chloride “likely to be carcinogenic in humans,” based predominantly on evidence of carcinogenicity at two sites in two-year bioassays on mice, as per U.S. EPA (2005a) *Guidelines for Carcinogen Risk Assessment*.<sup>204</sup> To the extent the commenter raises issues with EPA’s authority under other CAA programs, those programs are not at issue in this rulemaking.

*Comment:* HSIA stated that in 1994, EPA concluded after conducting risk screens that methylene chloride emissions from foam blowing in compliance with existing regulatory standards were within the range of acceptable carcinogenic risk. The instant proposal cites no piece of hazard, exposure, or risk information that has come to light over the past 22 years to change that assessment.

*Response:* We disagree that there has been no new assessment of the risk from methylene chloride for this end-use in the past 22 years. As noted, EPA recently performed a risk review for the flexible polyurethane foam production source category in which EPA evaluated the risk that remained from emissions from sources in this source category after promulgation of the MACT standard. Based on that analysis and to address risk, EPA concluded that it should tighten the MACT standard by banning the use of methylene chloride and six other HAP foam blowing agents. That same risk analysis supports EPA’s action here.

*Comment:* HSIA commented that EPA failed to account for other factors that may present a greater risk to human health besides carcinogenicity, such as

flammability, contribution to smog formation, and GWP.

*Response:* We disagree that we did not evaluate and consider the other SNAP review criteria in making our decision. Those criteria were discussed in detail at 81 FR at 22875–8– in the proposed rule and are also discussed above. As noted above, EPA determined that the risk based on the other criteria was not significantly different.

*Comment:* HSIA commented that, while Table 21 characterizes the ODP of methylene chloride as unknown, EPA has on numerous occasions determined that methylene chloride is “non-ozone-depleting.”

*Response:* As discussed in the preamble to the proposal, more recent data indicate that methylene chloride may have a measurable impact on the stratosphere. In addition, more recent studies using 3-dimensional atmospheric modeling have indicated that another halogenated HC, *trans*-1,2-dichloroethylene, which has two chlorine atoms like methylene chloride, has a small but measurable ODP of approximately 0.00024 and an atmospheric lifetime of 12.7 days.<sup>205</sup> EPA has determined that the difference in ODP for the various alternatives in this end-use, including methylene chloride, is not significant and does not have a bearing on the change of status decision.

*Comment:* HSIA commented that EPA’s proposal ignored the distinction between hazard and risk, and thereby overturns several decades of EPA and other federal policy regarding the regulation of potential carcinogens and other toxic materials.

*Response:* For flexible PU foam, we are removing the acceptable listing for a substitute in order to be consistent with other federal regulations that now prohibit use of this substitute in this end-use based upon a risk assessment performed for the MACT standard. That risk assessment did consider risk and not just hazard (*i.e.*, the probability of an adverse health effect, and not just the potential adverse health effects that could occur, depending on exposure). We agree with the commenter that the proposal did not quantitatively analyze carcinogenic risk for the integral skin PU and polyolefin end-uses. Therefore, we are not finalizing our proposal to change the listing status of methylene chloride from acceptable to unacceptable in integral skin PU and polyolefin foams.

*Comment:* HSIA commented that hazardous air pollutants under CAA section 112, such as methylene chloride, are not addressed by the Montreal Protocol or Title VI, and that EPA lacks statutory authority to regulate toxic air contaminants under CAA section 612.

*Response:* EPA disagrees that the Agency lacks authority to regulate hazardous air pollutants under section 612 and the commenter fails to cite to any provision that would prohibit such regulation. Under section 612, EPA is required to review alternatives for ozone depleting substitutes and to list as unacceptable those that pose greater risk to human health or the environment than other available substitutes. There is nothing in section 612 that states or even suggests that EPA is to review only those substitutes that are not hazardous air pollutants and any definition of risk would include the types of risks posed by hazardous air pollutants, such as cancer risk, neurotoxicity, and reproductive toxicity. We note that EPA first listed methylene chloride as a substitute for ODS under section 612 in 1994 and the issue of EPA’s authority to do so was not raised at that time, nor has it been raised in the intervening years.

## ii. Relationship to Other Rules

*Comment:* HSIA commented that the proposed change of status for methylene chloride is based in part on a NESHAP finding, which is based entirely on the CAA § 112(f)(2) requirement that EPA adopt “residual risk” standards that “provide an ample margin of safety to protect public health in accordance with [§ 112]. HSIA argued that the SNAP rule is not based on, nor should be based on, an “ample margin of safety.” This commenter also stated that the only relevant part of the NESHAP finding to the SNAP decision is that the residual risks to public health of seven environmental hazardous air pollutants, including methylene chloride, was found to be acceptable.

*Response:* EPA recognizes that the residual risk review of the MACT standard found the residual risks to public health of methylene and six other hazardous air pollutants from flexible polyurethane production facilities to be “acceptable.” Under section 112 of the CAA, where a risk is unacceptable, EPA is required to regulate emissions without consideration of cost. A determination that the risk is acceptable, however, is not a determination that there is no risk. EPA is also required to then determine whether the existing standards “provide an ample margin of safety to protect public health” or to protect against “an

<sup>204</sup> Dichloromethane; CASRN 75–09–2 Integrated Risk Assessment System Chemical Summary Document. U.S. EPA, National Center for Environmental Assessment. Accessible online at [https://cfpub.epa.gov/ncea/iris/iris\\_documents/documents/subst/0070\\_summary.pdf](https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0070_summary.pdf).

<sup>205</sup> Patten and Wuebbles, 2010. “Atmospheric Lifetimes and Ozone Depletion Potentials of *trans*-1-chloro-3,3,3-trichloropropylene and *trans*-1,2-dichloroethylene in a three-dimensional model.” *Atmos. Chem. Phys.*, 10, 10867–10874, 2010.

adverse environmental effect.” EPA determined that it was necessary to ban the use of methylene chloride based foam blowing agents to protect public health with an ample margin of safety. For purposes of the SNAP review of toxicity risks, EPA relied on that risk analysis, which demonstrated a risk from use of methylene chloride based foam blowing agents. As explained more fully above, EPA determined that the overall risk posed by methylene chloride, based on the risk from toxicity, was more significant than the risk posed by other available alternatives for this end use.

#### 4. Closed Cell Foam Products

##### a. Background

##### i. What are the affected end-uses?

The foam sector includes both closed cell and open cell foams. Closed cell foams are specifically designed to retain the foam blowing agent in the cells; in insulation foam products, the foam blowing agent continues to perform a function in providing thermal insulation, once the foam has already been blown. With open cell foams, the foam blowing agent completes its function once the foam is blown; almost all of the foam blowing agent escapes from the open cells prior to import, and any vestigial amounts remaining do not perform a function.

Foam blowing end-uses that contain closed-cell foams include rigid PU spray foam (all three applications described in section VI.C.1); rigid PU commercial refrigeration and sandwich panels; rigid PU marine flotation foam; rigid PU appliance foam; rigid PU slabstock and other; rigid PU and polyisocyanurate laminated boardstock; polystyrene: extruded boardstock and billet; polystyrene: extruded sheet; polyolefin; and phenolic insulation board and bunstock. Foam blowing end-uses containing open cell foams include flexible PU and integral skin PU. Open cell phenolic, and some other open cell foams also exist within the SNAP foam blowing end-uses that include closed cell foams. Integral skin foam may include a rigid surface with an interior flexible core.

##### ii. How do other stratospheric ozone protection requirements apply to foam products?

Several provisions of CAA Title VI and EPA’s implementing regulations are relevant to HCFC foam products. Under regulations implementing CAA section 611, EPA requires labeling of products that contain an ODS and those that are manufactured with an ODS. EPA determined that open cell foams blown

with an ODS must be labeled as a product manufactured with an ODS. (58 FR 8136, 8143–8150, February 11, 1993; 79 FR 64253, 64258–64259, October 28, 2014). In contrast, closed cell foam products blown with an ODS must be labeled as a product *containing* an ODS for labeling purposes. (58 FR 8136, 8150–8151, February 11, 1993; 79 FR 64253, 64258–64259, October 28, 2014). As of January 1, 2015, any product containing a closed cell foam blown with an HCFC must be labeled as a product containing an ozone-depleting substance under the regulations at 40 CFR 82.106 implementing CAA section 611.

Section 610 restricts sale and distribution and offers of sale and distribution of certain products containing or manufactured with CFCs and HCFCs.<sup>206</sup> Section 610(d)(3)(A) explicitly provides an exception for foam insulation products containing HCFCs. EPA has implemented this restriction and the exception for HCFC foam insulation products through its Nonessential Products Ban regulations codified at 40 CFR part 82 subpart C.

CAA section 605(a) prohibits the introduction into interstate commerce or use of any class II substance effective January 1, 2015, unless such substance—

(1) has been used, recovered, and recycled;

(2) is used and entirely consumed (except for trace quantities) in the production of other chemicals;

(3) is used as a refrigerant in appliances manufactured prior to January 1, 2020; or

(4) is listed as acceptable for use as a fire suppression agent for nonresidential applications in accordance with section 612(c).

The section 605(a) implementing regulations codified at 40 CFR part 82, subpart A restrict the use of virgin HCFCs to air conditioning, refrigeration, and fire suppression applications, with minor exceptions. Thus, while the Nonessential Products Ban does not apply to HCFC insulating foams, section 605(a) and its implementing regulations prohibit the use of HCFCs for blowing foam in the United States. The combined effect of the Nonessential Products Ban and the section 605(a) implementing regulations is that HCFC foam insulation products may be imported, sold, and distributed in the United States but cannot be manufactured in the United States.

In the preamble to a July 11, 2000, SNAP proposed rule, EPA reviewed its

<sup>206</sup> Section 610 does not address products containing or manufactured with substitutes.

authority under CAA section 610 and noted that HCFC insulating foams were exempt from regulation under that section of the statute. EPA stated that “Title VI of the Act thus does not provide EPA with the authority to prevent imports of products containing those foams” (65 FR 42653, 42656). EPA did not, however, base this statement on a full examination of the various authorities under Title VI. In taking final action on that proposal, EPA noted that while under section 610 it could not ban the *sale* of HCFC foam insulation products, section 610 “does not address EPA’s ability to regulate the transition from use of ODS to alternatives in the manufacturing of products such as foam.” EPA further noted: “Section 612 can restrict the use of a substitute in a product regardless of whether or not that product is considered nonessential under Section 610” (69 FR 58275, September 30, 2004).

##### b. What is EPA’s final decision?

As proposed, EPA is applying the unacceptability determinations in this action for foam blowing agents to closed cell foam products and products containing closed cell foam. In addition, EPA is applying all listings for foam blowing agents codified in the appendices to 40 CFR part 82 subpart G to such products. Use of closed cell foam products (e.g., manufactured rigid PU insulation or XPS boardstock) or products that contain closed cell foam (e.g., household and commercial appliances, boats) manufactured with an unacceptable foam blowing agent on or after the specified date is subject to the use prohibitions under SNAP. This includes, but is not limited to, incorporating a closed cell foam blown with an unacceptable blowing agent into a subsequent product and installing a closed cell foam product or product containing closed cell foam. Foam products or products containing foam manufactured prior to the specified date are not subject to the use prohibition whether manufactured in the United States or abroad.

##### i. How is EPA interpreting “use” of foam blowing agents in closed cells foams?

Section 612 requires EPA to promulgate regulations prohibiting the replacement of ODS with certain substitutes and to publish lists of the substitutes prohibited for specific uses as well as those found acceptable for those uses. EPA’s implementing regulations at 40 CFR 82.174 state, in part: “No person may use a substitute after the effective date of any

rulemaking adding such substitute to the list of unacceptable substitutes” (40 CFR 82.174(d)). The SNAP regulations define “use” of a substitute as including, but not being limited to, “use in a manufacturing process or product, in consumption by the end-user, or in intermediate uses, such as formulation or packaging for other subsequent uses.” (§ 82.172)

With respect to other sectors, EPA has treated use of a product manufactured with or containing a substance as constituting use of the substance where the product holds some amount of the substance, the substance continues to perform its intended function, and the substance is likely to be emitted in the United States either during use of the product or at the time of its disposal. For example, an aerosol can is manufactured to contain a substance as a propellant, and then that propellant leaks, is released by the end user during use of the aerosol can’s contents, or is emitted at the time of disposal if it has not already been used up. In the July 2015 rule, in changing the status of certain substances with respect to aerosols, EPA prohibited use of aerosol products containing those substances, while stating that products manufactured prior to the change of status date could still be used after that date (80 FR 42883). By analogy, we are now interpreting “use” of a foam blowing agent to include use of a closed cell foam product manufactured after the specified date. For such products, the foam blowing agent remains in the cells and continues to be used for the purpose of insulation during the lifetime of the product. Furthermore, emissions of the foam blowing agent occur at the time of disposal of the closed cell foam product. Thus, emissions from a closed cell product used in the United States can be expected to occur in the United States regardless of whether the product was manufactured domestically or abroad. This action ensures that products manufactured abroad and subsequently imported will be treated the same as products manufactured domestically. However, as noted above in section VI.C.1, the use prohibition does not apply to use of rigid PU one-component foam sealant cans or low pressure two-component spray foam kits that are manufactured prior to the change of status dates for those applications.

EPA is not treating use of an open cell foam product as constituting use of the foam blowing agent. The foam blowing agent in an open cell foam product does not continue to perform its intended function during the lifetime of the product. Except for insignificant

amounts remaining in the cells, emissions of the foam blowing agent occur at the time and place of manufacture. Therefore, we are differentiating between closed cell and open cell foam products for this purpose. This is consistent with the different treatment of closed and open cell foam products under the section 611 labeling regulations.

ii. When will use of closed cell foam products with unacceptable blowing agents be prohibited?

For changes of status finalized in this rule (section VI.C.1 and VI.C.2), the unacceptability determination applies to use of closed cell foam products and products that contain closed cell foam where the products are manufactured on or after the change of status date. As noted in the July 2015 rule with respect to MVAC and stand-alone refrigeration equipment (80 FR 42884), it is reasonable to allow use of products manufactured before the change of status date to avoid market disruption, creation of stranded inventory, and perverse incentives for releasing these substances to the environment. This applies also to products that are manufactured outside the United States before the change of status date and imported afterwards. Buyers should obtain documentation from importers that the imported products were manufactured or in inventory before the change of status date.

For alternatives that have already been listed as unacceptable with a change of status date of January 1, 2017,<sup>207</sup> or earlier—namely, HCFC blowing agents listed as unacceptable in appendices K, M, Q, and U to 40 CFR part 82 subpart G, and HFC blowing agents listed as unacceptable for rigid PU and PIR boardstock, extruded polystyrene sheet, and phenolic foams in appendix U to 40 CFR part 82 subpart G—the unacceptability determination applies to use of closed cell foam products and products that contain closed cell foam manufactured on or after the date one year after the date of publication of a final rule. This timing is intended to allow importers and international manufacturers of such products time to adjust their manufacture and import plans. For substitutes listed as unacceptable with a change of status date after January 1, 2017—namely, HFC and HFC blend blowing agents listed as unacceptable in rigid PU slabstock and other; rigid PU

<sup>207</sup> There will also be a change of status on January 1, 2017 for flexible PU and integral skin PU, but these are open cell foams and are not part of this rule for closed cell foams.

appliance foam; rigid PU commercial refrigeration and sandwich panels; rigid PU marine flotation foam; rigid PU spray foam; polyolefin; and polystyrene extruded boardstock and billet—the unacceptability determination applies both to use of an unacceptable foam blowing agent and to use of closed cell foam products and products that contain closed cell foam manufactured with an unacceptable foam blowing agent on or after the change of status date for each end-use (January 1 of 2019, 2020, or 2021).

c. How is EPA responding to comments?

EPA received several comments from individuals and organizations with various interests in foam blowing agents. Comments were in reference to EPA’s proposed application of unacceptability determinations of foam blowing agents to closed cell foam products and products containing closed cell foam manufactured with unacceptable blowing agents, to EPA’s authority for the proposed new interpretation, to the proposed change of status dates, and to questions about a specific application. Some commenters supported EPA’s proposed application of unacceptability to products, while others opposed that interpretation. Two commenters suggested different change of status dates from those EPA proposed, one suggesting an earlier date and the other suggesting a later date.

Commenters included CPI, an organization commenting on behalf of the polyurethanes industry; Honeywell and Chemours, suppliers of alternative foam blowing agents; Whirlpool, a manufacturer of appliances using foam insulation; Structural Composites and Comsys, manufacturers of a specialized composite foam product for boats and refrigerated trailers; NMMA, an organization representing manufacturers of boats; and environmental organizations, NRDC and IGSD.

We have grouped comments together and responded to the issues raised by the comments in the sections that follow, or in a separate Response to Comments document which is included in the docket for this rule (EPA-HQ-OAR-2015-0663).

i. Substitutes and End-Uses Proposed

*Comment:* Honeywell supported EPA’s proposal to allow the continued use of closed cell foam and products containing closed cell foam, where such foams were manufactured prior to the date on which the substitutes with which they were blown become unacceptable. The commenter stated



that this is particularly important for refrigerated containers and trailers that travel across international borders and are used in service for five to ten years, and then sold at the end of their life for use as storage, living space, or other applications. Honeywell commented that EPA should continue to allow a refrigerated trailer that was manufactured with an unacceptable foam blowing agent before the unacceptability date to be resold at the end of its life, which would come well after the change of status date.

*Response:* EPA agrees that allowing the use of closed cell foam products and products containing closed cell foam that were manufactured prior to the change of status date results in allowing refrigerated containers and trailers to be used for their useful life in refrigerated transport and then for reuse in other applications.

#### ii. Change of Status Date

*Comment:* Honeywell supported EPA's proposal to provide a transition period for closed cell foams, and products that contain such foams that were blown with a substance that is already unacceptable, such as an HCFC. The commenter stated, however, that the proposed date of one year after publication of the rule is longer than necessary and suggested the compliance date should instead be within 180 days after publication of the final rule. Honeywell suggested that a 180-day period would provide a reasonable amount of time for transition to acceptable solutions, since near "drop in" low-GWP alternatives are already commercial for closed-cell foam applications.

*Response:* EPA disagrees with the commenter and is finalizing the change of status date of one year after publication of a final rule, as proposed. EPA disagrees with Honeywell that a 180-day period is sufficient to allow importers and international manufacturers of such products time to adjust their manufacture and import plans. This would be giving less than half the time that EPA has given to any other sector or end-use for a change of status where a substitute is currently being used. EPA has heard from systems houses and end users that alternative foam blowing agents, including olefinic foam blowing agents, require significant time for development and are not "drop in" replacements (e.g., 80 FR 42925–6, 42928, July 20, 2015). At least one recently listed alternative foam blowing agent, HFO-1336mzz(Z), is not expected to be commercially available until after that timeframe. Further, the commenter has not supported their statement that

180 days should be sufficient. Thus, we do not see that it is appropriate to change the proposed change of status date.

*Comment:* Whirlpool suggested that EPA should grant the same lead-in period for use of imported products containing unacceptable HFC blowing agents as it granted for use of HFCs in domestic product manufacture. This commenter stated that manufacturers had just over 53 months from publication of the July 2015 rule to complete a transition of their domestic manufacturing lines and products manufactured on these lines before the January 1, 2020 change of status date (for appliance foam). Whirlpool requested that the change of status date be set to July 1, 2021, in order to provide an equitable transition period, assuming that this rule would be finalized in late 2016.

*Response:* EPA disagrees with the commenter and is finalizing the change of status dates as proposed. We disagree with Whirlpool that it is necessary or equitable for manufacturers of products outside the United States containing closed cell foams, such as appliances, to have until July, 2021, to continue using unacceptable HFC blowing agents for the U.S. market. Their domestic counterparts, in comparison, must stop using unacceptable HFC blowing agents as of January 1, 2020. EPA first signaled its interest in regulating use of foam products in an August 6, 2014, proposed rule (79 FR 46125, 46154) and did not withdraw that proposal. Manufacturers with both domestic and foreign manufacturing facilities have gained experience and knowledge with use of new blowing agents, and thus we expect that future transitions will be quicker. In addition, sufficient supplies of alternatives are anticipated to be on the market beginning in 2017 to allow product development, which was an important consideration when we set the change of status date for a number of rigid PU foam end-uses, including appliance foam, in the July 2015 rule (80 FR 42925–26). Thus, we consider that the proposed January 1, 2020, change of status date for appliances containing appliance foam blown with unacceptable alternatives still provides adequate time. For substitutes listed as unacceptable with a change of status date after January 1, 2017, the unacceptability determination applies to use of closed cell foam products and products that contain closed cell foam manufactured with an unacceptable foam blowing agent on or after the change of status date for each end-use (January 1 of 2019, 2020, or 2021).

#### iii. SNAP Authority, Interpretation, and Impacts

*Comment:* Chemours, Honeywell, NMMA, Comsys and Structural Composites, NRDC, and IGSD all supported EPA's proposal to prohibit the import of closed cell foams, and appliances containing them, that have been produced with and contain blowing agents whose status has been changed to unacceptable. They considered this to be fairer than the current situation, in which products containing foam blown with unacceptable foam blowing agents may be imported and sold in the United States while domestic manufacturers are prohibited from making and selling an identical product. Comsys and Structural Composites and Honeywell noted that EPA's proposal would remove the current incentive for U.S.-based manufacturers to move production outside of the United States in order to use less expensive substances with higher environmental impacts in nations that do not have such stringent requirements, thereby protecting the environment, U.S. jobs, and U.S.-based small businesses.

In contrast, CPI opposed EPA's proposal and urged EPA to reconsider or redefine its interpretation of use. This commenter raised concerns about potential unintended consequences and inconsistency in the treatment of foams produced domestically and overseas. CPI believed this interpretation leads to the possibility of prohibiting the import of products manufactured prior to the change of status date and thus treating imported products inconsistently with domestically-produced products manufactured prior to the change of status date. CPI believed that this inconsistency suggests that EPA's proposed action is beyond its authority under the CAA or contrary to the intent of the statute. CPI stated that they were unaware of any precedent or authority that would allow EPA to interpret "use" differently based on the location of a manufacturer's facility, and thus opposed EPA's reinterpretation of use for foam products. In addition, CPI elsewhere had suggested that EPA should consider the change of status date to be the date a manufacturer packages polyol resin blends, including the blowing agent, into a drum, canister, or can, and believed EPA's interpretation of "use" for products was inconsistent with that suggestion.

*Response:* EPA agrees with the first set of commenters that our proposed interpretation of "use" provides for more equitable treatment of domestic and foreign manufacturing. We also

find, as discussed by the commenters, that this interpretation of “use” will have environmental and other benefits. EPA clarifies that the use prohibition would not apply to closed cell foam products, or products containing such foams, manufactured with unacceptable blowing agents prior to the change of status date, whether the product was manufactured in the United States or abroad. Thus, EPA would be interpreting use the same way, irrespective of the location of the manufacturer’s facility. Concerning CPI’s suggestion that use should be based upon the date of manufacturing and packaging a polyol resin, see section IV.C.1.c.ii above. We note that the definition of use in the initial SNAP rule at 40 CFR 82.172 refers to use as “including but not limited to use in a manufacturing process or product, in consumption by the end-user, or in intermediate uses, such as formulation or packaging for other subsequent uses.”

#### D. Fire Suppression and Explosion Protection

##### 1. Acceptable Listing of 2-BTP for Total Flooding and Streaming

###### a. Background

The fire suppression and explosion protection end-uses addressed in this action are total flooding and streaming. Total flooding systems, which historically employed halon 1301 as a fire suppression agent, are used in both

normally occupied and unoccupied areas. In the United States, approximately 90 percent of installed total flooding systems protect anticipated hazards from ordinary combustibles (*i.e.*, Class A fires), while the remaining ten percent protect against applications involving flammable liquids and gases (*i.e.*, Class B fires).<sup>208</sup> It is also estimated that approximately 75 percent of total flooding systems protect electronics (*e.g.*, computers, telecommunications, process control areas) while the remaining 25 percent protect other applications, primarily in civil aviation (*e.g.*, engine nacelles/APUs, cargo compartments, lavatory trash receptacles), military weapons systems (*e.g.*, combat vehicles, machinery spaces on ships, aircraft engines and tanks), oil/gas and manufacturing industries (*e.g.*, gas/oil pumping, compressor stations), and maritime (*e.g.*, machinery space, cargo pump rooms). Streaming applications, which have historically used halon 1211 as an extinguishing agent, include portable fire extinguishers designed to protect against specific hazards.

###### b. What is EPA’s final decision?

EPA is listing 2-BTP as acceptable, subject to use conditions, for the total flooding end-use. The use condition requires that 2-BTP be used only in engine nacelles and APUs on aircraft in total flooding fire suppression systems.

In addition, EPA is listing 2-BTP as acceptable, subject to use conditions for the streaming end use. The use condition requires that 2-BTP be used as a streaming agent only for handheld extinguishers in aircraft.

i. How does 2-BTP compare to other fire suppressants for these end-uses with respect to SNAP criteria?

###### (a) Total Flooding

EPA has listed a number of alternatives as acceptable for the total flooding end-use. In the proposed rule (81 FR at 22824; April 18, 2016) EPA provided information on the environmental and health properties of 2-BTP and the various substitutes in this end-use. Additionally, EPA’s risk assessments for 2-BTP and a technical support document that provides the **Federal Register** citations concerning data on the SNAP criteria (*e.g.*, ODP, GWP, VOC, toxicity, flammability) for acceptable alternatives in the relevant end-uses are available in the docket for this rulemaking (EPA–HQ–OAR–2015–0663). In addition to halon 1301, the current market for total flooding systems also includes HCFCs, HFCs, inert gases, and a variety of NIK extinguishing agents (*e.g.*, powdered aerosols, foams, water).<sup>209</sup> 2-BTP has an ODP of 0.0028, and the ODPs of other total flooding alternatives are zero to 0.048. 2-BTP has a GWP of 0.23–0.26. As shown in Table 22, the GWPs of other total flooding alternatives range from zero to 3,500.

TABLE 22—GWP, ODP, AND VOC STATUS OF 2-BTP COMPARED TO OTHER TOTAL FLOODING AND STREAMING AGENTS

Fire suppressants	GWP	ODP	VOC	Listing status
2-BTP .....	<sup>1</sup> 0.23–0.26	0.0028	Yes .....	Acceptable, subject to use conditions.
<b>Total flooding</b>				
FK-5-1-12mmy2 (C6 Perfluoroketone) .....	<1	0	Yes .....	Acceptable.
CF <sub>3</sub> I .....	0.4	0.008	Yes .....	Acceptable.
CO <sub>2</sub> .....	1	0	No .....	Acceptable.
HCFC Blend A <sup>2</sup> .....	1,546	0.048	No .....	Acceptable.
HFC-227ea .....	3,220	0	No .....	Acceptable.
HFC-125 .....	3,500	0	No .....	Acceptable.
Water, Inert gases, Powdered aerosols A–E .....	0	0	No .....	Acceptable.
<b>Streaming</b>				
HCFC Blend B <sup>3</sup> .....	77	0.00098	No .....	Acceptable.
HFC-227ea .....	3,220	0	No .....	Acceptable.
HFC-236fa .....	9,810	0	No .....	Acceptable.
FK-5-1-12mmy2 (C6 Perfluoroketone) .....	<1	0	Yes .....	Acceptable.
CF <sub>3</sub> I .....	0.4	0.008	Yes .....	Acceptable.
CO <sub>2</sub> .....	1	0	No .....	Acceptable.
Water .....	0	0	No .....	Acceptable.

