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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Airspace Docket No. 2000–ASW–12]

Revision of Class E Airspace; Carrizo Springs, Glass Ranch, TX

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Direct final rule; request for comments.

SUMMARY: This amendment revises the Class E airspace at Carrizo Springs, Glass Ranch, TX. The development of a Global Positioning System (GPS) Standard Instrument Approach Procedure (SIAP), at Indio-Faith Airport, Carrizo Springs, TX, has made this rule necessary. This action is intended to provide adequate controlled airspace extending upward from 700 feet or more above the surface for Instrument Flight Rules (IFR) operations to Indio-Faith Airport, Carrizo Springs, TX.

DATES: Effective 0901 UTC, August 10, 2000.

Comments must be received on or before June 5, 2000.

ADDRESSES: Send comments on the rule in triplicate to Manager, Airspace Branch, Air Traffic Division, Federal Aviation Administration, Southwest Region, Docket No. 2000–ASW–12, Forth Worth, TX 76193–0520. The official docket may be examined in the Office of the Regional Counsel, Southwest Region, Federal Aviation Administration, 2601 Meacham Boulevard, Room 663, Forth Worth, TX, between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays. An informal docket may also be examined during normal business hours at the Airspace Branch, Air Traffic Division, Federal Aviation Administration, Southwest Region, Room 414, Fort Worth, TX.

FOR FURTHER INFORMATION CONTACT: Donald J. Day, Airspace Branch, Air Traffic Division, Southwest Region, Federal Aviation Administration, Fort Worth, TX 76193–0520, telephone 817–222–5593.

SUPPLEMENTARY INFORMATION: This amendment to 14 CFR part 71 revises the Class E airspace at Carrizo Springs, Glass Ranch, TX. The development of a GPS SIAP, at Indio-Faith Airport, Carrizo Springs, TX, has made this rule necessary. This action is intended to provide adequate controlled airspace extending upward from 700 feet or more above the surface for IFR operations to Indio-Faith Airport, Carrizo Springs, TX.

Class E airspace designations are published in Paragraph 6005 of FAA Order 7400.9G, dated September 1, 1999, and effective September 16, 1999, which is incorporated by reference in 14 CFR § 71.1. The Class E airspace designation listed in this document will be published subsequently in the order.

The Direct Final Rule Procedure

The FAA anticipates that this regulation will not result in adverse or negative comment and therefore is issuing it as a direct final rule. A substantial number of previous opportunities provided to the public to comment on substantially identical actions have resulted in negligible adverse comments or objections. Unless a written adverse or negative comment, or a written notice of intent to submit an adverse or negative comment is received within the comment period, the regulation will become effective on the date specified above. After the close of the comment period, the FAA will publish a document in the **Federal Register** indicating that no adverse or negative comments were received and confirming the date on which the final rule will become effective. If the FAA does receive, within the comment period, an adverse or negative comment, or written notice of intent to submit such a comment, a document withdrawing the direct final rule will be published in the **Federal Register**, and a notice of proposed rulemaking may be published with a new comment period.

Comments Invited

Although this action is in the form of a final rule and was not preceded by a notice of proposed rulemaking, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified under the caption **ADDRESSES.** All communications received on or before the closing date for comments will be considered, and this rule may be amended or withdrawn in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of this action and determining whether additional rulemaking action is needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this action will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: ''Comments to Docket No. 2000–ASW–12.'' The postcard will be date stamped and returned to the commenter.

Agency Findings

The regulations adopted herein 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. Therefore, it is determined that this final rule will not have federalism implications under Executive Order 13132.

Further, the FAA has determined that this regulation is noncontroversial and unlikely to result in adverse or negative comments and only involves an established body of technical regulations that require frequent and

routine amendments to keep them operationally current. Therefore, I certify that this regulation (1) Is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) if promulgated, 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. Since this rule involves routine matters that will only affect air traffic procedures and air navigation, it does not warrant preparation of a Regulatory Flexibility Analysis because the anticipated impact is so minimal.

List of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me, the Federal Aviation Administration amends 14 CFR part 71 as follows:

PART 71—DESIGNATION OF CLASS A, CLASS B, CLASS C, CLASS D, AND CLASS E AIRSPACE AREAS; AIRWAYS; ROUTES; AND REPORTING POINTS

1. The authority citation for 14 CFR part 71 continues to read as follows:

Authority: 49 U.S.C. 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 Federal Aviation Administration Order 7400.9G, *Airspace Designations and Reporting Points,* dated September 1, 1999, and effective September 16, 1999, is amended as follows:

Paragraph 6005 Class E airspace areas extending upward from 700 feet or more above the surface of the earth.

* * * * *

ASW TX E5 Carrizo Springs, Glass Ranch Airport, TX [Revised]

Carrizo Springs, Glass Ranch Airport, TX
(Lat. 28°15′46″ N., long. 100°09′01″ W.)
Carrizo Springs, Indio-Faith Airport, TX
(Lat. 28°15′46″ N., long. 100°09′44″ W.)

That airspace extending upward from 700 feet above the surface within a 6.5-mile radius of Glass Ranch Airport, excluding that airspace within Restricted Area R–6316 and within a 6.5-mile radius of Indio-Faith Airport, excluding that airspace within Mexico.

* * * * *

Issued in Fort Worth, TX, on April 12, 2000.

Robert N. Stevens,

Acting Manager, Air Traffic Division, Southwest Region.

[FR Doc. 00–9838 Filed 4–20–00; 8:45 am]

BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Airspace Docket No. 2000–ASW–11]

Revocation of Class E Airspace, Freeport, TX

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Direct final rule; request for comments.

SUMMARY: This amendment revokes the Class E Airspace at Freeport, TX. The cancellation of VHF Omnidirectional Range/Distance Measuring Equipment (VOR/DME) Special Instrument Approach Procedures to heliports in the Freeport, TX area has prompted this action. The intended effect of this action is to relinquish control over airspace that is no longer needed for aircraft operating in the vicinity of Freeport, TX.

DATES: Effective 0901 UTC, August 10, 2000. Comments must be received on or before June 5, 2000.

ADDRESSES: Send comments on the rule in triplicate to Manager, Airspace Branch, Air Traffic Division, Federal Aviation Administration, Southwest Region, Docket No. 2000–ASW–11, Fort Worth, TX 76193–0520. The official docket may be examined in the Office of the Regional Counsel, Southwest Region, Federal Aviation Administration, 2601 Meacham Boulevard, Room 663, Fort Worth, TX, between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays. An informal docket may also be examined during normal business hours at the Airspace Branch, Air Traffic Division, Federal Aviation Administration, Southwest Region, Room 414, Fort Worth, TX.

FOR FURTHER INFORMATION CONTACT: Donald J. Day, Airspace Branch, Air Traffic Division, Southwest Region, Federal Aviation Administration, Fort Worth, TX 76193–0520, telephone 817–222–5593.

SUPPLEMENTARY INFORMATION: This amendment to 14 CFR part 71 revokes the Class E Airspace at Freeport, TX. The cancellation of VOR/DME Special Instrument Approach Procedures to heliports in the Freeport, TX area has promoted this action. The intended effect of this action is to relinquish control over airspace that is no longer needed for aircraft operating in the vicinity of Freeport, TX.

Class E airspace designations are published in Paragraph 6005 of FAA Order 7400.9G, dated September 1, 1999, and effective September 167, 1999, which is incorporated by reference in 14 CFR 71.1. The Class E airspace designations listed in this document will be published subsequently in the order.

The Direct Final Rule Procedure

The FAA anticipates that this regulation will not result in adverse or negative comment and therefore is issuing it as a direct final rule. A substantial number of previous opportunities provided to the public to comment on substantially identical actions have resulted in negligible adverse comments or objections. Unless written adverse or negative comment, or a written notice of intent to submit an adverse or negative comment is received within the comment period, the regulation will become effective on the date specified above. After the close of the comment period, the FAA will publish a document in the **Federal Register** indicating that no adverse or negative comments were received and confirming the date on which the final rule will become effective. If the FAA does receive, within the comment period, an adverse or negative comment, or written notice of intent to submit such a comment, a document withdrawing the direct final rule will be published in the **Federal Register**, and a notice of proposed rulemaking may be published with a new comment period.

Comments Invited

Although this action is in the form of a final rule and was not preceded by a notice of proposed rulemaking, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified under the caption **ADDRESSES.** All communications received on or before the closing date for comments will be considered, and this rule may be amended or withdrawn in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of this action and

determining whether additional rulemaking action is needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this action will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: ''Comments to Docket No. 2000–ASW–11.'' The postcard will be date stamped and returned to the commenter.

Agency Findings

The regulations adopted herein 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. Therefore, it is determined that this final rule will not have federalism implications under Executive Order 13132.

Further, the FAA has determined that this regulation is noncontroversial and unlikely to result in adverse or negative comments and only involves an established body of technical regulations that require frequent and routine amendments to keep them operationally current. Therefore, I certify that this regulation (1) Is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) if promulgated, 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. Since this rule involves routine matters that will only affect air traffic procedures and air navigation, it does not warrant preparation of a Regulatory Flexibility Analysis because the anticipated impact is so minimal.

List of Subjects in 14 CFR part 71

Airspace, Incorporation by reference, Navigation (air).

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me, the Federal Aviation Administration amends 14 CFR part 71 as follows:

PART 71—DESIGNATION OF CLASS A, CLASS B, CLASS C, CLASS D, AND CLASS E AIRSPACE AREAS; AIRWAYS; ROUTES, AND REPORTING POINTS

1. The authority citation for 14 CFR part 71 continues to read as follows:

Authority: 49 U.S. 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 Federal Aviation Administration Order 7400.9G, *Airspace Designations and Reporting Points,* dated September 1, 1999, and effective September 16, 1999, is amended as follows:

* * * * *

Paragraph 6005 Class E airspace areas extending upward from 700 feet or more above the surface of the earth.

* * * * *

ASW TX E5 Freeport, TX [Revoked]

* * * * *

Issued in Fort Worth, TX, April 12, 2000.

Robert N. Stevens,

Acting Manager, Air Traffic Division, Southwest Region.

[FR Doc. 00–9837 Filed 4–20–00; 8:45 am]

BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Airspace Docket No. 2000–ASW–05]

Revision of Class E Airspace; Jasper, TX

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Direct final rule; confirmation of effective date.

SUMMARY: This notice confirms the effective date of a direct final rule which revises Class E airspace at Jasper, TX.

EFFECTIVE DATE: The direct final rule published at 65 FR 8043 is effective 0901 UTC, June 15, 2000.

FOR FURTHER INFORMATION CONTACT: Donald J. Day, Airspace Branch, Air Traffic Division, Southwest Region, Federal Aviation Administration, Fort Worth, TX 76193–0520, telephone: 817–222–5593.

SUPPLEMENTARY INFORMATION: The FAA published this direct final rule with a request for comments in the **Federal Register** on February 17, 2000, (65 FR 8043). The FAA uses the direct final rulemaking procedure for a noncontroversial rule where the FAA believes that there will be no adverse public comment. This direct final rule advised the public that no adverse comments were anticipated, and that unless a written adverse comment, or a written notice of intent to submit such an adverse comment, were received within the comment period, the regulation would become effective on June 15, 2000. No adverse comments were received, and, thus, this action confirms that this direct final rule will be effective on that date.

Issued in Fort Worth, TX, on April 12, 2000.

Robert N. Stevens,

Acting Manager, Air Traffic Division, Southwest Region.

[FR Doc. 00–9836 Filed 4–20–00; 8:45 am]

BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Airspace Docket No. 2000–ASW–04]

Revision of Class E Airspace; Uvalde, TX

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Direct final rule; confirmation of effective date.

SUMMARY: This notice confirms the effective date of a direct final rule which revises Class E airspace at Uvalde, TX

EFFECTIVE DATE: The direct final rule published at 65 FR 8044 is effective 0901 UTC, June 15, 2000.

FOR FURTHER INFORMATION CONTACT: Donald J. Day, Airspace Branch, Air Traffic Division, Southwest Region, Federal Aviation Administration, Fort Worth, TX 76193–0520, telephone: 817–222–5593.

SUPPLEMENTARY INFORMATION: The FAA published this direct final rule with a request for comments in the **Federal Register** on February 17, 2000, (65 FR 8044). The FAA uses the direct final rulemaking procedure for a noncontroversial rule where the FAA believes that there will be no adverse public comment. This direct final rule advised the public that no adverse comments were anticipated, and that unless a written adverse comment, or a written notice of intent to submit such an adverse comment, were received within the comment period, the regulation would become effective on June 15, 2000. No adverse comments

were received, and, thus, this action confirms that this direct final rule will be effective on that date.

Issued in Fort Worth, TX, on April 12, 2000.

Robert N. Stevens,

Acting Manager, Air Traffic Division, Southwest Region.

[FR Doc. 00–9835 Filed 4–20–00; 8:45 am]

BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Airspace Docket No. 2000–ASW–03]

Revision of Class E Airspace; Port Lavaca, TX

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Direct final rule; confirmation of effective date.

SUMMARY: This notice confirms the effective date of a direct final rule which revises Class E airspace at Port Lavaca, TX.

EFFECTIVE DATE: The direct final rule published at 65 FR 8045 is effective 0901 UTC, June 15, 2000.

FOR FURTHER INFORMATION CONTACT: Donald J. Day, Airspace Branch, Air Traffic Division, Southwest Region, Federal Aviation Administration, Fort Worth, TX 76193–0520, telephone: 817–222–5593.

SUPPLEMENTARY INFORMATION: The FAA published this direct final rule with a request for comments in the **Federal Register** on February 17, 2000, (65 FR 8045). The FAA uses the direct final rulemaking procedure for a noncontroversial rule where the FAA believes that there will be no adverse public comment. This direct final rule advised the public that no adverse comments were anticipated, and that unless a written adverse comment, or a written notice of intent to submit such an adverse comment, were received within the comment period, the regulation would become effective on June 15, 2000. No adverse comments were received, and, thus, this action confirms that this direct final rule will be effective on that date.

Issued in Fort Worth, TX, on April 12, 2000.

Robert N. Stevens,

Acting Manager, Air Traffic Division, Southwest Region.

[FR Doc. 00–9834 Filed 4–20–00; 8:45 am]

BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Airspace Docket No. 99–AAL–22]

Establishment of Class E Airspace; Holy Cross, AK

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action establishes Class E airspace at Holy Cross, AK. The establishment of Global Positioning System (GPS) instrument approach procedures at Holy Cross Airport made this action necessary. The Holy Cross Airport status changes from Visual Flight Rules (VFR) to Instrument Flight Rules (IFR). This rule provides adequate controlled airspace for aircraft flying IFR procedures at Holy Cross, AK.

EFFECTIVE DATE: 0901 UTC, June 15, 2000.

FOR FURTHER INFORMATION CONTACT: Bob Durand, Operations Branch, Federal Aviation Administration, 222 West 7th Avenue, Box 14, Anchorage, AK 99513–7587; telephone number (907) 271–5898; fax: (907) 271–2850; email: Bob.Durand@faa.gov. Internet address: http://www.alaska.faa.gov/at or at address http://162.58.28.41/at.

SUPPLEMENTARY INFORMATION:

History

On December 13, 1999, a proposal to amend part 71 of the Federal Aviation Regulations (14 CFR part 71) to establish the Class E airspace at Holy Cross, AK, was published in the **Federal Register** (64 FR 69431). The proposal was necessary due to the establishment of GPS instrument approach procedures to Runway 1 and Runway 19 at Holy Cross, AK. Interested parties were invited to participate in this rulemaking proceeding by submitting written comments on the proposal to the FAA. No public comments to the proposal were received; thus, the rule is adopted as written.

The area would be depicted on aeronautical charts for pilot reference. The coordinates for this airspace docket are based on North American Datum 83. The Class E airspace areas designated as 700/1200 foot transition areas are published in paragraph 6005 in FAA Order 7400.9G, *Airspace Designations and Reporting Points,* dated September 1, 1999, and effective September 16, 1999, which is incorporated by reference in 14 CFR 71.1. The Class E airspace designations listed in this document will be published subsequently in the Order.

The Rule

This amendment to 14 CFR part 71 establishes the Class E airspace at Holy Cross, AK, through the establishment of two GPS instrument approaches. The airport status changes from VFR to IFR. The area will be depicted on aeronautical charts for pilot reference. The intended effect of this rule is to provide controlled airspace for IFR operations at Holy Cross, AK.

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 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 will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

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, CLASS B, CLASS C, CLASS D, AND CLASS E AIRSPACE AREAS; AIRWAYS; ROUTES; AND REPORTING POINTS

1. The authority citation for 14 CFR part 71 continues to read as follows:

Authority: 49 U.S.C. 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 Federal Aviation Administration Order 7400.9G, *Airspace Designations and Reporting Points,* dated September 1, 1999, and effective September 16, 1999, is amended as follows:

* * * * *

Paragraph 6005 Class E airspace extending upward from 700 feet or more above the surface of the earth.

* * * * *

AAL AK E5 Holy Cross, AK [New]

Holy Cross Airport
(Lat. 62°11′18″ N., long. 159°46′ 30″ W.)

That airspace extending upward from 700 feet above the surface within 6.3-mile radius of the Holy Cross Airport and that airspace extending upward from 1,200 feet above the surface within a 24-mile radius of the Holy Cross Airport; excluding that airspace within the Anvik Class E airspace area.

* * * * *

Issued in Anchorage, AK, on April 14, 2000.

Anthony M. Wylie,

Assistant Manager, Air Traffic Division, Alaskan Region.

[FR Doc. 00–10014 Filed 4–20–00; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Airspace Docket No. 99–AAL–20]

Establishment of Class E Airspace; Kipnuk, AK

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action establishes Class E airspace at Kipnuk, AK. The establishment of a Global Positioning System (GPS) instrument approach procedure at Kipnuk Airport made this action necessary. The Kipnuk Airport status changes from Visual Flight Rules (VFR) to Instrument Flight Rules (IFR). This rule provides adequate controlled airspace for aircraft flying IFR procedures at Kipnuk, AK.

EFFECTIVE DATE: 0901 UTC, June 15, 2000.

FOR FURTHER INFORMATION CONTACT: Bob Durand, Operations Branch, Federal Aviation Administration, 222 West 7th Avenue, Box 14, Anchorage, AK 99513–7587; telephone number (907) 271–5898; fax: (907) 271–2850; email: Bob.Durand@faa.gov. Internet address: http://www.alaska.faa.gov/at or at address http://162.58.28.41/at.

SUPPLEMENTARY INFORMATION:

History

On December 13, 1999, a proposal to amend part 71 of the Federal Aviation Regulations (14 CFR part 71) to establish the Class E airspace at Kipnuk, AK, was published in the **Federal Register** (64 FR 69430). The proposal was necessary due to the establishment of a GPS instrument approach procedure to Runway 15 at Kipnuk, AK. Interested parties were invited to participate in this rulemaking proceeding by submitting written comments on the proposal to the FAA. No public comments to the proposal were received; thus, the rule is adopted as written.

The area would be depicted on aeronautical charts for pilot reference. The coordinates for this airspace docket are based on North American Datum 83. The Class E airspace areas designated as 700/1200 foot transition areas are published in paragraph 6005 in FAA Order 7400.9G, *Airspace Designations and Reporting Points,* dated September 1, 1999, and effective September 16, 1999, which is incorporated by reference in 14 CFR 71.1. The Class E airspace designations listed in this document will be published subsequently in the Order.

The Rule

This amendment to 14 CFR part 71 establishes the Class E airspace at Kipnuk, AK, through the establishment of a GPS instrument approach to Runway 15. The airport status changes from VFR to IFR. The area will be depicted on aeronautical charts for pilot reference. The intended effect of this rule is to provide controlled airspace for IFR operations at Kipnuk, AK.

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 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 will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

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, CLASS B, CLASS C, CLASS D, AND CLASS E AIRSPACE AREAS; AIRWAYS; ROUTES; AND REPORTING POINTS

1. The authority citation for 14 CFR part 71 continues to read as follows:

Authority: 49 U.S.C. 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 Federal Aviation Administration Order 7400.9G, *Airspace Designations and Reporting Points,* dated September 1, 1999, and effective September 16, 1999, is amended as follows:

* * * * *

Paragraph 6005 Class E airspace extending upward from 700 feet or more above the surface of the earth.

* * * * *

AAL AK E5 Kipnuk, AK [New]

Kipnuk Airport, AK
(Lat. 59°55′59″ N., long. 164°01′50″ W.)
Kipnuk VOR/DME
(Lat. 59°56′34″ N., long. 164°02′04″ W.)

That airspace extending upward from 700 feet above the surface within 6.2-mile radius of the Kipnuk Airport and within 3 miles each side of the Kipnuk VOR/DME 168° radial extending from the 6.2-mile radius of the airport to 9.5 miles south of the airport and within 4 miles east and 8 miles west of the Kipnuk VOR/DME 348° radial extending from the Kipnuk VOR/DME to 16 miles north of the VOR/DME; and that airspace extending upward from 1,200 feet above the surface within a 51-mile radius of the VOR/DME; excluding that airspace within the Norton Sound Low Offshore Airspace Area and the Bethel Class E airspace area.

* * * * *

Issued in Anchorage, AK, on April 14, 2000.

Anthony M. Wylie,

Acting Manager, Air Traffic Division, Alaskan Region.

[FR Doc. 00–10013 Filed 4–20–00; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Airspace Docket No. 99–AAL–19]

Establishment of Class E Airspace; Scammon Bay, AK

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action establishes Class E airspace at Scammon Bay, AK. The establishment of Global Positioning System (GPS) instrument approach procedures at Scammon Bay Airport made this action necessary. The Scammon Bay Airport status changes from Visual Flight Rules (VFR) to Instrument Flight Rules (IFR). This rule provides adequate controlled airspace for aircraft flying IFR procedures at Scammon Bay, AK.

EFFECTIVE DATE: 0901 UTC, June 15, 2000.

FOR FURTHER INFORMATION CONTACT: Bob Durand, Operations Branch, Federal Aviation Administration, 222 West 7th Avenue, Box 14, Anchorage, AK 99513–7587; telephone number (907) 271–5898; fax: (907) 271–2850; email: Bob.Durand@faa.gov. Internet address: http://www.alaska.faa.gov/at or at address http://162.58.28.41/at.

SUPPLEMENTARY INFORMATION:

History

On November 22, 1999, a proposal to amend part 71 of the Federal Aviation Regulations (14 CFR part 71) to establish the Class E airspace at Scammon Bay, AK, was published in the **Federal Register** (64 FR 63765). The proposal was necessary due to the establishment of GPS instrument approach procedures at Scammon Bay, AK. Interested parties were invited to participate in this rulemaking proceeding by submitting written comments on the proposal to the FAA. No public comments to the proposal were received; thus, the rule is adopted as written.

The area would be depicted on aeronautical charts for pilot reference. The coordinates for this airspace docket are based on North American Datum 83. The Class E airspace areas designated as 700/1200 foot transition areas are published in paragraph 6005 in FAA Order 7400.9G, Airspace Designations and Reporting Points, dated September 1, 1999, and effective September 16, 1999, which is incorporated by reference in 14 CFR 71.1. The Class E airspace designations listed in this document will be published subsequently in the Order.

The Rule

This amendment to 14 CFR part 71 establishes the Class E airspace at Scammon Bay, AK, through the establishment of GPS instrument approaches. The airport status changes from VFR to IFR. The area will be depicted on aeronautical charts for pilot reference. The intended effect of this rule is to provide controlled airspace for IFR operations at Scammon Bay, AK.

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 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 will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

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, CLASS B, CLASS C, CLASS D, AND CLASS E AIRSPACE AREAS; AIRWAYS; ROUTES; AND REPORTING POINTS

1. The authority citation for 14 CFR part 71 continues to read as follows:

Authority: 49 U.S.C. 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 Federal Aviation Administration Order 7400.9G, *Airspace Designations and Reporting Points,* dated September 1, 1999, and effective September 16, 1999, is amended as follows:

* * * * *

Paragraph 6005 Class E airspace extending upward from 700 feet or more above the surface of the earth.

* * * * *

AAL AK E5 Scammon Bay, AK [New]

Scammon Bay Airport
(Lat. 61°50′40″ N., long. 165°34′26″ W.)
Hooper Bay VOR
(lat. 61° 30′ 52″ N., long. 166° 08′ 04″ W.)
That airspace extending upward from 700 feet above the surface within 6.3-mile radius of the Scammon Bay Airport and that airspace extending upward from 1,200 feet above the surface within a 42-mile radius of the Hooper Bay VOR extending clockwise between the 006° radial and 066° radial.

* * * * *

Issued in Anchorage, AK, on April 14, 2000.

Anthony M. Wylie,

Acting Manager, Air Traffic Division, Alaskan Region.

[FR Doc. 00–10012 Filed 4–20–00; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 73

[Airspace Docket No. 95–ASW–6]

RIN 2120–AA66

Establishment of Restricted Areas R–5117, R–5119, R–5121 and R–5123; NM

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action establishes four restricted areas in the West/Central New Mexico area (Restricted Areas R–5117, and R–5121, Fort Wingate, NM; R–5119, Socorro, NM; and R–5123, Magdalena, NM). The FAA is taking this action to provide an area for the United States Army (US Army), to conduct missile and sensor tests associated with the Theater Missile Defense (TMD) system.

EFFECTIVE DATE: 0901 UTC, June 15, 2000.

FOR FURTHER INFORMATION CONTACT: Bill Nelson, Airspace and Rules Division, ATA–400, Office of Air Traffic Airspace Management, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone: (202) 267–8783.

SUPPLEMENTARY INFORMATION:

History

On May 15, 1995, the US Army requested that the FAA establish four restricted areas in West/Central New Mexico to support the US Army Tactical Missile System projects.

On February 2, 1996, the FAA published in the **Federal Register** a notice proposing to establish four restricted areas in West/Central, New Mexico (61 FR 3884). Interested parties were invited to participate in this rulemaking effort by submitting written comments on the proposal. In response to the notice, the FAA received comments from New Mexico Tech (Langmuir Laboratory for Atmospheric Research) and the Aircraft Owners and Pilots Association (AOPA). Comments received were considered before making a determination on this final rule. An analysis of the comments received and the FAA's responses are summarized below.

Discussion of Comments

New Mexico Tech commented on proposed R–5119. It stated that it currently uses R–5113 for thunderstorm research. Thus, it believes that R–5119 should not have an adverse effect on R–5113 provided (1) the US Army completes its test activity by 9:00 a.m., local time and (2) the designated altitude of R–5119 does not extend below FL 350.

The FAA finds that the restricted airspace will not adversely effect New Mexico Tech's thunderstorm research in R–5113. The operational limits of the two restricted areas are as follows: R–5113 is designated as the airspace from the surface to 45,000 feet mean sea level (MSL); and R–5119 is designated as the airspace from FL 350 to unlimited altitude. Due to the design of R–5119 a portion of R–5113 geographically overlaps R–5119's upper northwestern area. However, the high operational altitude of the test missiles transiting R–5119 make it unlikely that a trespass will occur in the upper limit of R–5113 at 45,000 feet MSL as the test missiles over-fly R–5113 in descent to the adjacent White Sands Missile Range (WSMR). After careful and thorough consideration of the facts presented by the US Army, the FAA believes this final rule has little, if any, impact on the research activities of New Mexico Tech.