<sup>208</sup> Wickham, 2002. Status of Industry Efforts to Replace Halon Fire Extinguishing Agents. March, 2002.

<sup>209</sup> ICF, 2016h. Market Characterization for Fire Suppression, Comfort Cooling, Cold Storage, and Household Refrigeration Industries in the United States. Prepared for the U.S. Environmental Protection Agency. October 2015.

<sup>210</sup> Patten et al., 2012. Correction to “OH reaction rate constant, IR absorption spectrum, ozone depletion potentials and global warming potentials of 2-bromo-3,3,3-trifluoropropene,” J. Geophys. Res., 117, D22301, doi:10.1029/2012JD019051.

TABLE 22—GWP, ODP, AND VOC STATUS OF 2-BTP COMPARED TO OTHER TOTAL FLOODING AND STREAMING AGENTS—Continued

Fire suppressants	GWP	ODP	VOC	Listing status
H Galden HFPEs .....	2,790–6,230	0	No .....	Acceptable.

<sup>1</sup> GWP range represents GWPs for 30°N. to 60°N. and 60°S. to 60°N. emissions scenarios for a 100-year time horizon. A tropospheric well-mixed approximation of the GWP is equal to 0.59.<sup>210</sup>

<sup>2</sup> HCFC Blend A is a blend consisting of HCFC-123 (4.75 percent), HCFC-22 (82 percent), HCFC-124 (9.5 percent), and D-limonene (3.75 percent).

<sup>3</sup> HCFC Blend B is a proprietary blend consisting largely of HCFC-123.

In addition to ODP and GWP, EPA evaluated potential impacts of emissions of 2-BTP on local air quality. 2-BTP meets the definition of VOC under CAA regulations (see 40 CFR 51.100(s)) and is not excluded from that definition for the purpose of SIPs to attain and maintain the NAAQS. EPA compared the annual VOC emissions from the use of 2-BTP as a total flooding agent to other anthropogenic sources of VOC emissions considering both worst-case and more realistic scenarios. Under either scenario, emissions are a small fraction of a percentage ( $5.6 \times 10^{-5}$  percent to  $2.1 \times 10^{-3}$  percent) of all anthropogenic VOC emissions in the United States in 2014.<sup>211 212</sup> Given this emission level, we determined it was not necessary to perform an assessment of the effect of these emissions on ambient ozone levels; any effect would be insignificant. This is particularly true since use will be limited to aircraft and thus most releases of 2-BTP are expected to be at altitude, not in the lower troposphere. Other acceptable fire suppression agents currently in use in this end-use are also VOC (e.g., C6-perfluoroketone).

EPA evaluated the risks associated with potential exposures to 2-BTP during production operations and the filling of fire extinguishers as well as in the case of an inadvertent discharge of the system during maintenance activities on the fire extinguishing system. EPA's review of the human health impacts of 2-BTP, including the summary of available toxicity studies, is in the docket for this rulemaking (EPA-HQ-OAR-2015-0663).<sup>213 214</sup>

<sup>211</sup> ICF, 2016k. Significant New Alternatives Policy Program. Fire Extinguishing and Explosion Prevention Sector. Risk Screen on Substitutes for Total Flooding Systems in Unoccupied Spaces. Substitute: 2-bromo-3,3,3-trifluoropropene (2-BTP).

<sup>212</sup> Based on the 2014 annual total VOC emissions for the United States (i.e., approximately  $17.13 \times 10^6$  MT) as reported in the National Emissions Inventory (EPA, 2015).

<sup>213</sup> ICF, 2016j. Significant New Alternatives Policy Program. Fire Extinguishing and Explosion Prevention Sector. Risk Screen on Substitutes as a Streaming Agent in Civil Aviation Applications. Substitute: 2-bromo-3,3,3-trifluoropropene (2-BTP).

<sup>214</sup> ICF, 2016k. Significant New Alternatives Policy Program. Fire Extinguishing and Explosion

Exposure to 2-BTP is not likely during installation or servicing of 2-BTP total flooding systems for engines and APUs on aircraft. These are both considered to be unoccupiable areas, meaning personnel cannot physically occupy these spaces, thus reducing the risk from exposure to an inadvertent discharge. The risk of accidental activation of the fire extinguishing system while personnel are present near the protected space is low if proper procedures, including those of the 2-BTP system manufacturer as well as the aircraft manufacturer, are followed. Instructions on system installation and servicing included in manuals for the 2-BTP systems should be followed. In the case of an inadvertent discharge of the system during maintenance activities on the fire extinguishing system or surrounding equipment, the cowl doors that would be open to allow access to the area will allow personnel to immediately egress and avoid exposure. Protective gloves and tightly sealed goggles should be worn for installation and servicing activities, to protect workers in any event of potential discharge of the proposed substitute, accidental or otherwise. Filling or servicing operations should be performed in well-ventilated areas. EPA's evaluation indicates that the use of 2-BTP is not expected to pose a significant toxicity risk to personnel or the general population. The risks after exposure are common to many total flooding agents, including those already listed as acceptable under SNAP for this same end-use such as C6-perfluoroketone.

EPA is listing 2-BTP acceptable, subject to use conditions, as a total flooding agent for use in engine nacelles and APUs on aircraft because the overall environmental and human health risk posed by the substitute is lower than or comparable to the overall risk posed by other alternatives listed as acceptable in the same end-use.

Prevention Sector. Risk Screen on Substitutes for Total Flooding Systems in Unoccupied Spaces. Substitute: 2-bromo-3,3,3-trifluoropropene (2-BTP).

#### (b) Streaming Uses

EPA has listed a number of alternatives as acceptable for the streaming end-use. In the proposed rule (81 FR at 22824; April 18, 2016) EPA provided information on the environmental and health properties of 2-BTP and the various substitutes in this end-use. Additionally, EPA's risk assessments for 2-BTP and a technical support document that provides the **Federal Register** citations concerning data on the SNAP criteria (e.g., ODP, GWP, VOC, toxicity, flammability) for acceptable alternatives in the relevant end-uses are available in the docket for this rulemaking (EPA-HQ-OAR-2015-0663). In addition to halon 1211, the current market for streaming applications also includes HCFCs, HFCs, and a variety of other agents (e.g., dry chemical, CO<sub>2</sub>, water).<sup>215</sup> Specific alternatives used for streaming uses include HCFC Blend B (with an ODP of roughly 0.01 and a GWP of roughly 80), HFC-227ea (with an ODP of zero and a GWP of 3,220), and C7 Fluoroketone (with an ODP of zero and a GWP of approximately one). The ODP, GWP, and VOC status of 2-BTP and other alternatives that are also used as streaming agents are described in Table 22.

Regarding local air quality impacts, EPA compared the annual VOC emissions from the use of 2-BTP as a streaming agent to other anthropogenic sources of VOC emissions considering both worst-case and more realistic scenarios, as described in the previous section. Other acceptable fire suppression agents currently in use as streaming agents are also VOC (e.g., C6-perfluoroketone, C7-fluoroketone).

EPA evaluated occupational and general population exposure at manufacture and at end-use to ensure that the use of 2-BTP as a streaming agent will not pose unacceptable risks to workers or the general public as discussed in the previous section. Also

<sup>215</sup> ICF, 2016h. Market Characterization for Fire Suppression, Comfort Cooling, Cold Storage, and Household Refrigeration Industries in the United States. Prepared for the U.S. Environmental Protection Agency. October 2015.

discussed previously, EPA has evaluated the risks associated with potential exposures to 2-BTP during production operations and the filling of fire extinguishers as well as in the case of an inadvertent discharge of the fire extinguisher during maintenance activities.

The risks after exposure are common to many streaming agents, including those already listed as acceptable under SNAP for this same end-use, such as C6-perfluoroketone.

EPA is listing 2-BTP acceptable, subject to use conditions, as a streaming agent on aircraft because the overall environmental and human health risk posed by the substitute is lower than or comparable to the overall risk posed by other alternatives listed as acceptable in the same end-use.

ii. What further information is EPA providing in the acceptability listing for 2-BTP?

In the "Further Information" column of the regulatory listings for total flooding agents, EPA is providing the following information:

- This fire suppressant has a relatively low GWP of 0.23–0.26 and a short atmospheric lifetime of approximately seven days.
- This agent is subject to requirements contained in a TSCA section 5(e) Consent Order and any subsequent TSCA section 5(a)(2) SNUR.
- For establishments manufacturing, installing, and servicing engine nacelles and auxiliary power units on aircraft using this agent:

(1) This agent should be used in accordance with the safety guidelines in the latest edition of the National Fire Protection Association (NFPA) 2001 Standard for Clean Agent Fire Extinguishing Systems;

(2) In the case that 2-BTP is inhaled, person(s) should be immediately removed and exposed to fresh air; if breathing is difficult, person(s) should seek medical attention;

(3) Eye wash and quick drench facilities should be available. In case of ocular exposure, person(s) should immediately flush the eyes, including under the eyelids, with fresh water and move to a non-contaminated area.

(4) Exposed person(s) should remove all contaminated clothing and footwear to avoid irritation, and medical attention should be sought if irritation develops or persists;

(5) Although unlikely, in case of ingestion of 2-BTP, the person(s) should consult a physician immediately;

(6) Manufacturing space should be equipped with specialized engineering controls and well ventilated with a local

exhaust system and low-lying source ventilation to effectively mitigate potential occupational exposure; regular testing and monitoring of the workplace atmosphere should be conducted;

(7) Employees responsible for chemical processing should wear the appropriate PPE, such as protective gloves, tightly sealed goggles, protective work clothing, and suitable respiratory protection in case of accidental release or insufficient ventilation;

(8) All spills should be cleaned up immediately in accordance with good industrial hygiene practices;

(9) Training for safe handling procedures should be provided to all employees that would be likely to handle containers of the agent or extinguishing units filled with the agent;

(10) Safety features that are typical of total flooding systems such as pre-discharge alarms, time delays, and system abort switches should be provided, as directed by applicable OSHA regulations and NFPA standards; use of this agent should also conform to relevant OSHA requirements, including 29 CFR 1910, subpart L, sections 1910.160 and 1910.162.

In the "Further Information" column of the regulatory listing for the streaming agent end use, EPA is providing the following information:

- This fire suppressant has a relatively low GWP of 0.23–0.26 and a short atmospheric lifetime of approximately seven days.
- This agent is subject to requirements contained in a Toxic Substance Control Act (TSCA) section 5(e) Consent Order and any subsequent TSCA section 5(a)(2) Significant New Use Rule (SNUR).
- For establishments manufacturing, installing and maintaining handheld extinguishers using this agent:

(1) Use of this agent should be used in accordance with the latest edition of NFPA Standard 10 for Portable Fire Extinguishers;

(2) In the case that 2-BTP is inhaled, person(s) should be immediately removed and exposed to fresh air; if breathing is difficult, person(s) should seek medical attention;

(3) Eye wash and quick drench facilities should be available. In case of ocular exposure, person(s) should immediately flush the eyes, including under the eyelids, with fresh water and move to a non-contaminated area.

(4) Exposed person(s) should remove all contaminated clothing and footwear to avoid irritation, and medical attention should be sought if irritation develops or persists;

(5) Although unlikely, in case of ingestion of 2-BTP, the person(s) should consult a physician immediately;

(6) Manufacturing space should be equipped with specialized engineering controls and well ventilated with a local exhaust system and low-lying source ventilation to effectively mitigate potential occupational exposure; regular testing and monitoring of the workplace atmosphere should be conducted;

(7) Employees responsible for chemical processing should wear the appropriate PPE, such as protective gloves, tightly sealed goggles, protective work clothing, and suitable respiratory protection in case of accidental release or insufficient ventilation;

(8) All spills should be cleaned up immediately in accordance with good industrial hygiene practices;

(9) Training for safe handling procedures should be provided to all employees that would be likely to handle containers of the agent or extinguishing units filled with the agent; and

(10) 2-BTP use as a streaming fire extinguishing agent in handheld extinguishers in aircraft should be in accordance with UL 711, Rating and Testing of Fire Extinguishers, the Federal Aviation Administration (FAA) Minimum Performance Standard for Hand-Held Extinguishers (DOT/FAA/AR-01/37), with regard to the size and number of extinguishers depending on the size of aircraft, and FAA Stratification and Localization of Halon 1211 Discharged in Occupied Aircraft Compartments (DOT/FAA/TC-14/50).

iii. When will the listing apply?

EPA is establishing a listing date as of January 3, 2017, the same as the effective date of this regulation, to allow for the safe use of this substitute at the earliest opportunity.

c. How is EPA responding to comments?

EPA received several comments from organizations with various interests in the fire protection industry on the proposed listing of 2-BTP as acceptable, subject to use conditions, as a total flooding and streaming agent in certain aircraft applications. Comments were in reference to EPA's approach to the end-use categories for fire suppression, an expedited listing for 2-BTP based on international halon replacement deadline for handheld extinguishers on new aircraft, conditions for use including minimum volumes for aircraft compartments for safe handheld extinguisher use and labeling of extinguishers, and broadening the acceptable applications for 2-BTP. All commenters supported the proposed

listing decision, however, several commenters requested that EPA consider a listing date of no later than August 2016 for 2-BTP in order to meet an international target date of the end of 2016 for all aircraft entering service to use handheld extinguishers that do not use halon. Several commenters suggested the reference to aviation-specific guidance rather than UL standard as more comprehensive analysis of safe agent levels for handheld extinguishers used onboard aircraft.

Commenters included the International Coordinating Council of Aerospace Industries Associations (ICCAIA) representing Aerospace Industries Associations of the United States, Europe, Canada, Brazil, Russia, and Japan; the Halon Alternatives Research Corporation, Inc. (HARC), a trade association; NAM; NEDA/CAP; Boeing; Airbus also representing the aircraft manufacturers Bombardier, Dassault Aviation, and Embraer; and P3Group.

We have grouped comments together and responded to the issues raised by the comments in the sections that follow, or in a separate Response to Comments document which is included in the docket for this rule (EPA-HQ-OAR-2015-0663).

#### i. Substitutes and End-Uses Proposed

*Comment:* Several commenters expressed support for EPA's proposed acceptability listing of 2-BTP; these included Airbus, Boeing, ICCAIA, NAM, NEDA/CAP, and P3Group. Airbus noted the "complexity of fighting fires in aircraft cabins and cockpits requires fire-fighting agents and equipment which also minimize health impacts on aircraft crews and occupants while ensuring continued safe flight and landing." Airbus also cited the "need for . . . EPA approval of 2-BTP as a prerequisite to allow commercialization in the leading US civil aviation market. Others including Boeing, ICCAIA, NAM, and NEDA/CAP noted the importance of this acceptability listing to meeting the ICAO Annex 6 deadline of December 31, 2016, for halon replacement in handheld extinguishers for all new production aircraft, and requested EPA to consider an expedited listing for 2-BTP. Airbus and HARC both urged EPA to continue review of other potential applications of 2-BTP and broaden its acceptability listings in other uses which would support the long-term availability of the agent on the market. HARC expressed concern that the restriction to only aircraft use impacts the agent's commercial viability as an aircraft halon replacement.

*Response:* EPA appreciates the interest and support offered by the commenters in the acceptability listing of 2-BTP. EPA is aware of the ICAO requirement to replace halons on handheld extinguishers on newly produced aircraft entering service after the end of this year. EPA has worked expeditiously to issue a final rule as quickly as possible noting that the comment period closed June 16, 2016. Regarding comments urging EPA to consider use of 2-BTP in other fire protection applications, as stated in the proposed rule, EPA is reviewing additional potential fire suppression applications for 2-BTP as identified by the submitter.

#### ii. Listing Date

*Comment:* ICCAIA urged a final acceptability listing of 2-BTP by August 2016 in order to meet an international deadline for halon replacement in handheld extinguishers for all aircraft placed into service on or after December 31, 2016. That deadline was incorporated by the International Civil Aviation Organization (ICAO) in 2011 into the revised Chicago Convention Standards and Recommended Practices (SARPs) for Annex 6, Operation of Aircraft, which affects already certified aircraft, and Annex 8, Airworthiness of Aircraft, which affects new aircraft types, to include deadlines for halon replacement in various applications on aircraft including in handheld extinguishers. Considering the additional design, reviews, and certifications required following EPA's acceptability listing for 2-BTP, ICCAIA requested that EPA also consider the option of issuing a separate final rule for 2-BTP to meet this August timeline. Other commenters in support of ICCAIA's request for expedited listing for 2-BTP included Airbus, Boeing, NEDA/CAP, and NAM. Airbus, Boeing, and NAM cited the adoption of halon replacement deadlines for civil aviation into the ICAO SARPs; in 2011, ICAO amended its Annex 6, Operation of Aircraft.

*Response:* EPA appreciates the significant interest in the acceptability listing of 2-BTP to meet the ICAO requirement to replace halons on handheld extinguishers on aircraft. EPA has worked expeditiously to issue a final rule as quickly as possible noting that the comment period closed June 16, 2016. The commenters did not provide sufficient information to explain how an August 2016 acceptability listing fits into the design, specification, review, and certification process for new production aircraft and how it would have specifically affected this timeline.

It is also worth noting that while the United States strongly supported related actions taken at ICAO on halons including the amendments to Annexes 6 and 8, following the final amendment of Annexes 6 and 8, the United States filed a difference to these new SARPs. As a Contracting State to the Chicago Convention, the United States is required to either comply with or file differences to the Standards contained in the ICAO Annexes; differences filed by member States are not considered permanent, but rather States are meant to continuously review the status of their differences and inform ICAO if and when a difference is no longer necessary.

#### iii. Use Conditions

*Comment:* ICCAIA, Airbus, P3Group, and Boeing referred to discussion in the preamble regarding EPA's evaluation of potential exposure risk at end-use, specifically to 2-BTP discharged from handheld extinguishers onboard aircraft. The NPRM made reference to the UL 2129 standard, Halocarbon Clean Agent Fire Extinguishers, which prohibits discharge in a confined space exceeding the cardiotoxic LOEL for any fire suppressant. EPA stated that "per UL 2129, labels for 2-BTP extinguishers will contain the statement, 'Do not use in confined spaces less than 896 cubic feet per extinguisher.'" P3Group noted that the UL 2129 value of 896 ft<sup>3</sup> minimum confined space volume was based on the LOEL for the extinguishing agent, and the extinguisher containing 3.75 lbs. of 2-BTP. Airbus noted that implementing the 896 cubic feet compartment size limit as a strict requirement would exclude 2-BTP handheld extinguishers from any smaller aircraft or even from use in large transport aircraft cockpits, service or crew rest compartments if considered, in terms of fire-fighting, as individual compartments. All commenters noted that the industry utilizes FAA guidance for determining appropriate minimum volumes relevant to aircraft compartments as this guidance provides more comprehensive analysis of acceptable agent levels under aircraft operating conditions. Airbus suggested text for proposed use conditions for 2-BTP including required labeling per UL 2129, and a listing of the minimum space volume in order to discharge other sizes of extinguishers on aircraft. Boeing commented that they disagreed with the Airbus proposed use conditions for 2-BTP citing that these requirements for aircraft are specified by the FAA guidance which the industry intends to follow.

*Response:* EPA appreciates the clarification of the UL 2129 standard and the information on the relevant FAA guidance that is intended to be used by the industry to determine appropriate minimum volumes for aircraft handheld extinguishers. EPA is revising the additional information on 2-BTP use as a streaming fire extinguishing agent in handheld extinguishers in aircraft to indicate that use should be in accordance with UL 711, Rating and Testing of Fire Extinguishers, the Federal Aviation Administration (FAA) Minimum Performance Standard for Hand-Held Extinguishers (DOT/FAA/AR-01/37), with regard to the size and number of extinguishers depending on the size of aircraft, and FAA Stratification and Localization of Halon 1211 Discharged in Occupied Aircraft Compartments (DOT/FAA/TC-14/50).

## 2. Change of Listing Status for Certain Perfluorocarbons for Total Flooding

While EPA proposed and requested comments on listing the PFCs ( $C_4F_{10}$  and  $C_3F_8$ ) as unacceptable in fire suppression total flooding uses, EPA is deferring final action at this time. EPA plans to continue assessing the merits of taking action in this sector more broadly, based on additional information provided during the comment period on the use of alternatives in this end use. EPA requested advance comments on other alternatives, specifically SF<sub>6</sub> and HFC-125 in total flooding and HFC-227ea in both total flooding and streaming applications, to improve our understanding. We received several comments in support of the proposed action on PFCs and several commenters requested that EPA eliminate or limit the use of additional high-GWP HFCs. Other commenters requested that EPA take no action at this time with regard to the other alternatives for which EPA sought advance comments, citing current use in challenging applications such as aviation and the need to ensure their availability for these uses in the future. These comments provided us with additional but limited information on uses of SF<sub>6</sub>, HFC-23, HFC-125, HFC-227ea, HFC-134a, and HFC-236fa, confirming the specialized, niche applications for some of these agents.

## 3. Removal of Use Conditions for Powdered Aerosol D

### a. Background

Powdered Aerosol D is a pyrotechnic particulate aerosol and explosion suppressant that also is marketed under the trade names of Aero-K® and Stat-X®.

This fire suppressant is supplied to users as a solid housed in a double-walled hermetically-sealed steel container. When the unit is triggered by heat (300 °C), the product is pyrotechnically activated to produce gases and aerosol particles from a mixture of chemicals. EPA listed Powdered Aerosol D as acceptable subject to use conditions as a total flooding agent (71 FR 56359; September 7, 2006). The use conditions required that Powdered Aerosol D be used only in areas that are not normally occupied, because the Agency did not have sufficient information at that time supporting its safe use in areas that are normally occupied. Based on a review of additional information from the submitter to support the safe use of Powdered Aerosol D in normally occupied spaces, EPA subsequently determined that Powdered Aerosol D is also acceptable for use in total flooding systems for normally occupied spaces (79 FR 62863; October 21, 2014). The listing provides that Powdered Aerosol D is acceptable for total flooding uses, which includes both unoccupied and occupied spaces. In the October 2014 listing action, EPA noted that in a subsequent rulemaking, the Agency would remove the previous listing of acceptable subject to use conditions.

### b. What is EPA's final decision?

As proposed, EPA is removing the previous listing in appendix O to subpart G of 40 CFR part 82 for Powdered Aerosol D as acceptable subject to use conditions as a total flooding agent (71 FR 56359; September 7, 2006). This has been superseded by the listing of October 21, 2014 (79 FR 62863) listing Powdered Aerosol D as acceptable for total flooding uses, which includes both unoccupied and occupied spaces.

### c. How is EPA responding to comments?

*Comment:* Chemours stated that it opposed the removal of the use restrictions for Powdered Aerosol D based on the fatalities from the recent incident in a bank vault in Thailand after the inadvertent discharge of a powdered aerosol system. Chemours noted that the industry still needed to learn about the appropriate use of this technology.

*Response:* EPA is aware of the incident at the Thai bank and understands the investigation continues. We note that the substitute involved was not Powdered Aerosol D. Regarding the listing of Powdered Aerosol D under the SNAP program, a decision to not modify the acceptable subject to use conditions, as advocated by the

commenter, will not achieve the result they are seeking. As noted, Powdered Aerosol D is listed as acceptable for all total flooding uses. If the commenter believes that there is evidence to support that Powdered Aerosol D cannot be used safely in some total flooding uses, they should submit that information to EPA and EPA could consider it to determine whether it should initiate rulemaking to change the acceptable listing.

## VII. How is EPA responding to other public comments?

EPA received additional comments on topics not addressed in other sections of this document. These comments address a host of issues, including EPA's CAA authority to change the status of alternatives; perceived inconsistencies with the SNAP program's "guiding principles;" perceived inconsistency with other actions; and interactions with other rules. Additionally, some commenters requested status changes for end-uses or alternatives that were not included in the proposed rule.

We have grouped comments together and responded to the issues raised by the comments in the sections that follow, or in a separate Response to Comments document which is included in the docket for this rule (EPA-HQ-OAR-2015-0663).

### A. General Comments

#### 1. Proposed Status Listing Changes

*Comment:* Several commenters, including the Alliance, Clayton, EIA, NRDC, IGSD, Honeywell, NASA, Dow, and CARB generally supported EPA's actions related to the proposed status changes. While these commenters expressed their support for the SNAP program, the Alliance emphasized the importance of an amendment to the Montreal Protocol for a gradual phase-down approach to HFCs and urged caution when changing listing status of substitutes under the SNAP framework. The Alliance believe that a gradual phasedown approach is important in order to allow for effective technology development and introduction, to allow for the building codes and safety standards process to align with the newly available low-GWP technologies and applications, and to ensure energy efficiency performance is not diminished. Honeywell commented that the proposed listing changes would lead to significant emission reductions, setting an example for other countries around the world to follow. Clayton noted that EPA was extremely thorough in considering challenges posed by the proposal and engaging with

stakeholders. NASA noted that they take regulatory compliance seriously and have committed significant time and resources to implementing environmentally acceptable materials in their facilities and programs. Dow stressed that any new technologies should be built upon success with attainable timelines that allow the industry to innovate, develop, and commercialize alternative technologies for our stakeholders.

*Response:* EPA thanks these commenters for supporting the proposed listing changes. As noted elsewhere in this document, EPA views this final action as complementary to the United States' support for adopting an amendment to the Montreal Protocol to phase down production and consumption of HFCs.

*Comment:* Chemours and Honeywell supported EPA's efforts to reduce GHG emissions associated with the use of HFCs in the production of insulating foams and other foam products by listing high-GWP foam blowing agents as unacceptable and approving technically appropriate lower-GWP alternatives as sufficient quantities of those lower GWP solutions become commercially available.

*Response:* EPA appreciates the commenters' support for changing the status of high-GWP foam blowing agents.

*Comment:* NEDA/CAP, an organization representing manufacturers of a variety of refrigeration and air conditioning equipment among others, commented that its members have recently made substantial capital investments replacing IPR and commercial building ACs, warehouse chillers, and other equipment that utilized ODS refrigerants that have been phased out because acceptable non-ODS refrigerants were available for these uses. NEDA/CAP's members are concerned that there are almost no acceptable, commercially available alternatives for the refrigerants proposed for a status change and the proposed rule would reduce demand for non-ODS refrigerants for new equipment. NEDA/CAP believe it is "unfair and unreasonable" for EPA to propose to change the status of certain HFCs from acceptable to unacceptable in new equipment without simultaneously listing acceptable, commercially available alternatives. For these reasons, NEDA/CAP recommended that EPA evaluate the actual availability of alternatives, not their theoretical availability, in its examination of alternatives under CAA section 612. Specifically, NEDA/CAP recommended that EPA evaluate the continued

availability of acceptable alternatives for existing equipment (e.g., IPR, and commercial comfort and industrial cooling equipment) that may be affected by the proposed rule.

*Response:* EPA disagrees with the commenter that there are almost no available alternatives for the substitutes for which EPA proposed a status change. As noted in the NPRM and section VI.A.5–9 of the preamble to the final rule, EPA has listed a number of alternatives as acceptable in new equipment in residential and light commercial AC and heat pumps, cold storage warehouses, and centrifugal and positive displacement chillers for commercial comfort AC. CO<sub>2</sub>, propane, isobutane, R-441A, ammonia, HFO-1234ze(E), *trans*-1-chloro-3,3,3-trifluoroprop-1-ene, and not-in-kind technologies such as Stirling cycle, water/lithium bromide absorption, dessicant cooling, or evaporative cooling, are acceptable in new equipment for one or more of the end-uses for which EPA proposed a change in status. The commenter also did not provide information as to why they believe these alternatives would not be viable in new equipment. Moreover, EPA does not agree that the change of status for certain refrigerants in specific uses would result in a corresponding reduction in demand for non-ozone-depleting refrigerants in new equipment. The overall global demand for refrigeration and air conditioning equipment has expanded while ODS are being phased out and EPA anticipates this expansion will continue. There will be continued use of other non-ozone-depleting alternatives not subject to this action in new equipment.

*Comment:* NEDA/CAP commented that EPA should address in the rulemaking (1) EPA's analysis of the impact of the proposed status changes on the refrigerant supply base for existing affected refrigeration and cooling equipment; (2) whether the supply base for this existing equipment will remain viable for the expected life of recently replaced equipment; (3) what the economic impacts are for businesses related to the inevitable drop in demand for existing refrigerants; (4) whether alternative refrigerants other than propane will be available and what the conditions for their use will be; (5) the impact of the proposal on the production of current acceptable HFCs and propylene and indicate what the alternatives available are for retrofit of existing equipment if existing chemical producers cease manufacturing these compounds as a result of the proposed rule.

*Response:* EPA has provided information in the docket to this rulemaking and in the preamble to the July 2015 rule concerning changes in the production of both fluorinated and non-fluorinated alternatives to ODS. EPA has no information to suggest there will be a shortage in refrigerant supply for existing equipment.

This action does not require retrofitting existing equipment. EPA is confident there will be adequate supply to service existing equipment either based on continued production or based on recovery and reuse of existing supplies of the refrigerants undergoing a change of status. EPA bases this judgment on our historical experience. For example, CFC chillers can still be serviced even though we have had no production or import of newly produced CFCs since 1996. Similarly, halons continued to be used even though we ceased production and import of newly produced halons in 1994. HCFC-22 was phased out of production for new equipment as of 2010, but is still being produced and used for existing equipment.

EPA's action does not ban production of any HFC and as noted above, some of the HFCs will be blended with HFOs to develop new refrigerants. While there may be a shift between chemical or refrigerant producers, it is not clear that there will be a loss for these companies and demand may increase in other global markets. It is possible that the price of refrigerants undergoing a status change will increase if supplies decrease relative to demand. End users with existing equipment may take steps to reduce the impact of price changes on the open market such as recovering and recycling their refrigerant, as many supermarkets currently do with HCFC-22.

As noted throughout this rule, we anticipate many refrigerants will be available and not just propane. Propane is only acceptable for a limited number of refrigeration and AC end-uses, including household refrigerators and freezers, and is not currently listed as acceptable for chillers, cold storage warehouses, or retail food refrigeration—refrigerated food processing and dispensing equipment. EPA has listed a number of HFO and HFO/HFC refrigerants as acceptable with no use conditions for use in each of the refrigeration and AC end-uses undergoing a change of status in this rule (e.g., R-450A and R-513A for all these end-uses; HFO-1336mzz(Z), HCFO-1233zd(E), HFO-1234ze(E) and R-514A for centrifugal chiller). In addition, CO<sub>2</sub> and ammonia are acceptable refrigerants in retail food



refrigeration—refrigerated food processing and dispensing equipment and ammonia is acceptable in cold storage warehouses.

Chemical producers may continue to produce the HFCs undergoing a change of status for uses that are acceptable including for servicing of existing equipment and for end-uses that are not subject to a change of status. In the case of propylene, that refrigerant has only been listed as acceptable as a refrigerant in IPR, and EPA has not proposed to change that status. Nothing in this action calls for retrofitting. However, we note that EPA has published lists of acceptable refrigerants for new equipment and retrofits, and these are available at <https://www.epa.gov/snap/refrigeration-and-air-conditioning>.

## 2. Proposed Status Change Dates

*Comment:* The Alliance appreciated that EPA considered the DOE energy conservation standards for the rulemaking, but urged the Agency to better coordinate the proposed status change dates with the ongoing DOE energy conservation rulemaking schedules.

*Response:* EPA appreciates this comment. The Agency and DOE have increased our dialogue to better understand the timing that each is taking under our separate authorities.

*Comment:* Arkema, NAFEM, and UTC requested that EPA delay the change of status dates to provide adequate time for product research and development, product testing, certification, and time for the approved alternatives to become widely available on the marketplace. Arkema noted that the proposed rule seems to acknowledge these difficulties only for uses involving either the federal government or the aeronautics industry, giving extra time for military, space, and aeronautics applications to transition from HFCs in foam blowing and in chillers. Arkema also stated that if the rule is finalized as proposed, EPA should allow all users to claim an exemption based on the unavailability of feasible alternatives or explain the standard (e.g., availability of alternatives, cost, environmental benefits, etc.) it is trying to satisfy in setting the change of status dates. NAFEM requested an extension of at least 10 years for the proposed status changes to allow sufficient time for safe product development and testing, while Arkema suggested specific dates for specific substitutes and end-uses, ranging from 2021 for 407A–F in new chillers, refrigerated food processing and dispensing, and cold storage warehouses to 2025 for most applications of R-134a and R-410A. UTC

stated that EPA should not implement the change of status for HFC-134a before 2025, which would allow time for system redesign, testing, and to change state and local codes in cases where the refrigerants are flammable. UTC believes that any change of status dates earlier than January 1, 2025, would effectively lead to a ban on the sale of air cooled chillers in many states and force customers to use existing units or to switch to lower efficiency packaged products and VRF systems that are still allowed to use R-410A. While EPA and large parts of the industry are committed to a transition away from HFC refrigerants, there is simply no forcing mechanism at the state and local level that would lead to near-immediate adoption of the necessary code changes.

*Response:* EPA looked at each change of status independently and has provided a rationale for the specific date for each end-use affected by this final rule. EPA does not agree that any specific minimal number of years should be required for a change of status and notes that there may be instances where immediate action is justified. With regards to NAFEM's comments supporting an extension, it is not clear if NAFEM is requesting additional time for an end-use covered in this action or whether the request concerns the July 2015 rule, which is beyond the scope of this action. EPA disagrees with Arkema's comments regarding the availability of alternatives. EPA has listed as acceptable alternatives that pose lower overall risk to human health and the environment than the substitutes we are listing as unacceptable, which supports a transition away from the substitutes that we have concluded provide a greater risk to human health and the environment. The commenter did not provide information as to why these alternatives would not be viable in the end-uses addressed in this action.

*Comment:* NAFEMF suggested that EPA provide manufacturers an opportunity to qualify for additional status change extensions under SNAP's grandfathering provisions. They noted that EPA has historically allowed manufacturers that transitioned to a substitute deemed acceptable by the Agency to continue using the previously acceptable substitute until the current supply was used up, even if that occurred after the rule's compliance date.

*Response:* While EPA is not applying "grandfathering" in this rulemaking, we have established status change dates for different sectors and end-uses that reflect the date by which we expect alternatives that pose lower overall risk

to human health and the environment will be available, both for existing and new users of certain substitutes. In considering when alternatives will be available for these other end-uses, we have considered the technical challenges that the end users are facing with the transition. Under both the approach used in this rule and the grandfathering approach, we consider whether there is a basis to establish the change of status later than the effective date of the rulemaking and thus the approaches result in a similar outcome.

*Comment:* Johnson Controls commented that there is speculation that EPA chose the change of status dates in this rule to meet obligations proposed in the North American amendment proposal to the Montreal Protocol.

*Response:* The change of status dates in this rule were arrived at after careful consideration of the availability of other substitutes in each end-use. These decisions were informed by extensive consultation with stakeholders throughout the rulemaking process. While the United States is seeking an amendment to the Montreal Protocol, it is not clear what control measures, if any, might be adopted. The changes in status here relate to use in the United States of alternatives that are safer overall for human health and the environment.

*Comment:* Arkema provided a list of steps needed for "product line development" including "researching options, risk assessment, analyzing existing manufacturing capabilities, working with component suppliers, building test units, testing beta units, updating manufacturing processes (including employee training), building pre-production units, field testing, completing the customer approval process, phasing in production, disposing of trapped inventory, and training installation and maintenance personnel" and ensuring "products conform to local building codes." For new cold storage warehouses and for refrigerated food processing and dispensing equipment, Arkema suggested a 2021 transition date for R-407A, R-407B, R-407C, R-407D, R-407E, and R-407F, claiming that "[t]his decision should mirror previous supermarket decisions for new and retrofit applications." For HFC-134a, they proposed a 2025 status change date and as their "[r]ationale" only stated "[s]upply, suitability of alternatives."

*Response:* The commenter is mistaken as to EPA's previous action for the supermarket systems end-use category within the retail food refrigeration end-use. In SNAP Rule 20 (80 FR 42870; July

20, 2015), EPA changed the status of only one of the identified refrigerants (R-407B) for this end use and established a January 1, 2017 status change date for new equipment.

For the reasons provided in section VI.A.6 and in our proposal, we have determined that January 1, 2023 is a reasonable but expeditious date for the change of status for new cold storage warehouses. For new refrigerated food processing and dispensing equipment, the recommended 2021 date for the R-407 series refrigerants matched our proposal and for the reasons provided in section VI.A.7 and our proposal we have finalized that change of status date.

The commenter did not otherwise provide any support for why a bifurcated 2021 and 2025 change of status date was sufficient and needed to address the technical challenges for either the cold storage warehouse end-use or the refrigerated food processing and dispensing equipment end-use category. For the 2025 date, the commenter provided no justification for why the supply or suitability of existing alternatives was not sufficient to support the proposed January 1, 2023, status change date for cold storage warehouses but would be to support a January 1, 2025, date. The commenter did not provide any evidence that supply of alternatives was lacking to justify their proposed 2025 status change date for HFC-134a in both end-uses. EPA had already determined that not to be true in a previous rulemaking (80 FR 42904; July 20, 2015). Further, the commenter did not indicate why the supply for HFC-134a alternatives in either end-use would not be available until 2025 yet the supply of alternatives for the R-407 series refrigerants would be available by 2021, or why the set of alternatives would be different.

## B. Authority

### 1. General Authority

*Comment:* EIA supported EPA's authority to regulate substances within a comparative risk framework. EIA commented that EPA's SNAP program was created to assure the health and environmental safety of alternatives for ODS that were being phased out, which is achieved through EPA's comparative review process. EIA also indicated that the proposed rule is an important step towards implementing the President's CAP.

*Response:* EPA appreciates the commenter's support of the rule.

*Comment:* Arkema, AHAM, and Mexichem expressed the opinion that the proposed rule is outside the scope of EPA's regulatory authority. Similar to

their comments submitted in response to the NPRM for the July 2015 rule, the commenters stated that the purpose of the original SNAP program was to evaluate substitutes for ODS, and that now using this same framework to evaluate non-ODS against other non-ODS on the basis of GWP, for example, violates the authority granted under CAA section 612. They argued that these new compounds are not substitutes for ODS, and thus are not real "substitutes" in the context of the original SNAP framework. Arkema emphasized its support for an HFC amendment to the Montreal Protocol, but asserted that EPA is proposing to "replace non-ODS with new non-ODS chemicals based on [GWP]," which goes against the mandate of CAA section 612 to "replace" ODS. AHAM stated that CAA Title VI was not intended to "provide EPA broad, general and roving authority to regulate refrigerants, foams and chemicals in whatever circumstances it deems desirable if they are unrelated to ozone depletion." Likewise, Mexichem asserted that the repeated references to class I and class II substances in Title VI demonstrate that, in enacting CAA section 612, Congress was concerned with phasing out ODS, and that there is "no mention in section 612 (or its legislative history) that Congress ever intended for this law to be used to regulate second-generation substances on the basis of [GWP]."

*Response:* EPA disagrees with the commenters that it lacks the authority to regulate the continuing replacement of ODS with the substitutes whose listing status is addressed in this action. In this rulemaking, EPA considered whether such replacement should continue to occur given the expanded suite of other alternatives to ODS in the relevant end-uses and our evolving understanding of risks to the environment and public health. There is no question that the substitutes subject to a change in status in this action (e.g., HFC-134a) directly replaced ODS in the relevant sectors. See section VII.A.2 of the preamble to the July 2015 rule for additional discussion of non-ODS alternatives.

*Comment:* AHAM stated that this proposal violates Executive Orders 12866 (9-30-93), 13563 (1-18-2011), and 13610 (5-10-12) requiring that agencies consider the cumulative effects of regulations, including cumulative burden. AHAM commented that given the new energy efficiency standards placed on the appliance industry, being forced to also comply with the timeline and additional restrictions proposed in this rulemaking would be unnecessarily burdensome on affected entities. They especially emphasized the minimal

difference in emissions saved by prematurely transitioning the industry to these substitutes.

*Response:* EPA disagrees with the commenter's assertion that the proposed rule violates Executive Order 13563, given that there is currently no DOE standard that results in cumulative regulatory burden with this rule. Further, we expect that with a change of status date of January 1, 2021, for household refrigerators and freezers, companies would be able to coordinate compliance with an energy conservation standard with a compliance date in 2020. Thus, we believe that in fact, the potential cumulative impacts of the two sets of regulations are reasonable. See also the discussion in section VI.A.8.ii on the change of status dates for household refrigerators and freezers.

### 2. GWP Considerations

*Comment:* Mexichem commented that EPA focuses the analysis of HFC-134a on comparative GWP instead of conducting a comprehensive analysis that considers all of the agency's criteria—atmospheric effects, exposure assessments, toxicity data, flammability, and other environmental impacts, such as ecotoxicity and local air quality impacts—as well as a full alternatives analysis of performance, availability, hazard, exposure, and cost of the alternatives. Arkema also commented that EPA relies on the differences in GWP to justify the proposed status changes, but fails to explain why those differences result in a larger risk for certain HFCs in each end-use. For example, Arkema stated that EPA does not explain the rationale for proposing to change the status from acceptable to unacceptable for some high-GWP substitutes, such as R-407A with a GWP of 2,107, but not R-407F with a GWP of 1,824, for cold storage warehouses.

*Response:* EPA disagrees with the commenters that it relies solely on GWP in the evaluation of the alternatives under the SNAP program. In all cases, EPA considers the intersection between the specific alternative and the particular end-use and the availability of substitutes for those particular end-uses. When reviewing a substitute, EPA compares the risk posed by that substitute to the risks posed by other alternatives and determines whether that specific substitute under review poses significantly more risk than other alternatives for the same use. In our analysis of overall risk, we evaluate the criteria at 40 CFR 82.180(a)(7). For particular substances, EPA found significant potential differences in risk with respect to one or more specific criteria, such as flammability, toxicity,

or local air quality concerns, while otherwise posing comparable levels of risk to those of other alternatives in specific end-uses. Regarding GWP, that is one of several criteria EPA considers in the overall evaluation of the alternatives under the SNAP program. There are a number of examples in this rulemaking where we determined not to change the status of HFC-134a, for example, because the GWP of other alternatives is a concern for a specific use. For particular substances, such as R-407A, EPA found significant potential differences in risk with respect to one or more specific criteria, such as GWP, while otherwise posing comparable levels of risk to those of other alternatives in specific end-uses. EPA also notes that several decisions included in this action are based on significant potential differences with respect to other factors including flammability, and local air quality. For example, we are listing propylene and R-443A as unacceptable in centrifugal chillers, positive displacement chillers, cold storage warehouses, and residential and light commercial AC and heat pumps in particular because of concerns about local air quality. We are listing all refrigerants identified as flammability Class 3 in ANSI/ASHRAE Standard 34–2013 and all refrigerants meeting the criteria for flammability Class 3 in ANSI/ASHRAE Standard 34–2013 as unacceptable for use in retrofit unitary split AC systems and heat pumps in the residential and light commercial air conditioning and heat pumps end-use.

Concerning differences in GWP values and how EPA decided to change the status of certain alternatives while other alternatives remained acceptable, EPA did not establish bright-line cutoffs but rather considered which substitutes are available on an end-use by end-use basis. For the example of refrigerants in the cold storage warehouse end-use that Arkema cites, we considered that R-407F has the lowest GWP of the refrigerant blends that are both widely commercially available and can be used for those situations and types of equipment where HCFC-22 is used. R-407A has a higher GWP and otherwise is comparable to R-407F, and thus results in higher overall risk to human health and the environment.

See also section VII.A.3 of the preamble to the July 2015 rule and section 6.3.3 of the Response to Comments for the NPRM for that rule for additional information on GWP considerations under the SNAP program.

*Comment:* Arkema commented that EPA makes GWP the sole criterion for decisions about atmospheric effects,

instead of basing it on the “total [GWP] of the substitute and the indirect contributions to global warming caused by the production or use of the substitute (e.g., changes in energy efficiency), and environmental release data, including available information on any pollution controls used or that could be used in association with the substitute.”

*Response:* EPA disagrees that GWP was the only criterion considered in determining whether to change the status of a substitute. Further information and explanation on use of GWP as a metric is provided in section VII.A.3 of the preamble to the July 2015 rule and in the following response. Considerations of atmospheric effects and related health and environmental impacts have always been a part of SNAP’s comparative review process, and the provision of GWP-related information is required by the SNAP regulations (see 40 CFR 82.178 and 82.180). The issue of EPA’s authority to consider GWP in its SNAP listing decisions was raised in the initial rule establishing the SNAP program. In the preamble to the final 1994 SNAP rule, EPA stated: “The Agency believes that the Congressional mandate to evaluate substitutes based on reducing overall risk to human health and the environment authorizes use of global warming as one of the SNAP evaluation criteria. Public comment failed to identify any definition of overall risk that warranted excluding global warming” (59 FR 13044, March 18, 1994). Consistent with that understanding, the 1994 SNAP rule specifically included “atmospheric effects and related health and environmental impacts” as evaluation criteria the Agency uses in undertaking comparative risk assessments (59 FR 13044, March 18, 1994; 40 CFR 82.180(a)(7)(i)). That rule also established the requirement that anyone submitting a notice of intent to introduce a substitute into interstate commerce provide the substitute’s GWP (see 40 CFR 82.178(a)(6)). Accordingly, we have considered the relative GWP of alternatives in many SNAP listing decisions. EPA did not propose to revise its regulations to abandon consideration of GWP in this rule.

In response to comments that EPA failed to assess and account for indirect climate impacts, we note that we do not have a practice in the SNAP program of including indirect climate impacts in the overall risk analysis. EPA initially contemplated such considerations in the initial SNAP rule, but our experience has been that it is impractical to perform a detailed analysis of indirect global

warming impacts associated with a particular substitute. For example, the inherent energy efficiency of the substitute is not the same as the energy efficiency of equipment using that substitute. To analyze energy efficiency and other indirect climate impacts would require EPA to identify not only every type of equipment but also each model, identify or predict the amount of each available substitute that might be used in each type of equipment, make assumptions about how the equipment would be operated, assess what type of electricity was used to both manufacture the substance and power the equipment or manufacturing process, and so on. See the July 2015 rule, 80 FR at 42921 and section 6.4.2 of the response to comments document for that rule. We do, however, consider issues such as technical needs for energy efficiency (e.g., to meet DOE standards) in determining whether alternatives are “available,” and have followed that practice in this rulemaking. We believe that there is a sufficient range of acceptable alternatives that end users will be able to maintain energy efficiency levels. We also note that federal energy conservation standards will continue to ensure that equipment regulated by this rule will not increase its indirect climate impacts.

*Comment:* Honeywell commented that even greater emissions reductions could be projected by using more up-to-date GWP values. Honeywell commented that the use of out-of-date GWP values in such an important rule can cause confusion, especially among those trying to evaluate and compare low-GWP technologies. Instead of GWP values from the IPCC Fourth Assessment Report (AR4), Honeywell suggested that EPA consider adopting the IPCC AR5 GWP values in the future.

*Response:* EPA used the GWP values in the IPCC AR4 in the NPRM and continues to use these in this final rulemaking to maintain consistency with other rules and facets of the SNAP program and with other U.S. domestic programs (e.g., EPA’s Greenhouse Gas Reporting program, codified at 40 CFR part 98). Using consistent GWPs allows for more efficient operation of U.S. climate programs and facilitates integration with other public and private sector programs on international, national, state, and local levels. It also reduces the burden on stakeholders of keeping track of separate GWPs when interacting with these programs. Use of the AR4 GWPs will also ensure compatibility with the Climate Action Report and other reporting requirements under the United Nations Framework Convention

on Climate Change (UNFCCC). Countries, including the United States, that submit GHG inventories under the UNFCCC have decided to use AR4 GWPs for the GHGs that have AR4 GWPs, beginning with the inventories submitted in 2015.<sup>216</sup> Adoption of AR5 GWPs while other EPA and international programs are using AR4 GWPs likely would cause stakeholder confusion, create an ongoing need to explain the distinction in GWPs in subsequent actions, and complicate decision-making. Also, use of AR4 GWPs ensures that the SNAP program uses widely relied on, published, peer-reviewed GWP data. EPA may consider adoption of AR5 GWPs or other GWP values in the future. In any event, use of AR5 GWPs would not result in a change in EPA's conclusions about the comparative risk posed by the substitutes addressed in this rule.

*Comment:* CARB recommended establishing specific numerical limits for GWP of acceptable substitutes in certain end-uses. They recommended prohibiting all refrigerants with a GWP greater than 150 in cold storage warehouses, refrigerated food processing and dispensing equipment and household refrigerators and freezers. For chillers, CARB recommended prohibiting all refrigerants with a GWP greater than 750.

*Response:* EPA has not set "bright line" cut offs based on GWP or the other SNAP criteria, for reasons explained in numerous actions, including section IV.B of the SNAP Proposed Rule 20 (79 FR 46135; August 6, 2014), sections IV.B and V.C.6.(a) of the corresponding final Rule 20 (80 FR 42920; July 20, 2015), section I.A of the proposed rule (81 FR 22812–22813; April 18, 2016), and section I.A of this final rule. As noted in those actions, the structure of the SNAP program, which is based on a comparative framework of available substitutes for a specific end-use at the time a decision is being made, does not support the use of such bright lines.

### 3. SNAP Review Criteria and Guiding Principles

*Comment:* Arkema commented that the proposed rule fails to follow EPA's policies in the guiding principles, fails to consider all relevant information as defined by regulation, and fails to apply

the regulatory criteria for SNAP evaluation when determining if a substitute poses more risk than other alternatives for the same end-use. Arkema stated that EPA's policy has been to restrict a SNAP substitute only if it is significantly worse than the alternatives; however, the proposed rule "relies on differences in [GWP] to justify reclassification." Arkema further commented that, according to 40 CFR 82.178(a)(6), EPA is to consider information concerning GWP, including both the total GWP of the substitute and the indirect contributions to global warming caused by the production or use of the substitute, and environmental release data, including available information on any pollution controls used or that could be used in association with the substitute. Arkema believes EPA fails to follow these principles and instead, makes GWP the sole criterion for decisions about atmospheric effects. Finally, Arkema commented that the proposed rule states "EPA is not setting a risk threshold for any specific SNAP criterion, such that the only acceptable substitutes pose risk below a specified level of risk." Arkema believes this statement violates EPA's policy to regulate only significant risk in a specific end-use because it asserts that the Agency "can ban a substance to reduce any risk, regardless of the magnitude of the risk."

*Response:* EPA disagrees with the commenter that the proposed rule violates the Agency's regulations or guiding principles. See the preamble to the July 2015 rule at 80 FR 42940–42. We consider the proposed and final rules to be consistent with the SNAP guiding principles:

1. First guiding principle: *Evaluate substitutes within a comparative risk framework.* As suggested by the first guiding principle, in all of the actions that EPA proposed and is today finalizing, EPA evaluated the risk of substitutes compared to available or potentially available alternatives. In that effort, a range of risk factors are well described in this action. The factors that EPA considers are stated at 40 CFR 82.180(a)(7).

2. Second guiding principle: *Do not require that substitutes be risk free to be found acceptable.* EPA has not required substitutes to be risk free. We acknowledge in the proposed and final rules that both the substitutes changing status and the other available alternatives have risks. In this rule, as in past SNAP rules, we have considered whether there are alternatives that are available or potentially available that pose a lower overall risk to human

health and the environment in specific end-uses and end-use categories.

3. Third guiding principle: *Restrict those substitutes that are significantly worse.* EPA has based our decisions on whether substitutes have significantly greater risk than other available substitutes for the same uses. For example, we did not propose and are not finalizing today changes in status where there is only a marginal difference in risk between two alternatives available or potentially available in the same end-use. As described in the preambles to the proposed and final rules, the Agency carefully considered the substances addressed in this action on the basis of the SNAP criteria, and concluded that other alternatives presented a degree of reduced overall risk sufficient to warrant the actions being taken in this rulemaking. In response to the comment that the NPRM compares GWPs without explaining the significance of the differences for any effect on climate, EPA did not estimate differences in temperature change or other physical climate metrics due to the impacts of the rule. EPA has not used these metrics in the past as measures of climate impact for other SNAP decisions. See section II.G and III on the use of GWP as a metric for climate impact and the significance of the rule for climate.

4. Fourth guiding principle: *Evaluate risks by use.* EPA evaluated substitutes for specific uses and reached different conclusions for the same substitute in different uses, depending on the specific risks and other available or potentially available alternatives in the relevant uses. For example, we are listing propane as acceptable, subject to use conditions in new self-contained commercial ice machines, new water coolers, and new very low temperature refrigeration equipment, while listing propane and all other ASHRAE flammability Class 3 refrigerants as unacceptable for retrofitting existing unitary split systems within residential and light commercial AC and heat pumps. No action was taken to ban any one HFC or other alternative across all end-uses. Additionally, as noted by the commenter, we considered the potential risks of alternatives used for servicing of MVAC or commercial refrigeration apart from new equipment or from retrofits of existing equipment. See section 6.3.6 of the Response to Comments for the NPRM for the July 2015 rule.