The AOPA expressed concerns that the TMD program poses a significant hazard to general aviation (GA) operations and that the proposed restricted areas will require GA pilots to circumnavigate the areas. AOPA believes that increased restrictions on airspace are not an efficient use of airspace, will result in increased fuel costs and will cause unnecessary changes to planned routes of flight. Additionally, as part of its comment, AOPA asked what plan, if any, is in place to protect nonparticipating aircraft from missiles that malfunction and deviate from the planned trajectory. Further, AOPA believes that all alternatives must be explored prior to the establishment of Special Use Airspace (SUA).

The US Army Space and Strategic Defense Command and the WSMR analyst have conducted extensive research studying flight profiles of target and defense missiles. An analysis of this research data led to the development of launch hazard areas (e.g. booster drop zones, intercept debris impact zones) and intact target vehicle and defensive missile impact zones. Based on the analysis, the four restricted areas were identified to segregate these potentially hazardous activities from nonparticipating aircraft.

Prior to each test missile launch, range personnel will conduct impact area analysis based on detailed launch planning and trajectory modeling. Test missile launches will be conducted only when the impact area analysis confirms that flight vehicles and debris would be contained within the predetermined areas. However, to further reduce risk and lessen any potential impact on civil or GA aviation, the US Army has agreed to (1) schedule testing to conclude by 9:00 a.m., local time, when the volume of air traffic is normally low and, (2) limit the number of tests per year (estimated at 6 to 10 per year). Though it is anticipated to remain limited, in the interest of national security the test program number, as published in the notice, may be exceeded. Further, each test from launch to impact is designed to take less than 15 minutes.

It is important to note that, in the past, the US Army has employed successfully the boosters to be used on the test missiles and the boosters are considered highly reliable in the terms of safety and predictability. Therefore, the FAA finds that the chances of a test missile flight failure during launch through impact is considered remote. However, the US Army has established safety procedures in the event of such a failure.

The US Army categorizes termination into three potential mishap areas: (1) On the launcher; (2) flight shortly after liftoff; and (3) flight after exiting the launch site. R–5117 and R–5121 are designed to contain the first two potential mishap categories. In the event of an exceptional circumstance such as a missile malfunction, the Range Safety Officer determines the safest point to initiate missile termination. This point is determined by real time performance data collected form a variety of instruments (e.g. telemetry, radar, computer, etc.). This data provides information on missile location and the point of debris impact at points along the trajectory to the planned impact in WSMR. Due to the high altitudes at which the test missiles navigate, the FAA has found that it is unlikely that a missile malfunction and subsequent termination outside of the designated restricted area will make the airspace underlying the missile flight path unsafe.

The US Army identified the minimum required airspace to contain the theater missile defense test operations in the national airspace system. Although the US Army has attempted to mitigate the impacts on civil operations by limiting the number, time of day, and flight time of the missile, some aircraft operations may be effected when the restricted areas are activated. However, during a standard 12-hour flying day, the limits and procedures established by the US Army will allow flight through the published restricted areas over 99 percent of the time. The FAA will activate the restricted airspace through a Notice to Airman (NOTAM) and will provide 24 hours of notice prior to activation. If a NOTAM is not published, aircraft may navigate through charted restricted areas, without concern. Therefore, there should be little, if any, impact on aircraft operations.

Charting permanent restricted areas on aeronautical charts provides users of the navigable airspace important information concerning potential flight hazards. The legend on the aeronautical chart reflects these areas as active ''By NOTAM, 24 Hours in Advance.'' Charting of the restricted airspace together with the use of the NOTAM system to publicize the effective date and activation times of restricted areas, remain the most efficient means to notify the flying public and segregate these potentially hazardous activities from GA operations.

The Rule

This amendment to 14 CFR part 73 establishes four restricted areas in West/Central New Mexico. Specifically, this action establishes four restricted areas: R–5117 and R–5121, Fort Wingate, NM; R–5119, Socorro, NM; and R–5123, Magdalena, NM. These restricted areas will provide an area for the US Army and designated joint-use agencies, to conduct tests to validate the TMD system design and operational effectiveness. Under the test program, missile launches will be conducted from Fort Wingate Army Depot, near Gallup, NM, and will terminate in the existing restricted area of the WSMR, NM. The FAA is taking this action to provide the

US Army SUA in support of the TMD testing program.

R–5117 is designated as the launch site and is located at Fort Wingate Army Depot, NM, southeast of Gallup, NM. R–5117 extends from the surface to unlimited altitude and contains the missile launch area. It overlies government-controlled land. R–5121 is designated adjacent to R–5117, and extends from FL 200 to unlimited altitude and contains missile ascent after the initial launch.

R–5123, located at Cibola National Forest, Magdalena, NM, extends from the surface to unlimited altitude and provides a booster drop zone to contain reentry and impact of missile boosters after launch from R–5117. R–5123 also overlies government-controlled land.

R–5119 is designated as a missile reentry and planned termination area in the existing R–5107 within the WSMR. R–5119 extends from FL 350 to unlimited altitude and is adjacent to the existing WSMR.

When activated, the restricted areas may impact visual flight rules (VFR) and/or instrument flight rules (IFR) aircraft operations, along the vicinity of the Gallup (GUP), Socorro (ONM) and Truth or Consequences (TCS) navigational aids because of the necessity to reroute planned flight routes due to TMD testing. However, the potential impact is significantly reduced by the limited number of planned test events (6 to 10 a year) anticipated, the short duration of activity (15 minutes total) and the notification and coordination procedures in place. Additionally, the US Army has agreed to complete test activity prior to 9:00 a.m., local time, when the volume of air traffic in the area is normally low. Except for editorial changes, this amendment is the same as that proposed in the notice. Section 73.51 of part 73 was republished in FAA Order 7400.8G dated September 1, 1999.

This regulation is limited to 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 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 it has been determined that 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 Department of Defense, Ballistic Missile Defense Organization (BMDO), issued the Theater Missile Defense Extended Test Range Final Environmental Impact Statement (EIS) in November 1994. Cooperating agencies for the EIS included the U.S. Air Force, Navy, US Army, and the FAA.

Initially, eleven candidate test range areas were considered for TMD extended-range testing. Seven of these alternatives were eliminated from further study due to inadequate features, such as lack of required instrumentation, absence of target launch land sites, prohibitive cold weather, unacceptable schedule delays, and inadequate land area for interceptor deployment. Four alternatives were retained for further consideration. Extended range testing was considered at WSMR, NM, Eglin Air Force Base, FL, Western Range, CA, and Kwajalein Missile Range, Republic of the Marshall Islands. The Western Range alternative was rejected because of soil erosion considerations and the costs of preparing the impact area for analysis. The Eglin Air Force Base and Kwajalein alternatives were rejected because testing would be limited to ocean impacts. Additionally, testing at Kwajalein posed technical difficulties and additional costs. Thus, the US Army has determined that extended range testing at WSMR is the preferred location as described in this rule because there are no impacts to wilderness study areas, recreation areas, national monuments and nesting and breading seasons of sensitive species. The selection of WSMR included two off-range missile launch alternatives; Fort Wingate Army Depot, NM, and the Green River Launch Complex, UT. The US Army selected the Fort Wingate Army Depot as the launch site.

The No Action Alternative would consist of the continuation of ongoing activities and operations at the four locations considered. The development of ground-based TMD missile and sensor systems would continue, with missile flight tests and target intercepts being conducted utilizing existing test ranges. No construction and operations for missile launch programs at the remote launch locations or use of sea launch capabilities would be conducted to support these types of ground-based TMD system tests. Test and training area restrictions, particularly on shorter-range missile flights conducted at WSMR, prohibited full validation of system design and operational effectiveness in realistic theater environments. As a result, the no action alternative was eliminated as a prudent and feasible alternative because it did not satisfy the mandatory requirements identified by the BMDO as necessary to fulfill its TMD program needs. The BMDO issued a Record of Decision in March 1995 that adopted all practicable means to avoid or minimize harm.

In February 2000, the FAA completed a written reevaluation of the EIS. The FAA adopted the EIS as final, pursuant to 40 CFR 1506.3(c) and (b) 62 FR 43730 and 62 FR 44685. After careful and thorough consideration of the facts contained herein and following consideration of the views of those Federal agencies having jurisdiction by law and special expertise with respect to the environmental impacts described, the undersigned finds that this Federal action is consistent with existing national policies and objectives as set forth in section 101(a) of the National Environmental Policy Act of 1959, as amended.

This final rule constitutes final agency action under 49 USC 46110. Any person disclosing a substantial interest in this order may appeal the order to the United States Court of Appeals of the District of Columbia upon petition, filed within 60 days after the order is issued.

List of Subjects in 14 CFR Part 73

Airspace, Navigation (air).

Adoption of the Amendment

In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR part 73 as follows:

PART 73—SPECIAL USE AIRSPACE

1. The authority citation for part 73 continues to read as follows:

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

§ 73.51 [Amended]

2. § 73.51 is amended as follows:

* * * * *

R–5117 Fort Wingate, NM [New]

Boundaries. Beginning at lat. 35°25′51″N., long. 108°30′09″ W.; to lat. 35°28′46″ N., long. 108°37′14″W.; to lat. 35°28′46″ N., long. 108°37′39″ W.; to lat. 35°21′27″ N., long. 108°36′58″ W.; to the point of beginning.

Designated altitudes. Surface to unlimited.

Time of designation. Intermittent by NOTAM 24 hours in advance.

Controlling agency. FAA, Albuquerque ARTCC.

Using agency. Commanding General, White Sands Missile Range, NM.

R–5119 Socorro, NM [New]

Boundaries. Beginning at lat. 33°59′56″ N., long. 106°43′29″ W.; to lat. 33°59′51″ N., long. 106°56′27″ W.; to lat. 34°08′16″ N., long. 107°05′17″ W.; to lat. 34°00′28″ N., long. 107°12′04″ W.; to lat. 33°46′04″ N., long. 107°02′38″ W.; to lat. 33°26′49″ N., long. 107°02′25″ W.; to lat. 33°26′49″ N., long. 107°00′00″ W.; to lat. 33°32′44″ N., long. 106°58′47″ W.; to lat. 33°54′10″ N., long. 106°46′24″ W.; to lat. 33°57′16″ N., long. 106°43′58″ W.; to the point of beginning.

Designated altitudes. FL 350 to unlimited.

Time of designation. Intermittent by NOTAM 24 hours in advance.

Controlling agency. FAA, Albuquerque ARTCC.

Using agency. Commanding General, White Sands Missile Range, NM.

R–5121 Ft. Wingate, NM [New]

Boundaries. Beginning at lat. 35°25′51″ N., long. 108°30′09″ W.; to lat. 35°21′22″ N., long. 108°25′59″ W.; to lat. 35°19′18″ N., long. 108°28′10″ W.; to lat. 35°17′48″ N., long. 108°31′41″ W.; to lat. 35°21′27″ N., long. 108°36′58″ W.; to the point of beginning.

Designated altitudes. FL 200 to unlimited.

Time of designation. Intermittent by NOTAM 24 hours in advance.

Controlling agency. FAA, Albuquerque ARTCC.

Using agency. Commanding General, White Sands Missile Range, NM.

R–5123 Magdalena, NM [New]

Boundaries. Beginning at lat. 34°22′30″ N., long. 107°57′00″ W.; to lat. 34°25′00″ N., long. 107°49′00″ W.; to lat. 34°24′45″ N., long. 107°37′00″ W.; to lat. 34°18′00″ N., long. 107°30′00″ W.; to lat. 34°15′08″ N., long. 107°37′00″ W.; to lat. 34°19′00″ N., long. 107°40′00″ W.; to lat. 34°15′08″ N., long. 107°45′20″ W.; to lat. 34°14′52″ N., long. 107°44′40″ W.; to lat. 34°13′00″ N., long. 107°48′00″ W.; to the point of beginning.

Designated altitudes. Surface to unlimited.

Time of designation. Intermittent by NOTAM 24 hours in advance.

Controlling agency. FAA, Albuquerque ARTCC.

Using agency. Commanding General, White Sands Missile Range, NM.

* * * * *

Issued in Washington, DC, on April 14, 2000.

Reginald C. Matthews,

Manager, Airspace and Rules Division.

[FR Doc. 00–10010 Filed 4–20–00; 8:45 am]

BILLING CODE 4910–13–P

COMMODITY FUTURES TRADING COMMISSION

17 CFR Part 1

RIN 3038–AB51

Minimum Financial Requirements for Futures Commission Merchants and Introducing Brokers

AGENCY: Commodity Futures Trading Commission.

ACTION: Final rules.

SUMMARY: The Commodity Futures Trading Commission (''Commission'') is amending Regulation 1.17, which governs the minimum financial requirements imposed upon futures commission merchants (''FCMs'') and introducing brokers (''IBs''). The amendments will ease the restrictions imposed upon the withdrawal of equity capital from an FCM. The amendments also increase the percentage deduction (*i.e.,* ''haircut'') applied to the value of equity securities pledged as collateral for secured demand notes that are included in the adjusted net capital of an FCM or IB and delete a reference to a section of the Securities and Exchange Commission's (''SEC'') capital rule that has been repealed.

EFFECTIVE DATE: May 22, 2000.

FOR FURTHER INFORMATION CONTACT: Henry J. Matecki, Financial Audit and Review Branch, Commodity Futures Trading Commission, 300 S. Riverside Plaza, Room 1600–N, Chicago, IL 60606; telephone (312) 886–3217; electronic mail *hmatecki@cftc.gov:* or Thomas J. Smith, Special Counsel, Division of Trading and Markets, Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street, NW., Washington, DC 20581; telephone (202) 418–5495; electronic mail *tsmith@cftc.gov.*

SUPPLEMENTARY INFORMATION

I. Background

On February 10, 2000, the Commission published in the **Federal Register** [1] for public comment proposed amendments to Regulation 1.17, which governs the minimum financial requirements imposed upon FCMs and IBs (the ''Proposal'').[2] The Proposal was to: (1) Ease the restrictions imposed upon the withdrawal of equity capital from an FCM; (2) increase the percentage deduction (*i.e.,* ''haircut'') applied to the value of equity securities pledged as collateral for secured demand notes that are included in the adjusted net capital of an FCM or IB; and (3) delete a reference to a section of the SEC's capital rules that has been repealed. The comment period expired on March 13, 2000. No comments were received.

After considering the issues, the Commission has determined to adopt the amendments as proposed. A discussion of the final rule amendments is provided below.

II. Rule Amendments

A. Restriction on the Withdrawal of Equity Capital From an FCM

Commission Regulation 1.17(e) prohibits the withdrawal of equity capital from an FCM [3] to redeem or to repurchase shares of stock of the FCM, to pay dividends, or to make an unsecured advance or loan to a stockholder, partner, sole proprietor or employee of the FCM if, after giving effect to the withdrawal and to certain other specified withdrawals and payments, the FCM's adjusted net capital would be less than the greatest of:

(1) $300,000 (120 percent of the $250,000 minimum adjusted net capital requirement);

(2) Seven percent of the customer funds required to be segregated or set aside pursuant to the Commodity Exchange Act (''Act'') and Commission regulations, [4] (hereinafter collectively referred to as the ''customer segregated and secured amount'');

(3) 120 percent of the amount of adjusted net capital required by a registered futures association of which the FCM is a member; or

(4) For an FCM that is also a securities broker or dealer registered with the SEC, the amount of net capital specified in SEC Rule 15c3–1(e).[5]

[1] 65 FR 6569 (February 10, 2000).

[2] Commission rules cited herein can be found at 17 CFR Ch. I (1999).

[3] The prohibition against withdrawal of equity capital set forth in Regulation 1.17(e) applies to both FCMs and IBs. The restriction requires consideration of both the minimum dollar amount of net capital required for both types of registrants ($250,000 for FCMs and $30,000 for IBs) and, just for FCMs, the amount of funds required to be segregated and set aside for FCMs' customers. For purposes of this final rulemaking, only the restriction on FCMs need be addressed since the amendments relate only to the percentage applied to the amount of funds required to be segregated and set aside for customers.

[4] Before applying the percentage capital factor, the amount required to be segregated or set aside is reduced by the market value of commodity options purchased by customers on or subject to the rules of a contract market or a foreign board of trade for which the full premiums have been paid: provided, however, that the option premium deduction for each customer is limited to the amount of customer funds and the foreign futures and foreign options secured amounts in such customer's account(s).

[5] SEC rules cited herein can be found at 17 CFR Part 240 (1999).

The Commission is amending the restriction in (2) above to permit the withdrawal of equity capital from an FCM provided that, after giving effect to the withdrawal, the FCM's adjusted net capital is in excess of six percent of the customer segregated and secured amount. The Commission believes that easing this restriction is appropriate in light of other provisions of the Commission's regulations that provide adequate assurances against the excessive withdrawal of equity capital.

Generally, FCMs that carry customer positions are required to maintain minimum adjusted net capital of at least four percent of the customer segregated and secured amount.[6] FCMs that are members of self-regulatory organizations (''SROs''—that is, commodity exchanges and NFA) also must comply with the minimum net capital requirements of those exchanges, which are required to be at least as stringent as the Commission's.[7]

An FCM that fails to comply with the minimum net capital requirement must transfer all customer accounts and immediately cease doing business as an FCM.[8] Therefore, each FCM must ensure that a capital withdrawal does not cause the FCM's adjusted net capital to fall below four percent of the customer segregated and secured amount.

In addition, as stated in the Proposal, the Commission's ''early warning'' notice and financial reporting requirements deter excessive equity withdrawals. Regulation 1.12(b)(2) requires an FCM to notify in writing the Commission and its designated self-regulatory organization (''DSRO'') if its adjusted net capital does not equal or exceed six percent of the customer segregated and secured amount. The early warning notices must be filed within five business days of the FCM's adjusted net capital falling below the early warning level. Moreover, Regulation 1.12(g)(2) requires an FCM to give the Commission written notice at least two business days prior to a planned withdrawal of equity capital if such withdrawal would reduce excess net capital by 30 percent or more from that most recently reported in a financial report filed with the Commission.

An FCM that hits the early warning trigger is also required to file a financial report on Form 1–FR–FCM with the Commission and its DSRO as of the close of the month during which its adjusted net capital does not exceed the early warning level and for each month thereafter until three successive months have elapsed during which its adjusted net capital is at all times equal to or in excess of the early warning level.[9] The early warning notices bring to the Commission's and DSRO's attention firms that should be subjected to closer monitoring because of their minimal regulatory capital.

Furthermore, the Commission's ''debt-equity ratio'' requirement also provides a limit on the amount of capital that may be withdrawn from an FCM. Regulation 1.17(d) prohibits the withdrawal of capital from an FCM if, after giving effect to the withdrawal, the FCM's equity capital would be less than 30 percent of its debt-equity total.[10] Finally, as noted in the Proposal, setting the capital withdrawal limit at the Commission's early warning level is consistent with the capital withdrawal rules adopted by the SEC for securities brokers or dealers that compute their minimum net capital requirement in accordance with the ''alternative'' method.[11]

B. Equity Securities Pledged as Collateral for Secured Demand Notes

The Commission is amending Regulation 1.17(h)(1)(iii) to increase from 15 percent to 30 percent the haircut that is applied to equity securities collateralizing secured demand notes that are included in an FCM's or IB's adjusted net capital computation. The amendment will provide greater uniformity between the Commission's and SEC's capital rules.

As stated in the Proposal, SEC capital rules currently require brokers and dealers to apply a 30 percent haircut to equity securities collateralizing secured demand notes included in the brokers' or dealers' adjusted net capital.[12] Uniform capital rules reduce the regulatory burden imposed upon dually-registered FCMs (*i.e.,* FCMs that are also SEC registered securities brokers or dealers) by more readily permitting such FCMs to comply with both the Commission's and SEC's capital rules.

Furthermore, as more fully discussed in the Proposal, the Commission's capital rules incorporate by reference the securities haircuts set forth in the SEC's capital rules. In 1992, the SEC adopted several amendments to its capital rules. One of the amendments had the unintended consequence of reducing from 30 percent to 15 percent the haircut that an FCM was required to apply to equity securities collateralizing a secured demand note. [13] Brokers and dealers, however, were still required to apply a 30 percent haircut to such equity securities. The amendments would restore the haircut to the 30 percent level.

C. Technical Amendment

The Commission is amending Regulation 1.17(c)(5)(v) to delete a reference to SEC Rule 15c3–1(f) which has been repealed.[14] The technical amendment has no impact on the Commission's capital rule and will not affect FCMs or IBs.

III. Related Matters

A. Regulatory Flexibility Act

The Regulatory Flexibility Act (''RFA''), 5 U.S.C. 601–611, requires that agencies, in proposing rules, consider the impact of those rules on small businesses. The rule amendments discussed herein would affect FCMs and IBs. The Commission has previously determined that, based upon the fiduciary nature of FCM/customer relationships, as well as the requirement that FCMs meet minimum financial requirements, FCMs should be excluded from the definition of small entity.

With respect to IBs, the Commission stated that it is appropriate to evaluate within the context of a particular rule whether some or all IBs should be

[6] Regulation 1.17(a)(1)(i). FCMs that are also registered with the SEC as securities brokers or dealers are required to comply with the Commission's minimum adjusted net capital requirement or the minimum adjusted net capital requirement established by SEC Rule 15c3–1(e), whichever is greater.

[7] Regulations 1.17(a)(2)(i) and 1.52.

[8] Regulation 1.17(a)(4).

[9] Regulation 1.12(b)(4).

[10] Equity capital is defined by Regulation 1.17(d)(1) to include certain loans subject to qualifying satisfactory subordination agreements and the following: (1) In the case of a corporation, the sum of its par or stated value of capital stock, paid in capital in excess of par, retained earnings, unrealized profit and loss, and other capital accounts;

(2) In the case of a partnership, the sum of its capital accounts of partners (inclusive of such partners' commodity interest and securities accounts subject to the provisions of Rule 1.17(e) concerning restrictions on withdrawals of equity capital), and unrealized profit and loss; and

(3) In the case of a sole proprietorship, the sum of its capital accounts and unrealized profit and loss.

''Debt-equity total'' is defined by Regulation 1.17(d)(2) and encompasses equity capital as defined above plus loans subject to satisfactory subordination agreements that do not qualify as equity capital under Regulation 1.17(d)(1).

[11] *See* SEC Rule 15c3–1(a)(1)(ii).

[12] *See* Rule 15c3–1d(a)(2)(iii).

[13] *See* 57FR 56984 (December 2, 1992).

[14] *See* 57 FR 56973 (December 2, 1992).

considered to be small entities and, if so, to analyze the economic impact on such entities at that time. The technical amendment to Regulation 1.17(c)(5)(v) and the amendment to Regulation 1.17(e) easing the restriction on the withdrawal of equity capital from an FCM do not impose additional requirements on an IB. The amendment to Regulation 1.17(h)(1)(iii) increasing the haircut on equity securities submitted as collateral for a secured demand note may have a minimal economic impact on an IB's financial operations. The amendment, however, conforms the Commission's rules to those of the SEC and restores the haircut to its previous level prior to the SEC amendment of its capital rules in December 1992. Furthermore, no comments were received in response to the Commission's specific request for comments on the impact these rules, as proposed, would have on small entities. Thus, on behalf of the Commission, the Chairman certifies that the rule amendments will not have a significant economic impact on a substantial number of small entities.

B. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (PRA), 44 U.S.C. 3501 *et seq.*, requires federal agencies (including the Commission) to review rules and rule amendments to evaluate the information collection burden that they impose on the public. The Commission believes that paragraphs (c)(5)(v), (e)(1)(ii), and (h)(1)(iii) of Rule 1.17, as amended, do not impose an information collection burden on the public.

List of Subjects in 17 CFR Part 1

Brokers, Commodity futures.

In consideration of the foregoing and pursuant to the authority contained in the Commodity Exchange Act and, in particular, Sections 4f, 4g and 8a (5) thereof, 7 U.S.C. 6d, 6g and 12a(5), the Commission hereby amends Chapter I of Title 17 of the Code of Federal Regulations as follows:

PART 1—GENERAL REGULATIONS UNDER THE COMMODITY EXCHANGE ACT

1. The authority citation for Part 1 continues to read as follows:

Authority: 7 U.S.C. 1a, 2, 2a, 4, 4a, 6, 6a, 6b, 6c, 6d, 6e, 6f, 6g, 6h, 6i, 6j, 6k, 6l, 6m, 6n, 6o, 6p, 7, 7a, 7b, 8, 9, 12, 12a, 12c, 13a, 13a–1, 16, 16a, 19, 21, 23, and 24.

2. Section 1.17 is amended by revising paragraphs (c)(5)(v), (e)(1)(ii), and (h)(1)(iii) to read as follows:

§ 1.17 Minimum financial requirements for futures commission merchants and introducing brokers.

* * * * *

(c) * * *

(5) * * *

(v) In the case of securities and obligations used by the applicant or registrant in computing net capital, and in the case of a futures commission merchant with securities in segregation pursuant to section 4d(2) of the Act and the regulations in this chapter which were not deposited by customers, the percentages specified in Rule 240.15c3–1(c)(2)(vi) of the Securities and Exchange Commission (17 CFR 240.15c3–1(c)(2)(vi)) (''securities haircuts'') and 100 percent of the value of ''nonmarketable securities'' as specified in Rule 240.15c3–1(c)(2)(vii) of the Securities and Exchange Commission (17 CFR 240.15c3–1(c)(2)(vii));

* * * * *

(e)* * *

(1)* * *

(ii) For a futures commission merchant or applicant therefor, 6 percent of the following amount: The customer funds required to be segregated pursuant to the Act and the regulations in this part and the foreign futures or foreign options secured amount, less the market value of commodity options purchased by customers on or subject to the rules of a contract market or a foreign board of trade for which the full premiums have been paid: Provided, however, That the deduction for each customer shall be limited to the amount of customer funds in such customer's account(s) and foreign futures and foreign options secured amounts;

* * * * *

(h)* * *

(1)* * *

(iii) The term ''collateral value'' of any securities pledged to secure a secured demand note means the market value of such securities after giving effect to the percentage deductions specified in Rule 240.15c3–1d(a)(2)(iii) of the Securities and Exchange Commission (17 CFR 240.15c3–1d(a)(2)(iii)).

* * * * *

Issued in Washington D.C. on April 12, 2000 by the Commission.

Jean A. Webb,

Secretary of the Commission.

[FR Doc. 00–9647 Filed 4–20–00; 8:45 am]

BILLING CODE 6351–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 175

[Docket No. 98F–0675]

Indirect Food Additives: Adhesives and Components of Coatings

AGENCY: Food and Drug Administration, HHS.

ACTION: Final rule.

SUMMARY: The Food and Drug Administration (FDA) is amending the food additive regulations to provide for the safe use of polyethylenepolyamines as cross-linking agents for epoxy resins in coatings intended for use in contact with food. This action responds to a petition filed by the Dow Chemical Co.

DATES: This rule is effective April 21, 2000; submit written objections and requests for a hearing by May 22, 2000.

ADDRESSES: Submit written objections to the Dockets Management Branch (HFA–305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852.

FOR FURTHER INFORMATION CONTACT: Hortense S. Macon, Center for Food Safety and Applied Nutrition (HFS–216), Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202–418–3086.

SUPPLEMENTARY INFORMATION: In a notice published in the **Federal Register** of August 24, 1998 (63 FR 45073), FDA announced that a food additive petition (FAP 8B4606) had been filed by The Dow Chemical Co., 2030 Dow Center, Midland, MI 48674. The petition proposed to amend the food additive regulations in § 175.300 *Resinous and polymeric coatings* (21 CFR 175.300) to provide for the safe use of polyethylenepolyamines (PEPA's) as cross-linking agents for epoxy resins in coatings intended for use in contact with food.