5. Fifth guiding principle: *Provide the regulated community with information as soon as possible.* EPA provided the regulated community with information as soon as possible by holding a series of workshops and public meetings

<sup>216</sup> The IPCC publishes Scientific Assessment Reports, including updated and expanded sets of GWPs, approximately every six years. The countries that submit annual GHG inventories under the UNFCCC update the GWPs that they use for those inventories less frequently. For example, the GWPs from the IPCC Second Assessment Report have been used for UNFCCC reporting for over a decade.

concerning this action and other regulatory issues relevant to various industrial sectors over the course of more than a year before we issued our proposal. See section 6.3.6 of the Response to Comments for the NPRM for the July 2015 rule.

6. Sixth guiding principle: *Do not endorse products manufactured by specific companies.* Our change of status decisions reflect the availability of multiple alternatives for each end-use. Regarding endorsements, see section V.B.6.a of the preamble to the July 2015 rule at 80 FR 42896.

7. Seventh guiding principle: *Defer to other environmental regulations when warranted.* We note that this reads “Defer to other environmental regulations when warranted” (emphasis added). Other regulations may not ensure that substitutes that pose significantly greater risk are prohibited where safer alternatives are available because those regulations do not address all or address sufficiently the risk posed. EPA has considered the potential impacts of other environmental, health, and safety regulations. EPA carefully considered these and other existing regulations under other programs when reviewing substitutes. For example, we considered the presence of OSHA regulations in addressing flammability risk in factories where foam is blown. EPA did not propose and is not finalizing a change in how this principle is applied. EPA continues to consider other environmental, health and safety regulations and notes these regulations where appropriate in our decisions. We also considered the existing MACT standard that prohibits the use of methylene chloride in flexible PU foam production for major sources, including relying on the risk analysis performed for EPA’s recent risk review of the MACT. See sections VI.A.2 and VI.C.4 regarding EPA’s consideration of other stratospheric ozone regulations.

Concerning consideration of all relevant information as defined by regulation, we note that it is within the discretion of the Agency to determine which information is relevant out of the total set of information in EPA’s possession. The specific information that must be provided to EPA for review under the SNAP regulations at 40 CFR 82.178 informs, but does not govern, EPA’s decisional criteria for review of substitutes under 40 CFR 82.180(a)(7).

Concerning Arkema’s quotation from the proposed rule, it states that we do not use the same “bright line” risk threshold for all substances. This is consistent with EPA’s guiding principles, where we consider

comparative risk of the available substitutes within an end-use. From a scientific point of view, it would be inappropriate, and potentially not protective, for EPA to use the same concentration in ppm to determine flammability risks or toxic concentrations for different substitutes, rather than considering the LFL or exposure limit for the specific substitute.

*Comment:* Arkema commented that the military, NASA, and the aeronautics industry would have special exceptions for certain chiller and spray-foam applications for which there appears to be little supporting technical detail in the record, but that at least for chillers are based on the relative significance of the associated emissions. Arkema asked what the effect on the atmosphere would be if the entire private sector had the benefits of the proposed narrowed use limits for military marine vessels, human-rated spacecraft, and related support equipment.

*Response:* We expect that the rest of the private sector would not meet the requirements for a narrowed use limit because substitutes that are acceptable, subject to narrowed use limits, may only be used where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements. Multiple alternatives with lower GWP are available for chillers and equipment manufacturers are already implementing them;<sup>217 218</sup> thus, other alternatives are technically feasible. See also sections VI.A.5.i and VI.A.6.i of this rule for a discussion of available alternatives. This is different from the situation for military marine vessels and human-rated spacecraft and related support equipment which have many unique characteristics that make it more difficult and time-consuming to evaluate and implement alternatives; see the preamble to the NPRM at 81 FR 22844, 22848 (April 18, 2016). In addition, the time periods for qualification of products to meet specifications for the military or for space flight and aeronautics-related applications are significant. For example, in the case of foams, one aerospace company stated that it would take more than two years to develop, test and qualify a new alternative, and it will take at least another five years “to manufacture flight-representative foam samples, followed by ground and flight

testing,” and then additional time to retool their facilities to manufacture the foam with an alternative blowing agent.<sup>219</sup> NASA began development of spray polyurethane foams using HFC-245fa in 2007 and only now in 2016 expects to complete qualification.<sup>220</sup>

EPA did not base the narrowed use limits for centrifugal and positive displacement compressor chillers for military marine vessels or for human-rated spacecraft and related support equipment applications on the relative significance of the associated emissions; rather, for informational purposes, we indicated that emissions were not expected to be significant. EPA’s decisions are based on the comparative risk of various alternatives considering the SNAP criteria, not based on achieving a specific climate benefit. EPA provided information concerning the estimated climate benefits associated with the proposed and final rule. EPA did not calculate the benefits or atmospheric impacts from every possible scenario.

*Comment:* AHRI, the Alliance, HARC and NEDA/CAP all urged consistency in EPA’s stance on and implementation of the SNAP program. AHRI and HARC encouraged EPA to adhere closely to the principles of the Agency’s position at the Montreal Protocol and the initial 1994 SNAP framework. The Alliance requested (1) that EPA clarify how the proposal is consistent with a global phase-down approach to HFCs, (2) that EPA articulate how the SNAP program would be used in the context of implementing an HFC amendment to the Montreal Protocol, and (3) that for any future rulemakings for a change of SNAP listing status, EPA publish a clear and predictable evaluation process by which risk factors are compared in the comparative risk framework to make SNAP change of status decisions with transparency on how the factors will be weighted. NEDA/CAP expressed concern about the greater frequency of new rules and listings and the “rolling and complex schedule” of change of status dates, which could complicate industry’s ability to operate the installed base of existing equipment using refrigerants proposed to undergo a change of status in new equipment. NEDA/CAP suggested that EPA provide a “master schedule” for the review and

<sup>219</sup> The Boeing Company. Comments on Proposed Rule to Change the Status of Certain Substitutes under the Significant New Alternatives Policy Program. October, 2014.

<sup>220</sup> Spray Foam Magazine, 2016. “SPF and SLS Help NASA Explore Deep Space” September/October issue, 2016. This document is accessible at: <http://sprayfoammagazine.com/spf-sls-help-nasa-explore-deep-space/>.

<sup>217</sup> Press release, “Ingersoll Rand Innovates HVAC Portfolio Using Next Generation, Low Global Warming Refrigerant, R-452B”, June 16, 2016.

<sup>218</sup> Press release, “Trane Announces Significant Centrifugal Chiller Line Expansion and Services for the United States and Canada.” July 13, 2016.

listing of substitutes, given the fact that “EPA’s increasingly ‘piecemeal’ new approach to SNAP revisions creates other business planning problems and potentially significant equipment compatibility issues for existing refrigerant, chiller and cooling equipment.”

*Response:* EPA considers this final rule to be consistent with the framework in the initial SNAP rule, as explained in section II of the NPRM at 81 FR 22816–9 and in section II of this preamble. This rule concerns specific uses of certain alternatives to ODS, including some HFCs, while the North American Proposal to amend the Montreal Protocol to add a global phase-down of HFCs concerns HFC production and consumption generally without reference to specific uses. Reductions in use of certain HFCs in specific end uses due to changes of status under the SNAP program are expected to result in decreased production of those HFCs, which would contribute to the United States’ ability to implement reductions in production and consumption of HFCs under a global phase-down of HFCs along the lines of the North American Proposal.

With regard to specific quantification of reductions in overall risk to human health and the environment, in the 1994 rulemaking, we considered and rejected comments suggesting that we develop an index to rank all substitutes based on risk. In the preamble to the rule, we specifically noted that “a strict quantitative index would not allow for sufficient flexibility in making appropriate risk management decisions” (59 FR 13044, March 18, 1994). See July 2015 SNAP rule at 80 FR 42940. Concerning NEDA/CAP’s comment about the frequency of recent rulemakings and listings, EPA notes that we have the authority to change the status of a previously listed alternative and mentioned this as a possibility in the initial SNAP rulemaking. See the preamble to the July 2015 rule at 80 FR 42939–40. Further, the CAP has guided EPA in our decision to issue more frequent listings as well as rulemakings including changes of status. We also note that some of our recent decisions mentioned by NEDA/CAP have provided additional alternatives for both new and retrofits of existing equipment, which would have no impact on the production of other alternatives or on existing equipment manufactured with other alternatives. Concerning NEDA/CAP’s comment about the potential impact of the rule on existing equipment, see the discussion in section VII.A.1.

*Comment:* AHAM commented that EPA has no justification for changing the listing status of compounds of which the toxicity, GWP, efficiency and other criteria of evaluation remain unchanged.

*Response:* EPA disagrees. The suite of available or potentially available alternatives changes over time and the availability of those alternatives enables a broader review of comparative risk under section 612(c). Further, our understanding of the impact that HFCs have on climate has evolved and become much deeper over the years. See the preamble to the July 2015 rule at 80 FR 42935–6.

*Comment:* Arguing that we should not change the status of R-407A and R-407B for cold storage warehouse, and should find R-448A and R-449A acceptable for that end-use as well as for refrigerated food processing and dispensing equipment, AHRI stated that the “direct refrigerant emissions in these end uses represent a small percentage of the overall life cycle climate performance” and that overall greenhouse gas emissions will increase if a less efficient product were used.

*Response:* EPA interprets this comment to be based on the SNAP review criteria of “atmospheric effects,” which is discussed above in section II.E.1. We have noted that part of our review of the overall risk to human health and the environment that substitutes pose includes the GWP of a particular substitute, and the GWPs of R-407A and R-407B are higher than those of other alternatives in the cold storage warehouse end-use. Our conclusion as discussed in section VI.A.6.b.i above was that these refrigerants pose overall greater risk than other alternatives. With respect to R-448A and R-449A in both end-uses, we noted in sections VI.A.6.c.i and VI.A.7.b.ii above that EPA is currently evaluating those refrigerants for these end-uses but has not yet issued either a proposed decision or a Notice of Acceptability for these refrigerants in these end-uses.

The reader is referred to sections VII.B.2 above and VII.D.3. As discussed in response to other comments in section VII.D.3 below, energy efficiency is not a specific criterion under SNAP, and indirect GHG emissions may vary based on energy efficiency of the appliance. As discussed in response to comment in section VII.B.2 above, EPA initially contemplated considering indirect climate impacts as part of our overall risk analysis in the initial SNAP rule, but our experience has been that it is impractical to perform a detailed analysis of indirect global warming

impacts associated with a particular substitute.

### C. Cost and Economic Impacts

EPA received comments from Arkema, NAFEM, Structural Composites and Compsys, AHAM, and UTC in which commenters provided data on the cost and economic impacts of the proposed rule. These comments are summarized in the response to comments sections for the end-uses addressed in this final rule. We summarize and respond to the more general cost comments in this section.

#### 1. Costs of Rule

*Comment:* EPA received comments suggesting that EPA provide more time for the changes in status in order to avoid undue burden on the U.S. economy. UTC commented that if this rule is finalized as proposed, industries and companies utilizing many of the refrigerants and propellants affected by this rule will need to invest substantial resources in order to promote compliance with the intended transition over the next decade. AHAM stated that under EPA’s proposed change of status dates, the costs would be significantly higher during the transition to an alternative refrigerant as compared to a date three years later, which would allow companies adequate time to structure costs and decrease risk over multiple years and at almost half the cost. AHRI noted that accelerating the process for changing multiple product platforms by even a single year can significantly impact manufacturers’ costs and resources burden. Arkema commented that no SNAP rule should impose unreasonable burdens on the U.S. economy. Arkema recommended that EPA allow more time for transitions to avoid that outcome.

*Response:* EPA understands that there are challenges associated with transitioning substitutes, including costs to manufacturers in redesigning equipment and making changes to manufacturing facilities. As an initial matter, and as discussed more fully in section VII.A.3, under the SNAP criteria for review in 40 CFR 82.180(a)(7), consideration of cost is limited to cost of the substitute under review, and that consideration does not include the cost of transition when a substitute is found unacceptable.

The transition timelines in this final rule are based on information concerning the availability of alternatives. While EPA does not consider the cost of transition in its analysis, EPA recognizes that later dates allow industry time to plan and to spread out capital costs over longer time

periods. We have selected the change of status dates, both as proposed and as finalized, considering technical factors, such as time required for research and development, time required for testing to meet industry and regulatory standards, time to adjust their manufacturing processes to safely accommodate the use of other substitutes, and supply of alternatives.

*Comment:* NAFEM commented that if the proposed changes are finalized, the rule will limit manufacturer productivity, threaten less profitable but important niche product lines that currently meet marketplace needs, and shift significant costs to end users of commercial refrigeration equipment. NAFEM further commented that costs and impacts for niche product lines, safety concerns, and evaluation, research, redesign, testing, implementation and training should be included in EPA's revised analyses. Structural Composites and Compsys comments that costs will dramatically increase if alternatives fail and several rounds of trials are required.

*Response:* Although EPA did not consider the costs of transitioning to other alternatives in making the listing decisions in this rulemaking, for informational purposes, we did prepare a cost analysis and a small business impacts analysis for this rule for businesses that are directly regulated. EPA recognizes that transitioning to other alternatives is likely to require capital costs and investments in research, updated equipment, and their related financial impacts. However, EPA's cost analysis did not evaluate the share of costs likely to be borne by consumers, since it is not clear what proportion of cost impacts may be passed on to consumers, and further, such economic analyses typically look at costs to the regulated community rather than indirect impacts on consumers. NAFEM did not provide specific cost or cost impact information for niche users or specific information for profit losses that would have allowed us to analyze the impacts for niche product lines. In the cases where commenters provided specific, detailed cost information, we used that information to revise the cost assumptions in our updated cost analysis for this final rule. For additional information on economic analysis conducted for this rule, see the supporting document "Cost Analysis for Regulatory Changes to the Listing Status of High-GWP Alternatives used in

Refrigeration and Air Conditioning, Foams, and Fire Suppression."<sup>221</sup>

## 2. EPA's Cost Analysis and Small Business Impacts Screening Analysis

*Comment:* EPA received comments indicating that small businesses bear a disproportionate share of the regulatory burden. NAFEM and Structural Composites and Compsys stated that the proposed rule was overly burdensome to small businesses. NAFEM comments that if this rule is finalized as proposed, the available supply of equipment models will decrease because manufacturers will not be able to sell existing supply, will not have a portfolio of products ready to sell that comply with the new rule, and will have to pause the current development process for new projects already in the planning stage, further burdening small businesses. AHAM commented that the EPA's estimates for one time investments and annualized costs for facility conversion were "grossly" understated and EPA does not capture the "full financial impact to manufacturers."

*Response:* EPA disagrees with this comment. We prepared a preliminary small business screening analysis during the development of the proposed rule. We have updated our small business screening analysis using the change of status decisions and dates in the final rule and using detailed cost information provided by commenters.<sup>222</sup> In the analyses, EPA recognized that some small businesses may experience significant costs, but concluded that the number of small businesses that would experience significant costs was not substantial. A Small Business Advocacy Panel is convened when a proposed rulemaking is expected to have a significant impact on a substantial number of small entities, or "SISNOSE." EPA's preliminary and final screening analyses concluded that this rulemaking would not pose a SISNOSE. Accordingly, we did not convene a Small Business Advocacy Panel.

More broadly, for purposes of E.O. 12866, we performed an analysis of the costs of the proposed rule on all-sized businesses and estimated the total annualized upfront compliance costs to range from \$59.2–\$71.3 million, using a

7% discount rate, and \$58.8–\$70.6 million, using a 3% discount rate.<sup>223</sup> Total annualized compliance costs across affected small businesses are estimated at approximately \$11.8–\$14.4 million at a 7% discount rate, or \$11.5–\$14.0 million at a 3% discount rate.<sup>224</sup> We updated both analyses based upon the regulatory options and change of status dates in the final rule. The changes in the final rule—especially with respect to compliance dates—do not change the cost impacts on businesses. The commenters did not point to any specific aspects of that analysis that they believe are deficient.

Both the screening analysis for purposes of determining whether there was a SISNOSE and the analysis for purposes of E.O. 12866 were conducted based on the best market and cost information available to the Agency.

EPA also disagrees with the comment regarding the inability to sell existing supply as the status changes in the rule relate to new manufacturing and do not limit the sale of existing supply.

*Comment:* Arkema commented that EPA underestimated the costs of the NPRM. Arkema believes EPA's cost estimates are unduly optimistic given all that must be done to redesign equipment. Arkema further commented on three areas of economic analysis that they state need to be addressed. First, Arkema stated that EPA does not include the "wasted costs" incurred by those manufacturers that have actually changed designs of their equipment to meet DOE standards, based on the continued availability of existing SNAP substitutes, but that now may need to change their designs again. Second, Arkema suggested that EPA should account for "economic effects" on U.S. plants that produce HFC-134a and the other HFCs and HFC blends whose listing the Agency proposed to change. Third, Arkema suggested that the economic analyses should disclose how EPA expects prices and availability to change once it eliminates competing products, including stimulation of short-term demand for the HFCs and HFC blends whose listing the Agency proposed to change, longer term increases in prices for the HFCs and HFC blends, and increased demand for next-generation fluorinated products.

<sup>221</sup> ICF, 2016a. Cost Analysis for Regulatory Changes to the Listing Status of High-GWP Alternatives used in Refrigeration and Air Conditioning, Foams, and Fire Suppression. September, 2016.

<sup>222</sup> ICF, 2016b. Economic Impact Screening Analysis for Regulatory Changes to the Listing Status of High-GWP Alternatives used in Refrigeration and Air Conditioning, Foams, and Fire Suppression. ICF International. September, 2016.

<sup>223</sup> ICF, 2016a. Cost Analysis for Regulatory Changes to the Listing Status of High-GWP Alternatives used in Refrigeration and Air Conditioning, Foams, and Fire Suppression. ICF International. September, 2016.

<sup>224</sup> ICF, 2016b. Economic Impact Screening Analysis for Regulatory Changes to the Listing Status of High-GWP

Alternatives used in Refrigeration and Air Conditioning, Foams, and Fire Suppression. ICF International. September, 2016.



*Response:* See response above and see also section VII.B.1 of the preamble to the July 2015 rule.

*Comment:* Structural Composites and Comsys generally agreed with the economic impact of transitioning to an alternative, as outlined in EPA's "Economic Impact Screening Analysis for Regulatory Changes to the Listing Status of High-GWP Alternatives used in Refrigeration and Air Conditioning, Foams, and Fire Suppression."

*Response:* EPA appreciates this comment.

*Comment:* AHAM noted the anticipated development costs fluctuate depending on the transition deadline. According to data collected by AHAM, EPA's proposed date of 2021 for new household refrigerants has the highest transition cost per company, while the 2024 deadline proposed by industry allows companies adequate time to structure costs over multiple years at nearly half the cost.

*Response:* The cost of transition to other alternatives is not a consideration under the SNAP review criteria. See sections VI and VII.C for additional information on considerations of cost under the SNAP program. With regard to AHAM's analysis, it is not clear what years AHAM considered. For example, we could not determine if AHAM considered dates earlier than 2021 or limited their evaluation to 2021 and later dates.

#### D. Environmental Impacts of Status Changes

##### 1. General Comments

*Comment:* UTC commented that EPA should avoid utilizing specific GWP limits in this or subsequent rulemakings.

*Response:* EPA agrees with this commenter, and notes that no SNAP action has established a maximum GWP above which a substitute would be unacceptable. EPA recognizes that different end-uses have different technical demands and available alternatives, and so has always sought to determine which substitutes are safer overall in the intersection of each substitute and end-use.

*Comment:* NRDC and EIA expressed their support for the rule, encouraged similar actions be taken in other sectors and end-uses, and stated that promotion of alternatives with lower GWPs than those that are still acceptable is necessary.

*Response:* We appreciate the support of these commenters and their concurrence in the importance of the benefits of this rule. Regarding requests for finding unacceptable substitutes

with GWPs in the range of 600 to 1,400, the agency must consider the availability of other alternatives that are safer overall in each end use. We encourage the development of such alternatives, and as technologies continue to evolve, the agency intends to continue to evaluate present and new alternatives.

*Comment:* Hudson encouraged EPA not to approve substitutes for retrofit purposes unless they have a lower GWP and are more energy efficient than the current chemical in that equipment.

*Response:* This action does not approve substitutes for retrofit purposes.

##### 2. EPA's Climate Benefits Analysis

*Comment:* AHAM, FPA, Johnson Controls, NEDA/CAP, Flexible Packaging Association, and Sub Zero Group stated that the environmental benefits of this action are small when compared with the total of the United States' GHG emissions or in comparison with the benefits of other EPA rules.

*Response:* EPA disagrees with the notion that the environmental benefits of this rule are "miniscule," as one commenter said, or that the benefits to human health and the environment are too small to make this action worthwhile. While the Agency agrees that some other sectors, such as electricity generation, currently emit more GHGs than the sectors affected by this rule, the estimated benefits of this rule are significant. To place the benefits in perspective, the 10–11 MMTCO<sub>2</sub>eq of prevented emissions in 2030 are equivalent to the total energy use of over one million homes, or equivalent to taking well over two million cars off the road.<sup>225</sup> Further, the problem of climate change is of the type that is the result of many small acts of pollution rather than one giant spill or other polluting event. It is the sum of all the small releases of gases that leads to the problem, and to claim that individual sources of emissions should not be reduced because their contributions, taken alone, are not as large as those of others would make control of the problem impossible. In fact, due to the high GWPs of many of the gases affected by this rule, reducing emission of HFCs is widely considered low-hanging fruit in terms of the efficiency of approaches to reduce GHG emissions.<sup>226</sup>

<sup>225</sup> EPA's Greenhouse Gas Equivalencies Calculator. Accessible at [www.epa.gov/energy/greenhouse-gas-equivalencies-calculator](http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator).

<sup>226</sup> UNEP, 2011. HFCs: A Critical Link in Protecting Climate and the Ozone Layer, A UNEP Synthesis Report. November, 2011. This document is accessible at: [www.unep.org/dewa/portals/67/pdf/HFC\\_report.pdf](http://www.unep.org/dewa/portals/67/pdf/HFC_report.pdf).

*Comment:* UTC commented that the environmental analysis underlying this rule is flawed, and that benefits should be calculated based on a projection of state-by-state code adoption.

*Response:* EPA disagrees with this commenter. In our consultation with stakeholders, we have frequently heard that patchworks of local regulations often make matters more difficult for businesses. This action will change the status of certain substitutes in certain end-uses uniformly across the country. Hence our approach of calculating benefits assuming similar adoption rates nationally is appropriate. It is true that some localities may implement regulations that nudge or force businesses to transition faster than the transition dates in this rule, just as some businesses may make the decision to transition more quickly, but that simply means that the cumulative benefits estimated are conservative in this respect. Benefits in given years after the transition dates would not be affected by such early transitions.

*Comment:* NAFEM requested that EPA conduct a study to determine the effect on the environment of this action using refrigerant escape estimates rather than overall use of refrigerants in various end-uses.

*Response:* EPA does consider the rates at which substitutes leak or are otherwise emitted in its estimation of environmental benefits. The Agency's Vintaging Model accounts for emissions from use, servicing, and disposal of equipment and materials as each year's worth, or "vintage," of that equipment goes through its life cycle. This model, and the estimates of leak rates within it, is peer-reviewed and regularly updated.

##### 3. Energy Efficiency

*Comment:* Hudson and UTC both claim that the energy efficiency implications of changes in refrigerant should be considered, and Hudson specifically suggests that finding alternatives acceptable for retrofit uses can lead to losses in efficiency.

*Response:* The SNAP regulations for review of substitutes include both a list of "information required to be submitted" (section 82.178) and "criteria for review" of SNAP submissions (section 82.180). The list of required information includes global warming impacts and mentions changes in energy efficiency as an example of indirect contributions to global warming. The criteria for review do not mention energy efficiency. While EPA uses all information submitted to inform its general understanding of the substitute, the end-use, and the sector, the Agency does not use all the

information as part of its comparative assessment to support listing decisions. As EPA previously stated, “[w]e note that we do not have a practice in the SNAP program of including energy efficiency in the overall risk analysis. We do, however, consider issues such as technical needs for energy efficiency (e.g., to meet DOE standards) in determining whether alternatives are ‘available’” (80 FR 42921; July 20, 2015).

The Agency agrees with the commenters that energy efficiency can have significant impacts on the GHG emissions. However, we disagree that this action will have unintended detrimental effects on energy efficiency. As described in the July 2015 rule (80 FR 42902), the energy efficiency actually achieved will depend on both the refrigerant used and the design and settings of the equipment. It is impractical for EPA to evaluate all possible equipment design and refrigerant combinations. As part of its consideration of whether available alternatives exist in particular end-uses, SNAP considers as part of its evaluation whether use of potential alternatives is feasible. For example, if use of a particular alternative made it impossible for end users to comply with DOE energy conservation standards, that chemical would not be considered a truly available substitute, and this would be considered in decisions on the status of other alternatives in that end-use. In fact, many substitutes that remain acceptable can lead to better energy efficiency in that end-use than the alternatives that are having their status changed in this rule.

*Comment:* For new cold storage warehouses, Daikin recommended that R-410A remain acceptable in direct expansion systems “in order to maintain the energy efficiency and safety of Cold Storage Warehouses.” They provided an explanation of why R-410A is more energy efficient than R-404A. Arguing that we should not change the status of R-407A and R-407B, and should find R-448A and R-449A acceptable, for both cold storage warehouses and for refrigerated food processing and dispensing equipment, AHRI stated without identifying any specific substitutes that “[s]ome of the SNAP listed low-GWP refrigerants in this application will result in less efficient products.”

*Response:* See responses above. For new cold storage warehouses, we noted that some equipment could be subject to DOE energy conservation standards, and have considered this in determining a reasonable yet expeditious change of status date. For new refrigerated food

processing and dispensing equipment, as an equipment manufacturer indicated, there are not applicable DOE energy conservation standards.

#### *E. Interactions With Other Rules*

*Comment:* CPI and BASF stated that there needs to be an alignment between EPA and the Canadian regulatory framework for HFC emissions. Both organizations encouraged EPA to work with Environment and Climate Change Canada (ECCC) to align regulatory controls under development to limit HFC emissions from foam products that impact similar end-uses. The commenters stated that a consistent approach would reduce confusion in the marketplace and facilitate compliance with any use restrictions.

*Response:* The regulatory frameworks and decisions of the U.S. and other countries may vary due to differences in the statutes on which the regulations are based as well as public input and other factors. While EPA agrees that certain countries, such as Canada, look to the work already done in the United States and some similarities may result, each country’s regulations are based on its domestic statutes and regulatory processes. ECCC proposals to date have considered EPA’s rules,<sup>227</sup> and EPA appreciates the value of consistency where practicable.

#### *F. Other Suggestions or Requests*

*Comment:* Zero Zone recommended that EPA add R-448A and R-449A to the list of acceptable alternatives for stand-alone equipment. NAFEM commented that there are no acceptable alternatives for R-404A, other than propane, and recommended that EPA add R-448A and R-449A to the list of acceptable alternatives for medium temperature stand-alone equipment. NAFEM stated that “R-448A and 449A have lower GWPs and deliver fewer emissions than 404A, and in most cases, these refrigerants can be used as a drop in replacement for 404A.” NAFEM commented that the same public health arguments that the EPA cited in deeming R-450A and similar refrigerants as acceptable for medium temperature stand-alone (retail food refrigeration) equipment should also apply to R-448A and R-449A. NAFEM noted that EPA performed assessments to examine the health and environmental risks of R-450A in docket EPA-HQ-OAR-2003-

0118. NAFEM indicated that it would be burdensome for manufacturers using R-404A for medium temperature applications to transition to R-450A, for example, given that R-450A “was designed to replace R-134A and has significantly different performance characteristics when compared to R-404A.” NAFEM stated that R-450A is a low pressure gas compared to the R-404A, which is a medium-pressure gas, and cited technical challenges with transitioning to R-450A would require redesign of current systems and regulatory testing. These factors, NAFEM stated, would reduce productivity of the equipment, increase manufacturing costs, and threaten market supply of medium temperature equipment. Conversely, NAFEM believe the use of R-448A and R-449A would only require valve adjustments in current system design, reduce GWP by  $\frac{2}{3}$ , and would require about 10 percent effort for manufacturers to implement when compared to R-450A. In support of their argument for the acceptable listing of R-448A and R-449A for medium temperature equipment, NAFEM also stated that stand-alone equipment has lower leak rates and refrigerant charge than remote systems.

*Response:* These comments go beyond the scope of the current rulemaking as they concern end-uses and/or substitutes not addressed in this action. EPA appreciates receiving this information and will consider the comments as it evaluates possible future actions.

*Comment:* While CARB supported EPA’s efforts to change the status of certain high-GWP alternatives for use in several end-uses, the agency encouraged EPA to list additional high-GWP refrigerants as unacceptable in the refrigeration and AC sector and work with refrigerant safety standards committees, such as ASHRAE and UL, to accelerate the transition to lower-GWP refrigerants. CARB also stated that the proposed rule is a valuable early action item that will assist in developing additional HFC reduction measures in their SLCP Reduction Strategy that they plan to finalize in the fall of 2016.

*Response:* EPA appreciates receiving this information and will consider the comments as it evaluates possible future actions. EPA is committed to its engagement with stakeholders in the refrigerants industry, including ASHRAE and UL. For example, EPA staff are currently members of ASHRAE, and participate in relevant subcommittees, such as ASHRAE Standing Standard Project Committees 15 and 15.2, some of the leading safety

<sup>227</sup> See the ECCC’s permitting and reporting requirements for HFCs, which take effect in February 2017. Canada Gazette, June 2016. Ozone-depleting Substances and Halocarbon Alternatives Regulations. Available at: <http://www.gazette.gc.ca/rp-pr/p2/2016/2016-06-29/html/sor-dors137-eng.php>.

standards for refrigerants in the United States, and EPA staff regularly attend industry conferences intended for the refrigerants industry.

*Comment:* The Alliance requested that EPA disclose the timeline for finalizing the Agency's proposal to amend the section 608 refrigerant management regulations (80 FR 69458; November 9, 2015). The Alliance indicated that its members are supportive of the proposal, but are concerned that the Agency has not finalized the rule, given that the public comment period closed on December 9, 2015. They also noted that they submitted a petition on January 31, 2015, requesting the proposed rule. The Alliance believe that "promoting effective refrigerant management practices, including recovery, reclamation and reuse, is an important immediate element of reducing the GHG footprint associated with the use of HFCs and will allow production to be focused primarily for use in new equipment."

*Response:* EPA agrees with the Alliance that the 608 rule will strengthen refrigerant management practices and reduce emissions of ODS and gases with high GWPs. For information on the final 608 rule, see the docket for the rulemaking (EPA-HQ-OAR-2015-0453).

*Comment:* HSI encouraged EPA to postpone the publication of the rule until relevant cases still pending, which challenged the July 2015 rule, have been settled.

*Response:* EPA disagrees. We are finalizing this rule in a timely fashion in response to public comments to provide information to the regulated community, some of whom have requested expedited finalization.

## VIII. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at <http://www2.epa.gov/laws-regulations/laws-and-executive-orders>.

### A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is a significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review. It raises novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order. Any changes made in response to OMB recommendations have been documented in the docket. EPA prepared analyses of the potential costs

and benefits associated with this action. These are available in docket EPA-HQ-OAR-2015-0663 under the titles, "Climate Benefits of the SNAP Program Status Change Rule" and "Cost Analysis for Regulatory Changes to the Listing Status of High-GWP Alternatives used in Refrigeration and Air Conditioning, Foams, and Fire Suppression."

### B. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection requirements contained in the existing regulations and has assigned OMB control number 2060-0226. This rule contains no new requirements for reporting or recordkeeping.

### C. Regulatory Flexibility Act

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. The small entities subject to the requirements of this action are small businesses. For purposes of assessing the impacts of this rule on small entities, EPA evaluated small businesses as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201. The Agency has determined that about 90 small businesses could be subject to the rulemaking, and roughly 76 percent of the small businesses subject to this rulemaking would be expected to experience compliance costs of less than one percent of annual sales revenue. Details of this analysis are presented in the document entitled, "Economic Impact Screening Analysis for Regulatory Changes to the Listing Status of High-GWP Alternatives used in Refrigeration and Air Conditioning, Motor Vehicle Air Conditioners, Foams, and Fire Suppression."<sup>228</sup> EPA evaluated the potential costs to small businesses associated with the rule. EPA estimates that the total annualized compliance costs for all small businesses would be approximately \$11.8 to \$14.4 million at a seven percent discount rate, or \$11.5 to \$14.0 million at a three percent discount rate.<sup>229</sup> This action allows equipment manufacturers the additional options of using propane, HFO-1234yf, and 2-BTP in the specified end-uses but does not mandate such use. Because these substitutes are not yet being used in the United States for the end-uses (with the exception of

limited test-marketing), no change in business practice would be required to meet the use conditions, resulting in no adverse impact compared to the absence of this rule. Provisions that allow venting of HC refrigerants in the uses of propane addressed by this rule would reduce regulatory burden. We have therefore concluded that this action would relieve regulatory burden for all small entities that choose to use propane as a refrigerant in the end-uses in this listing. The use conditions of this rule apply to manufacturers of commercial ice machines, water coolers, and very low temperature refrigeration equipment that choose to use propane.

The requirements of this rule with respect to HFCs would impact small businesses that manufacture food processing and dispensing equipment, household refrigerators and freezers, cold storage refrigeration systems, and polyurethane foams; operators of cold storage refrigeration systems, including refrigerated warehouses, wholesalers, and food manufacturers; and manufacture and use cold storage warehouses, and small businesses that import products containing closed cell phenolic, polyisocyanurate, polyolefin, PU, and polystyrene foams manufactured with HFC or HCFC foam blowing agents. The prohibition of methylene chloride as a foam blowing agent is not anticipated to impact small businesses because this substance is not expected to be used currently as a blowing agent. This rule's provisions do not create enforceable requirements for refrigeration and AC technicians, but they would indirectly affect technicians servicing motor vehicle AC systems, certain types of retail food refrigeration equipment, cold storage warehouses, and commercial AC equipment where the technician, rather than the refrigeration or AC equipment owner, purchases servicing equipment for different refrigerants. EPA expects these indirect impacts on technicians are minimal, because the transitions to different refrigerants required by this rule are already occurring due to corporate social responsibility initiatives (e.g., Consumer Goods Forum pledge concerning HFC refrigerants), and because many of the still-acceptable alternatives are already used for these refrigeration or AC equipment types. Further, most acceptable HFC refrigerant blends can be recovered and serviced using equipment that service technicians already own. In some uses, there is no significant impact of the rule because the substitutes prohibited are not widely used (e.g., use of perfluorocarbons for fire suppression,

<sup>228</sup> ICF, 2016b. Economic Impact Screening Analysis for Regulatory Changes to the Listing Status of High-GWP Alternatives used in Refrigeration and Air Conditioning, Foams, and Fire Suppression. September, 2016.

<sup>229</sup> Ibid.

use of methylene chloride as a foam blowing agent in various types of foam). A significant portion of the businesses regulated under this rule are not small businesses (e.g., commercial AC manufacturers). We have therefore concluded that this action will not have a significant impact on a significant number of small entities.

#### *D. Unfunded Mandates Reform Act (UMRA)*

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local or tribal governments or the private sector.

#### *E. Executive Order 13132: Federalism*

This action does not have federalism implications. It will 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. EPA is aware that the California Air Resources Board has proposed regulation of a number of the substitutes and end-uses in this rule.

#### *F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments*

This action does not have tribal implications as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments, 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, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this action.

#### *G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks*

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This rule restricts the use of certain substitutes that have greater overall risks for human health and the environment, primarily due to their high GWP. The reduction in GHG emissions would provide climate benefits for all people, including benefits for children and future generations. The risk screens are in the

docket for this rulemaking.<sup>230 231 232 233 234</sup>

#### *H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use*

This action is not a “significant energy action” because it is not likely to have a significant adverse effect on the supply, distribution or use of energy. For the end-uses that are related to energy effects such as refrigeration and AC, a number of alternatives are available to replace those refrigerants that are listed as unacceptable in this action; many of the alternatives are as energy efficient or more energy efficient than the substitutes being listed as unacceptable. Thus, we have concluded that this rule is not likely to have any adverse energy effects.

#### *I. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51*

This action involves technical standards. EPA is using standards from UL in the use conditions for propane and standards from SAE for HFO-1234yf. Additionally, EPA is incorporating by reference a standard from SAE that EPA already requires in a use condition for HFC-152a in MVAC. These use conditions will ensure that these new substitutes for very low temperature refrigeration equipment, commercial ice machines, and water coolers, do not present significantly greater risk to human health or the environment than other alternatives.

EPA is incorporating by reference portions of current editions of the UL Standard 399, “Standard for Drinking-Water Coolers”; UL Standard 471, “Standard for Commercial Refrigerators and Freezers”; and UL Standard 563, “Standard for Ice Makers”, which includes requirements for the safe use of

refrigerants. Specifically, these standards are:

1. *Supplement SB to UL Standard 399: Requirements for Drinking Water Coolers Employing A Flammable Refrigerant in the Refrigerating System* (7th Edition, August 22, 2008). This document establishes requirements for self-contained drinking water coolers, including those supplying cold and/or hot water and those employing flammable refrigerants. The standard is available at <http://ulstandards.ul.com/standard/?id=399>, and may be purchased by mail at: COMM 2000, 151 Eastern Avenue, Bensenville, IL 60106; Email: [orders@comm-2000.com](mailto:orders@comm-2000.com); Telephone: 1–888–853–3503 in the U.S. or Canada (other countries dial +1–415–352–2168); Internet address: <http://ulstandards.ul.com/> or [www.comm-2000.com](http://www.comm-2000.com). The cost of UL 399 is \$798 for an electronic copy and \$998 for hardcopy. UL also offers a subscription service to the Standards Certification Customer Library (SCCL) that allows unlimited access to their standards and related documents. The cost of obtaining this standard is not a significant financial burden for equipment manufacturers and purchase is not required for those selling, installing and servicing the equipment. Therefore, EPA concludes that the UL standard being incorporated by reference is reasonably available.

2. *Supplement SB to UL Standard 471: Requirements for Refrigerators and Freezers Employing A Flammable Refrigerant in the Refrigerating System* (10th Edition, November 24, 2010). This document establishes requirements for commercial refrigerators and freezers that employ a refrigerant that has been identified as having flammable characteristics. The standard is available at <http://ulstandards.ul.com/standard/?id=471&edition=10&doctype=ulstd>, and may be purchased by mail at: COMM 2000, 151 Eastern Avenue, Bensenville, IL 60106; Email: [orders@comm-2000.com](mailto:orders@comm-2000.com); Telephone: 1–888–853–3503 in the U.S. or Canada (other countries dial +1–415–352–2168); Internet address: <http://ulstandards.ul.com/> or [www.comm-2000.com](http://www.comm-2000.com). The cost of UL 471 is \$716 for an electronic copy and \$897 for hardcopy. UL also offers a subscription service to the SCCL that allows unlimited access to their standards and related documents. The cost of obtaining this standard is not a significant financial burden for equipment manufacturers and purchase is not required for those selling, installing and servicing the equipment. Therefore, EPA concludes that the UL

<sup>230</sup> ICF, 2016c. Significant New Alternatives Policy Program: Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Water Coolers Substitute: Propane (R-290).

<sup>231</sup> ICF, 2016d. Significant New Alternatives Policy Program: Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Very Low Temperature Refrigeration Substitute: Propane (R-290) and Ethane (R-170).

<sup>232</sup> ICF, 2016e. Significant New Alternatives Policy Program: Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Commercial Ice Machines Substitute: Propane (R-290).

<sup>233</sup> ICF, 2016f. Significant New Alternatives Policy Program: Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Residential and Light Commercial Air Conditioning and Heat Pumps. Substitute: R-443A.

<sup>234</sup> ICF, 2016g. Significant New Alternatives Policy Program: Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Chillers and Cold Storage Warehouses. Substitute: Propylene (R-1270).

standard being incorporated by reference is reasonably available.

3. *Supplement SA to UL Standard 563: Requirements for Ice Makers Employing a Flammable Refrigerant in the Refrigeration System* (8th Edition, July 31, 2009). This document establishes requirements for automatic ice makers, including unitary and remote ice makers. The standard is available at <http://ulstandards.ul.com/standard/?id=563&edition=8&doctype=ulstd>, and may be purchased by mail at: COMM 2000, 151 Eastern Avenue, Bensenville, IL 60106; Email: [orders@comm-2000.com](mailto:orders@comm-2000.com); Telephone: 1-888-853-3503 in the U.S. or Canada (other countries dial +1-415-352-2168); Internet address: <http://ulstandards.ul.com/> or [www.comm-2000.com](http://www.comm-2000.com). The cost of UL 563 is \$716 for an electronic copy and \$897 for hardcopy. UL also offers a subscription service to the SCCL that allows unlimited access to their standards and related documents. The cost of obtaining this standard is not a significant financial burden for equipment manufacturers and purchase is not required for those selling, installing and servicing the equipment. Therefore, EPA concludes that the UL standard being incorporated by reference is reasonably available.

EPA is also incorporating by reference the list of refrigerants that ASHRAE designates as flammability Class 3 according to ASHRAE Standard 34-2013, *Designation and Safety Classification of Refrigerants*, in the unacceptability listing for certain highly flammable refrigerants for use in existing residential and light commercial split AC systems. This standard is available at <https://www.ashrae.org/resources-publications/bookstore/standards-15-34> and may be purchased by mail at: 6300 Interfirst Drive, Ann Arbor, MI 48108; by telephone: 1-800-527-4723 in the U.S. or Canada; Internet address: [http://www.techstreet.com/ashrae/ashrae\\_standards.html?ashrae\\_auth\\_token=](http://www.techstreet.com/ashrae/ashrae_standards.html?ashrae_auth_token=). The cost of ASHRAE Standard 34-2013 is \$107 for an electronic or hardcopy. The cost of obtaining this standard is not a significant financial burden for equipment manufacturers and purchase is not required for those selling, installing and servicing the equipment. Therefore, EPA concludes that the ASHRAE standard being incorporated by reference is reasonably available.

In addition, EPA is using standards from SAE in the use conditions for HFO-1234yf. These standards are:

1. *SAE J639: Safety Standards for Motor Vehicle Refrigerant Vapor*

*Compression Systems* (revised December 19, 2011). This document establishes safety standards for HFO-1234yf MVAC systems that include unique fittings; a warning label indicating the refrigerant's identity and that it is a flammable refrigerant; and requirements for engineering design strategies that include a high-pressure compressor cutoff switch and pressure relief devices. This standard is available at [http://standards.sae.org/j639\\_201112/](http://standards.sae.org/j639_201112/).

2. *SAE J1739 (adopted 2009): Potential Failure Mode and Effects Analysis in Design (Design FMEA) and Potential Failure Mode and Effects Analysis in Manufacturing and Assembly Processes (Process FMEA) and Effects Analysis for Machinery (Machinery FMEA)* (revised January 1, 2009). This standard describes potential FMEA in design and potential FMEA in manufacturing and assembly processes. It requires manufacturers of MVAC systems and vehicles to conduct a FMEA and assists users in the identification and mitigation of risk by providing appropriate terms, requirements, ranking charts, and worksheets. This standard is available at [http://standards.sae.org/j1739\\_200901/](http://standards.sae.org/j1739_200901/).

3. *SAE J2844 (Revised October 2011): R-1234yf (HFO-1234yf) New Refrigerant Purity and Container Requirements For Use in Mobile Air-Conditioning Systems* (revised October 2011). This standard sets purity standards and describes container requirements, including fittings for refrigerant cylinders. For connections with refrigerant containers for use in professional servicing, use fittings must be consistent with SAE J2844 (revised October 2011). This standard is available at [http://standards.sae.org/j2844\\_201110/](http://standards.sae.org/j2844_201110/).

These standards may be purchased by mail at: SAE Customer Service, 400 Commonwealth Drive, Warrendale, PA 15096-0001; by telephone: 1-877-606-7323 in the United States or 724-776-4970 outside the United States or in Canada. The cost of SAE J639, SAE J1739, and SAE 2844 is \$74 each for an electronic or hardcopy. The cost of obtaining these standards is not a significant financial burden for manufacturers of MVAC systems and purchase is not required for those selling, installing and servicing the systems. Therefore, EPA concludes that the use of SAE J639, SAE J1739, and SAE J2844 are reasonably available.

In addition, in today's rule, we are incorporating by reference a standard that EPA already requires in a use condition for HFC-152a in MVAC:

4. *SAE J2773: Standard for Refrigerant Risk Analysis for Mobile Air*

*Conditioning Systems* (revised February 4, 2011). This standard describes methods to understand the risks associated with MVAC systems in all aspects of a vehicle's lifecycle including design, production, assembly, operation and end of life. This standard is available at [http://standards.sae.org/j2773\\_201102/](http://standards.sae.org/j2773_201102/) and may be purchased by mail at: SAE Customer Service, 400 Commonwealth Drive, Warrendale, PA 15096-0001; by telephone: 1-877-606-7323 in the United States or 724-776-4970 outside the United States or in Canada. The cost of SAE J2773 is \$74 for an electronic or hardcopy. The cost of obtaining this standard is not a significant financial burden for manufacturers of MVAC systems and purchase is not required for those selling, installing and servicing the systems. Therefore, EPA concludes that the use of SAE J2773 is reasonably available.

#### *J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations*

The human health or environmental risk addressed by this action will not have potential disproportionately high and adverse human health or environmental effects on minority, low-income or indigenous populations. This action's health and risk assessments are contained in the comparisons of toxicity for the various substitutes, as well as risk screens for the substitutes that are listed as acceptable, subject to use conditions, or are newly listed as unacceptable.<sup>235 236 237 238 239</sup> The risk screens are in the docket for this rulemaking.

#### *K. Congressional Review Act (CRA)*

This action is subject to the CRA, and EPA will submit a rule report to each House of the Congress and to the

<sup>235</sup> ICF, 2016c. Significant New Alternatives Policy Program: Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Water Coolers Substitute: Propane (R-290).

<sup>236</sup> ICF, 2016d. Significant New Alternatives Policy Program: Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Very Low Temperature Refrigeration Substitute: Propane (R-290) and Ethane (R-170).

<sup>237</sup> ICF, 2016e. Significant New Alternatives Policy Program: Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Commercial Ice Machines Substitute: Propane (R-290).

<sup>238</sup> ICF, 2016f. Significant New Alternatives Policy Program: Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Residential and Light Commercial Air Conditioning and Heat Pumps. Substitute: R-443A.

<sup>239</sup> ICF, 2016g. Significant New Alternatives Policy Program: Refrigeration and Air Conditioning Sector Risk Screen on Substitutes in Chillers and Cold Storage Warehouses. Substitute: Propylene (R-1270).

Comptroller General of the United States. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

## IX. References

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#### List of Subjects in 40 CFR Part 82

Environmental protection, Administrative practice and procedure, Air pollution control, Incorporation by reference, Recycling, Reporting and recordkeeping requirements, Stratospheric ozone layer.

Dated: September 26, 2016.

**Gina McCarthy,**  
*Administrator.*

For the reasons set forth in the preamble, EPA amends 40 CFR part 82 as follows:

#### PART 82—PROTECTION OF STRATOSPHERIC OZONE

■ 1. The authority citation for part 82 continues to read as follows:

**Authority:** 42 U.S.C. 7414, 7601, 7671–7671q.

#### Subpart F—Recycling and Emissions Reduction

■ 2. Amend § 82.154 by revising the introductory text to paragraph (a)(1) and paragraph (a)(1)(viii) to read as follows:

##### § 82.154 Prohibitions.

(a) \* \* \* (1) No person maintaining, servicing, repairing, or disposing of an appliance or industrial process refrigeration may knowingly vent or otherwise release into the environment any refrigerant from such appliances. Notwithstanding any other provision of this subpart, the following substitutes in the following end-uses are exempt from this prohibition and from the requirements of this subpart:

\* \* \* \* \*

(viii) Propane (R-290) in retail food refrigerators and freezers (stand-alone units only); household refrigerators, freezers, and combination refrigerators and freezers; self-contained room air conditioners for residential and light commercial air-conditioning and heat pumps; vending machines; and effective January 3, 2017, self-contained commercial ice machines, very low temperature refrigeration equipment, and water coolers;

\* \* \* \* \*

#### Subpart G—Significant New Alternatives Policy Program

■ 3. In appendix B to subpart G of part 82, the table titled "Refrigerants—Acceptable Subject to Use Conditions" is amended by:

- a. Revising the fifth entry;
- b. Adding three entries at the end; and
- c. Revising the NOTE following footnote 3.

The revisions and additions to read as follows:

#### Appendix B to Subpart G of Part 82—Substitutes Subject to Use Restrictions and Unacceptable Substitutes

## REFRIGERANTS—ACCEPTABLE SUBJECT TO USE CONDITIONS

Application	Substitute	Decision	Conditions	Comments
CFC-12 Automobile Motor Vehicle Air Conditioning (New equipment only).	R-152a as a substitute for CFC-12.	Acceptable subject to use conditions.	Engineering strategies and/or devices shall be incorporated into the system such that foreseeable leaks into the passenger compartment do not result in R-152a concentrations of 3.7% v/v or above in any part of the free space inside the passenger compartment for more than 15 seconds when the car ignition is on. Manufacturers must adhere to all the safety requirements listed in the Society of Automotive Engineers (SAE) Standard J639 (adopted 2011), including unique fittings and a flammable refrigerant warning label as well as SAE Standard J2773 (adopted February 2011).	Additional training for service technicians recommended. Manufacturers should conduct and keep on file failure mode and Effect Analysis (FMEA) on the MVAC as stated in SAE J1739.
Motor vehicle air conditioning (newly manufactured medium-duty passenger vehicles).	HFO-1234yf .....	Acceptable subject to use conditions.	As of January 3, 2017: ..... (1) HFO-1234yf MVAC systems must adhere to all of the safety requirements of SAE J639 (adopted 2011), including requirements for a flammable refrigerant warning label, high-pressure compressor cutoff switch and pressure relief devices, and unique fittings. For connections with refrigerant containers for use in professional servicing, use fittings must be consistent with SAE J2844 (revised October 2011). (2) Manufacturers must conduct Failure Mode and Effect Analysis (FMEA) as provided in SAE J1739 (adopted 2009). Manufacturers must keep the FMEA on file for at least three years from the date of creation.	Additional training for service technicians recommended. HFO-1234yf is also known as 2,3,3,3-tetrafluoro-prop-1-ene (CAS. Reg. No. 754-12-1).
Motor vehicle air conditioning (newly manufactured heavy-duty pickup trucks).	HFO-1234yf .....	Acceptable subject to use conditions.	As of January 3, 2017: ..... (1) HFO-1234yf MVAC systems must adhere to all of the safety requirements of SAE J639 (adopted 2011), including requirements for a flammable refrigerant warning label, high-pressure compressor cutoff switch and pressure relief devices, and unique fittings. For connections with refrigerant containers for use in professional servicing, use fittings must be consistent with SAE J2844 (revised October 2011). (2) Manufacturers must conduct Failure Mode and Effect Analysis (FMEA) as provided in SAE J1739 (adopted 2009). Manufacturers must keep the FMEA on file for at least three years from the date of creation.	Additional training for service technicians recommended. HFO-1234yf is also known as 2,3,3,3-tetrafluoro-prop-1-ene (CAS No 754-12-1).
Motor vehicle air conditioning (newly manufactured complete heavy-duty vans only).	HFO-1234yf .....	Acceptable subject to use conditions.	As of January 3, 2017: ..... (1) HFO-1234yf MVAC systems must adhere to all of the safety requirements of SAE J639 (adopted 2011), including requirements for a flammable refrigerant warning label, high-pressure compressor cutoff switch and pressure relief devices, and unique fittings. For connections with refrigerant containers for use in professional servicing, use fittings must be consistent with SAE J2844 (revised October 2011). (2) Manufacturers must conduct Failure Mode and Effect Analysis (FMEA) as provided in SAE J1739 (adopted 2009). Manufacturers must keep the FMEA on file for at least three years from the date of creation.	Additional training for service technicians recommended. HFO-1234yf is also known as 2,3,3,3-tetrafluoro-prop-1-ene (CAS No 754-12-1). HFO-1234yf is acceptable for complete heavy-duty vans. Complete heavy-duty vans are not altered by a secondary or tertiary manufacturer.

\* \* \* \* \*

**Note 1:** The Director of the Federal Register approves the incorporation by reference of the material under “Conditions” in the table “REFRIGERANTS—ACCEPTABLE SUBJECT TO USE CONDITIONS” (5 U.S.C. 552(a) and 1 CFR part 51). You may obtain a copy from SAE Customer Service, 400 Commonwealth Drive, Warrendale, PA 15096-0001 USA; email: [CustomerService@sae.org](mailto:CustomerService@sae.org); Telephone: 1-877-606-7323 (U.S. and Canada only) or 1-724-776-4970 (outside the U.S. and

Canada); Internet address: <http://store.sae.org/dlabout.htm>. You may inspect a copy at U.S. EPA’s Air Docket; EPA West Building, Room 3334; 1301 Constitution Ave. NW., Washington, DC, or at the National Archives and Records Administration (NARA). For questions regarding access to these standards, the telephone number of EPA’s Air Docket is 202-566-1742. For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/](http://www.archives.gov/federal_register/)

[code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://code_of_federal_regulations/ibr_locations.html).

\* \* \* \* \*

■ 4. Appendix K to subpart G of part 82 is revised to read as follows:

**Appendix K to Subpart G of Part 82—Substitutes Subject to Use Restrictions and Unacceptable Substitutes Listed in the July 22, 2002, Final Rule Effective August 21, 2002**

#### FOAM BLOWING—UNACCEPTABLE SUBSTITUTES

End-use	Substitute	Decision	Comments
Replacements for HCFC-141b in the following rigid polyurethane/polyisocyanurate applications: —Boardstock —Appliance —Spray	HCFC-22, HCFC-142b and blends thereof.	Unacceptable Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before December 1, 2017 may be used after that date.	Alternatives exist with lower or zero-ODP.
All foam end-uses .....	HCFC-124 .....	Unacceptable Closed cell foam products and products containing closed cell foams manufactured with this substitute on or before December 1, 2017 may be used after that date.	Alternatives exist with lower or zero-ODP.