In its evaluation of the safety of PEPA's, FDA has reviewed the safety of the additive itself and the chemical impurities that may be present in the additive resulting from its manufacturing process. Although PEPA's have not been shown to cause cancer, they could contain minute amounts of unreacted starting material, ethylene dichloride (1,2-dichloroethane), a carcinogenic impurity. However, FDA concludes that 1, 2-dichloroethane is not likely to be present in the final food contact material in an amount that could present a safety concern for the

following reasons. Based on the low boiling point of 1,2-dichloroethane relative to PEPA's, residual 1,2-dichloroethane would be expected to be removed during any purification process of PEPA's. Any residual 1,2-dichloroethane in PEPA's would also be expected to be removed on curing of epoxy resins with PEPA's. In addition, because epoxy resins cured with PEPA's will be allowed only for repeat-use applications, any 1,2-dichloroethane that could be present in food would be minimized by evaporation and washing of the surface before food is added and by the large volume of food in contact with the cured resin over its service lifetime. Based on this information, the agency concludes that the proposed use of the additive is safe, and that the additive will achieve its intended technical effect. Therefore, the agency concludes that the regulations in § 175.300 should be amended as set forth below.

In accordance with § 171.1(h) (21 CFR 171.1(h)), the petition and the documents that FDA considered and relied upon in reaching its decision to approve the petition are available for inspection at the Center for Food Safety and Applied Nutrition by appointment with the information contact person listed above. As provided in § 171.1(h), the agency will delete from the documents any materials that are not available for public disclosure before making the documents available for inspection.

The agency has previously considered the environmental effects of this rule as announced in the notice of filing for FAP 8B4606 (63 FR 45073). No new information or comments have been received that would affect the agency's previous determination that there is no significant impact on the human environment and that an environmental impact statement is not required.

This final rule contains no collection of information. Therefore, clearance by the Office of Management and Budget under the Paperwork Reduction Act of 1995 is not required.

Any person who will be adversely affected by this regulation may at any time on or before May 22, 2000, file with the Dockets Management Branch (address above) written objections thereto. Each objection shall be separately numbered, and each numbered objection shall specify with particularity the provisions of the regulation to which objection is made and the grounds for the objection. Each numbered objection on which a hearing is requested shall specifically so state. Failure to request a hearing for any particular objection shall constitute a waiver of the right to a hearing on that objection. Each numbered objection for which a hearing is requested shall include a detailed description and analysis of the specific factual information intended to be presented in support of the objection in the event that a hearing is held. Failure to include such a description and analysis for any particular objection shall constitute a waiver of the right to a hearing on the objection. Three copies of all documents shall be submitted and shall be identified with the docket number found in brackets in the heading of this document. Any objections received in response to the regulation may be seen in the Dockets Management Branch between 9 a.m. and 4 p.m., Monday through Friday.

List of Subjects in 21 CFR Part 175

Adhesives, Food additives, Food packaging.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs, 21 CFR part 175 is amended as follows:

PART 175—INDIRECT FOOD ADDITIVES: ADHESIVES AND COMPONENTS OF COATINGS

1. The authority citation for 21 CFR part 175 continues to read as follows:

Authority: 21 U.S.C. 321, 342, 348, 379e.

2. Section 175.300 is amended in paragraph (b)(3)(viii)(*b*) by alphabetically adding an entry to read as follows:

§ 175.300 Resinous and polymeric coatings.

* * * * *

(b) * * *

(3) * * *

(viii) * * *

(*b*) * * *

Polyethylenepolyamine (CAS Reg. No. 68131–73–7), for use only in coatings intended for repeated use in contact with food, at temperatures not to exceed 180 °F (82 °C).

* * * * *

Dated: April 14, 2000.

Margaret M. Dotzel,

Acting Associate Commissioner for Policy.

[FR Doc. 00–9941 Filed 4–20–00; 8:45 am]

BILLING CODE 4160–01–F

DEPARTMENT OF THE TREASURY

Internal Revenue Service

26 CFR Parts 1 and 31

[TD 8880]

RIN 1545–AU46

Relief From Disqualification for Plans Accepting Rollovers

AGENCY: Internal Revenue Service (IRS), Treasury.

ACTION: Final regulations.

SUMMARY: This document contains final regulations under section 401(a)(31) of the Internal Revenue Code. These final regulations provide specific rules that grant relief from disqualification to an eligible retirement plan that inadvertently accepts an invalid rollover contribution. The final regulations also clarify that it is not necessary for a distributing plan to have a favorable IRS determination letter in order for a plan administrator of a receiving plan to reach a reasonable conclusion that a contribution is a valid rollover contribution.

DATES: These regulations are effective on April 21, 2000.

FOR FURTHER INFORMATION CONTACT: Pamela R. Kinard, (202) 622–6030 (not a toll-free number).

SUPPLEMENTARY INFORMATION:

Background

On September 22, 1995, the Treasury Department and the IRS published in the **Federal Register** (60 FR 49199) Final Income Tax Regulations (TD 8619) under sections 401(a)(31) and 402(c). The final regulations provide guidance for complying with the Unemployment Compensation Amendments of 1992 (UCA). A proposed amendment to the regulations (REG–245562–96) under section 401(a)(31) was published in the **Federal Register** (61 FR 49279) on September 19, 1996. The 1996 proposed regulations under sections 401(a)(31) and 402(c) expand and clarify the guidance previously issued in the Final Income Tax Regulations. On December 17, 1998, an amendment to the proposed regulations (REG–245562–96) under section 401(a)(31) was published in the **Federal Register** (63 FR 69584). This amendment to the proposed regulations was issued in response to the congressional directive in section 1509 of Taxpayer Relief Act of 1997 (TRA '97), which directs the IRS to issue guidance clarifying that it is not necessary for a distributing plan to have a favorable IRS determination letter in order for a plan administrator of a

receiving plan to reasonably conclude that a contribution is a valid rollover contribution. Written comments responding to the 1996 proposed regulations were received. There were no written comments responding to the 1998 amendment to the proposed regulations. No public hearing was requested or held. After consideration of the comments, the amended proposed regulations under section 401(a)(31) are adopted by this Treasury decision.

Explanation of Provisions and Summary of Comments

A. Relief From Disqualification

The final regulations under section 401(a)(31) of the Internal Revenue Code provide that an eligible retirement plan which accepts a direct rollover from another plan will not fail to satisfy section 401(a) or 403(a) merely because the plan making the distribution is, in fact, not qualified under section 401(a) or 403(a) at the time of the distribution if, prior to accepting the rollover, the plan administrator of the receiving plan reasonably concluded that the distributing plan was qualified under section 401(a) or 403(a).

The proposed regulations clarify and expand upon this relief. Under the proposed regulations, an eligible retirement plan that accepts an invalid rollover contribution, whether as a direct rollover or as a rollover contribution other than a direct rollover, will be treated, for purposes of section 401(a) or 403(a), as accepting a valid rollover contribution, if the plan administrator of the receiving plan satisfies two conditions. First, when accepting the rollover contribution, the plan administrator of the receiving plan must reasonably conclude that the rollover contribution is a valid rollover contribution. Second, if the plan administrator of the receiving plan later determines that the rollover contribution was an invalid rollover contribution, the plan must distribute the amount of the invalid rollover contribution, plus earnings attributable thereto, to the employee within a reasonable period of time.

B. Documentation Offered as Evidence To Support a Reasonable Conclusion

The 1996 proposed regulations do not mandate any particular documentation or procedures that a plan administrator must use in order to reach a reasonable conclusion that a rollover contribution is a valid rollover contribution. The 1996 proposed regulations contain a series of examples to illustrate the types of documentation and procedures that would be sufficient to support a reasonable conclusion. In each example, the employee making the rollover contribution provides the plan administrator of the receiving plan with a letter from the plan administrator of the distributing plan stating that the distributing plan has received an IRS determination letter indicating that the distributing plan is qualified under section 401(a).

Several commentators stated that the examples in the 1996 proposed regulations appear to imply that the acknowledgment of the receipt of a favorable IRS determination letter by a distributing plan is a prerequisite to a plan administrator of a receiving plan reaching a reasonable conclusion that a rollover contribution is a valid rollover contribution. Commentators argued that the public policy goal of pension portability would be impeded if an eligible retirement plan is subject to complex administrative procedures when accepting rollover contributions. These concerns were addressed in the 1998 amendment to the proposed regulations implementing the congressional directive in section 1509 of TRA '97. That amendment clarifies that it is not necessary for a distributing plan to have a favorable IRS determination letter in order for a plan administrator of a receiving plan to reach a reasonable conclusion that a contribution is a valid rollover contribution. In addition, an example was added to the proposed regulations in which an employee does not provide a statement from the distributing plan administrator that the distributing plan has received a favorable IRS determination letter, but instead the employee provides a statement from the distributing plan administrator relating to the qualification of the distributing plan. In the preamble to the 1998 amendment to the proposed regulations, it is stressed that none of the examples in the proposed regulations are intended to describe the only types of information that a plan administrator can find to be sufficient and the examples are not intended to preclude reliance on other types of information, such as opinions or statements regarding the plan's qualification provided by appropriate professionals with expertise in plan qualification requirements.

C. Miscellaneous Comments

One commentator stated that both Examples 1 and 3 in the proposed regulations, which provide that Employee A will not have attained age 70½ by the end of the year in which the rollover contribution will occur, imply that if an employee were age 70½ or older, a rollover option would be unavailable. This implication was not intended. The fact was included merely to illustrate the more common scenario of an employee who is under age 70½ and rolls over a retirement plan distribution.

Some commentators proposed that guidance is needed regarding the procedures for correcting invalid rollover contributions. One commentator suggested that relief, similar to that provided to plans receiving invalid rollover contributions, should also be afforded to plans receiving assets and liability transfers in the event that a transferor's plan does not satisfy the qualification requirements under the Code. These comments will be taken into account in developing future guidance priorities.

Special Analyses

It has been determined that this Treasury decision is not a significant regulatory action as defined in Executive Order 12866. Therefore, a regulatory assessment is not required. It also has been determined that section 553(b) of the Administrative Procedure Act (5 U.S.C. chapter 5) does not apply to these regulations, and because these regulations do not impose a collection of information on small entities, the Regulatory Flexibility Act (5 U.S.C. chapter 6) does not apply. Therefore, a Regulatory Flexibility Analysis is not required. Pursuant to section 7805(f) of the Internal Revenue Code, the notice of proposed rulemaking preceding these regulations was submitted to the Chief Counsel for Advocacy of the Small Business Administration for comment on its impact on small business.

Drafting Information

The principal author of these regulations is Pamela R. Kinard, Office of the Associate Chief Counsel (Employee Benefits and Exempt Organizations), IRS. However, other personnel from the IRS and Treasury Department participated in their development.

List of Subjects

26 CFR Part 1

Income taxes, Reporting and recordkeeping requirements.

26 CFR Part 31

Employment taxes, Estate taxes, Excise taxes, Gift taxes, Income taxes, Penalties, Reporting and recordkeeping requirements.

Adoption of Amendments to the Regulations

Accordingly, 26 CFR parts 1 and 31 are amended as follows:

PART 1—INCOME TAXES

Paragraph 1. The authority citation for part 1 continues to read in part as follows:

Authority: 26 U.S.C. 7805 * * *

Par. 2. Section 1.401(a)(31)–1 is amended as follows:

1. Under the heading ''List of Questions,'' redesignating Q–14 through Q–18 as Q–15 through Q–19, respectively, and adding new Q–14.

2. Under the heading ''Questions and Answers,'' removing the paragraph designation (a) and the paragraph heading, and removing paragraph (b) from A–13.

3. Under the heading ''Questions and Answers,'' redesignating Q&A–14 through Q&A–18 as Q&A–15 through Q&A–19, respectively, and adding new Q&A–14.

4. Under the heading ''Questions and Answers,'' removing the language ''Q&A–15'' in the fourth sentence of the newly designated A–16 and adding ''Q&A–16'' in its place.

5. Under the heading ''Questions and Answers,'' removing the language ''Q&A–17'' in the first sentence of the newly designated A–18 and adding ''Q&A–18'' in its place.

The additions read as follows:

§ 1.401(a)(31)–1 Requirement to offer direct rollover of eligible rollover distributions; questions and answers.

* * * * *

List of Questions

* * * * *

Q–14. If a plan accepts an invalid rollover contribution, whether or not as a direct rollover, how will the contribution be treated for purposes of applying the qualification requirements of section 401(a) or 403(a) to the plan?

* * * * *

Questions and Answers

* * * * *

Q–14. If a plan accepts an invalid rollover contribution, whether or not as a direct rollover, how will the contribution be treated for purposes of applying the qualification requirements of section 401(a) or 403(a) to the plan?

A–14. (a) *Acceptance of invalid rollover contribution.* If a plan accepts an invalid rollover contribution, the contribution will be treated, for purposes of applying the qualification requirements of section 401(a) or 403(a) to the receiving plan, as if it were a valid rollover contribution, if the following two conditions are satisfied. First, when accepting the amount from the employee as a rollover contribution, the plan administrator of the receiving plan reasonably concludes that the contribution is a valid rollover contribution. While evidence that the distributing plan is the subject of a determination letter from the Commissioner indicating that the distributing plan is qualified would be useful to the receiving plan administrator in reasonably concluding that the contribution is a valid rollover contribution, it is not necessary for the distributing plan to have such a determination letter in order for the receiving plan administrator to reach that conclusion. Second, if the plan administrator of the receiving plan later determines that the contribution was an invalid rollover contribution, the amount of the invalid rollover contribution, plus any earnings attributable thereto, is distributed to the employee within a reasonable time after such determination.

(b) *Definitions.* For purposes of this Q&A–14:

(1) An *invalid rollover contribution* is an amount that is accepted by a plan as a rollover within the meaning of § 1.402(c)–2, Q&A–1 (or as a rollover contribution within the meaning of section 408(d)(3)(A)(ii)) but that is not an eligible rollover distribution from a qualified plan (or an amount described in section 408(d)(3)(A)(ii)) or that does not satisfy the other requirements of section 401(a)(31), 402(c), or 408(d)(3) for treatment as a rollover or a rollover contribution.

(2) A *valid rollover contribution* is a contribution that is accepted by a plan as a rollover within the meaning of § 1.402(c)–2, Q&A–1 or as a rollover contribution within the meaning of section 408(d)(3) and that satisfies the requirements of section 401(a)(31), 402(c), or 408(d)(3) for treatment as a rollover or a rollover contribution.

(c) *Examples.* The provisions of paragraph (a) of this Q&A–14 are illustrated by the following examples:

Example 1. (i) Employer X maintains for its employees Plan M, a profit sharing plan qualified under section 401(a). Plan M provides that any employee of Employer X may make a rollover contribution to Plan M. Employee A is an employee of Employer X, will not have attained age 70½ by the end of the year, and has a vested account balance in Plan O (a plan maintained by Employee A's prior employer). Employee A elects a single sum distribution from Plan O and elects that it be paid to Plan M in a direct rollover.

(ii) Employee A provides the plan administrator of Plan M with a letter from the plan administrator of Plan O stating that Plan O has received a determination letter from the Commissioner indicating that Plan O is qualified.

(iii) Based upon such a letter, absent facts to the contrary, a plan administrator may reasonably conclude that Plan O is qualified and that the amount paid as a direct rollover is an eligible rollover distribution.

Example 2. (i) The facts are the same as *Example 1,* except that, instead of the letter provided in paragraph (ii) of *Example 1,* Employee A provides the plan administrator of Plan M with a letter from the plan administrator of Plan O representing that Plan O satisfies the requirements of section 401(a) (or representing that Plan O is intended to satisfy the requirements of section 401(a) and that the administrator of Plan O is not aware of any Plan O provision or operation that would result in the disqualification of Plan O).

(ii) Based upon such a letter, absent facts to the contrary, a plan administrator may reasonably conclude that Plan O is qualified and that the amount paid as a direct rollover is an eligible rollover distribution.

Example 3. (i) Same facts as *Example 1,* except that Employee A elects to receive the distribution from Plan O and wishes to make a rollover contribution described in section 402 rather than a direct rollover.

(ii) When making the rollover contribution, Employee A certifies that, to the best of Employee A's knowledge, Employee A is entitled to the distribution as an employee and not as a beneficiary, the distribution from Plan O to be contributed to Plan M is not one of a series of periodic payments, the distribution from Plan O was received by Employee A not more than 60 days before the date of the rollover contribution, and the entire amount of the rollover contribution would be includible in gross income if it were not being rolled over.

(iii) As support for these certifications, Employee A provides the plan administrator of Plan M with two statements from Plan O. The first is a letter from the plan administrator of Plan O, as described in *Example 1,* stating that Plan O has received a determination letter from the Commissioner indicating that Plan O is qualified. The second is the distribution statement that accompanied the distribution check. The distribution statement indicates that the distribution is being made by Plan O to Employee A, indicates the gross amount of the distribution, and indicates the amount withheld as Federal income tax. The amount withheld as Federal income tax is 20 percent of the gross amount of the distribution. Employee A contributes to Plan M an amount not greater than the gross amount of the distribution stated in the letter from Plan O and the contribution is made within 60 days of the date of the distribution statement from Plan O.

(iv) Based on the certifications and documentation provided by Employee A, absent facts to the contrary, a plan administrator may reasonably conclude that Plan O is qualified and that the distribution otherwise satisfies the requirements of section 402(c) for treatment as a rollover contribution.

Example 4. (i) The facts are the same as in *Example 3,* except that, rather than contributing the distribution from Plan O to Plan M, Employee A contributes the distribution from Plan O to IRA P, an individual retirement account described in

section 408(a). After the contribution of the distribution from Plan O to IRA P, but before the year in which Employee A attains age 70½, Employee A requests a distribution from IRA P and decides to contribute it to Plan M as a rollover contribution. To make the rollover contribution, Employee A endorses the check received from IRA P as payable to Plan M.

(ii) In addition to providing the certifications described in *Example 3* with respect to the distribution from Plan O, Employee A certifies that, to the best of Employee A's knowledge, the contribution to IRA P was not made more than 60 days after the date Employee A received the distribution from Plan O, no amount other than the distribution from Plan O has been contributed to IRA P, and the distribution from IRA P was received not more than 60 days earlier than the rollover contribution to Plan M.

(iii) As support for these certifications, in addition to the two statements from Plan O described in *Example 3,* Employee A provides copies of statements from IRA P. The statements indicate that the account is identified as an IRA, the account was established within 60 days of the date of the letter from Plan O informing Employee A that an amount had been distributed, and the opening balance in the IRA does not exceed the amount of the distribution described in the letter from Plan O. There is no indication in the statements that any additional contributions have been made to IRA P since the account was opened. The date on the check from IRA P is less than 60 days before the date that Employee A makes the contribution to Plan M.

(iv) Based on the certifications and documentation provided by Employee A, absent facts to the contrary, a plan administrator may reasonably conclude that Plan O is qualified and that the contribution by Employee A is a rollover contribution described in section 408(d)(3)(A)(ii) that satisfies the other requirements of section 408(d)(3) for treatment as a rollover contribution.

* * * * *

Par. 3. Section 1.402(c)–2 is amended as follows:

1. Section 1.402(c)–2 is amended by adding a sentence to the end of A–11.

2. Under the heading ''List of Questions,'' removing the language ''§ 1.401(a)(31)–1, Q&A–17'' in Q–15 and adding ''§ 1.401(a)(31)–1, Q&A–18'' in its place.

3. Under the heading ''Questions and Answers,'' removing the language ''§ 1.401(a)(31)–1, Q&A–15'' in the third sentence of A–9(a) and adding ''§ 1.401(a)(31)–1, Q&A–16'' in its place.

4. Under the heading ''Questions and Answers,'' removing the language ''§ 1.401(a)(31)–1, Q&A–15'' in the introductory text of A–9(c) and adding ''§ 1.401(a)(31)–1, Q&A–16'' in its place.

5. Under the heading ''Questions and Answers,'' removing the language ''§ 1.401(a)(31)–1, Q&A–15'' in the last sentence of *Example 1*(b) of A–9(c) and adding ''§ 1.401(a)(31)–1, Q&A–16'' in its place.

6. Under the heading ''Questions and Answers,'' removing the language ''§ 1.401(a)(31)–1, Q&A–16'' in the last sentence of A–10(b) and adding ''§ 1.401(a)(31)–1, Q&A–17'' in its place.

7. Under the heading ''Questions and Answers,'' removing the language ''§ 1.401(a)(31)–1, Q&A–17'' in the last sentence of A–14 and adding ''§ 1.401(a)(31)–1, Q&A–18'' in its place.

8. Under the heading ''Questions and Answers,'' removing the language ''§ 1.401(a)(31)–1, Q&A–17'' in Q–15 and adding ''§ 1.401(a)(31)–1, Q&A–18'' in its place.

9. Under the heading ''Questions and Answers,'' removing the language ''§ 1.401(a)(31)–1, Q&A–17'' in the third sentence of A–15 and adding ''§ 1.401(a)(31)–1, Q&A–18'' in its place.

The addition reads as follows:

§ 1.402(c)–2 Eligible rollover distributions; questions and answers.

* * * * *

A–11. * * * See § 1.401(a)(31)–1, Q&A–14, for guidance concerning the qualification of a plan that accepts a rollover contribution.

* * * * *

§ 1.403(b)–2 [Amended]

Par. 4. Section 1.403(b)–2 is amended as follows:

1. Under the heading ''Questions and Answers,'' removing the language ''§ 1.401(a)(31)–1, Q&A–14'' in the next to last sentence of A–2(a) and adding ''§ 1.401(a)(31)–1, Q&A–15'' in its place.

2. Under the heading ''Questions and Answers,'' removing the language ''§ 1.401(a)(31)–1, Q&A–18'' in the second sentence of A–4(a)(1) and adding ''§ 1.401(a)(31)–1, Q&A–19'' in its place.

PART 31—EMPLOYMENT TAXES AND COLLECTION OF INCOME TAX AT SOURCE

Par. 5. The authority citation for part 31 continues to read in part as follows:

Authority: 26 U.S.C. 7805 * * *

§ 31.3405(c)–1 [Amended]

Par. 6. Section 31.3405(c)–1 is amended as follows:

1. Under the heading ''Questions and Answers,'' removing the language ''Q&A–17 of § 1.401(a)(31)–1'' in the next to last sentence of A–10(a) and adding ''Section 1.401(a)(31)–1, Q&A–18'' in its place.

2. Under the heading ''Questions and Answers,'' removing the language ''§ 1.401(a)(31)–1, Q&A–16'' in the third sentence of A–13 and adding ''§ 1.401(a)(31)–1, Q&A–17'' in its place.

Robert E. Wenzel,

Deputy Commissioner of Internal Revenue.

Approved: April 6, 2000.

Jonathan Talisman,

Acting Assistant Secretary of the Treasury (Tax Policy).

[FR Doc. 00–9815 Filed 4–20–00; 8:45 am]

BILLING CODE 4830–01–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[VA084/101–5045a; FRL–6562–9]

Approval and Promulgation of Air Quality Implementation Plans; Virginia; Revised Format for Materials Being Incorporated by Reference; Approval of Recodification of the Virginia Administrative Code

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: EPA is approving revisions to the Virginia State Implementation Plan submitted on January 13, 1998 and June 7, 1999 by the Virginia Department of Environmental Quality. These submittals include a recodification of and associated administrative revisions to Virginia's air pollution control regulations. This recodification reorganizes and renumbers the Virginia SIP to match the numbering system set forth in the Virginia Administrative Code. EPA is also revising the format of regulations for materials submitted by Virginia that are incorporated by reference (IBR) into their respective State implementation plans (SIPs). These provisions include both rules and source-specific requirements which EPA has approved as part of the Virginia SIP.

DATES: This rule is effective on June 20, 2000 without further notice, unless EPA receives adverse written comment by May 22, 2000. If EPA receives such comments, it will publish a timely withdrawal of the direct final rule in the **Federal Register** and inform the public that the rule will not take effect.

ADDRESSES: Written comments should be mailed to Marcia L. Spink, Associate Director, Office of Air Programs, Mailcode 3AP20, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103. Copies of the documents relevant to this action are available for public inspection during normal business hours at the Air Protection Division,

U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103; the Air and Radiation Docket and Information Center, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and the Virginia Department of Environmental Quality, 629 East Main Street, Richmond, Virginia, 23219.

FOR FURTHER INFORMATION CONTACT: Harold A. Frankford, (215) 814–2108 or by e-mail at frankford.harold@epa.gov.

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

I. Revised IBR Document

The supplementary information is organized in the following order:

What a SIP Is
How EPA Enforces SIPs
How the State and EPA Updates the SIP
How EPA Compiles the SIPs
How EPA Organizes the SIP Compilation
Where You Can Find a Copy of the SIP Compilation
The Format of the New Identification of Plan Section
When a SIP Revision Become Federally Enforceable
The Historical Record of SIP Revision Approvals
What EPA Is Doing In This Action
How This Document Complies With the Federal Administrative Requirements for Rulemaking

What a SIP Is

Each state has a SIP containing the control measures and strategies used to attain and maintain the national ambient air quality standards (NAAQS). The SIP is extensive, containing such elements as air pollution control regulations, emission inventories, monitoring network, attainment demonstrations, and enforcement mechanisms.

How EPA Enforces SIPs

Each state must formally adopt the control measures and strategies in the SIP after the public has had an opportunity to comment on them. They are then submitted to EPA as SIP revisions on which EPA must formally act.

Once these control measures and strategies are approved by EPA, after notice and comment, they are incorporated into the Federally approved SIP and are identified in Part 52 (Approval and Promulgation of Implementation Plans), Title 40 of the Code of Federal Regulations (40 CFR Part 52). The full text of the state regulation approved by EPA is not reproduced in its entirety in 40 CFR Part 52, but is ''incorporated by reference''. This means that EPA has approved a given state regulation with a specific effective date. This format allows both EPA and the public to know which measures are contained in a given SIP, and insures that the State is enforcing the regulations. It also allows EPA and the public to take enforcement action, should a State not enforce its SIP-approved regulations.

How the State and EPA Update the SIP

The SIP is a living document which the state can revise as necessary to address the unique air pollution problems in the state. Therefore, EPA from time to time must take action on SIP revisions containing new and/or revised regulations as being part of the SIP. On May 22, 1997 (62 FR 27968), EPA revised the procedures for incorporating by reference Federally-approved SIPs, as a result of consultations between EPA and OFR.

We began the process of developing: (1) A revised SIP document for each state that would be IBR under the provisions of 1 CFR Part 51; (2) a revised mechanism for announcing EPA approval of revisions to an applicable SIP and updating both the IBR document and the CFR; and (3) a revised format of the ''Identification of Plan'' sections for each applicable subpart to reflect these revised IBR procedures. The description of the revised SIP document, IBR procedures, and ''Identification of Plan'' format are discussed in further detail in the May 22, 1997, **Federal Register** document.

How EPA Compiles the SIPs

The Federally-approved regulations, source-specific permits, and nonregulatory provisions (entirely or portions of) submitted by each state agency have been compiled by EPA into a ''SIP compilation.'' The SIP compilation contains the updated regulations, source-specific permits, and nonregulatory provisions approved by EPA through previous rulemaking actions in the **Federal Register**. The compilations are contained in three-ring binders and will be updated, primarily on an annual basis.