■ 5. Appendix M to subpart G of part 82 is revised to read as follows:

**Appendix M to Subpart G—Unacceptable Substitutes Listed in the September 30, 2004 Final Rule, Effective November 29, 2004**

#### FOAM BLOWING—UNACCEPTABLE SUBSTITUTES

End-use	Substitute	Decision	Comments
All foam end-uses: —rigid polyurethane and polyisocyanurate laminated boardstock —rigid polyurethane appliance —rigid polyurethane spray and commercial refrigeration, and sandwich panels —rigid polyurethane slabstock and other foams —polystyrene extruded insulation boardstock and billet —phenolic insulation board and bunstock —flexible polyurethane —polystyrene extruded sheet —Except for: <sup>1</sup> —space vehicle —nuclear —defense —research and development for foreign customers	HCFC-141b .....	Unacceptable Closed cell foam products and products containing closed cell foams manufactured with this substitute on or before December 1, 2017 may be used after that date.	Alternatives exist with lower or zero-ODP.

<sup>1</sup> Exemptions for specific applications are identified in the list of acceptable substitutes, which is available on the SNAP Web site at: <https://www.epa.gov/snap/foam-blowing-agents>.

■ 6. Appendix O to subpart G of part 82 is amended by revising the table titled “Fire Suppression and Explosion Protection Sector-Total Flooding Substitutes-Acceptable Subject to Use Conditions” to read as follows:

**Appendix O to Subpart G of Part 82—Substitutes Listed in the September 27, 2006 Final Rule, Effective November 27, 2006**

## FIRE SUPPRESSION AND EXPLOSION PROTECTION SECTOR—TOTAL FLOODING SUBSTITUTES—ACCEPTABLE SUBJECT TO USE CONDITIONS

End-use	Substitute	Decision	Conditions	Further information
Total flooding .....	Gelled Halocarbon/ Dry Chemical Suspension (Envirogel) with sodium bicarbonate additive.	Acceptable subject to use conditions.	Use of whichever hydrofluorocarbon gas (HFC-125, HFC-227ea, or HFC-236fa) is employed in the formulation must be in accordance with all requirements for acceptability ( <i>i.e.</i> , narrowed use limits) of that HFC under EPA's SNAP program.	Use of this agent should be in accordance with the safety guidelines in the latest edition of the NFPA 2001 Standard for Clean Agent Fire Extinguishing Systems, for whichever hydrofluorocarbon gas is employed, and the latest edition of the NFPA 2010 standard for Aerosol Extinguishing Systems. Sodium bicarbonate release in all settings should be targeted so that increased blood pH level would not adversely affect exposed individuals. Users should provide special training, including the potential hazards associated with the use of the HFC agent and sodium bicarbonate, to individuals required to be in environments protected by Envirogel with sodium bicarbonate additive extinguishing systems. Each extinguisher should be clearly labeled with the potential hazards from use and safe handling procedures. See additional comments 1, 2, 3, 4, 5.
Total flooding .....	Powdered Aerosol E (FirePro®).	Acceptable subject to use conditions.	For use only in normally unoccupied areas ..	Use of this agent should be in accordance with the safety guidelines in the latest edition of the NFPA 2010 standard for Aerosol Extinguishing Systems. For establishments manufacturing the agent or filling, installing, or servicing containers or systems to be used in total flooding applications, EPA recommends the following: —adequate ventilation should be in place to reduce airborne exposure to constituents of agent; —an eye wash fountain and quick drench facility should be close to the production area; —training for safe handling procedures should be provided to all employees that would be likely to handle containers of the agent or extinguishing units filled with the agent; —workers responsible for clean up should allow for maximum settling of all particulates before reentering area and wear appropriate protective equipment; and —all spills should be cleaned up immediately in accordance with good industrial hygiene practices. See additional comments 1, 2, 3, 4, 5.
Total flooding .....	Phosphorous Tribromide (PBr <sub>3</sub> ).	Acceptable subject to use conditions.	For use only in aircraft engine nacelles .....	For establishments manufacturing the agent or filling, installing, or servicing containers or systems, EPA recommends the following: —adequate ventilation should be in place and/or positive pressure, self-contained breathing apparatus (SCBA) should be worn; —training for safe handling procedures should be provided to all employees that would be likely to handle containers of the agent or extinguishing units filled with the agent; and —all spills should be cleaned up immediately in accordance with good industrial hygiene practices. See additional comments 1, 2, 3, 4, 5.

## Additional comments:

- 1—Should conform to relevant OSHA requirements, including 29 CFR 1910, Subpart L, Sections 1910.160 and 1910.162.
- 2—Per OSHA requirements, protective gear (SCBA) should be available in the event personnel should reenter the area.
- 3—Discharge testing should be strictly limited to that which is essential to meet safety or performance requirements.
- 4—The agent should be recovered from the fire protection system in conjunction with testing or servicing, and recycled for later use or destroyed.
- 5—EPA has no intention of duplicating or displacing OSHA coverage related to the use of personal protective equipment (*e.g.*, respiratory protection), fire protection, hazard communication, worker training or any other occupational safety and health standard with respect to halon substitutes.

■ 7. Appendix Q to subpart G of part 82 is revised to read as follows:

**Appendix Q to Subpart G of Part 82—  
Unacceptable Substitutes Listed in the  
March 28, 2007 Final Rule, Effective  
May 29, 2007**

**FOAM BLOWING UNACCEPTABLE SUBSTITUTES**

End-use	Substitute	Decision	Further information
—Rigid polyurethane commercial refrigeration —Rigid polyurethane sandwich panels ..... —Rigid polyurethane slabstock and other foams.	HCFC-22, HCFC-142b as substitutes for HCFC-141b.	Unacceptable <sup>1</sup> ..... Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before December 1, 2017 may be used after that date.	Alternatives exist with lower or zero-ODP.
—Rigid polyurethane and polyisocyanurate laminated boardstock. —Rigid polyurethane appliance ..... —Rigid polyurethane spray and commercial refrigeration, and sandwich panels. —Rigid polyurethane slabstock and other foams. —Polystyrene extruded insulation boardstock and billet. —Phenolic insulation board and bunstock ..... —Flexible polyurethane ..... —Polystyrene extruded sheet .....	HCFC-22, HCFC-142b as substitutes for CFCs.	Unacceptable <sup>2</sup> ..... Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before December 1, 2017 may be used after that date.	Alternatives exist with lower or zero-ODP.

<sup>1</sup> For existing users of HCFC-22 and HCFC-142b as of November 4, 2005 other than in marine applications, the unacceptability determination is effective on March 1, 2008; for existing users of HCFC-22 and HCFC-142b as of November 4, 2005 in marine applications, including marine flotation foam, the unacceptability determination is effective on September 1, 2009. For an existing user of HCFC-22 or HCFC-142b that currently operates in only one facility that it does not own, and is scheduled to transition to a non-ODS, flammable alternative to coincide with a move to a new facility and installation of new process equipment that cannot be completed by March 1, 2008, the unacceptability determination is effective January 1, 2010.

<sup>2</sup> For existing users of HCFC-22 and HCFC-142b in polystyrene extruded insulation boardstock and billet and the other foam end-uses, as of November 4, 2005, the unacceptability determination is effective on January 1, 2010.

■ 8. Appendix U to subpart G of part 82 is amended by revising the tables titled “Foam Blowing Agents—Substitutes Acceptable Subject to Narrowed Use Limits” and “Unacceptable Substitutes” to read as follows:

**Appendix U to Subpart G of Part 82—  
Unacceptable Substitutes and  
Substitutes Subject to Use Restrictions  
Listed in the July 20, 2015 Final Rule,  
Effective August 19, 2015**

\* \* \* \* \*

**FOAM BLOWING AGENTS—SUBSTITUTES ACCEPTABLE SUBJECT TO NARROWED USE LIMITS**

End-use	Substitute	Decision	Narrowed use limits	Further information
Rigid Polyurethane: Appliance.	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel T1, and Formacel Z-6.	Acceptable Subject to Narrowed Use Limits.	Acceptable from January 1, 2020, until January 1, 2022, in military applications and until January 1, 2025, in space- and aeronautics-related applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before January 1, 2022, for military applications or on and before January 1, 2025, in space- and aeronautics-related applications, may be used after those dates.	Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> <li>• Process or product in which the substitute is needed;</li> <li>• Substitutes examined and rejected;</li> <li>• Reason for rejection of other alternatives, e.g., performance, technical or safety standards; and/or</li> <li>• Anticipated date other substitutes will be available and projected time for switching.</li> </ul>
Rigid Polyurethane: Commercial Refrigeration and Sandwich Panels.	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel T1, and Formacel Z-6.	Acceptable Subject to Narrowed Use Limits.	Acceptable from January 1, 2020, until January 1, 2022, in military applications and until January 1, 2025, in space- and aeronautics-related applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before January 1, 2022, for military applications or on and before January 1, 2025, in space- and aeronautics-related applications, may be used after those dates.	Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> <li>• Process or product in which the substitute is needed;</li> <li>• Substitutes examined and rejected;</li> <li>• Reason for rejection of other alternatives, e.g., performance, technical or safety standards; and/or</li> <li>• Anticipated date other substitutes will be available and projected time for switching.</li> </ul>

## FOAM BLOWING AGENTS—SUBSTITUTES ACCEPTABLE SUBJECT TO NARROWED USE LIMITS—Continued

End-use	Substitute	Decision	Narrowed use limits	Further information
Flexible Polyurethane	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof.	Acceptable Subject to Narrowed Use Limits.	Acceptable from January 1, 2017, until January 1, 2022, in military applications and until January 1, 2025, in space- and aeronautics-related applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements.	Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> <li>• Process or product in which the substitute is needed;</li> <li>• Substitutes examined and rejected;</li> <li>• Reason for rejection of other alternatives, <i>e.g.</i>, performance, technical or safety standards; and/or</li> <li>• Anticipated date other substitutes will be available and projected time for switching.</li> </ul>
Rigid Polyurethane: Slabstock and Other.	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel TI, and Formacel Z-6.	Acceptable Subject to Narrowed Use Limits.	Acceptable from January 1, 2019, until January 1, 2022, in military applications and until January 1, 2025, in space- and aeronautics-related applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before January 1, 2022, for military applications or on and before January 1, 2025, in space- and aeronautics-related applications, may be used after those dates.	Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> <li>• Process or product in which the substitute is needed;</li> <li>• Substitutes examined and rejected;</li> <li>• Reason for rejection of other alternatives, <i>e.g.</i>, performance, technical or safety standards; and/or</li> <li>• Anticipated date other substitutes will be available and projected time for switching.</li> </ul>
Rigid Polyurethane and Polyisocyanurate Laminated Boardstock.	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof.	Acceptable Subject to Narrowed Use Limits.	Acceptable from January 1, 2017, until January 1, 2022, in military applications and until January 1, 2025, in space- and aeronautics-related applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before January 1, 2022, for military applications or on and before January 1, 2025, in space- and aeronautics-related applications, may be used after those dates.	Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> <li>• Process or product in which the substitute is needed;</li> <li>• Substitutes examined and rejected;</li> <li>• Reason for rejection of other alternatives, <i>e.g.</i>, performance, technical or safety standards; and/or</li> <li>• Anticipated date other substitutes will be available and projected time for switching.</li> </ul>
Rigid Polyurethane: Marine Flotation Foam.	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel TI, and Formacel Z-6.	Acceptable Subject to Narrowed Use Limits.	Acceptable from January 1, 2020, until January 1, 2022, in military applications and until January 1, 2025, in space- and aeronautics-related applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before January 1, 2022, for military applications or on and before January 1, 2025, in space- and aeronautics-related applications, may be used after those dates.	Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> <li>• Process or product in which the substitute is needed;</li> <li>• Substitutes examined and rejected;</li> <li>• Reason for rejection of other alternatives, <i>e.g.</i>, performance, technical or safety standards; and/or</li> <li>• Anticipated date other substitutes will be available and projected time for switching.</li> </ul>
Polystyrene: Extruded Sheet.	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6.	Acceptable Subject to Narrowed Use Limits.	Acceptable from January 1, 2017, until January 1, 2022, in military applications and until January 1, 2025, in space- and aeronautics-related applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before January 1, 2022, for military applications or on and before January 1, 2025, in space- and aeronautics-related applications, may be used after those dates.	Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> <li>• Process or product in which the substitute is needed;</li> <li>• Substitutes examined and rejected;</li> <li>• Reason for rejection of other alternatives, <i>e.g.</i>, performance, technical or safety standards; and/or</li> <li>• Anticipated date other substitutes will be available and projected time for switching.</li> </ul>



## FOAM BLOWING AGENTS—SUBSTITUTES ACCEPTABLE SUBJECT TO NARROWED USE LIMITS—Continued

End-use	Substitute	Decision	Narrowed use limits	Further information
Polystyrene: Extruded Boardstock and Billet.	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel B, and Formacel Z-6.	Acceptable Subject to Narrowed Use Limits.	Acceptable from January 1, 2021, until January 1, 2022, in military applications and until January 1, 2025, in space- and aeronautics-related applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before January 1, 2022, for military applications or on and before January 1, 2025, in space- and aeronautics-related applications, may be used after those dates.	Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> <li>• Process or product in which the substitute is needed;</li> <li>• Substitutes examined and rejected;</li> <li>• Reason for rejection of other alternatives, <i>e.g.</i>, performance, technical or safety standards; and/or</li> <li>• Anticipated date other substitutes will be available and projected time for switching.</li> </ul>
Integral Skin Polyurethane.	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6.	Acceptable Subject to Narrowed Use Limits.	Acceptable from January 1, 2017, until January 1, 2022, in military applications and until January 1, 2025, in space- and aeronautics-related applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements.	Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> <li>• Process or product in which the substitute is needed;</li> <li>• Substitutes examined and rejected;</li> <li>• Reason for rejection of other alternatives, <i>e.g.</i>, performance, technical or safety standards; and/or</li> <li>• Anticipated date other substitutes will be available and projected time for switching.</li> </ul>
Polyolefin .....	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6.	Acceptable Subject to Narrowed Use Limits.	Acceptable from January 1, 2020, until January 1, 2022, in military applications and until January 1, 2025, in space- and aeronautics-related applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before January 1, 2022, for military applications or on and before January 1, 2025, in space- and aeronautics-related applications, may be used after those dates.	Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> <li>• Process or product in which the substitute is needed;</li> <li>• Substitutes examined and rejected;</li> <li>• Reason for rejection of other alternatives, <i>e.g.</i>, performance, technical or safety standards; and/or</li> <li>• Anticipated date other substitutes will be available and projected time for switching.</li> </ul>
Phenolic Insulation Board and Bunstock.	HFC-143a, HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof.	Acceptable Subject to Narrowed Use Limits.	Acceptable from January 1, 2017, until January 1, 2022, in military applications and until January 1, 2025, in space- and aeronautics-related applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before January 1, 2022, for military applications or on and before January 1, 2025, in space- and aeronautics-related applications, may be used after those dates.	Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> <li>• Process or product in which the substitute is needed;</li> <li>• Substitutes examined and rejected;</li> <li>• Reason for rejection of other alternatives, <i>e.g.</i>, performance, technical or safety standards; and/or</li> <li>• Anticipated date other substitutes will be available and projected time for switching.</li> </ul>

## UNACCEPTABLE SUBSTITUTES

End-use	Substitute	Decision	Further information
All Foam Blowing End-uses ..	HCFC-141b and blends thereof .....	Unacceptable effective September 18, 2015. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before December 1, 2017 may be used after that date.	HCFC-141b has an ozone depletion potential of 0.11 under the Montreal Protocol. EPA previously found HCFC-141b unacceptable in all foam blowing end-uses (appendix M to subpart G of 40 CFR part 82). HCFC-141b has an ozone depletion potential (ODP) of 0.11.
All Foam Blowing end-uses ..	HCFC-22, HCFC-142b, and blends thereof	Unacceptable effective September 18, 2015. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before December 1, 2017 may be used after that date.	Use or introduction into interstate commerce of virgin HCFC-22 and HCFC-142b for foam blowing is prohibited after January 1, 2010 under EPA's regulations at 40 CFR part 82 subpart A unless used, recovered, and recycled. These compounds have ODPs of 0.055 and 0.065, respectively.

## UNACCEPTABLE SUBSTITUTES—Continued

End-use	Substitute	Decision	Further information
Flexible Polyurethane .....	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof.	Unacceptable as of January 1, 2017, except where allowed under a narrowed use limit.	These foam blowing agents have global warming potentials (GWPs) ranging from 725 to 1,430. Other substitutes will be available for this end-use with lower overall risk to human health and the environment by the status change date.
Polystyrene: Extruded Sheet	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6.	Unacceptable as of January 1, 2017, except where allowed under a narrowed use limit. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before December 1, 2017 may be used after that date.	These foam blowing agents have GWPs ranging from higher than 370 to approximately 1,500. Other substitutes will be available for this end-use with lower overall risk to human health and the environment by the status change date.
Phenolic Insulation Board and Bunstock.	HFC-143a, HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof.	Unacceptable as of January 1, 2017, except where allowed under a narrowed use limit. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before December 1, 2017 may be used after that date.	These foam blowing agents have GWPs ranging from 725 to 4,470. Other substitutes will be available for this end-use with lower overall risk to human health and the environment by the status change date.
Integral Skin Polyurethane ....	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6.	Unacceptable as of January 1, 2017, except where allowed under a narrowed use limit.	These foam blowing agents have GWPs ranging from higher than 370 to approximately 1,500. Other substitutes will be available for this end-use with lower overall risk to human health and the environment by the status change date.
Rigid Polyurethane: Slabstock and Other.	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel TI, and Formacel Z-6.	Unacceptable as of January 1, 2019, except where allowed under a narrowed use limit. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before January 1, 2019, may be used after that date.	These foam blowing agents have GWPs ranging from higher than 370 to approximately 1,500. Other substitutes will be available for this end-use with lower overall risk to human health and the environment by the status change date.
Rigid Polyurethane and Polyisocyanurate Laminated Boardstock.	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof.	Unacceptable as of January 1, 2017, except where allowed under a narrowed use limit. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before December 1, 2017 may be used after that date.	These foam blowing agents have GWPs ranging from 725 to 1,430. Other substitutes will be available for this end-use with lower overall risk to human health and the environment by the status change date.
Rigid Polyurethane: Marine Flotation Foam.	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel TI, and Formacel Z-6.	Unacceptable as of January 1, 2020 except where allowed under a narrowed use limit. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before January 1, 2020, may be used after that date.	These foam blowing agents have GWPs ranging from higher than 370 to approximately 1,500. Other substitutes will be available for this end-use with lower overall risk to human health and the environment by the status change date.
Rigid Polyurethane: Commercial Refrigeration and Sandwich Panels.	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6.	Unacceptable as of January 1, 2020 except where allowed under a narrowed use limit. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before January 1, 2020, may be used after that date.	These foam blowing agents have GWPs ranging from higher than 370 to approximately 1,500. Other substitutes will be available for this end-use with lower overall risk to human health and the environment by the status change date.
Rigid Polyurethane: Appliance.	HFC-134a, HFC-245fa, HFC-365mfc and blends thereof; Formacel TI, and Formacel Z-6.	Unacceptable as of January 1, 2020, except where allowed under a narrowed use limit. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before January 1, 2020, may be used after that date.	These foam blowing agents have GWPs ranging from higher than 370 to approximately 1,500. Other substitutes will be available for this end-use with lower overall risk to human health and the environment by the status change date.
Polystyrene: Extruded Boardstock and Billet.	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, Formacel B, and Formacel Z-6.	Unacceptable as of January 1, 2021, except where allowed under a narrowed use limit. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before January 1, 2021, may be used after that date.	These foam blowing agents have GWPs ranging from higher than 140 to approximately 1,500. Other substitutes will be available for this end-use with lower overall risk to human health and the environment by the status change date.

## UNACCEPTABLE SUBSTITUTES—Continued

End-use	Substitute	Decision	Further information
Polyolefin .....	HFC-134a, HFC-245fa, HFC-365mfc, and blends thereof; Formacel TI, and Formacel Z-6.	Unacceptable as of January 1, 2020, except where allowed under a narrowed use limit. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before January 1, 2020, may be used after that date.	These foam blowing agents have GWPs ranging from higher than 370 to approximately 1,500. Other substitutes will be available for this end-use with lower overall risk to human health and the environment by the status change date.

\* \* \* \* \*

■ 9. Add appendix V to subpart G of part 82 to read as follows:

**Appendix V to Subpart G of Part 82—  
Substitutes Subject to Use Restrictions  
and Unacceptable Substitutes Listed in  
the December 1, 2016 Final Rule**

## REFRIGERANTS—ACCEPTABLE SUBJECT TO USE CONDITIONS

End-use	Substitute	Decision	Use conditions	Further information
Commercial ice machines (self-contained) (new only).	Propane (R-290)	Acceptable, subject to use conditions.	<p>As of January 3, 2017:</p> <p>This refrigerant may be used only in new equipment designed specifically and clearly identified for the refrigerant—<i>i.e.</i>, this refrigerant may not be used as a conversion or “retrofit” refrigerant for existing equipment.</p> <p>This refrigerant may be used only in self-contained commercial ice machines that meet all requirements listed in Supplement SA to UL 563.<sup>1,2,5</sup> In cases where this rule includes requirements more stringent than those in UL 563, the equipment must meet the requirements of the final rule in place of the requirements in the UL Standard.</p> <p>The charge size must not exceed 150g (5.29 oz) in each refrigerant circuit of a commercial ice machine.</p> <p>As provided in clauses SA6.1.1 and SA6.1.2 of UL 563, the following markings must be attached at the locations provided and must be permanent:</p> <p>(a) “DANGER—Risk of Fire or Explosion. Flammable Refrigerant Used. Do Not Use Mechanical Devices To Defrost Refrigerator. Do Not Puncture Refrigerant Tubing.” This marking must be provided on or near any evaporators that can be contacted by the consumer.</p> <p>(b) “DANGER—Risk of Fire or Explosion. Flammable Refrigerant Used. To Be Repaired Only By Trained Service Personnel. Do Not Puncture Refrigerant Tubing.” This marking must be located near the machine compartment.</p> <p>(c) “CAUTION—Risk of Fire or Explosion. Flammable Refrigerant Used. Consult Repair Manual/Owner’s Guide Before Attempting To Service This Product. All Safety Precautions Must be Followed.” This marking must be located near the machine compartment.</p> <p>(d) “CAUTION—Risk of Fire or Explosion. Dispose of Properly In Accordance With Federal Or Local Regulations. Flammable Refrigerant Used.” This marking must be provided on the exterior of the refrigeration equipment.</p> <p>(e) “CAUTION—Risk of Fire or Explosion Due To Puncture Of Refrigerant Tubing; Follow Handling Instructions Carefully. Flammable Refrigerant Used.” This marking must be provided near all exposed refrigerant tubing.</p> <p>All of these markings must be in letters no less than 6.4 mm (¼ inch) high.</p> <p>The equipment must have red Pantone Matching System (PMS) #185 marked pipes, hoses, or other devices through which the refrigerant passes, to indicate the use of a flammable refrigerant. This color must be applied at all service ports and other parts of the system where service puncturing or other actions creating an opening from the refrigerant circuit to the atmosphere might be expected and must extend a minimum of one (1) inch in both directions from such locations.</p>	<p>Applicable OSHA requirements at 29 CFR part 1910 must be followed, including those at 29 CFR 1910.106 (flammable and combustible liquids), 1910.110 (storage and handling of liquefied petroleum gases), 1910.157 (portable fire extinguishers), and 1910.1000 (toxic and hazardous substances).</p> <p>Proper ventilation should be maintained at all times during the manufacture and storage of equipment containing hydrocarbon refrigerants through adherence to good manufacturing practices as per 29 CFR 1910.106. If refrigerant levels in the air surrounding the equipment rise above one-fourth of the lower flammability limit, the space should be evacuated and re-entry should occur only after the space has been properly ventilated.</p> <p>Technicians and equipment manufacturers should wear appropriate personal protective equipment, including chemical goggles and protective gloves, when handling propane. Special care should be taken to avoid contact with the skin since propane, like many refrigerants, can cause freeze burns on the skin.</p> <p>A Class B dry powder type fire extinguisher should be kept nearby.</p> <p>Technicians should only use spark-proof tools when working on equipment with propane.</p> <p>Any recovery equipment used should be designed for flammable refrigerants.</p> <p>Any refrigerant releases should be in a well-ventilated area, such as outside of a building.</p> <p>Only technicians specifically trained in handling flammable refrigerants should service equipment containing propane. Technicians should gain an understanding of minimizing the risk of fire and the steps to use flammable refrigerants safely.</p> <p>Room occupants should evacuate the space immediately following the accidental release of this refrigerant.</p> <p>If a service port is added then, commercial ice machines or equipment using propane should have service aperture fittings that differ from fittings used in equipment or containers using non-flammable refrigerant. “Differ” means that either the diameter differs by at least ¼ inch or the thread direction is reversed (<i>i.e.</i>, right-handed vs. left-handed). These different fittings should be permanently affixed to the unit at the point of service and maintained until the end-of-life of the unit, and should not be accessed with an adaptor.</p>

## REFRIGERANTS—ACCEPTABLE SUBJECT TO USE CONDITIONS—Continued

End-use	Substitute	Decision	Use conditions	Further information
Very low temperature refrigeration equipment (new only).	Propane (R-290)	Acceptable, subject to use conditions.	<p>As of January 3, 2017:</p> <p>This refrigerant may be used only in new equipment designed specifically and clearly identified for the refrigerant—<i>i.e.</i>, this refrigerant may not be used as a conversion or “retrofit” refrigerant for existing equipment.</p> <p>This refrigerant may only be used in equipment that meets all requirements in Supplement SB to UL 471.<sup>1,2,4</sup> In cases where the final rule includes requirements more stringent than those of UL 471, the appliance must meet the requirements of the final rule in place of the requirements in the UL Standard.</p> <p>The charge size for the equipment must not exceed 150 grams (5.29 ounces) in each refrigerant circuit of the very low temperature refrigeration equipment.</p> <p>As provided in clauses SB6.1.2 to SB6.1.5 of UL 471, the following markings must be attached at the locations provided and must be permanent:</p> <p>(a) “DANGER—Risk of Fire or Explosion. Flammable Refrigerant Used. Do Not Use Mechanical Devices To Defrost Refrigerator. Do Not Puncture Refrigerant Tubing.” This marking must be provided on or near any evaporators that can be contacted by the consumer.</p> <p>(b) “DANGER—Risk of Fire or Explosion. Flammable Refrigerant Used. To Be Repaired Only By Trained Service Personnel. Do Not Puncture Refrigerant Tubing.” This marking must be located near the machine compartment.</p> <p>(c) “CAUTION—Risk of Fire or Explosion. Flammable Refrigerant Used. Consult Repair Manual/Owner’s Guide Before Attempting To Service This Product. All Safety Precautions Must be Followed.” This marking must be located near the machine compartment.</p> <p>(d) “CAUTION—Risk of Fire or Explosion. Dispose of Properly In Accordance With Federal Or Local Regulations. Flammable Refrigerant Used.” This marking must be provided on the exterior of the refrigeration equipment.</p> <p>(e) “CAUTION—Risk of Fire or Explosion Due To Puncture Of Refrigerant Tubing; Follow Handling Instructions Carefully. Flammable Refrigerant Used.” This marking must be provided near all exposed refrigerant tubing.</p> <p>All of these markings must be in letters no less than 6.4 mm (1/4 inch) high.</p> <p>The equipment must have red PMS #185 marked pipes, hoses, or other devices through which the refrigerant passes, to indicate the use of a flammable refrigerant. This color must be applied at all service ports and other parts of the system where service puncturing or other actions creating an opening from the refrigerant circuit to the atmosphere might be expected and must extend a minimum of one (1) inch in both directions from such locations.</p>	<p>Applicable OSHA requirements at 29 CFR part 1910 must be followed, including those at 29 CFR 1910.94 (ventilation) and 1910.106 (flammable and combustible liquids), 1910.110 (storage and handling of liquefied petroleum gases), 1910.157 (portable fire extinguishers), and 1910.1000 (toxic and hazardous substances).</p> <p>Proper ventilation should be maintained at all times during the manufacture and storage of equipment containing hydrocarbon refrigerants through adherence to good manufacturing practices as per 29 CFR 1910.106. If refrigerant levels in the air surrounding the equipment rise above one-fourth of the lower flammability limit, the space should be evacuated and re-entry should occur only after the space has been properly ventilated.</p> <p>Technicians and equipment manufacturers should wear appropriate personal protective equipment, including chemical goggles and protective gloves, when handling propane. Special care should be taken to avoid contact with the skin since propane, like many refrigerants, can cause freeze burns on the skin.</p> <p>A Class B dry powder type fire extinguisher should be kept nearby.</p> <p>Technicians should only use spark-proof tools when working on equipment with flammable refrigerants.</p> <p>Any recovery equipment used should be designed for flammable refrigerants.</p> <p>Any refrigerant releases should be in a well-ventilated area, such as outside of a building.</p> <p>Only technicians specifically trained in handling flammable refrigerants should service equipment containing propane. Technicians should gain an understanding of minimizing the risk of fire and the steps to use flammable refrigerants safely.</p> <p>Room occupants should evacuate the space immediately following the accidental release of this refrigerant.</p> <p>If a service port is added, then very low temperature equipment using propane should have service aperture fittings that differ from fittings used in equipment or containers using non-flammable refrigerant. “Differ” means that either the diameter differs by at least 1/16 inch or the thread direction is reversed (<i>i.e.</i>, right-handed vs. left-handed). These different fittings should be permanently affixed to the unit at the point of service and maintained until the end-of-life of the unit, and should not be accessed with an adaptor.</p> <p>Very low temperature equipment using propane may also use another acceptable refrigerant substitute in a separate refrigerant circuit or stage (<i>e.g.</i>, one temperature stage with propane and a second stage with ethane).</p>

## REFRIGERANTS—ACCEPTABLE SUBJECT TO USE CONDITIONS—Continued

End-use	Substitute	Decision	Use conditions	Further information
Water coolers (new only).	Propane (R-290)	Acceptable, subject to use conditions.	<p>As of January 3, 2017:</p> <p>This refrigerant may be used only in new equipment designed specifically and clearly identified for the refrigerant—i.e., this refrigerant may not be used as a conversion or “retrofit” refrigerant for existing equipment.</p> <p>This refrigerant may be used only in water coolers that meet all requirements listed in Supplement SB to UL 399<sup>1 2 3</sup>. In cases where the rule includes requirements more stringent than those of the UL 399, the appliance must meet the requirements of the final rule in place of the requirements in the UL Standard.</p> <p>The charge size must not exceed 60 grams (2.12 ounces) per refrigerant circuit in the water cooler.</p> <p>The equipment must have red PMS #185 marked pipes, hoses, or other devices through which the refrigerant passes, to indicate the use of a flammable refrigerant. This color must be applied at all service ports and other parts of the system where service puncturing or other actions creating an opening from the refrigerant circuit to the atmosphere might be expected and must extend a minimum of one (1) inch in both directions from such locations.</p> <p>As provided in clauses SB6.1.2 to SB6.1.5 of UL 399, the following markings must be attached at the locations provided and must be permanent:</p> <p>(a) “DANGER—Risk of Fire or Explosion. Flammable Refrigerant Used. Do Not Use Mechanical Devices To Defrost Refrigerator. Do Not Puncture Refrigerant Tubing.” This marking must be provided on or near any evaporators that can be contacted by the consumer.</p> <p>(b) “DANGER—Risk of Fire or Explosion. Flammable Refrigerant Used. To Be Repaired Only By Trained Service Personnel. Do Not Puncture Refrigerant Tubing.” This marking must be located near the machine compartment.</p> <p>(c) “CAUTION—Risk of Fire or Explosion. Flammable Refrigerant Used. Consult Repair Manual/Owner’s Guide Before Attempting To Service This Product. All Safety Precautions Must be Followed.” This marking must be located near the machine compartment.</p> <p>(d) “CAUTION—Risk of Fire or Explosion. Dispose of Properly In Accordance With Federal Or Local Regulations. Flammable Refrigerant Used.” This marking must be provided on the exterior of the refrigeration equipment.</p> <p>(e) “CAUTION—Risk of Fire or Explosion Due To Puncture Of Refrigerant Tubing; Follow Handling Instructions Carefully. Flammable Refrigerant Used.” This marking must be provided near all exposed refrigerant tubing.</p>	<p>Applicable OSHA requirements at 29 CFR part 1910 must be followed, including those at 29 CFR 1910.94 (ventilation) and 1910.106 (flammable and combustible liquids), 1910.110 (storage and handling of liquefied petroleum gases), 1910.157 (portable fire extinguishers), and 1910.1000 (toxic and hazardous substances).</p> <p>Proper ventilation should be maintained at all times during the manufacture and storage of equipment containing hydrocarbon refrigerants through adherence to good manufacturing practices as per 29 CFR 1910.106. If refrigerant levels in the air surrounding the equipment rise above one-fourth of the lower flammability limit, the space should be evacuated and re-entry should occur only after the space has been properly ventilated.</p> <p>Technicians and equipment manufacturers should wear appropriate personal protective equipment, including chemical goggles and protective gloves, when handling propane. Special care should be taken to avoid contact with the skin since propane, like many refrigerants, can cause freeze burns on the skin.</p> <p>A Class B dry powder type fire extinguisher should be kept nearby.</p> <p>Technicians should only use spark-proof tools when working on equipment with flammable refrigerants.</p> <p>Any recovery equipment used should be designed for flammable refrigerants.</p> <p>Any refrigerant releases should be in a well-ventilated area, such as outside of a building.</p> <p>Only technicians specifically trained in handling flammable refrigerants should service equipment containing propane. Technicians should gain an understanding of minimizing the risk of fire and the steps to use flammable refrigerants safely.</p> <p>Room occupants should evacuate the space immediately following the accidental release of this refrigerant.</p> <p>If a service port is added, then water coolers or equipment using propane should have service aperture fittings that differ from fittings used in equipment or containers using non-flammable refrigerant. “Differ” means that either the diameter differs by at least 1/16 inch or the thread direction is reversed (i.e., right-handed vs. left-handed). These different fittings should be permanently affixed to the unit at the point of service and maintained until the end-of-life of the unit, and should not be accessed with an adaptor.</p>

<sup>1</sup> The Director of the Federal Register approves this incorporation by reference (5 U.S.C. 552(a) and 1 CFR part 51). You may inspect a copy at U.S. EPA’s Air and Radiation Docket; EPA West Building, Room 3334, 1301 Constitution Ave. NW., Washington, DC or at the National Archives and Records Administration (NARA). For questions regarding access to these standards, the telephone number of EPA’s Air and Radiation Docket is 202-566-1742. 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

<sup>2</sup> You may obtain the material from: Underwriters Laboratories Inc. (UL) COMM 2000; 151 Eastern Avenue, Bensenville, IL 60106; [orders@comm-2000.com](mailto:orders@comm-2000.com); 1-888-853-3503 in the U.S. or Canada (other countries dial +1-415-352-2168); <http://ulstandards.ul.com/> or [www.comm-2000.com](http://www.comm-2000.com).

<sup>3</sup> UL 399, Standard for Safety: Drinking Water Coolers.—Supplement SB: Requirements for Drinking Water Coolers Employing a Flammable Refrigerant in the Refrigerating System, 7th edition, Dated August 22, 2008, including revisions through October 17, 2013.

<sup>4</sup> UL 471, Standard for Safety: Commercial Refrigerators and Freezers.—Supplement SB: Requirements for Refrigerators and Freezers Employing a Flammable Refrigerant in the Refrigerating System, 10th edition, Dated November 24, 2010.

<sup>5</sup> UL 563, Standard for Safety: Ice Makers.—Supplement SA: Requirements for Ice Makers Employing a Flammable Refrigerant in the Refrigerating System, 8th edition, Dated July 31, 2009, including revisions through November 29, 2013.

## REFRIGERANTS—SUBSTITUTES ACCEPTABLE SUBJECT TO NARROWED USE LIMITS

End-use	Substitutes	Decision	Narrowed use limits	Further information
Centrifugal chillers (new only).	HFC-134a .....	Acceptable subject to narrowed use limits.	Acceptable after January 1, 2024, only in military marine vessels where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements.	Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> <li>• Application in which the substitute is needed;</li> <li>• Substitutes examined and rejected;</li> <li>• Reason for rejection of other alternatives, <i>e.g.</i>, performance, technical or safety standards; and/or</li> <li>• Anticipated date other substitutes will be available and qualified and projected time for switching.</li> </ul>
Centrifugal chillers (new only).	HFC-134a and R-404A.	Acceptable subject to narrowed use limits.	Acceptable after January 1, 2024, only in human-rated spacecraft and related support equipment where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements.	Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> <li>• Application in which the substitute is needed;</li> <li>• Substitutes examined and rejected;</li> <li>• Reason for rejection of other alternatives, <i>e.g.</i>, performance, technical or safety standards; and/or</li> <li>• Anticipated date other substitutes will be available and qualified and projected time for switching.</li> </ul>
Positive displacement chillers (new only).	HFC-134a .....	Acceptable subject to narrowed use limits.	Acceptable after January 1, 2024, only in military marine vessels where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements.	Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> <li>• Application in which the substitute is needed;</li> <li>• Substitutes examined and rejected;</li> <li>• Reason for rejection of other alternatives, <i>e.g.</i>, performance, technical or safety standards; and/or</li> <li>• Anticipated date other substitutes will be available and qualified and projected time for switching.</li> </ul>
Positive displacement chillers (new only).	HFC-134a and R-404A.	Acceptable subject to narrowed use limits.	Acceptable after January 1, 2024, only in human-rated spacecraft and related support equipment where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements.	Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> <li>• Application in which the substitute is needed;</li> <li>• Substitutes examined and rejected;</li> <li>• Reason for rejection of other alternatives, <i>e.g.</i>, performance, technical or safety standards; and/or</li> <li>• Anticipated date other substitutes will be available and qualified and projected time for switching.</li> </ul>

## REFRIGERANTS—UNACCEPTABLE SUBSTITUTES

End-use	Substitutes	Decision	Further information
Centrifugal chillers (new only)	FOR12A, FOR12B, HFC-134a, HFC-227ea, HFC-236fa, HFC-245fa, R-125/134a/600a (28.1/70/1.9), R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-410A, R-410B, R-417A, R-421A, R-422B, R-422C, R-422D, R-423A, R-424A, R-434A, R-438A, R-507A, RS-44 (2003 composition), and THR-03.	Unacceptable as of January 1, 2024 except where allowed under a narrowed use limit.	These refrigerants have GWPs ranging from approximately 900 to 9,810. Other alternatives will be available for this end-use with lower overall risk to human health and the environment by the status change date.
Centrifugal chillers (new only)	Propylene (R-1270) and R-443A .....	Unacceptable as of January 3, 2017 .....	These refrigerants are highly photochemically reactive in the lower atmosphere and may deteriorate local air quality (that is, may increase ground level ozone). Other alternatives are available for this end-use with lower overall risk to human health and the environment.

## REFRIGERANTS—UNACCEPTABLE SUBSTITUTES—Continued

End-use	Substitutes	Decision	Further information
Cold storage warehouses (new only).	HFC-227ea, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407A, R-407B, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-423A, R-424A, R-428A, R-434A, R-438A, R-507A, and RS-44 (2003 composition).	Unacceptable as of January 1, 2023 .....	These refrigerants have GWPs ranging from approximately 2,090 to 3,990. Other alternatives will be available for this end-use with lower overall risk to human health and the environment by the status change date.
Cold storage warehouses (new only).	Propylene (R-1270) and R-443A .....	Unacceptable as of January 3, 2017 .....	These refrigerants are highly photochemically reactive in the lower atmosphere and may deteriorate local air quality (that is, may increase ground level ozone). Other alternatives are available for this end-use with lower overall risk to human health and the environment.
Household refrigerators and freezers (new only).	FOR12A, FOR12B, HFC-134a, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-407F, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-426A, R-428A, R-434A, R-437A, R-438A, R-507A, RS-24 (2002 formulation), RS-44 (2003 formulation), SP34E, and THR-03.	Unacceptable as of January 1, 2021 .....	These refrigerants have GWPs ranging from approximately 900 to 3,985. Other alternatives will be available for this end-use with lower overall risk to human health and the environment by the status change date.
Positive displacement chillers (new only).	FOR12A, FOR12B, HFC-134a, HFC-227ea, KDD6, R-125/134a/600a (28.1/70/1.9), R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407C, R-410A, R-410B, R-417A, R-421A, R-422B, R-422C, R-422D, R-424A, R-434A, R-437A, R-438A, R-507A, RS-44 (2003 composition), SP34E, and THR-03.	Unacceptable as of January 1, 2024 except where allowed under a narrowed use limit.	These refrigerants have GWPs ranging from approximately 900 to 3,985. Other alternatives will be available for this end-use with lower overall risk to human health and the environment by the status change date.
Positive displacement chillers (new only).	Propylene (R-1270) and R-443A .....	Unacceptable as of January 3, 2017 .....	These refrigerants are highly photochemically reactive in the lower atmosphere and may deteriorate local air quality (that is, may increase ground level ozone). Other alternatives are available for this end-use with lower overall risk to human health and the environment.
Residential and light commercial air conditioning and heat pumps (new only).	Propylene (R-1270) and R-443A .....	Unacceptable as of January 3, 2017 .....	These refrigerants are highly photochemically reactive in the lower atmosphere and may deteriorate local air quality (that is, may increase ground level ozone). Other alternatives are available for this end-use with lower overall risk to human health and the environment.
Residential and light commercial air conditioning—unitary split AC systems and heat pumps (retrofit only).	All refrigerants identified as flammability Class 3 in ANSI/ASHRAE Standard 34–2013 <sup>1,2,3</sup> . All refrigerants meeting the criteria for flammability Class 3 in ANSI/ASHRAE Standard 34–2013. This includes, but is not limited to, refrigerant products sold under the names R-22a, 22a, Blue Sky 22a refrigerant, Coolant Express 22a, DURACOOOL-22a, EC-22, Ecofreeez EF-22a, Envirosafe 22a, ES-22a, Frost 22a, HC-22a, Maxi-Fridge, MX-22a, Oz-Chill 22a, Priority Cool, and RED TEK 22a.	Unacceptable as of January 3, 2017 .....	These refrigerants are highly flammable and present a flammability risk when used in equipment designed for non-flammable refrigerants. Other alternatives are available for this end-use with lower overall risk to human health and the environment.
Retail food refrigeration (refrigerated food processing and dispensing equipment) (new only).	HFC-227ea, KDD6, R-125/290/134a/600a (55.0/1.0/42.5/1.5), R-404A, R-407A, R-407B, R-407C, R-407F, R-410A, R-410B, R-417A, R-421A, R-421B, R-422A, R-422B, R-422C, R-422D, R-424A, R-428A, R-434A, R-437A, R-438A, R-507A, RS-44 (2003 formulation).	Unacceptable as of January 1, 2021 .....	These refrigerants have GWPs ranging from approximately 1,770 to 3,990. Other alternatives will be available for this end-use with lower overall risk to human health and the environment by the status change date.

<sup>1</sup> The Director of the Federal Register approves this incorporation by reference (5 U.S.C. 552(a) and 1 CFR part 51). You may inspect a copy at U.S. EPA's Air and Radiation Docket; EPA West Building, Room 3334, 1301 Constitution Ave. NW., Washington, DC or at the National Archives and Records Administration (NARA). For questions regarding access to this standard, the telephone number of EPA's Air and Radiation Docket is 202–566–1742. 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

<sup>2</sup> You may obtain this material from: American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 6300 Interfirst Drive, Ann Arbor, MI 48108; 1–800–527–4723 in the U.S. or Canada; [http://www.techstreet.com/ashrae/ashrae\\_standards.html?ashrae\\_auth\\_token=](http://www.techstreet.com/ashrae/ashrae_standards.html?ashrae_auth_token=).

<sup>3</sup> ANSI/ASHRAE Standard 34–2013, Designation and Safety Classification of Refrigerants, 2013.



## FOAM BLOWING AGENTS—SUBSTITUTES ACCEPTABLE SUBJECT TO NARROWED USE LIMITS

End-use	Substitutes	Decision	Narrowed use limits	Further information
Rigid PU: Spray foam—high-pressure two-component.	HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365mfc; and Formacel TI.	Acceptable subject to narrowed use limits.	Acceptable from January 1, 2020, until January 1, 2025, only in military or space- and aeronautics-related applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before January 1, 2025, may be used after that date.	Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> <li>• Process or product in which the substitute is needed;</li> <li>• Substitutes examined and rejected;</li> <li>• Reason for rejection of other alternatives, e.g., performance, technical or safety standards; and/or</li> <li>• Anticipated date other substitutes will be available and projected time for switching.</li> </ul>
Rigid PU: Spray foam—low-pressure two-component.	HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365mfc; and Formacel TI.	Acceptable subject to narrowed use limits.	Acceptable from January 1, 2021, until January 1, 2025, only in military or space- and aeronautics-related applications where reasonable efforts have been made to ascertain that other alternatives are not technically feasible due to performance or safety requirements. Low pressure two-component spray foam kits manufactured with these substitutes on or before January 1, 2025, for military or space- and aeronautics-related applications may be used after that date.	Users are required to document and retain the results of their technical investigation of alternatives for the purpose of demonstrating compliance. Information should include descriptions of: <ul style="list-style-type: none"> <li>• Process or product in which the substitute is needed;</li> <li>• Substitutes examined and rejected;</li> <li>• Reason for rejection of other alternatives, e.g., performance, technical or safety standards; and/or</li> <li>• Anticipated date other substitutes will be available and projected time for switching.</li> </ul>

## FOAM BLOWING AGENTS—UNACCEPTABLE SUBSTITUTES

End-use	Substitutes	Decision	Further information
Flexible PU .....	Methylene chloride .....	Unacceptable as of January 3, 2017 .....	Methylene chloride is a carcinogen and may present a toxicity risk. Other alternatives are available for this end-use with lower overall risk to human health and the environment.
Rigid PU: Spray foam—one component foam sealants.	HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365mfc; and Formacel TI.	Unacceptable as of January 1, 2020 ..... One-component foam sealant cans manufactured with these substitutes on or before January 1, 2020, may be used after that date.	These foam blowing agents have GWPs ranging from higher than 730 to approximately 1,500. Other alternatives will be available for this end-use with lower overall risk to human health and the environment by the status change date.
Rigid PU: Spray foam—high-pressure two-component.	HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365mfc; and Formacel TI.	Unacceptable as of January 1, 2020, except where allowed under a narrowed use limit. Closed cell foam products and products containing closed cell foams manufactured with these substitutes on or before January 1, 2020, may be used after that date.	These foam blowing agents have GWPs ranging from higher than 730 to approximately 1,500. Other alternatives will be available for this end-use with lower overall risk to human health and the environment by the status change date.
Rigid PU: Spray foam—low-pressure two-component.	HFC-134a, HFC-245fa, and blends thereof; blends of HFC-365mfc with at least four percent HFC-245fa, and commercial blends of HFC-365mfc with seven to 13 percent HFC-227ea and the remainder HFC-365mfc; and Formacel TI.	Unacceptable as of January 1, 2021, except where allowed under a narrowed use limit. Low pressure two-component spray foam kits manufactured with these substitutes on or before January 1, 2025, may be used after that date.	These foam blowing agents have GWPs ranging from higher than 730 to approximately 1,500. Other alternatives will be available for this end-use with lower overall risk to human health and the environment by the status change date.

## FIRE SUPPRESSION AND EXPLOSION PROTECTION AGENTS—ACCEPTABLE SUBJECT TO USE CONDITIONS

End-use	Substitute	Decision	Use conditions	Further information
Streaming .....	2-BTP .....	Acceptable, subject to use conditions.	As of January 3, 2017, acceptable only for use in handheld extinguishers in aircraft.	<p>This fire suppressant has a relatively low GWP of 0.23–0.26 and a short atmospheric lifetime of approximately seven days.</p> <p>This agent is subject to requirements contained in a Toxic Substance Control Act (TSCA) section 5(e) Consent Order and any subsequent TSCA section 5(a)(2) Significant New Use Rule (SNUR).</p> <p>For establishments manufacturing, installing and maintaining handheld extinguishers using this agent:</p> <ol style="list-style-type: none"> <li>(1) Use of this agent should be used in accordance with the latest edition of NFPA Standard 10 for Portable Fire Extinguishers;</li> <li>(2) In the case that 2-BTP is inhaled, person(s) should be immediately removed and exposed to fresh air; if breathing is difficult, person(s) should seek medical attention;</li> <li>(3) Eye wash and quick drench facilities should be available. In case of ocular exposure, person(s) should immediately flush the eyes, including under the eyelids, with fresh water and move to a non-contaminated area;</li> <li>(4) Exposed person(s) should remove all contaminated clothing and footwear to avoid irritation, and medical attention should be sought if irritation develops or persists;</li> <li>(5) Although unlikely, in case of ingestion of 2-BTP, the person(s) should consult a physician immediately;</li> <li>(6) Manufacturing space should be equipped with specialized engineering controls and well ventilated with a local exhaust system and low-lying source ventilation to effectively mitigate potential occupational exposure; regular testing and monitoring of the workplace atmosphere should be conducted;</li> <li>(7) Employees responsible for chemical processing should wear the appropriate PPE, such as protective gloves, tightly sealed goggles, protective work clothing, and suitable respiratory protection in case of accidental release or insufficient ventilation;</li> <li>(8) All spills should be cleaned up immediately in accordance with good industrial hygiene practices; and</li> <li>(9) Training for safe handling procedures should be provided to all employees that would be likely to handle containers of the agent or extinguishing units filled with the agent.</li> </ol>
Total flooding	2-BTP .....	Acceptable, subject to use conditions.	As of January 3, 2017, acceptable only for use in engine nacelles and auxiliary power units on aircraft.	<p>This fire suppressant has a relatively low GWP of 0.23–0.26 and a short atmospheric lifetime of approximately seven days.</p> <p>This agent is subject to requirements contained in a TSCA section 5(e) Consent Order and any subsequent TSCA section 5(a)(2) SNUR.</p> <p>For establishments manufacturing, installing, and servicing engine nacelles and auxiliary power units on aircraft using this agent:</p> <ol style="list-style-type: none"> <li>(1) This agent should be used in accordance with the safety guidelines in the latest edition of the National Fire Protection Association (NFPA) 2001 Standard for Clean Agent Fire Extinguishing Systems;</li> <li>(2) In the case that 2-BTP is inhaled, person(s) should be immediately removed and exposed to fresh air; if breathing is difficult, person(s) should seek medical attention;</li> <li>(3) Eye wash and quick drench facilities should be available. In case of ocular exposure, person(s) should immediately flush the eyes, including under the eyelids, with fresh water and move to a non-contaminated area.</li> <li>(4) Exposed person(s) should remove all contaminated clothing and footwear to avoid irritation, and medical attention should be sought if irritation develops or persists;</li> <li>(5) Although unlikely, in case of ingestion of 2-BTP, the person(s) should consult a physician immediately;</li> <li>(6) Manufacturing space should be equipped with specialized engineering controls and well ventilated with a local exhaust system and low-lying source ventilation to effectively mitigate potential occupational exposure; regular testing and monitoring of the workplace atmosphere should be conducted;</li> <li>(7) Employees responsible for chemical processing should wear the appropriate PPE, such as protective gloves, tightly sealed goggles, protective work clothing, and suitable respiratory protection in case of accidental release or insufficient ventilation;</li> <li>(8) All spills should be cleaned up immediately in accordance with good industrial hygiene practices;</li> <li>(9) Training for safe handling procedures should be provided to all employees that would be likely to handle containers of the agent or extinguishing units filled with the agent;</li> <li>(10) Safety features that are typical of total flooding systems such as pre-discharge alarms, time delays, and system abort switches should be provided, as directed by applicable OSHA regulations and NFPA standards; use of this agent should also conform to relevant OSHA requirements, including 29 CFR 1910, subpart L, sections 1910.160 and 1910.162.</li> </ol>



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## Part III

### Office of Personnel Management

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5 CFR Part 890

Removal of Eligible Family Members From Existing Self and Family  
Enrollments; Proposed Rule

**OFFICE OF PERSONNEL  
MANAGEMENT****5 CFR Part 890****RIN 3206–AN43****Removal of Eligible Family Members  
From Existing Self and Family  
Enrollments****AGENCY:** Office of Personnel  
Management (OPM).**ACTION:** Proposed rule.

**SUMMARY:** This action would amend Federal Employees Health Benefits (FEHB) Program rules. This proposed rule is in response to enrollee requests to remove family members from existing enrollments. The intended effect of this action is to allow certain eligible family members to be removed from self and family or self plus one enrollments.

**DATES:** Comments are due on or before January 30, 2017.

**ADDRESSES:** Send written comments to Padma Shah, Senior Policy Analyst, Planning and Policy Analysis, U.S. Office of Personnel Management, Room 4316, 1900 E Street NW., Washington, DC. You may also submit comments identified by the RIN number stated above using the Federal eRulemaking Portal (<http://www.regulations.gov>). Follow the instructions for submitting comments.