How EPA Organizes the SIP Compilation

Each compilation contains three parts. Part one contains the regulations, part two contains the source-specific requirements that have been approved as part of the SIP and part three contains nonregulatory provisions that have been EPA approved. Each part consists of a table of identifying information for each SIP-approved regulation, each SIP-approved source-specific permit, and each nonregulatory SIP provision. In this action, EPA is publishing the tables summarizing Parts one and two for each State. The table of identifying information in the compilation corresponds to the table of contents published in 40 CFR Part 52 for these states. EPA will publish the summary list of Part Three SIP provisions for Virginia in a separate action. EPA Regional Offices have the primary responsibility for ensuring accuracy and updating the compilations.

Where You Can Find a Copy of the SIP Compilation

EPA Region III developed and will maintain the compilation for Virginia. A copy of the full text of each state's regulatory and source-specific SIP compilation will also be maintained at the OFR and EPA's Air Docket and Information Center.

The Format of the New Identification of Plan Section

In order to better serve the public, EPA revised the organization of the ''Identification of Plan'' section and included additional information to clarify the enforceable elements of the SIP. The revised Identification of Plan section contains five subsections:

1. Purpose and scope
2. Incorporation by reference
3. EPA-approved regulations
4. EPA-approved source-specific permits
5. EPA-approved nonregulatory provisions such as transportation control measures, statutory provisions, control strategies, monitoring networks, etc.

When a SIP Revision Becomes Federally Enforceable

All revisions to the applicable SIP become Federally enforceable as of the effective date of the revisions to paragraphs (c), (d), or (e) of the applicable Identification of Plan section found in each subpart of 40 CFR Part 52.

The Historical Record of SIP Revision Approvals

To facilitate enforcement of previously approved SIP provisions and provide a smooth transition to the new SIP processing system, EPA retains the original Identification of Plan section, previously appearing in the CFR as the first or second section of Part 52 for each state subpart. After an initial two-year period, EPA will review its experience with the new system and enforceability of previously approved SIP measures and will decide whether

or not to retain the Identification of Plan appendices for some further period.

II. Recodification Submittals

On March 6, 1992, the Virginia State Assembly enacted Chapter 216—an act to amend Section 9–77.7, Code of Virginia, effective July 1, 1992. The amendment authorized reorganization of the Virginia Administrative Code (VAC), including reorganization of the air pollution control regulations. Beginning April 17, 1995, Virginia began publication of the air pollution control regulations in the new format. Virginia also announced the adoption of the new format for the Appendices, effective July 1, 1997. The final version of the Appendices were published in the May 26, 1997 *Virginia Register of Regulations*.

Public Hearings Held: December 18, 1997, in Richmond.

A. Revised Structure of Virginia's Regulations

Under the revised VAC system, Title 9 is the designated title for provisions related to the Environment, while Agency Number 5 corresponds to the Virginia Department of Environmental Quality (DEQ), Bureau of Air Pollution Control. Hence, Virginia's air pollution control regulations are cited as 9 VAC 5–xxx–xxx. This citation system replaces System VR–120–01, the general cite for Virginia's regulations for the Control and Abatement of Air Pollution prior to July 1, 1992. When approved, the regulation numbering format for the Federally-enforceable Virginia SIP regulations would mirror those of the State-enforceable regulations, with some exceptions.

Because Virginia's air pollution control regulations are extensive, they are arranged in subgroups such as chapters, parts, articles, and sections under the 9 VAC 5 system. The Virginia regulations under VR–120–01 also were arranged in subgroups, but with different names. Here is a comparison chart:

Group type	9 VAC 5 heading	VR–120–01 heading
Main Division	Chapter	Part.
First Subdivision	Part	
Second Subdivision	Article	Rule (Part IV) or Section (Part VIII).
Third Subdivision	Section	Section or Subsection [Part VIII rules].

Virginia Regulation 9 VAC 5 contains 10 chapters (10, 20, 30, 40, 50, 60, 70, 80, 160, and 170), as described below:

Chapter 10 General Definitions
Chapter 20 General Provisions
Chapter 30 Ambient Air Quality Standards
Chapter 40 Existing Stationary Sources
Chapter 50 New and Modified Stationary Sources
Chapter 70 Air Pollution Episode Prevention
Chapter 80 Permits for Stationary Sources
Chapter 91 Regulations for the Control of Motor Vehicle Emissions in Northern Virginia
Chapter 160 General Conformity Rules
Chapter 170 Regulation for General Administration

Within 9 VAC 5 Chapter 40, there are two major parts— Special Provisions (Part I) and Emissions Standards (Part II). Part I consists of provisions covering the following topics:

—Applicability
—Compliance (consisting of compliance schedules and methods for interpreting compliance of emissions standards based on process weight tables)
—Emissions testing
—Source monitoring
—Notification, records, and reporting

Part II consists of articles which contain general provisions governing visible emissions and fugitive dust/emissions, open burning, mobile sources, and designated source categories. These articles are listed below:

Article 1 Visible Emissions and Fugitive Dust/emissions
Article 4 General Process Operations
Article 5 Synthesized Pharmaceutical Products Manufacturing Operations
Article 6 Rubber Tire Manufacturing Operations
Article 7 Incinerators
Article 8 Fuel Burning Equipment
Article 9 Coke Ovens
Article 10 Asphalt Concrete Plants
Article 11 Petroleum Refinery Operations
Article 12 Chemical Fertilizer Manufacturing Operations
Article 13 Kraft Pulp Mills
Article 14 Sand and Gravel Processing Operations and Stone Quarrying and Processing Operations
Article 15 Coal Preparation Plants
Article 16 Portland Cement Plants
Article 17 Woodworking Operations
Article 18 Primary and Secondary Metal Operations
Article 19 Lightweight Aggregate Process Operations
Article 20 Feed Manufacturing Operations
Article 21 Sulfuric Acid Production Plants
Article 22 Sulfur Recovery Operations
Article 23 Nitric Acid Production Units
Article 24 Solvent Metal Cleaning Operations
Article 25 Volatile Organic Compound Storage and Transfer Operations
Article 26 Large Coating Application Systems
Article 27 Magnet Wire Costing Application Systems
Article 28 Automobile and Light Duty Truck Coating Application Systems
Article 29 Can Coating Application Systems
Article 30 Metal Coil Coating Application Systems
Article 31 Paper and Fabric Coating Application Systems
Article 32 Vinyl Coating Application Systems
Article 33 Metal Furniture Coating Application Systems
Article 34 Miscellaneous Metal Parts and Products Coating Application Systems
Article 35 Flatwood Paneling Coating Application Systems
Article 36 Graphic Arts Printing Processes
Article 37 Petroleum Liquid Storage and Transfer Operations
Article 38 Dry Cleaning Systems
Article 39 Asphalt Paving Operations
Article 40 Open Burning
Article 41 Mobile Sources
Article 45 Lithographic Printing Processes

Within each article, there are about 16 to 20 sections. The general section titles for the SIP-approved rules consist of the following topics:

1. Applicability and Designation of Facility
2. Definitions
3. Specific emission standards for various pollutants (generally, there is one separate section for each pollutant)
4. Control technology guidelines (whenever the article contains emission standards for volatile organic compounds)
5. Standard for visible emissions
6. Standard for fugitive dust/emissions
7. Compliance
8. Test methods and procedures

9. Monitoring

10. Notification, records, and reporting

11. Registration

12. Facility and control equipment maintenance or malfunction

13. Permits

B. Revisions to Appendices

Virginia has incorporated Appendices A through S under the old VR–120 format into the regulatory structure of the 9 VAC 5 format. The citation of the SIP-approved Appendices that are cited under the VR–120 format are redesignated as follows:

Old SIP citation (VR–120)	New SIP citation (9VAC 5)
Appendix A	5–10–30
Appendix B	5–20–200
Appendix G	5–20–202
Appendix H	5–20–203
Appendix J	5–40–41
Appendix K	5–20–204
Appendix M	5–20–21
Appendix N	5–40–21
Appendix P	5–20–206
Appendix Q	5–40–22
Appendix R	5–80–11
Appendix S	5–20–121

C. Administrative Revisions to the State Regulations Reflecting Revisions or Additions to Certain Definitions of Terms

Virginia has added or revised certain definitions to reflect: (1) A restructuring of the Virginia Administrative Code: (2) the use of the Virginia Register to officially announce proposed and adopted Commonwealth rules and regulations; and (3) the creation of the Virginia Department of the Environment. These definitions are described below:

1. Administrative Process Act

Old: Title 9, Section 1.1:1 of the Code of Virginia (1950), as amended

Revised: Chapter 1.1:1 (§ 9–6.14:1 *et seq.*) of Title 9 of the Code of Virginia

2. Department (*Added*)

Any employee or other representative of the Virginia Department of Environmental Quality, as designated by the Director

3. Director (*Revised*)

Refers to the Director of the Virginia Department of Environmental Quality, replacing the old term Executive Director [of the Virginia State Air Pollution Control Board].

4. Virginia Air Pollution Control Law

Old: Title 10, Chapter 1.2 of the Code of Virginia (1950), as amended

Revised: Chapter 13 (§ 10.1–1300 *et seq.*) of Title 9 of the Code of Virginia

5. Virginia Register Act (*Added*)

Chapter 1.2 (§ 9–6.15 *et seq.*) of Title 9 of the Code of Virginia EPA's approval of the recodified Virginia air pollution control regulations also includes revisions to the text of definitions and regulations found in Chapters 10 through 200 to reflect: (1) References to revised regulatory citations described in the current Administrative Process Act, Virginia Register Act, and Virginia Air Pollution Control Law; and (2) references to the Department [of Environmental Quality] or Department Director

D. Revised Structure of 9 VAC 5, Chapter 80

On June 7, 1999, Virginia submitted a revised and restructured numbering systems for 9 VAC 5 Chapter 80, Article 9 (permits for major sources and major modifications locating in nonattainment areas). This SIP revision submittal will restructure the following SIP-approved regulations:

State citation (9 VAC 5)	Title/subject	State effective date	Former SIP citation (120–08–03X)	Last EPA approval date (VR–120–08–03—effective 1/1/93)
Article 9	Permits for Major Stationary Sources and Major Modifications locating in Nonattainment Areas			
5–80–2000	Applicability	1/1/93 4/1/99	.03A	9/21/99 64 FR 51047
5–80–2010	Definitions	1/1/93 4/1/99	.03B	9/21/99 64 FR 51047
5–80–2020	General	1/1/93 4/1/99	.03C	9/21/99 64 FR 51047
5–80–2030	Applications	1/1/93 4/1/99	.03D	9/21/99 64 FR 51047
5–80–2040	Information required	1/1/93 4/1/99	.03E	9/21/99 64 FR 51047
5–80–2050	Standards/conditions for granting permits	1/1/93 4/1/99	.03F 9/21/99	64 FR 51047
5–80–2060	Action on permit application	1/1/93 4/1/99	.03G	9/21/99 64 FR 51047
5–80–2070	Public Participation	1/1/93 4/1/99	.03H	9/21/99 64 FR 51047
5–80–2080	Compliance determination and verification by performance testing.	1/1/93 4/1/99	.03I	9/21/99 64 FR 51047
5–80–2090	Application review and analysis	1/1/93 4/1/99	.03J	9/21/99 64 FR 51047
5–80–2100	Circumvention	1/1/93 4/199	.03K	9/21/99 64 FR 51047
5–80–2110	Interstate pollution abatement	1/1/93 4/1/99	.03L	9/21/99 64 FR 51047
5–80–2120	Offsets	1/1/93 4/1/99	.03M	9/21/99 64 FR 51047
5–80–2130	De minimis increases and stationary source modification alternatives for ozone nonattainment areas classified as serious or severe in 9 VAC 5–20–204.	1/1/93 4/1/99	.03N	9/21/99 64 FR 51047
5–80–2140	Exception	1/1/93 4/1/99	.03O	9/21/99 64 FR 51047
5–80–2150	Compliance with local zoning requirements	1/1/93 4/1/99	.03P	9/21/99 64 FR 51047

State citation (9 VAC 5)	Title/subject	State effective date	Former SIP citation (120–08–03X)	Last EPA approval date (VR–120–08–03—effective 1/1/93)
5–80–2160	Reactivation and Permit Shutdown	1/1/93 4/1/99	.03Q	9/21/99 64 FR 51047
5–80–2170	Transfer of Permits	1/1/93 4/1/99	.03R	9/21/99 64 FR 51047
5–80–2180	Revocation of permit	1/1/93 4/1/99	.03S	9/21/99 64 FR 51047
5–80–2190	Existence of permit no defense	1/1/93 4/1/99	.03T	9/21/99 64 FR 51047

Virginia's June 7, 1999 submittal which restructures the major new source and modification permitting requirements applicable to nonattainment areas consists of administrative and format changes; there are no substantive wording changes to the current federally-enforceable provisions.

Public Hearings held: December 4, 1998, in Richmond

In a separate action, EPA will review additional revisions to Virginia's administrative provisions (9 VAC 5–20 and 9 VAC 5–170) submitted on February 18, 1998 and March 4, 1998, as well as Part II of Virginia's general conformity provisions (9 VAC 5–160), submitted by Virginia on April 20, 1998.

III. EPA Evaluation of Recodification Submittals

EPA's action will have no adverse impact on the NAAQS for the various criteria pollutants governed by Virginia's revised rules. EPA concludes that the recodification of Virginia's regulations and revised administrative provisions have no direct impact on current ambient air quality. For the most part, EPA will be able to cite the same regulatory citations used by Virginia in the event of a federal enforcement action. Differences between the Federally enforceable Virginia SIP regulatory citations and those of the Virginia's which are not Federally enforceable are noted in the chart of regulations listed in revised 40 CFR § 52.2420(c).

In 1995, Virginia adopted legislation that provides, subject to certain conditions, for an environmental assessment (audit) ''privilege'' for voluntary compliance evaluations performed by a regulated entity.

The legislation further addresses the relative burden of proof for parties either asserting the privilege or seeking disclosure of documents for which the privilege is claimed. Virginia's legislation also provides, subject to certain conditions, for a penalty waiver for violations of environmental laws when a regulated entity discovers such violations pursuant to a voluntary compliance evaluation and voluntarily discloses such violations to the Commonwealth and takes prompt and appropriate measures to remedy the violations. Virginia's Voluntary Environmental Assessment Privilege Law, Va. Code Sec. 10.1–1198, provides a privilege that protects from disclosure documents and information about the content of those documents that are the product of a voluntary environmental assessment. The Privilege Law does not extend to documents or information: (1) That are generated or developed before the commencement of a voluntary environmental assessment; (2) that are prepared independently of the assessment process; (3) that demonstrate a clear, imminent and substantial danger to the public health or environment; or (4) that are required by law.

On January 12, 1997, the Commonwealth of Virginia Office of the Attorney General provided a legal opinion that states that the Privilege law, Va. Code Sec. 10.1–1198, precludes granting a privilege to documents and information ''required by law,'' including documents and information ''required by federal law to maintain program delegation, authorization or approval,'' since Virginia must ''enforce federally authorized environmental programs in a manner that is no less stringent than their federal counterparts. * * *'' The opinion concludes that ''[r]egarding § 10.1–1198, therefore, documents or other information needed for civil or criminal enforcement under one of these programs could not be privileged because such documents and information are essential to pursuing enforcement in a manner required by federal law to maintain program delegation, authorization or approval.''

Virginia's Immunity law, Va. Code Sec. 10.1–1199, provides that ''[t]o the extent consistent with requirements imposed by Federal law,'' any person making a voluntary disclosure of information to a state agency regarding a violation of an environmental statute, regulation, permit, or administrative order is granted immunity from administrative or civil penalty. The Attorney General's January 12, 1997 opinion states that the quoted language renders this statute inapplicable to enforcement of any federally authorized programs, since ''no immunity could be afforded from administrative, civil, or criminal penalties because granting such immunity would not be consistent with federal law, which is one of the criteria for immunity.''

Therefore, EPA has determined that Virginia's Privilege and Immunity statutes will not preclude the Commonwealth from enforcing its program consistent with the federal requirements. In any event, because EPA has also determined that a state audit privilege and immunity law can affect only state enforcement and cannot have any impact on federal enforcement authorities, EPA may at any time invoke its authority under the Clean Air Act, including, for example, sections 113, 167, 205, 211 or 213, to enforce the requirements or prohibitions of the state plan, independently of any state enforcement effort. In addition, citizen enforcement under section 304 of the Clean Air Act is likewise unaffected by this, or any, state audit privilege or immunity law.

What EPA Is Doing in This Action

EPA is approving the recodified Virginia provisions submitted on January 13, 1998 and June 7, 1999 by the Virginia Department of Environmental Quality as revisions to the Virginia SIP. EPA is also revising the format of 40 CFR part 52 for materials submitted by Virginia that are incorporated by reference (IBR) into their respective SIPs.

EPA has reviewed the submitted revisions, but has not fully reviewed the substance of recodified regulations that were approved into the SIP in previous rulemaking actions. EPA is now merely approving the renumbering system submitted by Virginia. To the extent that we have issued any SIP calls to Virginia with respect to the adequacy of any of

the rules subject to this recodification, we will continue to require Virginia to correct any such rule deficiencies despite our ap[proval of this recodification.

EPA is publishing this rule without prior proposal because the Agency views this as a noncontroversial amendment and anticipate no adverse comment. However, in the ''Proposed Rules'' section of today's **Federal Register**, EPA is publishing a separate document that will serve as the proposal to approve the SIP revision if adverse comments are filed. This rule will be effective on June 20, 2000 without further notice unless EPA receives adverse comment by May 22, 2000. If EPA receives adverse comment, EPA will publish a timely withdrawal in the **Federal Register** informing the public that the rule will not take effect. EPA will address all public comments in a subsequent final rule based on the proposed rule. EPA will not institute a second comment period on this action. Any parties interested in commenting must do so at this time.

IV. Administrative Requirements

A. General Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action'' and therefore is not subject to review by the Office of Management and Budget. This action merely approves state law as meeting federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it 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).

For the same reason, this rule also does not significantly or uniquely affect the communities of tribal governments, as specified by Executive Order 13084 (63 FR 27655, May 10, 1998). This rule 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, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it merely approves a state rule implementing a federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. As required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996), in issuing this rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct. EPA has complied with Executive Order 12630 (53 FR 8859, March 15, 1988) by examining the takings implications of the rule in accordance with the ''Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings'' issued under the executive order. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

B. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this 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 rule is not a ''major rule'' as defined by 5 U.S.C. 804(2).

C. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by June 20, 2000. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action to approve the recodification and associated administrative revisions of the Virginia Administrative Code into the Virginia SIP, as well as revise the format of 40 CFR part 52 for materials submitted by Virginia that are incorporated by reference may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Hydrocarbons, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides.

Dated: March 6, 2000.

Bradley M. Campbell,

Regional Administrator, Region III.

40 CFR part 52 is amended as follows:

PART 52—[AMENDED]

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

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

Subpart VV—Virginia

2. Section 52.2420 is redesignated as § 52.2465 and the heading and paragraph (a) are revised to read as follows:

§ 52.2465 Original identification of plan section.

(a) This section identifies the original ''Air Implementation Plan for the State of Virginia'' and all revisions submitted by Virginia that were federally approved prior to March 1, 2000.

* * * * *

3. A new Section 52.2420 is added to read as follows:

§ 52.2420 Identification of plan.

(a) Purpose and scope. This section sets forth the applicable State implementation plan for Virginia under section 110 of the Clean Air Act, 42

U.S.C. 7410, and 1 CAR part 51 to meet national ambient air quality standards.

(b) Incorporation by reference.

(1) Material listed in paragraphs (c) and (d) of this section with an EPA approval date prior to March 1, 2000 was approved for incorporation by reference by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Material is incorporated as it exists on the date of the approval, and notice of any change in the material will be published in the **Federal Register**. Entries in paragraphs (c) and (d) of this section with EPA approval dates after March 1, 2000 will be incorporated by reference in the next update to the SIP compilation.

(2) EPA Region 3 certifies that the rules/regulations provided by EPA in the SIP compilation at the addresses in paragraph (b)(3) of this section are an exact duplicate of the officially promulgated State rules/regulations which have been approved as part of the State implementation plan as of March 1, 2000.

(3) Copies of the materials incorporated by reference may be inspected at the Region 3 EPA Office at 1650 Arch Street, Philadelphia, PA 19103; the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC.; or at EPA, Air and Radiation Docket and Information Center, Air Docket (6102), 401 M Street, S.W., Washington, DC.

(c) EPA approved regulations.

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
Chapter 10 General Definitions [Part I]				
5–10–10	General	4/17/95	[Insert publication date and **Federal Register** cite]	120–01–01.
5–10–20	Terms Defined—Definitions of Administrator, Federally Enforceable, Implementation Plan, Potential to Emit, State Enforceable, Volatile Organic Compound.	4/1/96	3/12/97 62 FR 11334	§ 52.2465(c)(113) (i)(B)(*1*).
5–10–20	Terms Defined-Added Terms-Department, Virginia Register Act Revised Terms-Administrative Process Act, Director (replaces Executive Director), Virginia Air Pollution Control Law.	4/17/95	Insert publication date and **Federal Register** cite]	
5–10–20	Terms Defined [all other SIP-approved terms not listed above].	4/17/95	[Insert publication date and **Federal Register** cite]	120–01–02.
VR120–01–02	Terms Defined-Definitions of ''Person'' and ''Special Order''.	2/1/85	2/25/93 58 FR 11373	VA DEQ has submitted revised definitions; EPA will review in a separate action.
5–10–30	Abbreviations	7/1/97	[Insert publication date and **Federal Register** cite]	Appendix A.
Chapter 20 General Provisions				
5–20–10A.–C	Applicability	4/17/95	[Insert publication date and **Federal Register** cite]	120–02–01.
5–20–30A.–D	Enforcement of regulations, permits, and orders.	4/17/95	[insert publication date and **Federal Register** cite]	120–02–03.
5–20–60	Local ordinances	4/17/95	[insert publication date and **Federal Register** cite]	120–02–06.
5–20–70	Circumvention	4/17/95	[insert publication date and **Federal Register** cite]	120–02–07.
5–20–80	Relationship of state regulations to federal regulations.	4/17/95	[insert publication date and **Federal Register** cite]	120–02–08.
5–20–100	Right of entry	4/17/95	[insert publication date and Federal Register cite]	120–02–10.
5–20–110	Conditions on approvals	4/17/95	[insert publication date and **Federal Register** cite]	120–02–11.
5–20–121	Air Quality Program Policies and Procedures.	7/1/97	[insert publication date and **Federal Register** cite]	Appendix S.
5–20–140	Considerations for Approval Actions.	4/17/95	[insert publication date and **Federal Register** cite]	120–02–14.
5–20–150	Availability of Information	4/17/95	[insert publication date and **Federal Register** cite]	120–02–30.
5–20–160	Registration	4/17/95 7/1/97	[insert publication date and **Federal Register** cite]	120–02–31.
5–20–170	Control Programs	4/17/95 7/1/97	[insert publication date and **Federal Register** cite]	120–02–32.
5–20–180	Facility and Control Equipment Maintenance or Malfunction.	4/17/95 7/1/97	[insert publication date and **Federal Register** cite]	120–02–34.
5–20–200	Air Quality Control Regions (AQCR).	7/1/97	[insert publication date and **Federal Register** cite]	Appendix B.

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–20–202	Metropolitan Statistical Areas	7/1/97	[insert publication date and **Federal Register** cite]	Appendix G.
5–20–203	Air Quality Maintenance Areas (AQMA).	7/1/97	[insert publication date and **Federal Register** cite]	Appendix H.
5–20–204	Nonattainment Areas	7/1/97	[insert publication date and **Federal Register** cite]	Appendix K.
5–20–205	Prevention of Significant Deterioration Areas.	2/1/97	3/23/98 63 FR 13795	Former Appendix L—Effective 2/1/92.
5–20–206	Volatile Organic Compound and Nitrogen Oxides Emissions Control Areas.	7/1/97	Insert publication date and **Federal Register** cite]	Appendix P.
VR120–02–02	Establishment of Regulations and Orders.	2/1/85	2/25/93 58 FR 11373	EPA has informed VA that except for the Appeals rule, these provisions no longer need to be part of the SIP. VA has withdrawn 2/93 and 2/98 revisions to the Appeals rule from SIP review. Last substantive SIP change became State-effective on 8/6/79 [§ 52.2465 (c) (55)].
VR120–02–04	Hearings and Proceedings	2/1/85	2/25/93 58 FR 11373	
VR120–02–05A	Variances—General	2/1/85	2/25/93 58 FR 11373	
VR120–02–09	Appeals	2/1/85	2/25/93 58 FR 11373	
VR120–02–12	Procedural information and guidance.	2/1/85	2/25/93 58 FR 11373	
Appendix E	Public Participation Guidelines	2/1/85	2/25/93 58 FR 11373	
Appendix F	Delegation of Authority	2/1/85	2/25/93 58 FR 11373	
VR120–02–14B	Considerations for Approval Actions.	2/1/85	2/25/93 58 FR 11373	Codified at 52.2465(c)(74) VA has formally requested that this provision be removed from the SIP. EPA will review in a separate action.
	Chapter 30 Ambient Air Quality Standards [Part III]			
5–30–10	General	4/17/95	[Insert publication date and **Federal Register** cite]	120–03–01.
5–30–20	Particulate Matter (TSP)	4/17/95	[Insert publication date and **Federal Register** cite]	120–03–02.
5–30–30	Sulfur Oxides (Sulfur Dioxide)	4/17/95	[Insert publication date and **Federal Register** cite]	120–03–03.
5–30–40	Carbon Monoxide 4/17/95	4/17/95	[Insert publication date and **Federal register** cite]	120–03–04.
5–30–50	Ozone	4/17/95	[Insert publication date and **Federal Register** cite]	120–03–05.
5–30–60	Particulate Matter (PM_{10})	4/17/95	[Insert publication date and **Federal Register** cite]	120–03–06.
5–30–70	Nitrogen Dioxide	4/17/95	[Insert publication date and **Federal Register** cite]	120–03–07.
5–30–80	Lead	4/17/95	[Insert publication date and **Federal Register** cite]	120–03–08.
	Chapter 40 Existing Stationary Sources [Part IV]			
	Part I Special Provisions			
5–40–10	Applicability	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–01.
5–40–20	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–02.
5–40–21	Compliance Schedules	7/1/97	[Insert publication date and **Federal Register** cite]	Appendix N.
5–40–22	Interpretation of Emissions Standards Based on Process Weight-Rate Tables.	7/1/97	[Insert publication date and **Federal Register** cite]	Appendix Q.

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–40–30	Emission Testing	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–03.
5–40–40	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–04.
5–40–41	Emission Monitoring Procedures for Existing Sources.	7/1/97	[Insert publication date and **Federal Register** cite]	Appendix J.
5–40–50	Notification, Records and Reporting.	7/1/97	[Insert publication date and **Federal Register** cite]	120–04–05.
	Part II Emission Standards			
	Article 1 Visible Emissions and Fugitive Dust/Emissions [Rule 4–1]			
5–40–60	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0101.
5–40–70	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0102.
5–40–80	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0103.
5–40–90	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0104.
5–40–100	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0105.
5–40–110	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0106.
5–40–120	Waivers	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0107.
	Article 4 General Process Operations [Rule 4–4]			
5–40–240	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0401.
5–40–250	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0402.
5–40–260	Standard for Particulate Matter(AQCR 1–6).	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0403.
5–40–270	Standard for Particulate Matter (AQCR 7).	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0404.
5–40–280	Standard for Sulfur Dioxide	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0405.
5–40–300	Standard for Volatile Organic Compounds.	4/1/96	3/12/97 62 FR 11332	
5–40–310A.–E	Standard for Nitrogen Dioxide	1/1/93	4/28/99 64 FR 22792	120–04–0408.
5–40–311	Reasonably available control technology guidelines for stationary sources of nitrogen dioxide.	7/1/97	4/28/99 64 FR 22792	52.2420(c)(132); Exceptions: 311C.3.a, C.3.c, D.
5–40–320	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0409.
5–40–330	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0410.
5–40–360	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0413
5–40–370	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0414.
5–40–380	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0415.
5–40–390	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0416.
5–40–400	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0417.
5–40–410	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0418.
5–40–420	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0419.
	Article 5 Synthesized Pharmaceutical Products Manufacturing Operations [Rule 4–5]			
5–40–430	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0501.