**FOR FURTHER INFORMATION CONTACT:**  
Padma Shah at (202) 606–0004.

**SUPPLEMENTARY INFORMATION:****I. Background**

Currently under 5 CFR 890.302, all eligible family members are covered under a self and family enrollment. Subject to a temporary extension of coverage and conversion, a family member's coverage terminates on the day he or she ceases to be an eligible family member, as provided by 5 CFR 890.304. Existing regulations allow enrollees to change enrollment from self and family to self plus one or self only based on a qualifying life event or during Open Season. However, there is no provision in the existing regulations addressing the voluntary removal of an eligible covered family member under an existing self and family or self plus one enrollment.

The Office of Personnel Management has experienced a number of requests to remove eligible family members since OPM implemented FEHB coverage for children up to age 26 for plan year 2011 pursuant to the Patient Protection and Affordable Care Act, Public Law 111–148, as amended by the Health Care and Education Reconciliation Act, Public

Law 111–152 (the Affordable Care Act). In accordance with this law, OPM issued guidance to FEHB carriers in Carrier Letter No. 2010–18 and to agency benefit officers in Benefits Administration Letter No. 2010–201. In these guidance documents, OPM advised that for the upcoming plan year and beyond married children were eligible for coverage without dependency requirements, residency requirements, or requirements that a child be a student or have prior or current insurance coverage under their parent's FEHB Program enrollment. On October 30, 2013, OPM published a final rule codifying this change in eligibility in 5 CFR 890.302 (78 FR 64873).

With the extension of FEHB coverage to children up to age 26, including the addition of coverage for married and non-dependent children, there are more circumstances where eligible family members have their own coverage and are either not in need of coverage under a parent's FEHB self and family enrollment or do not wish to be covered under that enrollment. In addition, some FEHB-enrolled parents do not wish to provide health insurance coverage for their adult children. In light of the number of FEHB enrollees who have communicated to us that they do not wish to maintain coverage for their adult child and adult children who have communicated that they want to be removed from their parent's FEHB self and family enrollment, OPM has re-examined its previous policy not to allow removal of eligible family members under any circumstances. Our review of this issue also indicated that there may be circumstances where covered spouses would also seek to be removed from an existing enrollment. Accordingly, this proposed change attempts to provide appropriate removal opportunities for covered family members, including spouses and adult children. Though the availability of the new self plus one enrollment type will alleviate this issue somewhat, we anticipate that enrollees may still wish to remove family members from existing enrollments, especially in situations where there are more than three family members covered under a self and family enrollment.

**II. Discussion of the Proposed Rule**

The Office of Personnel Management proposes to add a new paragraph, 5 CFR 890.308(h), that allows eligible family members to be removed from a self and family or a self plus one enrollment in certain limited circumstances. A request for removal under this proposed rule can be submitted and effectuated

anytime during the plan year if the individual provides all needed documentation. The proposed rule also includes amendments to § 890.302 requiring that proof of family member eligibility must be provided upon request by a carrier, employing office, or OPM and updating paragraph numbering. For more information on these changes, see proposed rule Federal Employees Health Benefits Program: Removal of Ineligible Individuals from Existing Enrollments, publishing elsewhere in this issue of the **Federal Register**.

In a majority of cases, there appears to be no detriment to an eligible family member covered under a self and family or a self plus one enrollment, even if the family member has other coverage. Health insurance plans can coordinate coverage and provide what, in most cases, amounts to more generous benefits to a family member who has double coverage. However, in a minority of circumstances, it may be beneficial for a family member to be removed from an enrollment. For example, if a family member covered under an FEHB enrollment is eligible for their own employer's high deductible health plan with a health savings account, under Internal Revenue Service (IRS) regulations, the family member may not be able to take advantage of the employer's offer unless he or she is not covered under another health plan. Accordingly, the regulation proposes to allow spouses and adult children to be removed from a self and family or a self plus one enrollment if certain requirements are met.

In the case of a self plus one enrollment, it would, in most cases, be beneficial for the enrollee to decrease his or her enrollment to a self only enrollment or cancel the enrollment in accordance with § 890.302 for a family member to no longer be covered. Similarly, in the case of a self and family enrollment with two eligible family members, it would in most cases be beneficial for the enrollee to decrease to a self plus one enrollment. However, if the enrollee is enrolled in premium conversion, IRS rules would prohibit the decrease in or cancellation of the enrollment mid-year in the absence of a qualifying life event. Therefore, the regulation allows an enrollee or a family member to choose removal with no decrease in enrollment at any time mid-year.

This regulation also addresses situations where an enrollee has more than two eligible family members covered under a self and family enrollment, and one of the eligible family members may wish to no longer

be covered under the enrollment. For example, a self and family enrollment may cover an enrollee's spouse, one minor child and one adult child. The adult child may wish to stop coverage under the enrollee's self and family enrollment due to the availability of other employer-sponsored coverage, while the enrollee's spouse and minor child have no other access to coverage. In this example, the adult child can be removed from the existing self and family enrollment.

In contemplating circumstances for removal, OPM sought to balance the interests of eligible family members with the interests of FEHB enrollees. For example, under this proposed rule, spouses may be removed if both the enrollee and the spouse provide a notarized request for removal to their agency. This ensures that both the enrollee and family member are aware of and agree to the request and avoids agencies receiving conflicting requests as to whether a spouse should be covered where the spouses disagree, for instance where they are nearing or seeking divorce.

Adult children may be removed from a self plus one or self and family enrollment by the enrollee without the consent of the child if the enrollee provides proof that the child is no longer a dependent. Consistent with the Affordable Care Act, the proposed rule "continue[s] to make [FEHB] coverage available for an adult child" but permits an enrollee to reject the offer of coverage for adult children who are no longer dependents. OPM plans to provide subregulatory guidance defining how an individual may demonstrate that a child is no longer a dependent.

Adult children who request removal from a self and family or self plus one enrollment will be removed if the child submits a notarized request for removal. OPM recognizes that with the extension of coverage to married and non-dependent children to age 26, there are more eligible adult children covered under the program who have their own independent means for obtaining health insurance coverage or who wish for other reasons, such as an interest in privacy, not to be covered under their parent's enrollment. However, under the proposed rule, minor children may not be removed from an enrollment without a court order to protect the interests of children who are not yet at an age where they are ready to be responsible for their own health insurance coverage.

#### *Submissions of Requests*

To submit a notarized request for removal, the proposed rule instructs that the request must be submitted to

the employing agency and that the effective date of the removal be the first day of the pay period following the agency's approval of the request. When an enrollee requesting removal of an adult child has submitted proof that the adult child is no longer a dependent, the proposed effective date is the first day of the second pay period following the agency's approval of the request. This proposed effective date gives a child being removed without his or her consent a pay period to receive notice of the removal and to procure other health coverage.

If an eligible family member is removed from an enrollment, he or she may only regain coverage under the applicable self plus one or self and family enrollment during the annual Open Season or within 60 days of the eligible family member losing other coverage. Enrollees must provide the written consent of the family member and demonstrate their continued eligibility as a spouse or child under this section. This proposed policy avoids family members making multiple changes throughout the plan year and allows FEHB carriers to properly administer needed services. OPM will publish subregulatory guidance through a Benefits Administration Letter providing specific guidance to agencies on processes for removals.

Family members removed under this proposed regulation will not be eligible for temporary extension of coverage and conversion under § 890.401 or temporary continuation of coverage (TCC) under § 890.1103. The FEHB governing statute does not allow removed family members to be eligible for TCC or a temporary extension of coverage and conversion as such removal does not result in the child ceasing to meet the requirements for being considered a child within the meaning of 5 U.S.C. 8905a and 8901(1).

**Regulatory Impact Analysis:** OPM has examined the impact of this proposed rule as required by Executive Order 12866 and Executive Order 13563, which directs 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). A regulatory impact analysis must be prepared for major rules with economically significant effects of \$100 million or more in any one year. This rule is not considered a major rule because it provides a process for removal of erroneously enrolled eligible family members from self and family

enrollments, which we do not estimate to have widespread applicability under the FEHB Program.

#### **Regulatory Flexibility Act**

The Regulatory Flexibility Act of 1980 (Pub. L. 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 widerange of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions.

Agencies must perform a review to determine whether a rule will have a significant economic impact on a substantial number of small entities. If the agency determines that it will, the agency must prepare a regulatory flexibility analysis as described in the RFA. I certify that this regulation will not have a significant economic impact on a substantial number of small entities because the regulation only affects health insurance benefits of Federal employees and annuitants.

#### **Regulatory Review**

This rule has been reviewed by the Office of Management and Budget in accordance with Executive Orders 13563 and 12866.

#### **Federalism**

The Office of Personnel Management has examined this proposed rule in accordance with Executive Order 13132, Federalism. The agency has determined that this proposed rule will not have any negative impact on the rights, roles, and responsibilities of State, local, or Tribal governments.

#### **Paperwork Reduction Act**

The Paperwork Reduction Act of 1995 (44 U.S.C. chapter 3507(d); see 5 CFR part 1320) requires that the U.S. Office of Management and Budget (OMB) approve all collections of information by a Federal agency from the public before they can be implemented. Respondents are not required to respond to any collection of information unless it displays a current valid OMB control number. OPM is not proposing any additional collections in this rule.

**List of Subjects on 5 CFR Part 890**

Administrative practice and procedure, Government employees, Health insurance.

U.S. Office of Personnel Management.

**Beth F. Cobert,**

*Acting Director.*

For the reasons set forth in the preamble, OPM proposes to amend Part 890 of Title 5 of the Code of Federal Regulations as follows:

**PART 890—FEDERAL EMPLOYEES  
HEALTH BENEFITS PROGRAM**

■ 1. The authority citation for part 890 continues to read as follows:

**Authority:** 5 U.S.C. 8913; Sec. 890.301 also issued under sec. 311 of Pub. L. 111–03, 123 Stat. 64; Sec. 890.111 also issued under section 1622(b) of Pub. L. 104–106, 110 Stat. 521; Sec. 890.112 also issued under section 1 of Pub. L. 110–279, 122 Stat. 2604; 5 U.S.C. 8913; Sec. 890.803 also issued under 50 U.S.C. 403p, 22 U.S.C. 4069c and 4069c–1; subpart L also issued under sec. 599C of 101, 104 Stat. 2064, as amended; Sec. 890.102 also issued under sections 11202(f), 11232(e), 11246(b) and (c) of Pub. L. 105–33, 111 Stat. 251; and section 721 of Pub. L. 105–261, 112 Stat. 2061; Pub. L. 111–148, as amended by Pub. L. 111–152.

■ 2. Amend § 890.302 by revising paragraph (a)(1) to read as follows:

**§ 890.302 Coverage of family members.**

(a)(1) An enrollment for self plus one includes the enrollee and one eligible family member. An enrollment for self and family includes all family members who are eligible to be covered by the enrollment except as provided in section 890.308(h). Proof of family

member eligibility may be required, and must be provided upon request, to the carrier, the employing office or OPM. Except as provided in paragraph (a)(2) of this section, no employee, former employee, annuitant, child, or former spouse may enroll or be covered as a family member if he or she is already covered under another person's self plus one or self and family enrollment in the FEHB Program.

\* \* \* \* \*

■ 3. Amend § 890.308 by adding paragraph (h) to read as follows:

**§ 890.308 Disenrollment.**

\* \* \* \* \*

(h) *Removal from Enrollment: Eligible Family Members.* (1) An eligible family member may be removed from a self plus one or a self and family enrollment if a request is submitted to the employing office for approval in the following circumstances:

(i) In the case of a spouse, if the enrollee and his or her spouse provide a notarized request for removal.

(ii) In the case of a child who has reached the age of majority in the child's state of residence (the enrollee's state of residence if the child's is not known), if the enrollee provides proof that the child is no longer his or her dependent. The enrollee shall also provide the last known contact information for the child.

(iii) In the case of a child who has reached the age of majority in the child's state of residence, if the child provides a notarized request for removal.

(2) For removals under paragraphs (h)(1)(i) and (h)(1)(iii) of this section, the

effective date is the first day of the pay period following the date that the request is approved by the employing office. For removals under paragraph (h)(1)(ii), the effective date is the first day of the second pay period following the date the request is approved by the employing office.

(3) The family member's removal under this paragraph is considered a cancellation under § 890.304(d) and removed family members are not eligible for temporary extension of coverage and conversion under section 890.401 or temporary continuation of coverage under § 809.1103 of this chapter.

(4) If an eligible family member is removed under this paragraph, he or she may only regain coverage under the applicable self plus one or self and family enrollment if requested by the enrollee during the annual open season or within 60 days of the family member losing other health insurance coverage. The enrollee must also provide written consent to reinstatement of coverage from the family member and demonstrate eligibility of the spouse or child as a family member.

(5) If an employing office approves a request for removal, the employing office must notify the enrollee and the carrier of the removal immediately. For removals under paragraph (h)(1)(ii) of this section, the employing office must also immediately notify the child of the removal using the last known contact provided by the enrollee.

[FR Doc. 2016–28787 Filed 11–30–16; 8:45 am]

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# FEDERAL REGISTER

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## Part IV

### Office of Personnel Management

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5 CFR Part 890

Federal Employees Health Benefits Program: Removal of Ineligible  
Individuals From Existing Enrollments; Proposed Rule



**OFFICE OF PERSONNEL  
MANAGEMENT****5 CFR Part 890**

RIN 3206-AN09

**Federal Employees Health Benefits  
Program: Removal of Ineligible  
Individuals From Existing Enrollments****AGENCY:** Office of Personnel  
Management.**ACTION:** Proposed rule.

**SUMMARY:** The United States Office of Personnel Management (OPM) is issuing a notice of proposed rulemaking to amend Federal Employees Health Benefits (FEHB) Program regulations to provide a process for removal from FEHB enrollments of certain identified individuals who are found not to be eligible as family members. This process would apply to individuals for whom there is a failure to provide adequate documentation of eligibility when requested.

**DATES:** Comments are due on or before January 30, 2017.

**ADDRESSES:** Send written comments to Padma Shah, Senior Policy Analyst, Planning and Policy Analysis, U.S. Office of Personnel Management, Room 4312, 1900 E Street NW., Washington, DC; or FAX to (202) 606-0004 Attn: Padma Shah. You may also submit comments using the Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments.

**FOR FURTHER INFORMATION CONTACT:** Padma Shah at (202) 606-0004.

**SUPPLEMENTARY INFORMATION:** OPM is proposing to amend the Federal Employees Health Benefits (FEHB) Program regulations to (1) provide that proof of family member eligibility may be required for coverage under an FEHB Program self plus one or self and family enrollment and (2) to establish the circumstances under which individuals covered under an existing self plus one or self and family FEHB enrollment will be removed from such enrollment and the processes for removal, where the enrollee does not provide adequate documentation of eligibility. Currently, under § 890.302 of title 5, all eligible family members are covered under a self and family enrollment. A family member's coverage terminates, subject to a temporary extension of coverage, on the day he or she ceases to be an eligible family member, as provided by § 890.304. For example, if an enrollee's child reaches age 26, coverage terminates. Currently, the regulations do not address the removal of an

erroneously-covered ineligible individual from an existing self plus one or self and family enrollment.

The proposed regulation amends § 890.302 to provide that proof of family member eligibility must be provided upon request by a carrier, employing office, or OPM. OPM plans to provide further guidance on requirements for proof of family member eligibility through sub-regulatory guidance, including Benefits Administration Letters and Carrier Letters.

The proposed regulation also updates § 890.308 of title 5 to provide processes for removal of individuals who are determined to be ineligible as family members. This change reflects OPM's enhanced effort to ensure that individuals covered under existing FEHB enrollments meet legal and regulatory eligibility requirements.

The proposed process for removal of erroneously-covered ineligible family members from an existing enrollment is modeled on the process for removal of ineligible enrollees in § 890.308(a). The proposed regulation allows the removal to be initiated by the FEHB insurance carrier that operates the enrollee's plan, OPM as administrator of the FEHB Program, or the enrollee's employing office. If an enrollee disagrees with an initial determination of ineligibility, the enrollee may request reconsideration and submit appropriate documentation of eligibility to either the employing office or OPM depending on the circumstances.

In the case of a carrier-initiated removal, an enrollee's reconsideration request must be filed with the enrollee's employing office. The proposed rule provides that the employing office shall provide notice to the carrier that the enrollee is seeking reconsideration of the carrier's initial determination.

The proposed regulation provides that if OPM, the employing office, or the carrier, as applicable, finds the documentation to establish eligibility, the individual will continue to be covered as a family member under the enrollment without a gap in coverage, as appropriate. The proposed regulation provides that appropriate documentation of an enrollment includes, but is not limited to, copies of birth certificates, marriage certificates and, if applicable, other proof such as that the individual lives with and is supported by the enrollee. OPM plans to provide more specific information on what constitutes adequate documentation in forthcoming sub-regulatory guidance. OPM solicits comments on what may constitute appropriate documentation of family member eligibility.

If the enrollee does not submit appropriate documentation within the required timeframe, or the documentation is determined to be inadequate to establish eligibility, the removal of the family member will be prospective with limited exceptions. The proposed regulation provides that in the case of fraud or intentional misrepresentation of material fact on the part of the enrollee as prohibited by the terms of the FEHB plan, removals may be retroactive to the date of ineligibility.

The regulation also provides that temporary extension of coverage and conversion and temporary continuation of coverage will be administered in accordance with § 890.401 and Subparts H and K of this part and that any eligibility under these regulations will not extend beyond the date the entitlement would have ended if the individual had been removed on the date of loss of eligibility. Subparts H and K state that family members have 60 days from the date of the event causing the loss of coverage to enroll. Those timeframe are applicable to individuals who are removed from an enrollment under this regulation.

The regulation also provides that if acceptable proof of eligibility of an individual removed under this regulation is subsequently provided and a family member is found to have been eligible, coverage will be reinstated retroactively so that there is no gap in coverage, as appropriate.

**Regulatory Impact Analysis:** OPM has examined the impact of this proposed rule as required by Executive Order 12866 and Executive Order 13563, which directs 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). A regulatory impact analysis must be prepared for major rules with economically significant effects of \$100 million or more in any 1 year. This rule is not considered a major rule because it provides a process for removal of erroneously enrolled ineligible and eligible family members from self and family enrollments, which we do not estimate to have widespread applicability under the FEHB Program.

**Regulatory Flexibility Act**

I certify that this regulation will not have a significant economic impact on a substantial number of small entities because the regulation only affects health insurance benefits of Federal employees and annuitants.

## Regulatory Review

This rule has been reviewed by the Office of Management and Budget in accordance with Executive Orders 13563 and 12866.

## Federalism

We have examined this rule in accordance with Executive Order 13132, Federalism, and have determined that this rule will not have any negative impact on the rights, roles, and responsibilities of State, local, or Tribal governments.

## Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. chapter 35; see 5 CFR part 1320) requires that the U.S. Office of Management and Budget (OMB) approve all collections of information from a Federal agency from the public before they can be implemented. Respondents are not required to respond to any collection of information unless it displays a current valid OMB control number. OPM is not proposing any additional collections in this rule.

## List of Subjects on 5 CFR Part 890

Administrative practice and procedure, Government employees, Health insurance.

U.S. Office of Personnel Management.

**Beth F. Cobert,**

*Acting Director.*

For the reasons set forth in the preamble, OPM proposes to amend part 890 of Title 5 of the Code of Federal Regulations as follows:

## PART 890—FEDERAL EMPLOYEES HEALTH BENEFITS PROGRAM

■ 1. The authority citation for part 890 continues to read as follows:

**Authority:** 5 U.S.C. 8913; Sec. 890.301 also issued under sec. 311 of Public Law 111–03, 123 Stat. 64; Sec. 890.111 also issued under section 1622(b) of Public Law 104–106, 110 Stat. 521; Sec. 890.112 also issued under section 1 of Public Law 110–279, 122 Stat. 2604; 5 U.S.C. 8913; Sec. 890.803 also issued under 50 U.S.C. 403p, 22 U.S.C. 4069c and 4069c–1; subpart L also issued under sec. 599C of 101, 104 Stat. 2064, as amended; Sec. 890.102 also issued under sections 11202(f), 11232(e), 11246(b) and (c) of Public Law 105–33, 111 Stat. 251; and section 721 of Public Law 105–261, 112 Stat. 2061; Public Law 111–148, as amended by Public Law 111–152.

■ 2. In § 890.302 revise paragraph (a)(1) to read as follows:

### § 890.302 Coverage of family members.

(a)(1) An enrollment for self plus one includes the enrollee and one eligible family member. An enrollment for self

and family includes all family members who are eligible to be covered by the enrollment. Proof of family member eligibility may be required, and must be provided upon request, to the carrier, the employing office or OPM. Except as provided in paragraph (a)(2) of this section, no employee, former employee, annuitant, child or former spouse may enroll or be covered as a family member if he or she is already covered under another person's self plus one or self and family enrollment in the FEHB Program.

\* \* \* \* \*

■ 3. Amend § 890.308 by revising the section heading, adding headings to paragraphs (a), (b), (c), (d) and adding paragraphs (e), (f), and (g) to read as follows:

### § 890.308 Disenrollment and removal from enrollment.

(a) *Carrier Disenrollment: Enrollment Reconciliation.* \* \* \*

\* \* \* \* \*

(b) *Carrier Disenrollment: Death of Enrollee.* \* \* \*

\* \* \* \* \*

(c) *Carrier Disenrollment: Child Survivor Annuitant.* \* \* \*

\* \* \* \* \*

(d) *Carrier Disenrollment: Separation from Federal Employment.* \* \* \*

\* \* \* \* \*

(e) *Carrier Removal from Enrollment: Family Members* (1) A carrier may request verification from the enrollee at any time of eligibility of an individual who is covered as a family member of the enrollee in accordance with § 890.302. To verify eligibility, the carrier shall send the enrollee a request for appropriate documentation of the individual's relationship to the enrollee with a copy to the enrollee's employing office. The request shall contain a written notice that the individual will no longer be covered 60 calendar days after the date of the notice unless the enrollee or the employing office provides appropriate documentation as requested. If the carrier does not receive the requested documentation within the specified time frame or if based on the documentation provided the individual is found not to be eligible, written notice of removal must be sent to the enrollee, with a copy to the employing office, including an explanation of the process for seeking reconsideration. The time limit may be extended when the enrollee shows that he or she is prevented by circumstances beyond his or her control from providing timely documentation.

(2) Appropriate documentation includes, but is not limited to, copies of

birth certificates, marriage certificates, and, if applicable, other proof including that the individual lives with the enrollee and the enrollee is the individual's primary source of financial support.

(3) The effective date of a removal shall be prospective unless the record shows that the enrollee or the individual has committed fraud or made an intentional misrepresentation of material fact as prohibited by the terms of the plan.

(4) A request for reconsideration of the carrier's initial decision must be filed with the enrollee's employing office within 60 calendar days after the date of the initial decision. The employing office must notify the carrier when a request for reconsideration of the decision to remove the individual from the enrollment is made. The time limit for filing may be extended when the enrollee shows that he or she was not notified of the time limit and was not otherwise aware of it, or that he or she was prevented by circumstances beyond his or her control from making the request within the time limit. The request for reconsideration must be made in writing and must include the enrollee's name, address, Social Security Number or other personal identification number, the family member's name, the name of carrier, reason(s) for the request, and, if applicable, retirement claim number.

(5) The employing office must issue a written notice of its final decision to the enrollee, and notify the carrier of the decision, within 30 days of receipt of the request for reconsideration. The notice must fully set forth the findings and conclusions on which the decision was based.

(6) If an enrollee or individual provides acceptable proof of eligibility of an individual subsequent to removal, coverage under the enrollment shall be reinstated retroactively so that there is no gap in coverage, as appropriate.

(f) *Employing Office and OPM.* (1) An enrollee's employing office or OPM may request verification of eligibility from the enrollee of an individual who is covered as a family member of the enrollee in accordance with § 890.302 at any time. To verify eligibility, the employing office or OPM shall send a request for appropriate documentation of the individual's status to the enrollee. The request shall contain a written notice that the individual will no longer be covered 60 calendar days after the date of the notice unless the enrollee provides appropriate documentation as requested. If the employing office or OPM does not receive the requested documentation within the specified

time frame, or if based on the documentation provided the individual is found not to be eligible, the employing office or OPM shall direct the carrier to remove the individual from the enrollment and the employing office or OPM shall provide written notice to the enrollee including an explanation of the process for seeking reconsideration. The time limit may be extended when the enrollee shows that he or she is prevented by circumstances beyond his or her control from providing timely documentation.

(2) Appropriate documentation includes, but is not limited to, copies of birth certificates, marriage certificates, and, if applicable, other proof including that the individual lives with the enrollee and that the enrollee is the individual's primary source of financial support.

(3) The effective date of the removal shall be prospective unless the record shows that the enrollee or the individual has committed fraud or made an intentional misrepresentation of material fact as prohibited by the terms of the plan.

(4) The enrollee may request reconsideration of an employing office

or OPM's decision to remove the individual from the enrollment within 60 days of the initial decision. The enrollee may request reconsideration of an employing office decision to the employing office or an OPM decision to OPM. The employing office or OPM must notify the carrier when a request for reconsideration of the decision to remove the individual from the enrollment is made. The time limit for filing may be extended when the enrollee shows that he or she was not notified of the time limit and was not otherwise aware of it, or that he or she was prevented by circumstances beyond his or her control from making the request within the time limit. The request for reconsideration must be made in writing and must include the enrollee's name, address, Social Security Number or other personal identification number, the family member's name, the name of carrier, reason(s) for the request, and, if applicable, retirement claim number. The employing office or OPM must notify the carrier when a request for reconsideration of the decision to remove the individual from the enrollment is made.

(5) The employing office or OPM must issue a written notice of its final decision to the enrollee, and notify the carrier of the decision, within 30 days of receipt of the request for reconsideration. The notice must fully set forth the findings and conclusions on which the decision was based.

(6) If an enrollee or family member provides acceptable proof of eligibility of an individual subsequent to removal, coverage under the enrollment shall be reinstated retroactively so that there is no gap in coverage, as appropriate.

(g) If an individual is removed from an enrollment pursuant to paragraph (e) or (f) of this section, the individual may be eligible for a 31-day temporary extension of coverage, conversion and/or temporary continuation of coverage in accordance with § 890.401 and subparts H and K of this part. Any entitlement to coverage under § 890.401 and subparts H and K shall not extend beyond the date that entitlement would have ended if the individual had been removed on the date of loss of eligibility.

[FR Doc. 2016-28788 Filed 11-30-16; 8:45 am]

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**H.R. 845/P.L. 114-245**

National Forest System Trails Stewardship Act (Nov. 28, 2016; 130 Stat. 990)

**H.R. 4511/P.L. 114-246**

Gold Star Families Voices Act (Nov. 28, 2016; 130 Stat. 995)

**H.R. 5392/P.L. 114-247**

No Veterans Crisis Line Call Should Go Unanswered Act (Nov. 28, 2016; 130 Stat. 996)

**H.R. 6007/P.L. 114-248**

To amend title 49, United States Code, to include consideration of certain impacts on commercial space launch and reentry activities in a navigable airspace analysis, and for other purposes. (Nov. 28, 2016; 130 Stat. 998)

**Last List October 19, 2016**

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A new table will be published in the first issue of each month.

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