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–40–440	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0502.
4–40–450	Standard for Volatile Organic Compounds.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0503.
5–40–460	Control Technology Guidelines	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0504.
5–40–470	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0505.
5–40–480	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0506.
5–40–510	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0509.
5–40–520	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0510.
5–40–530	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0511.
5–40–540	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0512.
5–40–550	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0513
5–40–560	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0514.
5–40–570	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0515.
	Article 6 Rubber Tire Manufacturing Operations [Rule 4–6]			
5–40–580	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0601.
5–40–590	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0602.
5–40–600	Standard for Volatile Organic Compounds.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0603.
5–40–610	Control Technology Guidelines	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0604.
5–40–620	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0605.
5–40–630	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0606.
5–40–660	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0609.
5–40–670	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0610.
5–40–680	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0611.
5–40–690	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0612.
5–40–700	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0613.
5–40–710	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–614.
5–40–720	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0613.
	Article 7 Incinerators [Rule 4–7]			
5–40–730	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0701.
5–40–740	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0702.
5–40–750	Standard for Particulate Matter	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0703.
5–40–760	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0704.
5–40–770	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0705.
5–40–800	Prohibition of Flue-Fed Incinerators.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0708.
5–40–810	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0709.

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–40–820	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0710.
5–40–830	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0711.
5–40–840	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0712.
5–40–850	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0713.
5–40–860	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0714.
5–40–870	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0715.
	Article 8 Fuel Burning Equipment [Rule 4–8]			
5–40–880	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0801.
5–40–890	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0802.
5–40–900	Standard for Particulate Matter	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0803.
5–40–910	Emission Allocation System	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0804.
5–40–920	Determination of Collection Equipment Efficiency Factor.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0805.
5–40–930	Standard for Sulfur Dioxide	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0806.
5–40–940	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0807.
5–40–950	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0808.
5–40–980	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0811.
5–40–990	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0812.
5–40–1000	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0813.
5–40–1010	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0814.
5–40–1020	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0815.
5–40–1030	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0816.
5–40–1040	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0817.
	Article 9 Coke Ovens [Rule 4–9]			
5–40–1050	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0901.
5–40–1060	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0902.
5–40–1070	Standard for Particulate Matter	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0903.
5–40–1080	Standard for Sulfur Dioxide	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0904.
5–40–1090	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0905.
5–40–1100	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0906.
5–40–1130	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0909.
5–40–1140	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0910.
5–40–1150	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0911.
5–40–1160	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0912.
5–40–1170	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0913.

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State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–40–1180	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0914.
5–40–1190	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–0915.
	Article 10 Asphalt Concrete Plants [Rule 4–10]			
5–40–1200	Applicability and Designation of Affected Family.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1001.
5–40–1210	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1002.
5–40–1220	Standard for Particulate Matter	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1003.
5–40–1230	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1004.
5–40–1240	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1005.
5–40–1270	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1008.
5–40–1280	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1009.
5–40–1290	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1010.
5–40–1300	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1011.
5–40–1310	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1012.
5–40–1320	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1013.
5–40–1330	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1014.
	Article 11 Petroleum Refinery Operations [Rule 4–11]			
5–40–1340	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1101.
5–40–1350	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1102.
5–40–1360	Standard for Particulate Matter	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1103.
5–40–1370	Standard for Sulfur Dioxide	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1104.
5–40–1390	Standard for Volatile Organic Compounds.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1106.
5–40–1400	Control Technology Guidelines	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1107.
5–40–1410	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1108.
5–40–1420	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1109.
5–40–1450	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1112.
5–40–1460	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1113.
5–40–1470	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1114.
5–40–1480	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1115.
5–40–1490	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1116.
5–40–1500	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1117.
5–40–1510	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1118.
	Article 12 Chemical Fertilizer Manufacturing Operations [Rule 4–12]			
5–40–1520	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1201.

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–40–1530	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1202.
5–40–1540	Standard for Particulate Matter	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1203.
5–40–1550	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1204.
5–40–1560	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1205.
5–40–1590	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1208.
5–40–1600	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1209.
5–40–1610	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1210.
5–40–1620	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1211.
5–40–1630	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1212.
5–40–1640	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1213.
5–40–1650	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1214.
	Article 13 Kraft Pulp Mills [Rule 4–13]			
5–40–1660	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1301.
5–40–1670	Definitions of cross recovery furnance, kraft pulp mill, lime kiln, recovery furnace, smelt dissolving tank.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1302. Remaining definitions are federally enforceable as part of the Section 111(d) plan for kraft pulp mills (see, § 62.11610).
5–40–1680	Standard for Particulate Matter	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1303.
5–40–1700	Control Technology Guidelines	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1305.
5–40–1710	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1306.
5–40–1720	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1307.
5–40–1750A	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1310A. Note: Sections 5–40–1750B. through D. are Register enforceable as part of the Section 111(d) plan for kraft pulp mills (see, § 62.11610).
5–40–1760	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1311.
5–40–1770A	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1312A. Note: Sections 5–40–1770B. and C. are federally enforceable as part of the Section 111(d) plan for kraft pulp mills (see, § 62.11610).
5–40–1780A	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1313A. Note: Sections 5–40–1780B. through D. are federally enforceable as part of the Section 111(d) plan for kraft pulp mills (see, § 62.11610).
5–40–1790	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1314.
5–40–1800	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1315.
5–40–1810	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1316.
	Article 14 Sand Gravel Processing Operations and Stone Quarrying and Processing Operations [Rule 4–14]			
5–40–1820	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1401.
5–40–1830	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1402.

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–40–1840	Standard for Particulate Matter	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1403.
5–40–1850	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1404.
5–40–1860	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1405.
5–40–1890	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1408.
5–40–1900	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1409.
5–40–1910	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1410.
5–40–1920	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1411.
5–40–1930	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1412.
5–40–1940	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1413.
5–40–1950	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1414.
	Article 15 Coal Preparation Plants [Rule 4–15]			
5–40–1960	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1501.
5–40–1970	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1502.
5–40–1980	Standard for Particulate Matter	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1503.
5–40–1990	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1504.
5–40–2000	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1505.
5–40–2030	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1508.
5–40–2040	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1509.
5–40–2050	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1510.
5–40–2060	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1511.
5–40–2070	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1512.
5–40–2080	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1513.
5–40–2090	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1514.
	Article 16 Portland cement Plants [Rule 4–16]			
5–40–2100	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1601.
5–40–2110	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1602.
5–40–2120	Standard for Particulate Matter	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1603.
5–40–2130	Standard for Sulfur Dioxide	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1604.
5–40–2140	Standard for Visible emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1605.
5–40–2150	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1606.
5–40–2180	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1609.
5–40–2190	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1610.
5–40–2200	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1611.
5–40–2210	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1612.

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State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–40–2220	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1613.
5–40–2230	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1614.
5–40–2240	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1615.
	Article 17 Woodworking Operations [Rule 4–17]			
5–40–2250	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1701.
5–40–2260	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1702.
5–40–2270	Standard for Particulate Matter	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1703
5–40–2280	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1704.
5–40–2290	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1705.
5–40–2320	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1708.
5–40–2330	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–4–1709.
5–40–2340	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1710.
5–40–2350	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1711.
5–40–2360	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1712.
5–40–2370	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1713.
5–40–2380	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1714.
	Article 18 Primary and Secondary Metal Operations [Rule 4–18]			
5–40–2390	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1801.
5–40–2400	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1802.
5–40–2410	Standard for Particulate Matter	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1803.
5–40–2420	Standard for Sulfur Oxides	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1804.
5–40–2430	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1805.
5–40–2440	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1806.
5–40–2470	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1809.
5–40–2480	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1810.
5–40–2490	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1811.
5–40–2500	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1812.
5–40–2510	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1813.
5–40–2520	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1814.
5–40–2530	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1815.
	Article 19 Lightweight Aggregate Process Operations [Rule 4–19]			
5–40–2540	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1901.
5–40–2541	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1902.
5–40–2542	Standard for Particulate Matter	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1903.

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State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–40–2543	Standard for Sulfur Oxides	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1904.
5–40–2544	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1905.
5–40–2590	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1906.
5–40–2620	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1909.
5–40–2630	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1910.
5–40–2640	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1911.
5–40–2650	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1912.
5–40–2660	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1913.
5–40–2670	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1914.
5–40–2680	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–1915.
	Article 20 Feed Manufacturing Operations [Rule 4–20]			
5–40–2690	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2001.
5–40–2700	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2002.
5–40–2710	Standard for Particulate Matter	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2003.
5–40–2720	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2004.
5–40–2730	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2005.
5–40–2760	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2008.
5–40–2770	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2009.
5–40–2780	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2010.
5–40–2790	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2011.
5–40–2800	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2012.
5–40–2810	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2013.
5–40–2820	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2014.
	Article 21 Sulfuric Acid Production Plants [Rule 4–21]			
5–40–2830	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2101.
5–40–2840	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2102.
5–40–2850	Standard for Sulfur Dioxide	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2103.
5–40–2870	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2105.
5–40–2880	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2106.
5–40–2910	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2109.
5–40–2920	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2110.
5–40–2930	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2111.
5–40–2940	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2112.
5–40–2950	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2113.

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State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–40–2960	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2114.
5–40–2970	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2115.
	Article 22 Sulfur Recovery Operations [Rule 4–22]			
5–40–2980	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2201.
5–40–2990	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2202.
5–40–3000	Standard for Sulfur Dioxide	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2203.
5–40–3010	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2204.
5–40–3020	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2205.
5–40–3050	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2208.
5–40–3060	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2209.
5–40–3070	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2210.
5–40–3080	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2211.
5–40–3090	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2212.
5–40–3100	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2213.
5–40–3110	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2214.
	Article 23 Nitric Acid Production Units [Rule 4–23]			
5–40–3120	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2301.
5–40–3130	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2302.
5–40–3140	Standard for Nitrogen Oxides	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2303.
5–40–3150	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2304.
5–40–3160	Standard fof Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2305.
5–40–3190	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2308.
5–40–3200	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2309.
5–40–3210	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2310.
5–40–3220	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2311.
5–40–3230	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2312.
5–40–3240	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2313.
5–40–3250	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2314.
	Article 24 Solvent Metal Cleaning Operations [Rule 4–24]			
5–40–3260	Applicability and Designation of Affected Facility.	4/1/97	11/3/99 64 FR 59635	
5–40–3270	Definitions	4/1/97	11/3/99 64 FR 59635	
5–40–3280	Standard for Volatile Organic Compounds.	4/1/97	11/3/99 64 FR 59635	
5–40–3290	Control Technology Guidelines	4/1/97	11/3/99 64 FR 59635	
5–40–3300	Standard for Visible Emissions	4/1/97	11/3/99 64 FR 59635	

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–40–3310	Standard for Fugitive Dust/Emissions.	4/1/97	11/3/99 64 FR 59635	
5–40–3340	Compliance	4/1/97	11/3/99 64 FR 59635	
5–40–3350	Test Methods and Procedures	4/1/97	11/3/99 64 FR 59635	
5–40–3360	Monitoring	4/1/97	11/3/99 64 FR 59635	
5–40–3370	Notification, Records and Reporting.	4/1/97	11/3/99 64 FR 59635	
5–40–3380	Registration	4/1/97	11/3/99 64 FR 59635	
5–40–3390	Facility and Control Equipment Maintenance or Malfunction.	4/1/97	11/3/99 64 FR 59635	
5–40–3400	Permits	4/1/97	11/3/99 64 FR 59635	
	Article 25 Volatile Organic Compound Storage and Transfer Operations [Rule 4–25]			
5–40–3410	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2501.
5–40–3420	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2502.
5–40–3430	Standard for Volatile Organic Compounds.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2503.
5–40–3440	Control Technology Guidelines	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2504.
5–40–3450	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2505.
5–40–3460	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2506.
5–40–3490	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2509.
5–40–3500	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2510.
5–40–3510	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2511.
5–40–3520	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2512.
5–40–3530	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2513.
5–40–3540	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2514.
5–40–3550	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2515.
	Article 26 Large Coating Application Systems [Rule 4–26]			
5–40–3560	Applicability and Desgination of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2601.
5–40–3570	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2602.
5–40–3580	Standard for Volatile Organic Compounds.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2603.
5–40–3590	Control Technology Guidelines	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2604.
5–40–3600	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2605.
5–40–3610	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2606.
5–40–3640	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2609.
5–40–3650	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2610.
5–40–3660	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2611.
5–40–3670	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2612.
5–40–3680	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2613.

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–40–3690	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2614.
5–40–3700	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2615.
	Article 27 Magnet Wire Coating Application Systems [Rule 4–27]			
5–40–3710	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2701.
5–40–3720	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2702.
5–40–3730	Standard for Volatile Organic Compounds.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2703.
5–40–3740	Control Technology Guidelines	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2704.
5–40–3750	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2705.
5–40–3760	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2706.
5–40–3790	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2709.
5–40–3800	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2710.
5–40–3810	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2711.
5–40–3820	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2712.
5–40–3830	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2713.
5–40–3840	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2714.
5–40–3850	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2715.
	Article 28 Automobile and Light Duty Truck Coating Application Systems [Rule 4–28]			
5–40–3860	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2801.
5–40–3870	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2802.
5–40–3880	Standard for Volatile Organic Compounds.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2803.
5–40–3890	Control Technology Guidelines	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2804.
5–40–3900	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2805.
5–40–3910	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2806.
5–40–3940	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2809.
5–40–3950	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2810.
5–40–3960	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2811.
5–40–3970	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2812.
5–40–3980	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2813.
5–40–3990	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2814.
5–40–4000	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2815.
	Article 29 Can Coating Application Systems [Rule 4–29]			
5–40–4010	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2901.
5–40–4020	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2902.

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–40–4030	Standards for Volatile Organic Compounds.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2903.
5–40–4040	Control Technology Guidelines	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2904.
5–40–4050	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2905.
5–40–4060	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2906.
5–40–4090	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2909.
5–40–4100	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2910.
5–40–4110	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2911.
5–40–4120	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2912.
5–40–4130	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2913.
5–40–4140	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–2914.
	Article 30 Metal Coil Coating Application Systems [Rule 4–30]			
5–40–4160	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3001.
5–40–4170	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3002.
5–40–4180	Standard for Volatile Organic Compounds.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3003.
5–40–4190	Control Technology Guidelines	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3004.
5–40–4200	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3005.
5–40–4210	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3006.
5–40–4240	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3009.
5–40–4250	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3010.
5–40–4260	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3011.
5–40–4270	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3012.
5–40–4280	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3013.
5–40–4290	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3014.
5–40–4300	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3015.
	Article 31 Paper and Fabric Coating Application Systems [Rule 4–31]			
5–40–4310	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3101.
5–40–4320	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3102.
5–40–4330	Standard for Volatile Organic Compounds.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3103.
5–40–4340	Control Technology Guidelines	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3104.
5–40–4350	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3105.
5–40–4360	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3106.
5–40–4390	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3109.
5–40–4400	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3110.
5–40–4410	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3111.

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State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–40–4420	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3112.
5–40–4430	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3113.
5–40–4440	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3114.
5–40–4450	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3115.
	Article 32 Vinyl Coating Application Systems [Rule 4–32]			
5–40–4460	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3201.
5–40–4470	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3202.
5–40–4480	Standard for Volatile Organic Compounds.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3203.
5–40–4490	Control Technology Guidelines	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3204.
5–40–4500	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3205.
5–40–4510	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3206.
5–40–4540	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3209.
5–40–4550	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3210.
5–40–4560	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3211.
5–40–4570	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3212.
5–40–4580	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3213.
5–40–4590	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3214.
5–40–4600	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3215.
	Article 33 Metal Furniture Coating Application Systems [Rule 4–33]			
5–40–4610	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3301.
5–40–4620	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3302
5–40–4630	Standard for Volatile Organic Compounds.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3303.
5–40–4640	Control Technology	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3304.
5–40–4650	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3305.
5–40–4660	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3306.
5–40–4690	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3309.
5–40–4700	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3310.
5–40–4710	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3311.
5–40–4720	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3312.
5–40–4730	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3313.
5–40–4740	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3314.
5–40–4750	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3315.

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State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
Article 34 Miscellaneous Metal Parts and Products Coating Application Systems [Rule 4–34]				
5–40–4760	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3401.
5–40–4770	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3402.
5–40–4780	Standard for Volatile Organic Compounds.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3403.
5–40–4790	Control Technology Guidelines	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3404.
5–40–4800	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3405.
5–40–4810	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3406.
5–40–4840	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3409.
5–40–4850	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3410.
5–40–4860	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3411.
5–40–4870	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3412.
5–40–4880	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3413.
5–40–4890	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3414.
5–40–4900	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3415.
Article 35 Flatwood Paneling Coating Application Systems [Rule 4–35]				
5–40–4910	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3501.
5–40–4920	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3502.
5–40–4930	Standard for Volatile Organic Compounds.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3503.
5–40–4940	Control Technology Guidelines	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3504.
5–40–4950	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3505.
5–40–4960	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3506.
5–40–4990	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3509.
5–40–5000	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3510.
5–40–5010	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3511.
5–40–5020	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3512.
5–40–5030	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3513.
5–40–5040	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3514.
5–40–5050	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3515.
Article 36 Graphic Arts Printing Process [Rule 4–36]				
5–40–5060	Applicability and Designation of Affected Facility.	4/1/96	3/12/97 62 FR 11334	§ 52.2465(c)(113)(i)(B)(*4*)
5–40–5070	Definitions	4/1/96	3/12/97 62 FR 11334	
5–40–5080	Standard for Volatile Organic Compounds.	4/1/96	3/12/97 62 FR11334	
5–40–5090	Standard for Visible Emissions	4/1/96	3/12/97 62 FR 11334	
5–40–5100	Standard for Fugitive Dust/Emissions.	4/1/96	3/12/97 62 FR 11334	

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–40–5130	Compliance	4/1/96	3/12/97 62 FR 11334	
5–40–5140	Test Methods and Procedure	4/1/96	3/12/97 62 FR 11334	
5–40–5150	Monitoring	4/1/96	3/12/97 62 FR 11334	
5–40–5160	Notification, Records and Reporting.	4/1/96	3/12/97 62 FR 11334	
5–40–5170	Registration	4/1/96	3/12/97 62 FR 11334	
5–40–5180	Facility and Control Equipment Maintenance or Malfunction.	4/1/96	3/12/97 62 FR 11334	
5–40–5190	Permits	4/1/96	3/12/97 62 FR 11334	
	Article 37 Petroleum Liquid Storage and Transfer Operations [Rule 4–37]			
5–40–5200	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3701.
5–40–5210	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3702.
5–40–5220	Standard for Volatile Organic Compounds.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3703.
5–40–5230	Control Technology Guidelines	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3704.
5–40–5240	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3705.
5–40–5250	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3706.
5–40–5280	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3709.
5–40–5290	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3710.
5–40–5300	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3711.
5–40–5310	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3712.
5–40–5320	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3713.
5–40–5330	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3714.
5–40–5340	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3715.
	Article 38 Dry Cleaning Systems [Rule 4–38]			
5–40–5350	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3801.
5–40–5360	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3802.
5–40–5370	Standard for Volatile Organic Compounds.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3803.
5–40–5380	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3804.
5–40–5490	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3805.
5–40–5420	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3808.
5–40–5430	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3809.
5–40–5440	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3810.
5–40–5450	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3811.
5–40–5460	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3812.
5–40–5470	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3813.

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
	Article 39 Asphalt Paving Operations [Rule 4–39]			
5–40–5490	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3901.
5–40–5500	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3902.
5–40–5510	Standard for Volatile Organic Compounds.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3903.
5–40–5520	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3904.
5–40–5530	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3905.
5–40–5560	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3908.
5–40–5570	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3909.
5–40–5580	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3910.
5–40–5590	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–3911.
	Article 40 Open Burning [Rule 4–40]			
5–40–5600	Applicability	4/1/96	3/12/97 62 FR 11332	Provisions of Article 40 are applicable only in Northern Va and Richmond Emissions Control Areas as defined in 9 VAC 5–20–206.
5–40–5610	Definitions of ''refuse'', ''household refuse'', ''clean burning waste'', ''landfill'', ''local landfill'', ''sanitary landfill'', ''special incineration device''.	4/1/96	3/12/97 62 FR 11332	
5–40–5610	All definitions not listed above	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–4002.
5–40–5620	Open Burning Prohibitions	4/1/96	3/12/97 62 FR 11332	
5–40–5630	Permissible Open Burning	4/1/96	3/12/97 62 FR 11332	
5–40–5631	Forest Management and Agricultural Practices.	7/1/97	3/12/97 62 FR 11332	Former Appendix D, Effective 4/1/96.
	Article 41 Mobile Sources [Rule 4–41]			
5–40–5650	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–4101.
5–40–5660	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–4102.
5–40–5670	Motor Vehicles	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–4103.
5–40–5680	Other Mobile Sources	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–4104.
5–40–5690	Export/Import of Motor Vehicles	4/17/95	[Insert publication date and **Federal Register** cite]	120–04–4105.
	Article 45 Lithographic Printing Processes			
5–40–7800	Applicability and Designation of Affected Facility.	4/1/96	3/12/97 62 FR 11334	
5–40–7810	Definitions of ''alcohol'', ''cleaning solution'', fountain solution'', ''lithographic printing'', ''printing'', ''printing process''.	4/1/96	3/12/97 62 FR 11334	
5–40–7820	Standard for Volatile Organic Compounds.	4/1/96	3/12/97 62 FR 11334	
5–40–7840	Standard for Visible Emissions	4/1/96	3/12/97 62 FR 11334	
5–40–7850	Standard for Fugitive Dust Emissions.	4/1/96	3/12/97 62 FR 11334	

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–40–7880	Compliance	4/1/96	3/12/97 62 FR 11334	
5–40–7890	Test Methods and Procedures	4/1/96	3/12/97 62 FR 11334	
5–40–7900	Monitoring	4/1/96	3/12/97 62 FR 11334	
5–40–7910	Notification, Records and Reporting.	4/1/96	3/12/97 62 FR 11334	
5–40–7920	Registration	4/1/96	3/12/97 62 FR 11334	
5–40–7930	Facility and Control Equipment Maintenance and Malfunction.	4/1/96	3/12/97 62 FR 11334	
5–40–7940	Permits	4/1/96	3/12/97 62 FR 11334	
	Chapter 50 New and Modified Stationary Sources [Part V]			
	Part I Special Provisions			
5–50–10	Applicability	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–01.
5–50–20	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–02.
5–50–30	Performance Testing	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–03.
5–50–40	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–04.
5–50–50	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–05.
	Part II Emission Standards			
	Article 1 Visible Emissions and Fugitive Dust/Emissions [Rule 5–1]			
5–50–60	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0101.
5–50–70	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0102.
5–50–80	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0103.
5–50–90	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0104.
5–50–100	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0105.
5–50–110	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0106.
5–50–120	Waivers	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0107.
	Article 4 Stationary Sources [Rule 5–4]			
5–50–240	Applicability and Designation of Affected Facility.	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0401.
5–50–250	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0402.
5–50–260	Standard for Stationary Sources	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0403.
5–50–270	Standard for Major Stationary Sources (Nonattainment Areas).	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0404.
5–50–280	Standard for Major Stationary Sources (Prevention of significant Deterioration Areas).	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0405.
5–50–290	Standard for Visible Emissions	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0406.

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–50–300	Standard for Fugitive Dust/Emissions.	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0407.
5–50–330	Compliance	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0410.
5–50–340	Test Methods and Procedures	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0411
5–50–350	Monitoring	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0412
5–50–360	Notification, Records and Reporting.	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0413
5–50–370	Registration	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0414
5–50–380	Facility and Control Equipment Maintenance or Malfunction.	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0415.
5–50–390	Permits	4/17/95	[Insert publication date and **Federal Register** cite]	120–05–0416.
	Chapter 70 Air Pollution Episode Prevention [Part VII]			
5–70–10	Applicability	4/17/95	[Insert publication date and **Federal Register** cite]	120–07–01.
5–70–20	Definitions	4/17/95	[Insert publication date and **Federal Register** cite]	120–07–02.
5–70–30	General	4/17/95	[Insert publication date and **Federal Register** cite]	120–07–03.
5–70–40	Episode Determination	4/17/95	[Insert publication date and **Federal Register** cite]	120–07–04.
5–70–50	Standby Emission Reduction Plans.	4/17/95	[Insert publication date and **Federal Register** cite]	120–07–05.
5–70–60	Control Requirements	4/17/95	[Insert publication date and **Federal Register** cite]	120–07–06.
5–70–70	Local Air Pollution Control Agency Participation.	4/17/95	[Insert publication date and **Federal Register** cite]	120–07–07.
	Chapter 80 Permits for Stationary Sources [Part VIII]			
5–80–10/Article 6	New and Modified Stationary Sources.	4/17/95	[Insert publication date and **Federal Register** cite]	120–08–01
10A	Applicability	4/17/95	Insert publication date and **Federal Register** cite]	01A.
10B	Definitions	4/17/95	Insert publication date and **Federal Register** cite]	01B.
10C. (Exc.C.1.b	General	4/17/95	Insert publication date and **Federal Register** cite]	01C. (Exec.C.1.b.
10D	Applications	4/17/95	Insert publication date and **Federal Register** cite]	01D.
10E	Information required	4/17/95	Insert publication date and **Federal Register** cite]	01E.
10F	Action on permit application	4/17/95	Insert publication date and **Federal Register** cite]	01F.
10G	Public participation	4/17/95	Insert publication date and **Federal Register** cite]	01G.; Exceptions: 10.G.1 and .01G.4.b.
VR120–08–01C.1.a; .01C.4.b through .d.	Public Participation public recodified hearing requirements for major modifications.	4/31/81; recodified 2/1/85	5/4/82 47 FR 19134; recodified 2/25/93, 58 FR 11373	See § 52.2423(o).
10H.2. and 10H.3	Standards for granting permits	4/17/95	Insert publication date and **Federal Register** cite]	01H.2. and 01H.3.
10I.1. and 10I.3	Application review and analysis	4/17/95	Insert publication date and **Federal Register** cite]	01I.1. and 01I.3.
10J	Compliance determination and verification by performance testing.	4/17/95	Insert publication date and **Federal Register** cite]	01J.
10K	Permit invalidation, revocation and enforcement.	4/17/95	Insert publication date and **Federal Register** cite]	01K.
10L	Existence of permit no defense	4/17/95	Insert publication date and **Federal Register** cite]	01L.
10M	Compliance with local zoning requirements.	4/17/95	Insert publication date and **Federal Register** cite]	01M.
10N	Reactivation and permanent shutdown.	4/17/95	Insert publication date and **Federal Register** cite]	N.

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [former SIP citation]
10O	Transfer of permits	4/17/95	Insert publication date and **Federal Register** cite]	O.
10P	Circumvention	4/17/95	Insert publication date and **Federal Register** cite]	P.
5–80–11	Stationary source permit exemption levels.	7/1/97	Insert publication date and **Federal Register** cite]	Appendix R.
5–80–40	Permits-operating (all sections)	4/17/95	Insert publication date and **Federal Register** cite]	120–08–04 (§ 52.2465(c)(94).
Article 8 Permits-Major Stationary Sources and Major Modifications Located in Prevention of Significant Deterioration Areas				
5–80–1700	Applicability	1/1/97	3/23/98 63 FR 13795	
5–80–1710	Definitions	1/1/97	3/23/98 63 FR 13795	
5–80–1720	General	1/1/97	3/23/98 63 FR 13795	
5–80–1730	Ambient Air Increments	1/1/97	3/23/98 63 FR 13795	
5–80–1740	Ambient Air Ceilings	1/1/97	3/23/98 63 FR 13795	
5–80–1750	Applications	1/1/97	3/23/98 63 FR 13795	
5–80–1760	Compliance with Local Zoning Requirements.	1/1/97	3/23/98 63 FR 13795	
5–80–1770	Compliance Determination and Verification by Performance Testing.	1/1/97	3/23/98 63 FR 13795	
5–80–1780	Stack Heights	1/1/97	3/23/98 63 FR 13795	
5–80–1790	Review of Major Stationary Sources and Major Modifications—Source Applicability and Exemptions.	1/1/97	3/23/98 63 FR 13795	
5–80–1800	Control Technology Review	1/1/97	3/23/98 63 FR 13795	
5–80–1810	Source Impact Analysis	1/1/97	3/23/98 63 FR 13795	
5–80–1820	Air Quality Models	1/1/97	3/23/98 63 FR 13795	
5–80–1830	Air Quality Analysis	1/1/97	3/23/98 63 FR 13795	
5–80–1840	Source Information	1/1/97	3/23/98 63 FR 13795	
5–80–1850	Additional Impact Analysis	1/1/97	3/23/98 63 FR 13795	
5–80–1860	Sources Impacting Federal Class I Areas—Additional Requirements.	1/1/97	3/23/98 63 FR 13795	
5–80–1870	Public Participation	1/1/97	3/23/98 63 FR 13795	
5–80–1880	Source Obligation	1/1/97	3/23/98 63 FR 13795	
5–80–1890	Environmental Impact Statements	1/1/97	3/23/98 63 FR 13795	
5–80–1900	Disputed Permits	1/1/97	3/23/98 63 FR 13795	
5–80–1910	Interstate Pollution Abatement	1/1/97	3/23/98 63 FR 13795	
5–80–1920	Innovative Control Technology	1/1/97	3/23/98 63 FR 13795	
5–80–1930	Reactivation and Permanent Shutdown.	1/1/97	3/23/98 63 FR 13795	
5–80–1940	Transfer of Permits	1/1/97	3/23/98 63 FR 13795	
5–80–1950	Permitt Invalidation, Revocation, and Enforcement.	1/1/97	3/23/98 63 FR 13795	
5–80–1960	Circumvention	1/1/97	3/23/98 63 FR 13795	

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State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–80–1970	Review and Confirmation of this Chapter by Board.	1/1/97	3/23/98 63 FR 13795	
Article 9 Permits—Major Stationary Sources and Major Modifications Located in Nonattainment Areas 120–08–03.				
5–80–2000	Applicability	1/1/93 4/1/99	[Insert publication date and **Federal Register** cite]	03A. (9/21/99, 64 FR 51047).
5–80–2010	Definitions	1/1/93 4/1/99	[Insert publication date and **Federal Register** cite]	.03B (9/21/99, 64 FR 51047).
5–80–2020	General	1/1/93 4/1/99	[Insert publication date and **Federal Register** cite]	.03C (9/21/99, 64 FR 51047).
5–80–2030	Applications	1/1/93 4/1/99		.03D (9/21/99, 64 FR 51047).
5–80–2040	Information required	1/1/93 4/1/99	[Insert publication date and **Federal Register**cite]	.03E (9/21/99, 64 FR 51047).
5–80–2050	Standards/conditions for granting permits.	1/1/93 4/1/99	[Insert publications date and **Federal Register** cite]	.03F (9/21/99, 64 FR 51047).
5–80–2060	Action on permit application	1/1/93 4/1/99	[Insert publication date and **Federal Register** cite]	.03G (9/21/99, 64 FR 51047).
5–80–2070	Public Participation	1/1/83 4/1/99	[Insert publication date and **Federal Register** cite]	.03H (9/21/99, 64 FR 51047).
5–80–2080	Compliance determination and verification by performance testing.	1/1/93 4/1/99	[Insert publication date and **Federal Register** cite]	.03I. (9/21/99, 64 FR 51047).
5–80–2090	Application review and analysis	1/1/93 4/1/99	[Insert publication date and **Federal Register** cite]	.03J (9/21/99, 64 FR 51047).
5–80–2100	Circumvention	1/1/93 4/1/99	[Insert publication date and **Federal Register** cite]	.03K (9/21/99, 64 FR 51047).
5–80–2110	Interstate pollution abatement	1/1/93 4/1/99	[Insert publication date and **Federal Register** cite]	.03L (9/21/99, 64 FR 51047).
5–80–2120	Offsets	1/1/93 4/1/99	[Insert publication date and **Federal Register** cite]	.03M (9/21/99), 64 FR 51047).
5–80–2130	De minimis increases and stationary source modification alternatives for ozone nonattainment areas classified as serious or severe in 9 VAC 5–20–204.	1/1/93 4/1/99	[Insert publication date and **Federal Register** cite]	.03N (9/21/99, 64 FR 51047).
5–80–2140	Exception	1/1/93 4/1/99	[Insert publication date and **Federal Register** cite]	.03O (9/21/99, 64 FR 51047).
5–80–2150	Compliance with local zoning requirements.	1/1/93 4/1/99	[Insert publication date and **Federal Register**cite]	.03P (9/21/99, 64 FR 51047).
5–80–2160	Reactivation and Permit Shutdown	1/1/93 4/1/99	[Insert publication date and **Federal Register** cite]	.03Q (9/21/99, 64 FR 51047).
5–80–2170	Transfer of Permits	1/1/93 4/1/99	[Insert publication date and **Federal Register** cite]	.03R (9/21/99, 64 FR 51047).
5–80–2180	Revocation of permit	1/1/93 4/1/99	[Insert publication date and **Federal Register** cite]	.03S (9/21/99, 64 FR 51047).
5–80–2190	Existence of permit no defense	1/1/93 4/1/99	[Insert publication date and **Federal Register** cite]	.03T (9/21/99, 64 FR 51047).
Chapter 91 Regulations for the Control of Motor Vehicle Emissions in the Northern Virginia Area				
Part I Definitions				
5–91–10	General	1/24/97	9/1/99 64 FR 47670	
5–91–20	Terms Defined	1/1/98	9/1/99 64 FR 47670	Exception—''Northern Virginia program area'' does not include Fauquier County.
Part II General Provisions				
5–91–30	Applicability and authority of the department.	1/24/97	9/1/99 64 FR 47670	

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–91–50	Documents Incorporated by Reference.	1/24/97	9/1/99 64 FR 47670	
5–91–60	Hearings and Proceedings	1/24/97	9/1/99 64 FR 47670	
5–91–70	Appeal of Case Decisions	1/24/97	9/1/99 64 FR 47670	
5–91–80	Variances	1/24/97	9/1/99 64 FR 47670	
5–91–90	Right of entry	1/24/97	9/1/99 64 FR 47670	
5–91–100	Conditions on approvals	1/24/97	9/1/99 64 FR 47670	
5–91–110	Procedural information and guidance.	1/24/97	9/1/99 64 FR 47670	
5–91–120	Export and import of motor vehicles.	1/24/97	9/1/99 64 FR 47670	
5–91–130	Relationship of state regulations to federal regulations.	1/24/97	9/1/99 64 FR 47670	
5–91–140	Delegation of authority	1/24/97	9/1/99 64 FR 47670	
5–9–150	Availability of information	1/24/97	9/1/99 64 FR 47670	
	Part III Emission Standards for Motor Vehicle Air Pollution			
5–91–160	Exhaust emission standards for two-speed idle testing in enhanced emissions inspection programs.	1/24/97	9/1/99 64 FR 47670	
5–91–170	Exhaust emission standards for ASM testing in enhanced emissions inspection programs.	1/24/97	9/1/99 64 FR 47670	
5–91–180	Exhaust emission standards for on-road testing through remote sensing.	1/24/97	9/1/99 64 FR 47670	
5–91–190	Emissions control systems standards.	1/24/97	9/1/99 64 FR 47670	
5–91–200	Evaporative emissions standards	1/24/97	9/1/99 64 FR 47670	
5–91–210	Visible emissions standards	1/24/97	9/1/99 64 FR 47670	
	Part IV Permitting and Operation of Emissions Inspection Stations			
5–91–220	General provisions	1/24/97	9/1/99 64 FR 47670	
5–91–230	Applications	1/24/97	9/1/99 64 FR 47670	
5–91–240	Standards and conditions for permits.	1/24/97	9/1/99 64 FR 47670	
5–91–250	Action on permit application	1/24/97	9/1/99 64 FR 47670	
5–91–260	Emissions inspection station permits, categories.	1/24/97	9/1/99 64 FR 47670	
5–91–270	Permit renewals	1/24/97	9/1/99 64 FR 47670	
5–91–280	Permit revocation, surrender of materials.	1/24/97	9/1/99 64 FR 47670	
5–91–290	Emission inspection station operations.	1/24/97	9/1/99 64 FR 47670	
5–91–300	Emissions inspection station records.	1/24/97	9/1/99 64 FR 47670	
5–91–310	Sign and permit posting	1/24/97	9/1/99 64 FR 47670	
5–91–320	Equipment and facility requirements.	1/24/97	9/1/99 64 FR 47670	
5–91–330	Analyzer system operation	1/24/97	9/1/99 64 FR 47670	
5–91–340	Motor vehicle inspection report; certificate of emission inspection.	1/24/97	9/1/99 64 FR 47670	

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
5–91–350	Data media	1/24/97	9/1/99 64 FR 47670	
5–91–360	Inspection number and access code usage.	1/24/97	9/1/99 64 FR 47670	
5–91–370	Fleet emissions inspection stations; mobile fleet emissions inspection stations.	1/24/97	9/1/99 64 FR 47670	
Part V Emissions Inspector Testing and Licensing				
5–91–380	Emissions inspector licenses and renewals.	1/24/97	9/1/99 64 FR 47670	
5–91–390	Qualification requirements for emissions inspector licenses.	1/24/97	9/1/99 64 FR 47670	
5–91–400	Conduct of emissions inspectors	1/24/97	9/1/99 64 FR 47670	
Part VI Inspection Procedures				
5–91–410	General	1/24/97	9/1/99 64 FR 47670	
5–91–420	Inspection procedure; rejection, pass, fail, waiver.	1/24/97	9/1/99 64 FR 47670	
5–91–430	ASM test procedure	1/24/97	9/1/99 64 FR 47670	
5–91–440	Two-speed idle test procedure	1/24/97	9/1/99 64 FR 47670	
4–91–450	Fuel test evaporative pressure test and gas cap pressure test procedure.	1/24/97	9/1/99 64 FR 47670	
4–91–460	Fuel system evaporative purge test procedure.	1/24/97	9/1/99 64 FR 47670	
5–91–470	Short test standards for warranty eligibility.	1/24/97	9/1/99 64 FR 47670	
5–91–480	Emissions related repairs	1/24/97	9/1/99 64 FR 47670	
5–91–490	Engine and fuel changes	1/24/97	9/1/99 64 FR 47670	
Part VII Vehicle Emissions Repair Facility Certification				
5–91–500	Applicability and Authority	1/24/97	9/1/99 64 FR 47670	
5–91–510	Certification Qualifications	1/24/97	9/1/99 64 FR 47670	
5–91–520	Expiration, reinstatement, renewal, and requalification.	1/24/97	9/1/99 64 FR 47670	
5–91–530	Emissions repair facility operations	1/24/97	9/1/99 64 FR 47670	
5–91–540	Sign Posting	1/24/97	9/1/99 64 FR 47670	
Part VIII Emissions Repair Technician Certification and Responsibilities				
5–91–550	Applicability and authority	1/24/97	9/1/99 64 FR 47670	
5–91–560	Certification qualifications for emissions repair technicians.	1/24/97	9/1/99 64 FR 47670	
5–91–570	Expiration, reinstatement, renewal and requalification.	1/24/97	9/1/99 64 FR 47670	
5–91–580	Certified emissions repair technician responsibilities.	1/24/97	9/1/99 64 FR 47670	

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
	Part IX Enforcement Procedures			
5–91–590	Enforcement of regulations, permits, licenses, certifications and orders.	4/2/97	9/1/99 64 FR 47670	
5–91–600	General enforcement process	4/2/97	9/1/99 64 FR 47670	
5–91–600	General enforcement process	4/2/97	9/1/99 64 FR 47670	
5–91–610	Consent orders and penalties for violations.	4/2/97	9/1/99 64 FR 47670	
5–91–620	Major violations	4/2/97	9/1/99 64 FR 47670	
5–91–630	Minor violations	4/2/97	9/1/99 64 FR 47670	
	Part X Analyzer System Certification and Specifications for Enhanced Emissions Inspections Programs			
5–91–640	Applicability	1/24/97	9/1/99 64 FR 47670	
5–91–650	Design goals	1/24/97	9/1/99 64 FR 47670	
5–91–660	Warranty; service contract	1/24/97	9/1/99 64 FR 47670	
5–91–670	Owner provides services	1/24/97	9/1/99 64 FR 47670	
5–91–680	Certification of analyzer systems	1/24/97	9/1/99 64 FR 47670	
5–91–690	Span gases; gases for calibration purposes.	1/24/97	9/1/99 64 FR 47670	
5–91–700	Calibration of exhaust gas analyzers.	1/24/97	9/1/99 64 FR 47670	
5–91–710	Upgrade of analyzer system	1/24/97	9/1/99 64 FR 47670	
	Part XI Manufacturer Recall			
5–91–720	Vehicle manufacturer recall	1/24/97	9/1/99 64 FR 47670	
5–91–730	Exemptions; temporary extensions	1/24/97	9/1/99 64 FR 47670	
	Part XII On-Road Testing			
5–91–740	General Requirements	1/24/97	9/1/99 64 FR 47670	
5–91–750	Operating Procedures; violation of standards.	1/24/97	9/1/99 64 FR 47670	
5–91–760	Schedule of civil charges	1/24/97	9/1/99 64 FR 47670	
	Part XIII Federal Facilities			
5–91–770	General requirements	1/24/97	9/1/99 64 FR 47670	
5–91–780	Proof of compliance	1/24/97	9/1/99 64 FR 47670	
	Part XIV ASM Exhaust Emission Standards			
5–91–790	ASM start-up standards	1/24/97	9/1/99 64 FR 47670	
5–91–800	ASM final standards	1/24/97	9/1/99 64 FR 47670	

EPA-APPROVED REGULATIONS IN THE VIRGINIA SIP—Continued

State citation (9 VAC 5)	Title/subject	State effective date	EPA approval date	Explanation [Former SIP citation]
Chapter 160 General Conformity Rules 1/24/97				
Part I General Definitions				
5–160–10	General	1/24/97	10/21/97 62 FR 54585	
5–160–20	Terms Defined	1/24/97	10/21/97 62 FR 54585	
Part II General Provisions				
5–160–30	Applicability.	1/1/97	10/21/97 62 FR 54585	
5–160–40	Authority of Board and department	1/1/97	10/21/97 62 FR 54585	
5–160–50	Establishment of regulations and orders.	1/2/97	10/21/97 62 FR 54585	
5–160–60	Enforcement of regulations and order.	1/1/97	10/21/97 62 FR 54585	
5–160–70	Hearings and proceedings	1/1/97	10/21/97 62 FR 54585	
5–160–80	Relationship of state regulations to federal regulations.	1//97	10/21/97 62 FR 54585	
5–160–90	Appeals	1/1/97	10/21/97 62 FR 54585	
5–160–100	Availability of information	1/1/97	10/21/97 62 FR 54585	
Part III Criteria and Procedures for Making Conformity Determinations				
5–160–110	General	1/1/97	10/21/97 62 FR 54585	§ 52.2465(c)(118).
5–160–120	Conformity analysis	1/1/97	10/21/97 62 FR 54585	
5–160–130	Reporting requirements	1/1/97	10/21/97 62 FR 54585	
5–160–140	Public participation	1/1/97	10/21/97 62 FR 54585	
5–160–150	Frequency of conformity determinations.	1/1/97	10/21/97 62 FR 54585	
5–160–160	Criteria for determining conformity	1/1/97	10/21/97 62 FR 54585	
5–160–170	Procedures for conformity determinations.	1/1/97	10/21/97 62 FR 54585	
5–160–180	Mitigation of air quality impacts	1/1/97	10/21/97 62 FR 54585	
5–160–190	Savings provision	1/1/97	10/21/97 62 FR 54585	
5–160–200	Review and confirmation of this chapter by board.	1/1/97	10/21/97 62 FR 54585	
Chapter 200 National Low Emission Vehicle Program				
5–200–10	Definitions	4/14/99	12/28/99 64 FR 72564	SIP Effective Date: 2/28/00.
5–200–20	Participation in national LEV	4/14/99	12/28/99 64 FR 72564	SIP Effective Date: 2/28/00.
5–200–30	Transition from national LEV requirements to a Virginia Sec. 177 program.	4/14/99	12/28/99 64 FR 72564	SIP Effective Date: 2/28/00.
2 VAC 5—Chapter 480 Regulation Governing the Oxygenation of Gasoline				
5–480–20	Applicability	11/1/96	2/17/00 65 FR	SIP Effetive Date: 4/3/00.

(d) EPA approved State Source-Specific Requirements.

EPA-APPROVED VIRGINIA SOURCE-SPECIFIC REQUIREMENTS

Source name	Permit/order or registration number	State effective date	EPA approval date	40 CFR part 52 citation
Norfolk Naval Base-Exchange Service Station	[NONE]	8/6/79	8/17/81 46 FR 41499	52.2465(c)(41).
Reynolds Metal Co.—Rolling Mill	DSE–597–87	9/30/87	8/20/90 55 FR 33904	52.2465(c)(92).
Aqualon (Hercules) Company	50363	9/26/90	11/1/91 56 FR 56159	52.2465(c)(93).
Nabisco Brands, Inc	DTE–179–91	4/24/91	3/6/92 57 FR 8080	52.2465(c)(95).
Burlington Industries	30401	11/19/91	3/18/92 57 FR 9388	52.2465(c)(96).
Reynolds Metals Co.—Bellwood	DSE–413A–86	10/31/86	6/13/96 61 FR 29963	52.2465(c)(110).
Reynolds Metals Co.—South	DSE–412A–86			
Philip Morris, Inc.—Bended Leaf Facility	50080	2/27/86	10/14/97 62 FR 53277	52.2465(c)(120).
Philip Morris, Inc.—Park 500 Facility	50722	3/26/97		
Philip Morris, Inc.—Richmond Manufacturing Center	50076	7/13/96		
Virginia Electric and Power Co.—Innsbrook Technical Center.	50396	5/30/96		
Hercules, Inc.—Aqualon Division	V–0163–96	7/12/96		
City of Hopewell—Regional Wastewater Treatment Facility.	50735	5/30/96		
Allied Signal, Inc.—Hopewell Plant	50232	3/26/97	10/14/97 62 FR 53277	52.2465(c)(121).
Allied Signal, Inc.—Chesterfield Plant	V–0114–96	5/20/96		
Bear Island Paper Co. L.P	V–135–96	7/12/96		
Stone Container Corp.—Hopewell Mill	50370	5/30/96		
E.I. duPont de Nemours and Co.—Spruance Plant	V–0117–96	5/30/96	10/14/97 62 FR 53277	52.2465(c)(121).
ICI Americas Inc.—Films Division—Hopewell Site	50418	5/30/96		
Tuscarora, Inc	71814	6/5/96	1/22/99 64 FR 3425	52.2465(c)(128).

(e) [Reserved]

[FR Doc. 00–9535 Filed 4–20–00; 8:45 am]
BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[CA 031–0174a; FRL–6580–3]

Approval and Promulgation of Implementation Plans; California State Implementation Plan Revision, Lake County Air Quality Management District and San Joaquin Valley Unified Air Pollution Control District

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: EPA is taking direct final action on revisions to the California State Implementation Plan. The revisions concern rules from the following: Lake County Air Quality Management District (LCAQMD) and San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD). The rules control particulate matter (PM) emissions from open burning or processes identified by a weight rate throughput. This approval action will incorporate these rules into the federally-approved SIP. The intended effect of approving these rules is to regulate emissions of PM in accordance with the requirements of the Clean Air Act, as amended in 1990 (CAA). Thus, EPA is finalizing the approval of these rules into the California SIP under provisions of the CAA regarding EPA action on SIP submittals, SIPs for national primary and secondary ambient air quality standards, and plan requirements for attainment and nonattainment areas.

DATES: This rule is effective on June 20, 2000 without further notice, unless EPA receives relevant adverse comments by May 22, 2000. If EPA receives such comments, then it will publish a timely withdrawal in the **Federal Register** informing the public that this rule will not take effect.

ADDRESSES: Comments must be submitted in writing to Andrew Steckel at the Region IX office listed below. Copies of the rules and EPA's evaluation report for the rules are available for public inspection at EPA's Region IX office during normal business hours. Copies of the submitted rules are available for inspection at the following locations:

Rulemaking Office (AIR–4), Air Division, U.S. Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105.

Environmental Protection Agency, Air Docket (6102), Ariel Rios Building, 1200 Pennsylvania Avenue, NW., Washington, DC 20460.

California Air Resources Board, Stationary Source Division, Rule Evaluation Section, 2020 ''L'' Street, Sacramento, CA 95812.

Lake County Air Quality Management District, 883 Lakeport Boulevard, Lakeport, CA 95453.

San Joaquin Valley Unified Air Pollution Control District, 1990 East Gettysburg Street, Fresno, CA 93726.

FOR FURTHER INFORMATION CONTACT: Al Petersen, Rulemaking Office, (AIR–4), Air Division, U.S. Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105, Telephone: (415) 744–1135.

SUPPLEMENTARY INFORMATION:

I. Applicability

The rules being approved into the California SIP include: LCAQMD

Section (Rule) 226.5, Fire Season-Burn Ban; LCAQMD Section (Rule) 431.5, (Non-Agricultural Burning); LCAQMD Section (Rule) 433, (Exemption-Residential); Lake County Section (Rule) 1150, Wildland Vegetation Management Burning; and SJVUAPCD Rule 4202, Particulate Matter-Emission Rate. These rules were submitted by the California Air Resources Board (CARB) to EPA on July 23, 1999, March 26, 1990, March 10, 1998, February 7, 1989, and September 28, 1994, respectively.

II. Background

On March 3, 1978, EPA promulgated a list of total suspended particulate (TSP) nonattainment areas under the provisions of the 1977 Clean Air Act, that included the San Joaquin Valley Air Basin (43 FR 8964; 40 CFR 81.305). On July 1, 1987 (52 FR 24672) EPA replaced the TSP standards with new PM standards applying only to PM up to 10 microns in diameter (PM–10).[1] On November 15, 1990, amendments to the 1977 CAA were enacted (Public Law 101–549, 104 Stat. 2399, codified at 42 U.S.C. 7401–7671*q*). On the date of enactment of the 1990 CAA Amendments, PM–10 areas meeting the qualifications of section 107(d)(4)(B) of the Act were designated nonattainment by operation of law and classified as moderate or serious pursuant to section 188(a). Lake County was not among the areas designated nonattainment. On February 8, 1993, EPA classified four nonattainment areas as serious nonattainment, including the San Joaquin Valley Planning Area, which now comprises the SJVUAPCD.

Section 189(a) of the CAA requires moderate and above PM–10 nonattainment areas to adopt reasonably available control measures (RACM), including reasonably available control technology (RACT) for stationary sources of PM–10. Section 189(b) of the CAA requires serious nonattainment areas to adopt best available control measures (BACM) for significant sources of PM–10, including best available control technology (BACT). Therefore, SJVUAPCD must at a minimum meet the requirements of RACM. SJVUAPCD must also adopt BACM. However, EPA is deferring decision on the specific BACM requirements until EPA acts on SJVUAPCD's BACM plan [2] at a later date and will evaluate the rule by the requirements of RACM.

In response to section 110(a) and part D of the Act, the State of California submitted many PM–10 rules for incorporation into the California SIP, including the rules being acted on in this document. This document addresses EPA's direct-final action for the following:

LCAQMD Sections (Rules) 226.5, 431.5, 433, and 1150 were adopted September 13, 1988, June 13, 1989, July 15, 1997, and December 6, 1988, respectively; submitted by the State of California for incorporation into the SIP on July 23, 1999, March 26, 1990, March 10, 1998, and February 7, 1989, respectively; and found to be complete pursuant to EPA's completeness criteria that are set forth in 40 CFR part 51, appendix V [3] on August 24, 1999, June 20, 1990, May 21, 1998, and May 5, 1989, respectively.

SJVUAPCD Rule 4202, Particulate Matter-Emission Rate, was adopted December 17, 1992, submitted by the State of California for incorporation into the SIP on September 28, 1994, and found to be complete on November 22, 1994.

PM emissions can harm human health and the environment. These rules were adopted as part of LCAQMD and SJVUAPCD efforts to maintain the National Ambient Air Quality Standard (NAAQS) for PM–10. The following is EPA's evaluation and final action for these rules.

III. EPA Evaluation and Action

In determining the approvability of a PM–10 rule, EPA must evaluate the rule for consistency with the requirements of the CAA and EPA regulations, as found in section 110 and part D of the CAA and 40 CFR part 51 (Requirements for Preparation, Adoption, and Submittal of Implementation Plans). EPA must also ensure that rules are enforceable and strengthen or maintain the SIP's control strategy.

The statutory provisions relating to RACM/RACT and BACM/BACT are discussed in EPA's ''General Preamble,'' which give the Agency's preliminary views on how EPA intends to act on SIPs submitted under Title I of the CAA. See 57 FR 13498 (April 16, 1992), 57 FR 18070 (April 28, 1992) and 59 FR 41998 (August 16, 1994). In this rulemaking action, EPA is applying these policies to this submittal, taking into consideration the specific factual issues presented.

EPA previously reviewed rules from LCAQMD and SJVUAPCD and incorporated them into the federally approved SIP pursuant to section 110(k)(3) of the CAA.

There is currently no version of LCAQMD Section (Rule) 226.5, Fire Season-Burn Ban, in the SIP. This is a new rule that strengthens the SIP by prohibiting open burning from June 1 through the end of the fire season.

On October 23, 1989, EPA approved into the SIP a version of LCAQMD Section (Rule) 431.5, (Non-Agricultural Burning). Submitted Section (Rule) 431.5 replaces the SIP-approved rule and includes the following significant change that strengthens the SIP:

- Extends the prohibition against non-agricultural open burning from June 1 to the end of the fire season to include No-Burn Days designated by the APCO or by the CARB.

On October 23, 1989, EPA approved into the SIP a version of LCAQMD Section (Rule) 433, (Non-Agricultural Burning). Submitted Section (Rule) 433 replaces the SIP-approved rule and includes the following significant change that strengthens the SIP:

- Adds a prohibition against using ''burn barrels'' for residential open burning.

There is currently no version of LCAQMD Section (Rule) 1150, Wildland Vegetation Management Burning, in the SIP. This is a new rule that strengthens the SIP by regulating wildland vegetation management burning, including requiring a burn plan for over 20 acres.

On various dates, EPA approved into the SIP versions of Particulate Matter-Emission Rate rules for the eight counties that now comprise the SJVUAPCD. Submitted Rule 4202, Particulate Matter-Emission Rate, replaces these rules and includes no significant changes from the SIP versions from the eight counties. EPA has determined that submitted Rule 4202 meets the requirements of RACM.

EPA has evaluated the submitted rules and has determined that they are consistent with the CAA, EPA

[1] On July 18, 1997 EPA promulgated revised and new standards for PM–10 and PM–2.5 (62 FR 38651). The U.S. Court of Appeals for the D.C. Circuit in *American Trucking Assoc., Inc., et al.* v. *USEPA,* No. 97–1440 (May 14, 1999) issued an opinion that, among other things, vacated the new standards for PM–10 that were published on July 18, 1997 and became effective September 16, 1997. However, the PM–10 standards promulgated on July 1, 1987 were not an issue in this litigation, and the Court's decision does not affect the applicability of those standards in this area. Codification of those standards continue to be recorded at 40 CFR 50.6. In the notice promulgating the new PM–10 standards, the EPA Administrator decided that the previous PM–10 standards that were promulgated on July 1, 1987, and provisions associated with them, would continue to apply in areas subject to the 1987 PM–10 standards until certain conditions specified in 40 CFR 50.6(d) are met. See 62 FR at 38701. EPA has not taken any action under 40 CFR 50.6(d) for this area. Today's proposed action relates only to the CAA requirements concerning the PM–10 standards as originally promulgated in 1987.

[2] The present submittal of the SJVUAPCD PM–10 Attainment Demonstration Plan, May 15, 1997, must be revised in order to be approved by EPA.

[3] EPA adopted the completeness criteria on February 16, 1990 (55 FR 5830) and, pursuant to section 110(k)(1)(A) of the CAA, revised the criteria on August 26, 1991 (56 FR 42216).

regulations, and EPA policy. Therefore, the following rules are being approved under section 110(k)(3) of the CAA as meeting the requirements of section 110(a) and part D:

- LCAQMD Section (Rule) 226.5, Fire Season-Burn Ban (submitted July 23, 1999).
- LCAQMD Section (Rule) 431.5, (Non-Agricultural Burning) (submitted March 26, 1990).
- LCAQMD Section (Rule) 433, (Exemption-Residential) (submitted March 10, 1998).
- LCAQMD Section (Rule) 1150, Wildland Vegetation Management Burning (submitted February 7, 1989).
- SJVUAPCD Rule 4202, Particulate Matter-Emission Rate (submitted September 28, 1994).

A more detailed evaluation can be found in EPA's evaluation reports for these rules.

EPA is publishing this rule without prior proposal because the Agency views this as a noncontroversial amendment and anticipates no adverse comments. However, in the proposed rules section of this **Federal Register** publication, EPA is publishing a separate document that will serve as the proposal to approve the SIP revision should relevant adverse comments be filed. This rule will be effective June 20, 2000 without further notice unless the Agency receives relevant adverse comments by May 22, 2000.

If the EPA receives such comments, then EPA will publish a timely withdrawal informing the public that the rule will not take effect. All public comments received will then be addressed in a subsequent final rule based on the proposed rule. The EPA will not institute a second comment period on this rule. Any parties interested in commenting on this rule should do so at this time. If no such comments are received, the public is advised that this rule will be effective on June 20, 2000 and no further action will be taken on the proposed rule.

IV. Administrative Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action'' and therefore is not subject to review by the Office of Management and Budget. This action merely approves state law as meeting federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it 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). For the same reason, this rule also does not significantly or uniquely affect the communities of tribal governments, as specified by Executive Order 13084 (63 FR 27655, May 10, 1998). This rule 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, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it merely approves a state rule implementing a federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. As required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996), in issuing this rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct. EPA has complied with Executive Order 12630 (53 FR 8859, March 15, 1988) by examining the takings implications of the rule in accordance with the ''Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings' issued under the executive order. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

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

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by June 20, 2000. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Particulate matter, Reporting and recordkeeping requirements.

Dated: March 30, 2000.

Laura Yoshii,

Acting Regional Administrator, Region IX.

Part 52, Chapter I, Title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

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

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

Subpart F—California

2. Section 52.220 is amended by adding paragraphs (c)(177)(i)(F)(*2*), (c)(179)(i)(F)(*2*), (c)(199)(i)(D)(*7*), (c)(254)(i)(J)(*2*), and (c)(268)(i)(C) to read as follows:

§ 52.220 Identification of plan.

* * * * *

(c) * * *

(177) * * *

(i) * * *

(F) * * *

(*2*) Section (Rule) 1150, adopted on December 6, 1988.

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(179) * * *

(i) * * *

(F) * * *

(*2*) Section (Rule) 431.5, adopted on June 13, 1989.

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(199) * * *

(i) * * *

(D) * * *

(*7*) Rule 4202, adopted on December 17, 1992.

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(254) * * *

(i) * * *

(J) * * *

(*2*) Sections (Rules) 433, adopted on July 15, 1997.

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(268) * * *

(i) * * *

(C) Lake County Air Quality Management District.

(*1*) Section (Rule) 226.5, adopted on September 13, 1988.

* * * * *

[FR Doc. 00–9650 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[SIP NOS. MT–001–0012; MT–001–0013; MT–001–0014; MT–001–0015 FRL–6582–4]

Approval and Promulgation of Air Quality Implementation Plans; Montana; Emergency Episode Plan, Columbia Falls, Butte and Missoula Particulate Matter State Implementation Plans, Missoula Carbon Monoxide State Implementation Plan; Correction

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule; correction.

SUMMARY: The EPA published in the **Federal Register** on December 6, 1999, a document that, among other things, approved updates to Montana's State Implementation Plan (SIP) relating to the Emergency Episode Plan; Columbia Falls, Butte and Missoula Particulate Matter [particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM–10)] SIPS; and the Missoula Carbon Monoxide (CO) Plan. In the December 6, 1999, rule, EPA inadvertently referenced an incorrect citation to Missouri's SIP in the Code of Federal Regulations. EPA is correcting the citation with this document.

EFFECTIVE DATE: This rule is effective on April 21, 2000.

FOR FURTHER INFORMATION CONTACT: Laurie Ostrand, EPA, Region VIII, (303) 312–6437.

SUPPLEMENTARY INFORMATION: Throughout this document wherever ''we,'' or ''our'' are used we mean EPA.

Our December 6, 1999 (64 FR 68034) rulemaking indicated that on November 3, 1995 (60 FR 55792) we approved revisions to Montana's prevention of significant deterioration (PSD) regulations. With the November 3, 1995 document we inadvertently codified the revisions into 40 CFR 52.1320(c)(42) in lieu of CFR 52.1370(c)(42). Our December 6, 1999 document indicated that we were removing these revisions from 40 CFR 52.1320(c)(42) and adding them to 40 CFR 52.1370(c)(42). However, when we published the December 6, 1999 rule, we did not realize that on June 29, 1999 (64 FR 34717) 40 CFR 52.1320 had been redesignated as 40 CFR 52.1322. Therefore, our December 6, 1999 document should have removed 40 CFR 52.1322(c)(42) and not 40 CFR 52.1320(c)(42).

Section 553 of the Administrative Procedure Act, 5 U.S.C. 553(b)(B), provides that, when an agency for good cause finds that notice and public procedure are impracticable, unnecessary or contrary to the public interest, the agency may issue a rule without providing notice and an opportunity for public comment. We have determined that there is good cause for making today's rule final without prior proposal and opportunity for comment because we are merely correcting an incorrect citation in a previous action. Thus, notice and public procedure are unnecessary. We find that this constitutes good cause under 5 U.S.C. 553(b)(B).

Administrative Requirements

Under Executive Order (E.O.) 12866 (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action'' and is therefore not subject to review by the Office of Management and Budget. Because the agency has made a ''good cause'' finding that this action is not subject to notice-and-comment requirements under the Administrative Procedure Act or any other statute as indicated in the Supplementary Information section above, it is not subject to the regulatory flexibility provisions of the Regulatory Flexibility Act (5 U.S.C 601 *et seq.*), or to sections 202 and 205 of the Unfunded Mandates Reform Act of 1995 (UMRA) (Pub. L. 104–4). In addition, this action does not significantly or uniquely affect small governments or impose a significant intergovernmental mandate, as described in sections 203 and 204 of UMRA. This rule also does not significantly or uniquely affect the communities of tribal governments, as specified by Executive Order 13084 (63 FR 27655, May 10, 1998). This rule 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 governments, as specified by Executive Order 13132 (64 FR 43255, August 10, 1999). This rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant.

This technical correction action does not involve technical standards; thus the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. The rule also does not involve special consideration of environmental justice related issues as required by Executive Order 12898 (59 FR 7629, February 16, 1994). In issuing this rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct, as required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996). EPA has complied with Executive Order 12630 (53 FR 8859, March 15, 1998) by examining the takings implications of the rule in accordance with the ''Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings'' issued under the executive order. This rule does not impose an information collection burden under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

The Congressional Review Act (5 U.S.C. 801 *et seq.*), as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. Section 808 allows the issuing agency to make a rule effective sooner than otherwise provided by the CRA if the agency makes a good cause finding that notice and public procedure is impracticable, unnecessary or contrary to the public interest. This determination must be supported by a brief statement. 5 U.S.C. 808(2). As stated previously, EPA had made such a good cause finding,

including the reasons therefore, and established an effective date of April 21, 2000. 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 correction to the identification of plan for Missouri is not a ''major rule'' as defined by 5 U.S.C. 804(2).

April 7, 2000.

Patricia D. Hull,

Acting Regional Administrator, Region VIII.

In rule FR Doc. 99–31536, published on December 6, 1999 (64 FR 68034), make the following corrections:

PART 52—[CORRECTED]

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

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

Subpart AA—Missouri [Corrected]

2. On page 68038, in the third column, 3 lines from the top of the column, correct ''§ 52.1320'' to read ''§ 52.1322''.

3. On page 68038, in the third column, in amendatory instruction 2, correct ''52.1320(c)(42)'' to read ''52.1322(c)(42)''.

[FR Doc. 00–9926 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[IN99–1a; FRL–6573–7]

Approval and Promulgation of Implementation Plan; Indiana

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: EPA is approving revisions to particulate matter (PM) emissions regulations for Dubois County, Indiana, which the Indiana Department of Environmental Management (IDEM) submitted to EPA on February 3, 1999, as amendments to its State Implementation Plan (SIP). The revisions include relaxation of some PM limits, elimination of limits for boilers which are no longer operating, updating facility names, and changing some boiler fuel types.

DATES: This rule is effective on June 20, 2000, unless EPA receives adverse written comments by May 22, 2000. If adverse comment is received, EPA will publish a timely withdrawal of the rule in the **Federal Register** and inform the public that the rule will not take effect.

ADDRESSES: You should mail written comments to: J. Elmer Bortzer, Chief, Regulation Development Section, Air Programs Branch (AR–18J), U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604.

You may inspect copies of the State submittal and EPA's analysis of it at: Regulation Development Section, Air Programs Branch (AR–18J), U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604.

FOR FURTHER INFORMATION CONTACT: David Pohlman, Environmental Scientist, Regulation Development Section, Air Programs Branch (AR–18J), U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 886–3299.

SUPPLEMENTARY INFORMATION: Throughout this document wherever ''we,'' ''us,'' or ''our'' are used we mean EPA.

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I. What Is the EPA Approving?

We are approving revised PM rules for Dubois County, Indiana, which the Indiana Department of Environmental Management (IDEM) submitted to EPA on February 3, 1999. The revisions include relaxation of some PM limits, elimination of limits for boilers which are no longer operating, updating facility names, and changing some boiler fuel types. The submitted revisions are contained in Title 326 Indiana Administrative Code, Article 6, Rule 1, Section 9 (326 IAC 6–1–9).

II. What Are the Changes From Current Rules?

A. Sources Eliminated From the Rules

IDEM eliminated Indiana Cabinet, Dolly Madison Plant No. 3, Jasper Table, Hoosier Desk, Jasper Turning boilers No. 1 and No. 2, Jasper Novelty Furniture Plant No. 1, Jasper Novelty Furniture Plant No. 2, Jasper Novelty Furniture Plant No. 3 wood boiler, Jasper Cabinet coal and wood boiler, and Jasper Veneer boiler No. 3 from rule 326 IAC 6–1–9. These sources have shut down.

B. Source Name Revisions

Indiana Chair is changed to Indiana Dimension; Indiana Desk is changed to Indiana Furniture Industries; Huntingburg Wood Products is changed to Styline Industries, Plant #8; Jasper Laminates is changed to Jasper Laminates, Plant #1—Division of Kimball; Jasper Cabinets No. 2 is changed to Jasper Cabinets Corporation; Jasper Stylemasters 15th and Cherry is changed to Artec; Jasper Office Furniture is changed to Jasper Office Furniture Co., Inc., Plant #1; Jasper Turning is changed to Artec; Jasper Novelty Furniture Plt. No. 3 is changed to Jasper Furniture 30th St.; and Jasper Cabinet is changed to Jasper Corp.-Kimball International.

C. Fuel Usage and Heat Input Changes

The fuel for Jasper Laminates, Plant #1—Division of Kimball boiler No. 1 is changed from Wood-Oil-Waste Solvent to Wood-Wood Waste, and its heat input is changed from 23 MMBTU/hr to 20.5 MMBTU/hr. The fuel for Jasper Laminates, Plant #1—Division of Kimball boiler No. 2 is changed from Oil to Natural Gas, and its heat input is changed from 16 MMBTU/hr to 16.8 MMBTU/hr. The fuel for Jasper Cabinets Corporation's boiler is changed from Coal to Wood, and the heat input is changed from 3 MMBTU/hr to 5.3 MMBTU/hr. The heat input for Jasper Wood Products' Coal-Wood Boiler No. 1 is changed from 10 MMBTU/hr to 6 MMBTU/hr. The heat input for Jasper Wood Products' Coal-Wood Boiler No. 2 is changed from 10 MMBTU/hr to 6 MMBTU/hr. The heat input for Artec's Wood Chip Boiler is changed from 24 MMBTU/hr to 14 MMBTU/hr. The fuel for Jasper Chair's boiler is changed from Coal to Wood, and its heat input is changed from 6 MMBTU/hr to 18 MMBTU/hr.

D. Revised or Added Limits

The limits for Styline Industries, Plant #8 are changed from 2.8 tons/yr to 9.0 tons/yr, and from 0.340 lbs/MMBTU to 0.60 lbs/MMBTU. The limits for Forest

Wood Products No. 1 are changed from 2.1 tons/yr to 9.0 tons/yr, and from 0.140 lbs/MMBTU to 0.60 lbs/MMBTU. For Jasper Laminates, Plant #1—Division of Kimball, the short-term limit for boiler No. 1 was changed from 0.10 lbs/MMBTU to 0.60 lbs/MMBTU and the limits for boiler #2 were changed to add limits of 0.2 tons/yr and 0.01 grains/dscf in addition to the previously-existing limit of 0.003 lbs/MMBTU. For Jasper Cabinets Corporation, a new 6.7 MMBTU/hr Wood Boiler was added to the rule. This boiler has limits of 7.6 tons/yr and 0.60 lbs/MMBTU. The limits for Coal-Wood Boiler No. 1 at Jasper Wood Products were changed from 1.04 tons/yr to 9.0 tons/yr and from 0.060 lbs/MMBTU to 0.60 lbs/MMBTU. The limits for Coal-Wood Boiler No. 2 at Jasper Wood Products were changed from 3.1 tons/yr to 9.0 tons/yr and from 0.070 lbs/MMBTU to 0.60 lbs/MMBTU. Limits for Artec's Wood Chip Boiler were changed from 2.8 tons/yr to 12.0 tons/yr and from 0.060 lbs/MMBTU to 0.60 lbs/MMBTU.

III. Air Quality Modeling Analysis

The general criteria used by the EPA to evaluate such emissions trades, or ''bubbles'', under the Clean Air Act and applicable regulations are set out in the EPA's Emissions Trading Policy Statement (ETPS) (see 51 FR 43814). Emissions trades such as this, which result in an overall increase in allowable emissions, require a ''Level III'' modeling analysis under the ETPS to ensure that the National Ambient Air Quality Standards (NAAQS) will be protected. A Level III analysis is a full dispersion modeling analysis which must consider all sources affecting the trade's area of impact.

The submitted modeling analysis includes emissions from all sources with revised SIP limits, and uses a conservative background concentration to account for other, nearby sources.

In the submitted modeling analysis, which uses 5 years of meteorological data, a violation of the 24-hour NAAQS is indicated when six exceedances of the 24-hour standard are predicted. Each receptor's predicted 6th highest 24-hour value is, therefore, compared to the standard. The 24-hour PM standard is 150 micrograms per cubic meter ($\mu g/m^3$). Indiana's modeling indicated that the highest, sixth highest predicted 24-hour PM concentration at any receptor in the Dubois County area was 132.5 $\mu g/m^3$. Thus, the modeling analysis predicts that the 24-hour NAAQS will be protected.

A modeled violation of the annual PM standard is indicated when any receptor's 5 year arithmetic mean annual PM concentration exceeds the annual PM standard of 50 $\mu g/m^3$. Indiana's modeling analysis indicated that the highest arithmetic mean annual PM concentration predicted by the modeling for the Dubois County area was 33.6 $\mu g/m^3$. Therefore, the modeling analysis predicts that the annual PM NAAQS will be met.

IV. What Are the Environmental Effects of This Action?

As stated above, the air quality modeling analysis conducted by IDEM shows that the maximum daily and annual PM concentrations in Dubois County should stay below the NAAQS.

V. EPA Rulemaking Action

We are approving, through direct final rulemaking, revisions to particulate matter (PM) emissions regulations for Dubois County, Indiana. We are publishing this action without prior proposal because we view this as a noncontroversial revision and anticipate no adverse comments. However, in a separate document in this **Federal Register** publication, we are proposing to approve the SIP revision should adverse written comments be filed. This action will be effective without further notice unless we receive relevant adverse written comment by May 22. 2000. Should we receive such comments, we will publish a final rule informing the public that this action will not take effect. Any parties interested in commenting on this action should do so at this time. If no such comments are received, you are advised that this action will be effective on June 20, 2000.

VI. Administrative Requirements

A. Executive Order 12866

The Office of Management and Budget (OMB) has exempted this regulatory action from Executive Order 12866, entitled ''Regulatory Planning and Review.''

B. Executive Order 13045

Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997), applies to any rule that: (1) Is determined to be ''economically significant'' as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This rule is not subject to Executive Order 13045 because it does not involve decisions intended to mitigate environmental health or safety risks.

C. Executive Order 13084

Under Executive Order 13084, EPA may not issue a regulation that is not required by statute, that significantly affects or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the tribal governments, or EPA consults with those governments. If EPA complies by consulting, Executive Order 13084 requires EPA to provide to the Office of Management and Budget, in a separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected officials and other representatives of Indian tribal governments ''to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities.''

Today's rule does not significantly or uniquely affect the communities of Indian tribal governments. This action does not involve or impose any requirements that affect Indian Tribes. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

D. Executive Order 13132

Federalism (64 FR 43255, August 10, 1999) revokes and replaces Executive Orders 12612 (Federalism) and 12875 (Enhancing the Intergovernmental Partnership). Executive Order 13132 requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' is defined in the Executive Order to include regulations that 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.'' Under Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has federalism implications and that preempts State law unless the Agency consults with State and local officials early in the process of developing the proposed regulation.

This rule 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, as specified in Executive Order 13132, because it merely approves a state rule implementing a federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. Thus, the requirements of section 6 of the Executive Order do not apply to this rule.

E. Regulatory Flexibility

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions.

This rule will not have a significant impact on a substantial number of small entities because SIP approvals under section 110 and subchapter I, part D of the Clean Air Act do not create any new requirements but simply approve requirements that the State is already imposing. Therefore, because the Federal SIP approval does not create any new requirements, I certify that this action will not have a significant economic impact on a substantial number of small entities. Moreover, due to the nature of the Federal-State relationship under the Clean Air Act, preparation of flexibility analysis would constitute Federal inquiry into the economic reasonableness of state action. The Clean Air Act forbids EPA to base its actions concerning SIPs on such grounds. *Union Electric Co.,* v. *U.S. EPA,* 427 U.S. 246, 255–66 (1976); 42 U.S.C. 7410(a)(2).

F. Unfunded Mandates

Under sections 202 of the Unfunded Mandates Reform Act of 1995 (''Unfunded Mandates Act''), signed into law on March 22, 1995, EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in estimated costs to State, local, or tribal governments in the aggregate; or to the private sector, of $100 million or more. Under section 205, EPA must select the most cost-effective and least burdensome alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

EPA has determined that the approval action promulgated does not include a Federal mandate that may result in estimated costs of $100 million or more to either State, local, or tribal governments in the aggregate, or to the private sector. This Federal action approves pre-existing requirements under State or local law, and imposes no new requirements. Accordingly, no additional costs to State, local, or tribal governments, or to the private sector, result from this action.

G. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. Section 804, however, exempts from section 801 the following types of rules: rules of particular applicability; rules relating to agency management or personnel; and rules of agency organization, procedure, or practice that do not substantially affect the rights or obligations of non-agency parties. 5 U.S.C. 804(3). EPA is not required to submit a rule report regarding this action under section 801 because this is a rule of particular applicability.

H. National Technology Transfer and Advancement Act

Section 12 of the National Technology Transfer and Advancement Act (NTTAA) of 1995 requires Federal agencies to evaluate existing technical standards when developing a new regulation. To comply with NTTAA, EPA must consider and use ''voluntary consensus standards'' (VCS) if available and applicable when developing programs and policies unless doing so would be inconsistent with applicable law or otherwise impractical.

The EPA believes that VCS are inapplicable to this action. Today's action does not require the public to perform activities conducive to the use of VCS.

I. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by June 20, 2000. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Particulate matter, Reporting and recordkeeping requirements.

Dated: March 28, 2000.

Francis X. Lyons,

Regional Administrator, Region 5.

For the reasons stated in the preamble, part 52, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

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

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

Subpart P—Indiana

2. Section 52.770 is amended by adding paragraph (c)(132) to read as follows:

§ 52.770 Identification of plan.

* * * * *

(c) * * *

(132) On February 3, 1999, Indiana submitted revised particulate matter emissions regulations for Dubois County, Indiana. The submitted revision amends 326 IAC 6–1–9, and includes relaxation of some PM limits, the elimination of limits for boilers which are no longer operating, updated facility names, and changes to boiler fuel types.

(i) Incorporation by reference. Indiana Administrative Code Title 326: Air Pollution Control Board, Article 6: Particulate Rules, Rule 1: Nonattainment Area Limitations, Section 9: Dubois County. Added at 22 In. Reg. 423. Effective October 18, 1998.

[FR Doc. 00–9920 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 62

[Docket No. CT–055–7214a; FRL—6577–3]

Approval and Promulgation of State Plans for Designated Facilities and Pollutants: Connecticut; Plan for Controlling MWC Emissions From Existing MWC Plants

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: The Environmental Protection Agency (EPA) approves the sections 111(d)/129 State Plan submitted by the Connecticut Department of Environmental Protection (CTDEP) on October 1, 1999. This State Plan implements and enforces provisions at least as protective as the Emissions Guidelines (EGs) applicable to existing Municipal Waste Combustors (MWCs) units with capacity to combust more than 250 tons/day of municipal solid waste (MSW).

DATES: This direct final rule is effective on June 20, 2000, without further notice unless EPA receives significant, material and adverse comment by May 22, 2000. If EPA receives adverse comment, we will publish a timely withdrawal of the direct final rule in the **Federal Register** and inform the public that the rule will not take effect.

ADDRESSES: You should address your written comments to: Mr. John Courcier, Acting Manager, Air Permits Unit, Office of Ecosystem Protection, U.S. EPA—New England, Region 1, One Congress Street, Suite 1100 (CAP), Boston, Massachusetts 02114–2023.

Documents which EPA has incorporated by reference are available for public inspection at the Air and Radiation Docket and Information Center, Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460. You may examine relevant copies of materials the DEP submitted to EPA during normal business hours at the following locations. The interested persons wanting to examine these documents should make an appointment with the appropriate office at least 24 hours before the day of the visit.

Environmental Protection Agency—New England, Region 1, Air Permits Unit, Office of Ecosystem Protection, Suite 1100, One Congress Street, Boston, Massachusetts 02114–2023.

Connecticut Department of Environmental Protection, Bureau of Air Management, Planning and Standards Division, 79 Elm Street, Hartford, Connecticut 06106–5127, (860) 424–3026.

FOR FURTHER INFORMATION CONTACT: John Courcier at (617) 918–1659.

SUPPLEMENTARY INFORMATION:

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I. What Action Is EPA Taking Today?

EPA is approving the above referenced State Plan. EPA is publishing this approval action without a prior proposal because the Agency views this as a noncontroversial action and anticipates no adverse comments. However, in the proposed rules section of this **Federal Register** publication, EPA is publishing a separate document that will serve as the proposal to approve the State Plan should anyone file relevant adverse comments. If EPA receives no significant, material, and adverse comments by May 22, 2000, this action will be effective June 20, 2000.

If EPA receives significant, material, and adverse comments by the above date, we will withdraw this action before the effective date by publishing a subsequent document in the **Federal Register** that will withdraw this final action. EPA will address all public comments received in a subsequent final rule based on the parallel proposed rule published in today's **Federal Register**. EPA will not begin a second comment period on this action. Any parties interested in commenting on this action should do so at this time. If EPA receives no comments, this action will be effective June 20, 2000.

EPA's approval of CTDEP's State Plan is based on our findings that:

(1) CTDEP provided adequate public notice of public hearings for the proposed rule-making that allows Connecticut to carry out and enforce provisions that are at least as protective as the EGs for large MWCs, and

(2) CTDEP demonstrated its legal authority to adopt emission standards and compliance schedules applicable to the designated facilities; enforce applicable laws, regulations, standards and compliance schedules; seek injunctive relief; obtain information necessary to determine compliance; require record keeping; conduct inspections and tests; require the use of monitors; require emission reports of owners and operators; and make emission data publicly available.

II. When Did These Requirements First Become Known?

Some form of the EGs was first published in the **Federal Register** in 1989. On December 19, 1995, according to sections 111 and 129 of the Clean Air Act (Act), the EPA published the current form of the EGs applicable to existing MWCs. The EGs are at 40 CFR part 60, subpart Cb. *See* 60 FR 65387 and the Background section.

III. When Does the State Plan Become Effective?

This direct final rule is effective on June 20, 2000, without further notice unless as explained under I. above, EPA receives adverse comment by May 22, 2000.

IV. What Happens to the Federal Plan After the Effective Date of the State Plan?

The Federal Plan is an interim action. On the effective date of this action, the Federal Plan will no longer apply to MWC units covered by the State Plan.

V. Who Must Comply With the Requirements?

The State Plan affects all MWCs:

1. With a combustion capacity greater than 250 tons per day of municipal solid waste (large MWC units), and

2. Which commenced construction on or before September 20, 1994 (existing MWC units).

CTDEP submitted its Plan after the Court of Appeals vacated 40 CFR part 60, subpart Cb as it applies to small MWC units. Thus, the Connecticut State Plan, as approved by EPA, covers only large, existing MWC units. Small and new units are not subject to the requirements of subpart Cb and not subject to this approval.

VI. By What Date Must MWCs in Connecticut Achieve Compliance?

All existing large MWC units in the state of Connecticut must comply with these emission standards by December 19, 2000.

VII. MWC Operators Must Control Which Pollutants?

Subpart Cb regulates the following pollutants: particulate matter, opacity, sulfur dioxide, hydrogen chloride, oxides of nitrogen, carbon monoxide, lead, cadmium, mercury, and dioxin and dibenzofurans.

VIII. What Emission Controls Are Necessary To Achieve Compliance?

The basis for control of each pollutant is as follows:

a. for PM, opacity, Cd, Pb, and Hg	GCP and SD/ESP/CI, or GCP and SD/FF/CI;
b. for dioxin/furan	GCP and SD/ESP, or GCP and SD/FF;
c. for SO_2 and HCl	GCP and SD/ESP, or GCP and SD/FF;
d. for NO_X	SNCR.

GCP—good combustion practice
SD—spray dryer
ESP—electrostatic precipitator
FF—fabric filter
CI—carbon injection
SNCR—selective noncatalytic reduction

IX. What Happens if an MWC Does Not/Cannot Meet the Requirements by the Final Compliance Date?

Any existing large MWC unit that fails to meet the requirements by December 19, 2000 must shut down. The unit cannot start up until the owner/operator installs the controls necessary to meet the requirements.

X. What Did the State Submit as Part of Its State Plan?

The CTDEP submitted to EPA on October 1, 1999 the following sections 111(d)/129 State Plan components for carrying out and enforcing the EGs for existing MWCs in the State: Legal Authority; Emission Standards and Limitations; Compliance Schedule; MWC Emissions and MWC Plant/Unit Inventories; Procedures for Testing and Monitoring Sources of Air Pollutants; Source Surveillance, Compliance Assurance and Enforcement; Demonstration That the Public Had Adequate Notice and Opportunity to Submit Written Comments and Public Hearing Summary; and applicable State regulations (CTDEP regulations section 22a–174–38).

The State excluded from the State Plan the provision requiring compliance with a mercury emission limit of 0.028 mg/dscm, or 85% reduction by weight. Accordingly, only the limit of 0.080 mg/dscm, or 85% reduction by weight is included in the State Plan.

Also, as part of its MWC regulations, CT included a nitrogen oxides (NO_X) emissions trading program. Basically, the program allows MWCs that commenced construction before December 20, 1989, and therefore are not subject to the NSPS, to use NO_X credits to comply with the NO_X emission limits of subsection (c) of the regulation. The regulation allows MWCs constructed after December 20, 1989 to participate in the NO_X credit trading program. However, such sources may not use credits to meet the NO_X limits but may only generate credits if emissions are below the applicable limits and lower than the source's trading baseline.

The trading program regulations define the methodology and formulas for determining, on a daily basis, the quantity of credit that a unit generates or uses, including the recordkeeping and reporting requirements. The trading program regulations define the trading baseline as well as the credit quantification procedures. The program regulations also define violations and penalty provisions for MWC sources that do not meet the NO_X emission limits or fail to acquire sufficient credits to meet the limits on a daily basis.

XI. How Did the State Show That Its Plan is Approvable?

In section II of Connecticut's Plan, CTDEP states that the Connecticut General Assembly has granted the Commissioner of the CTDEP broad general authority to carry out his duties to protect the environment. In addition, this section documents the CTDEP's authority to: (1) Adopt emission standards and compliance schedules; (2) enforce applicable laws, regulations, standards and compliance schedules; (3) seek injunctive relief; (4) obtain information necessary to determine compliance; (5) require recordkeeping; (6) conduct inspections; (7) conduct compliance tests; (8) require the use of monitors; (9) require emission reports; and (10) make emissions data available to the public.

In Section III of the State Plan, CTDEP identifies a new regulation, Regulations of Connecticut State Agencies (R.S.C.A.) section 22a–174–38 for Municipal Waste Combustors (Appendix A of the Plan) and the part 70, Title V permit as the enforceable mechanisms. EPA is approving the standards and limitations under section 22a–174–38 for being at least as protective as the Federal requirements contained in subpart Cb for existing large MWC units.

In its State Plan and MWC regulations, CTDEP established a compliance schedule and legally enforceable increments of progress for each large MWC. EPA has reviewed and approved this portion of the State Plan for being at least as protective as Federal requirements for existing large MWC units.

In Section IV of the State Plan, CTDEP listed the five Designated Facilities that make up the MWC unit inventory for Connecticut. CTDEP also included a Table 2 in its Plan that contains the emissions data for Connecticut's MWCs. EPA reviewed and approved this portion of the Plan as meeting the Federal requirements for existing large MWC units. Although section 22a–174–38 regulates both existing MWCs and MWCs constructed after September 20, 1994, this action approves the State Plan only for the purpose of regulating existing large MWC units. The provisions of section 22a–174–38 which apply to new units (constructed after September 20, 1994) are not approved as part of the State Plan.

In Section V of the State Plan, CTDEP describes the emission limits and other requirements of R.S.C.A. Section 22a–174–38. EPA has determined that the applicable requirements of Section 22a–174–38 are at least as protective as the EGs.

In section V of the State Plan, CTDEP states that section 22a–174–38(m) requires MWC owners and operators to comply with any compliance schedules.

In section VII of the State Plan, CTDEP describes its legal authority to require owners and operators of designated facilities to maintain records and report to the State the nature and amount of emissions and any other information necessary to enable the State to judge the compliance status of the affected facilities. Section 22a–174–38 differs significantly from the EGs in that the State requires quarterly, rather than semiannual, reports of instances in which an MWC exceeds emission standards. CTDEP also cites its legal

authority to provide periodic inspection and testing and provisions for making reports of MWC emissions data, correlated with applicable emission standards, available to the public. EPA reviewed and approved these State requirements for being at least as protective as the Federal requirements for existing large MWC units.

In section VIII of the State Plan, CTDEP describes the record of the public hearing process. Appendix D of the State Plan contains the pertinent information. EPA reviewed and approved this portion of the Plan as meeting the minimum Federal public hearing requirements for a State Plan.

In section IX of the State Plan, CTDEP states it commitment to provide annual progress reports to EPA. The reports will include such things as the compliance status, enforcement actions, increments of progress, identification of sources that have ceased operation or started operation, contingency plan actions, any plan revisions, emission inventory information for sources that have started operation, updated emission inventory and compliance information, and copies of technical reports on all performance testing and monitoring, including concurrent process data.

XII. What is Connecticut's Nitrogen Oxides (NO_X) Emissions Trading Program?

As part of the MWC control program regulations, CT included a nitrogen oxides (NO_X emissions trading program. Basically, the program allows MWCs that commenced construction before December 20, 1989, and therefore are not subject to the NSPS, to use NO_X credits to comply with the NO_X emission limits of subsection (c) of the regulation. The regulation allows MWCs constructed after December 20, 1989 to participate in the NO_X credit trading program. However, such sources may not use credits to meet the NO_X limits but may only generate credits if emissions are below the applicable limits and lower than the source's trading baseline.

The trading program regulations define the methodology and formulas for determining, on a daily basis, the quantity of credit that a unit generates or uses, including the recordkeeping and reporting requirements. The trading program regulations define the trading baseline as well as the credit quantification procedures. The program regulations also define violations and penalty provisions for MWC sources that do not meet the NO_X emission limits or fail to acquire sufficient credits to meet the limits on a daily basis.

XIII. Is Connecticut's NO_X Emissions Trading Program Approvable?

In EPA's guidelines, EPA allowed states to include a NO_X emission credit trading program as part of the NO_X control portion of its MWC regulations. The guideline states that such NO_X emissions trading must be approved by EPA.

EPA has reviewed subsection (d) of section 22a–174–38. EPA finds CT's NO_X emissions trading program approvable as an emissions trading program for MWCs according to the EPA's EIP rules, 40 CFR part 51, subpart 51.490 through 51.493. The regulations under section 22a–174–38(d) adequately define the applicability of the program; the state program requirements, such as the program scope; source specific requirements, such as credit calculation procedures, emissions monitoring, recordkeeping, reporting, and compliance requirements; as well as the administrative requirements, schedule, and the enforcement and penalty mechanisms. Additionally, CTDEP currently conducts annual trading program audits which include an accounting of the credits created and used by MWCs. Furthermore, EPA finds that the emissions quantification protocols for credit creation and use under subsection (d)(4) are fully approvable as generic protocols for MWC units to create or use NO_X credits. In this way, upon approval of this regulation, NO_X credits created using the creation formula in that subsection will be considered federally enforceable for other purposes under CT regulations, *e.g.,* for compliance with NO_X RACT limits under section 22a–174–22.

XIV. When Did EPA Publish the Rules?

On December 19, 1995, according to sections 111 and 129 of the Clean Air Act (Act), EPA issued new source performance standards (NSPS) applicable to new MWCs and emissions guidelines (EGs) applicable to existing MWCs. The NSPS and EGs are codified at 40 CFR part 60, subparts Eb and Cb, respectively. *See* 60 FR 65387. Subparts Cb and Eb regulate the following: particulate matter, opacity, sulfur dioxide, hydrogen chloride, oxides of nitrogen, carbon monoxide, lead, cadmium, mercury, and dioxin and dibenzofurans.

On April 8, 1997, the United States Court of Appeals for the District of Columbia Circuit vacated subparts Cb and Eb as they apply to MWC units with capacity to combust less than or equal to 250 tons/day of MSW (small MWCs), consistent with its opinion in *Davis County Solid Waste Management and Recovery District* v. *EPA,* 101 F.3d 1395 (D.C. Cir. 1996), *as amended,* 108 F.3d 1454 (D.C. Cir. 1997). As a result, subparts Eb and Cb apply only to MWC units with individual capacity to combust more than 250 tons/day of municipal solid waste (large MWC units).

XV. Why Does EPA Need To Approve State Plans?

Under section 129 of the Act, EGs are not federally enforceable. Section 129(b)(2) of the Act requires states to submit State Plans to EPA for approval. Each state must show that its State Plan will carry out and enforce the EGs. State Plans must be at least as protective as the EGs, and they become federally enforceable upon EPA's approval.

The procedures for adopting and submitting State Plans are in 40 CFR part 60, subpart B. EPA originally issued the subpart B provisions on November 17, 1975. EPA amended subpart B on December 19, 1995, to allow the subparts developed under section 129 to include specifications that supersede the general provisions in subpart B regarding the schedule for submittal of State Plans, the stringency of the emission limitations, and the compliance schedules. *See* 60 FR 65414.

XVI. Administrative Requirements

A. Executive Order 12866

The Office of Management and Budget (OMB) has exempted this regulatory action from Executive Order 12866, entitled ''Regulatory Planning and Review.''

B. Executive Order 13132

Federalism (64 FR 43255, August 10, 1999) revokes and replaces Executive Orders 12612 (Federalism) and 12875 (Enhancing the Intergovernmental Partnership). Executive Order 13132 requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' is defined in the Executive Order to include regulations that 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.'' Under Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds

necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has federalism implications and that preempts State law unless the Agency consults with State and local officials early in the process of developing the proposed regulation.

Under section 129 of the Act, EPA is required to approve State Plans that meet the criteria of the statute. Furthermore, this final rule 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, as specified in Executive Order 13132, because it merely approves a state rule implementing a federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. Thus, the requirements of section 6 of the Executive Order do not apply to this rule.

C. Executive Order 13045

Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997), applies to any rule that: (1) Is determined to be ''economically significant'' as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This rule is not subject to Executive Order 13045 because it does not involve decisions intended to mitigate environmental health or safety risks that EPA has reason to believe may have a disproportionate effect on children.

D. Executive Order 13084

Under Executive Order 13084, EPA may not issue a regulation that is not required by statute, that significantly affects or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the tribal governments. If the mandate is unfunded, EPA must provide to the Office of Management and Budget, in a separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected and other representatives of Indian tribal governments ''to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities.''

Today's action does not create any new requirements on any entity affected by this State Plan. Thus, the action will not significantly or uniquely affect the communities of Indian tribal governments. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

E. Regulatory Flexibility Act

Under the Regulatory Flexibility Act, 5 U.S.C. 600 *et seq.*, EPA must prepare a regulatory flexibility analysis assessing the impact of any proposed or final rule on small entities. 5 U.S.C. 603 and 604. Alternatively, EPA may certify that the rule will not have a significant impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and government entities with jurisdiction over populations of less than 50,000.

State Plan approvals under section 111(d) and section 129(b)(2) of the Clean Air Act do not create any new requirements on any entity affected by this rule, including small entities. They simply approve requirements that the state is already imposing. Furthermore, in developing the MWC EGs and standards, EPA prepared a written statement pursuant to the Regulatory Flexibility Act which it published in the 1995 promulgation notice (*see* 60 FR 65413). In accordance with EPA's determination in issuing the 1995 MWC EGs, this State Plan does not include any new requirements that will have a significant economic impact on a substantial number of small entities. Therefore, because the Federal 111(d) Plan approval does not impose any new requirements and pursuant to section 605(b) of the Regulatory Flexibility Act, the Regional Administrator certifies that this rule will not have a significant impact on a substantial number of small entities.

F. Unfunded Mandates

Under section 202 of the Unfunded Mandates Reform Act of 1995 (''Unfunded Mandates Act''), signed into law on March 22, 1995, EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in estimated costs to State, local, or tribal governments in the aggregate, or to the private sector, of $100 million or more. Under section 205, EPA must select the most cost-effective and least burdensome alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted on by the rule.

In developing the MWC EGs and standards, EPA prepared a written statement pursuant to section 202 of the Unfunded Mandates Act which it published in the 1995 promulgation notice (*see* 60 FR 65405 to 65412). The EPA has determined that this State Plan does not include any new Federal mandates above those previously considered during promulgation of the 1995 MWC guidelines. In approving the State Plan, EPA is approving pre-existing requirements under State law and imposing no new requirements. Accordingly, no additional costs to State, local, or tribal governments, or to the private sector, result from EPA's approval of State Plan provisions, nor will EPA's approval of the State Plan significantly or uniquely affect small governments. Thus, this action is not subject to the requirements of sections 202, 203, 204, and 205 of the Unfunded Mandates Act.

G. Submission to Congress and the General Accounting Office

Under 5 U.S.C. section 801(a)(1)(A), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996, EPA submitted 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 General Accounting Office prior to publication of the rule in today's **Federal Register**. This rule is not a ''major rule'' as defined by 5 U.S.C. section 804(2).

H. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (''NTTAA''), Pub. L. 104–

113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.*, materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

In approving or disapproving state plans under section 129 of the Clean Air Act, EPA does not have the authority to revise or rewrite the State's rule, so the Agency does not have authority to require the use of particular voluntary consensus standards. Accordingly, EPA has not sought to identify or require the State to use voluntary consensus standards. Furthermore, Connecticut's Plan incorporates by reference test methods and sampling procedures for existing MWC units already established by the emissions guidelines for MWCs at 40 CFR part 60, subpart Cb, and does not establish new technical standards for MWCs. Therefore, the requirements of the NTTAA are not applicable to this final rule.

I. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by June 20, 2000. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review, nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2), 42 U.S.C. 7607(b)(2)). EPA encourages interested parties to comment in response to the proposed rule rather than petition for judicial review, unless the objection arises after the comment period allowed for in the proposal.

List of Subjects in 40 CFR Part 62

Administrative practice and procedure, Air pollution control, Environmental protection, Intergovernmental relations, Reporting and recordkeeping requirements, sulfur oxides.

Dated: March 31, 2000.

Mindy S. Lubber,

Regional Administrator, EPA New England.

40 CFR part 62 is amended as follows:

PART 62—[AMENDED]

1. The authority citation for part 62 continues to read as follows:

Authority: 42 U.S.C. 7401–7642.

Subpart H—Connecticut

2. Part 62 is amended by adding a new § 62.1500 and a new undesignated center heading to subpart H to read as follows:

Plan for the Control of Designated Pollutants From Existing Facilities (Section 111(d) Plan)

§ 62.1500 Identification of Plan.

(a) Identification of Plan. Connecticut Plan for the Control of Designated Pollutants from Existing Plants (section 111(d) Plan).

(b) The plan was officially submitted as follows:

(1) Plan for Implementing the Municipal Waste Combustor Guidelines and New Source Performance Standards, submitted on October 1, 1999.

(c) Designated facilities. The plan applies to existing sources, constructed on or before September 20, 1994, in the following categories of sources:

(1) Existing municipal waste combustor units greater than 250 tons per day.

3. Part 62 is amended by adding a new § 62.1501 and a new undesignated center heading to subpart H to read as follows:

Metals, Acid Gases, Organic Compounds and Nitrogen Oxide Emissions From Existing Municipal Waste Combustor Units With the Capacity To Combust Greater Than 250 Tons Per Day of Municipal Solid Waste

§ 62.1501 Identification of sources.

(a) The plan applies to the following existing municipal waste combustor facilities:

(1) Bridgeport RESCO in Bridgeport.

(2) Ogden Martin Systems of Bristol.

(3) Resource Recovery Systems of Mid-Connecticut in Hartford.

(4) Riley Energy Systems of Lisbon.

(5) American Ref-Fuel Company of Southeastern Connecticut in Preston.

(b) [Reserved]

[FR Doc. 00–9652 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 62

[Docket# ID–02–0001; FRL–6580–6]

Approval and Promulgation of Hospital/Medical/Infectious Waste Incinerators State Plan for Designated Facilities and Pollutants: Idaho

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: EPA is approving the State of Idaho's section 111(d) State Plan for controlling emissions from existing Hospital/Medical/Infectious Waste Incinerators (HMIWI). The plan was submitted on December 16, 1999, to fulfill the requirements of sections 111(d) and 129 of the Clean Air Act. The State Plan adopts and implements the Emissions Guidelines applicable to existing HMIWIs, and establishes emission limits and controls for sources constructed on or before June 20, 1996. EPA has determined that Idaho's State Plan meets CAA requirements and hereby approves this State Plan, thus making it federally enforceable.

DATES: This action will be effective on June 20, 2000, without further notice, unless EPA receives relevant adverse comments by May 22, 2000. If EPA receives such comments, then it will publish a timely withdrawal of the direct final rule in the **Federal Register** and inform the public that this rule will not take effect.

ADDRESSES: Written comments should be addressed to: Catherine Woo, US EPA, Region X, Office of Air Quality (OAQ–107), 1200 Sixth Avenue, Seattle, Washington 98101.

Copies of materials submitted to EPA may be examined during normal business hours at the following location: US EPA, Region X, Office of Air Quality, 1200 Sixth Avenue, Seattle, Washington 98101.

FOR FURTHER INFORMATION CONTACT: Catherine Woo, US EPA, Region X, Office of Air Quality (OAQ–107), 1200 Sixth Avenue, Seattle, Washington 98101, (206) 553–1814.

SUPPLEMENTARY INFORMATION: Throughout this document, whenever we, us or our is used, this refers to EPA. Information regarding this action is presented in the following order:

I. EPA Action
What action is EPA taking today?
Why is EPA taking this action?
Who is affected by Idaho's State Plan?
How does this approval affect sources located in Indian Country?

How does this approval relate to the Federal Plan?
II. Background
What is a State Plan?
What is a HMIWI State Plan?
Why are we requiring Idaho to submit a HMIWI State Plan?
What are the requirements for a HMIWI State Plan?
III. Idaho's State Plan
What is contained in the Idaho State Plan?
What approval criteria did we use to evaluate Idaho's State Plan?
IV. EPA Rulemaking Action
V. Administrative Requirements

I. EPA Action

What Action Is EPA Taking Today?

We are approving the State of Idaho's section 111(d) State Plan for controlling emissions from existing Hospital/Medical/Infectious Waste Incinerators (HMIWI). Idaho submitted its State Plan on December 16, 1999, to fulfill the requirements of sections 111(d) and 129 of the Clean Air Act (CAA). The State Plan adopts and implements the Emissions Guidelines (EG) applicable to existing HMIWIs, and establishes emission limits and controls for sources constructed on or before June 20, 1996. This approval, once effective, will make the Idaho HMIWI rules included in the plan federally enforceable.

Why Is EPA Taking This Action?

We have evaluated Idaho's HMIWI State Plan for consistency with the CAA, EPA guidelines and policy. We have determined that Idaho's State Plan meets all requirements, and, therefore, we are approving Idaho's plan to implement and enforce the standards applicable to existing HMIWI.

Who Is Affected by Idaho's State Plan?

Idaho's State Plan regulates all the sources designated by EPA's EG for existing HMIWIs which commenced construction on or before June 20, 1996. If your facility meets this criteria, then you are subject to these regulations.

How Does This Approval Affect Sources Located in Indian Country?

Idaho's State Plan does not cover facilities located in Indian Country. Therefore, any sources located in Indian Country will be subject to the Federal plan, once promulgated (see below).

How Does This Approval Relate to the Federal Plan?

The EPA plans to promulgate a Federal Plan which will cover sources located in Indian Country and sources for which there is no approved State Plan. Because there is no Federal Plan yet, existing HMIWI sources are not currently subject to any federal requirements. However, upon approval of Idaho's State Plan, HMIWI facilities within Idaho's jurisdiction will be subject to Idaho's State Plan as of the effective date of this action.

II. Background

What Is a State Plan?

Section 111 of the CAA, ''Standards of Performance for New Stationary Sources,'' authorizes us to set air emissions standards for certain categories of sources. These standards are called New Source Performance Standards (NSPS). When a NSPS is promulgated for new sources, section 111(d) also requires that we publish an EG applicable to the control of the same pollutant from existing (designated) facilities. States with designated facilities must then develop a State Plan to adopt the EG into the State's body of regulations. States must also include in their State Plan other elements, such as inventories, legal authority, and public participation documentation, to demonstrate their ability to enforce the State Plans.

What Is a HMIWI State Plan?

An HMIWI State Plan is a State Plan (as described above) that controls air pollutant emissions from existing incinerators which burn hospital waste or medical/infectious waste.

Why Are We Requiring Idaho To Submit a HMIWI State Plan?

When we developed NSPS for HMIWIs, we simultaneously developed the EG to control air emissions from existing HMIWIs (see 62 FR 48348–48391, September 15, 1997). Under section 129 of the CAA, the EG are not federally enforceable; therefore, section 129 of the CAA also requires states to submit to EPA for approval State Plans that implement and enforce the EG. These State Plans must be at least as protective as the EG, and they become federally enforceable upon approval by EPA. The procedures for adopting and submitting State Plans are located in 40 CFR part 60, subpart B. If a State fails to have an approvable plan in place by September 15, 1999, the EPA is required to promulgate a Federal plan to establish requirements for those sources not under an EPA-approved State Plan. Even though EPA has not yet promulgated such a plan, Idaho's State Plan is still approvable since it was deemed at least as protective as the standards set in the EG. Idaho has developed and submitted a State Plan, as required by section 111(d) of the CAA, to gain federal approval to implement and enforce the HMIWI EG.

What Are the Requirements for a HMIWI State Plan?

A section 111(d) State Plan submittal must meet the requirements of 40 CFR part 60, subpart B, sections 60.23 through 60.26, and 40 CFR part 60, subpart Ce. Subpart B contains the procedures for adoption and submittal of State Plans. This subpart addresses public participation, legal authority, emission standards and other emission limitations, compliance schedules, emission inventories, source surveillance, and compliance assurance and enforcement requirements. EPA promulgated the EG as 40 CFR part 60, subpart Ce on September 15, 1997. Subpart Ce contains the technical requirements for existing HMIWI sources and applies to sources that commenced construction on or before June 20, 1996. A State will generally address the HMIWI technical requirements by adopting by reference subpart Ce. The section 111(d) state plan is required to be submitted within one year of the EG promulgation date, i.e., by September 15, 1998. Prior to submittal to us, the State must make available to the public the State Plan and provide opportunity for public comment.

III. Idaho's State Plan

What Is Contained in the Idaho State Plan?

The State of Idaho submitted its section 111(d)/129 State Plan on December 16, 1999, for implementing EPA's EG for existing HMIWIs. Idaho adopted the EG requirements into IDAPA 16.01.01.862 (effective November 19, 1999) entitled, ''Emission Guidelines for HMIWI That Commenced Construction Before June 20, 1996.'' Idaho's section 111(d) Plan contains:

(1) A demonstration of the State's legal authority to implement the section 111(d) State Plan;

(2) State Rules adopted into 16.01.01.862 as the mechanism for implementing and enforcing the State Plan;

(3) Emission inventories of all Idaho's applicable sources, which is approximately fifteen existing HMIWIs. In these inventories, all designated pollutants have been identified and data have been provided for each;

(4) Emission limits that are as protective as the EG;

(5) Enforceable compliance schedules whereby all sources must comply with all emission standards within one year from the effective date of the State Plan. The State Plan was effective December 16, 1999; therefore, final compliance will be December 16, 2000;

(6) Testing, monitoring, reporting and recordkeeping requirements for the designated facilities;

(7) Records for the public notice and hearing; and

(8) Provisions for Idaho's progress reports to EPA.

What Approval Criteria Did We Use To Evaluate Idaho's State Plan?

We reviewed Idaho's HMIWI State Plan for approval against the following criteria: 40 CFR part 60, subpart B, sections 60.23 through 60.26; and 40 CFR part 60, subpart Ce, sections 60.30(e) through 60.39(e). A detailed discussion of our evaluation of Idaho's State Plan is included in our technical support document located in the official file for this action and available from the EPA contact listed above. We have determined that Idaho's HMIWI State Plan meets all of the applicable approval criteria.

IV. EPA Rulemaking Action

We are approving, through direct final rulemaking action, Idaho's section 111(d) and 129 State Plan for HMIWIs. EPA is publishing this action without prior proposal because the Agency views this as a noncontroversial action and anticipates no adverse comments. However, in the proposed rules section of this **Federal Register** publication, EPA is publishing a separate document that will serve as the proposal to approve the Idaho State Plan should relevant adverse comments be filed. This action will be effective on June 20, 2000, without further notice, unless EPA receives relevant adverse comments by May 22, 2000.

If EPA receives such comments, then it will publish a timely withdrawal in the **Federal Register** informing the public that this direct final rule will not take effect. All public comments received will then be addressed in a subsequent final rule based on the proposed rule. EPA will not institute a second comment period. Parties interested in commenting should do so at this time. If no such comments are received, the public is advised that this rule will be effective on June 20, 2000, and no further action will be taken on the proposed rule.

V. Administrative Requirements

A. General Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action,'' and therefore is not subject to review by the Office of Management and Budget. This action merely approves state law as meeting federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it 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). For the same reason, this rule also does not significantly or uniquely affect the communities of tribal governments, as specified by Executive Order 13084 (63 FR 27655, May 10, 1998). This rule 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, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it merely approves a state rule implementing a federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing State Plan submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a State Plan submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a State Plan submission, to use VCS in place of a State Plan submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. As required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996), in issuing this rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct. EPA has complied with Executive Order 12630 (53 FR 8859, March 15, 1988) by examining the takings implications of the rule in accordance with the ''Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings'' issued under the executive order. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

B. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this 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 rule is not a ''major rule'' as defined by 5 U.S.C. 804(2).

C. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by June 20, 2000. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 62

Environmental protection, Administrative practice and procedure, Air pollution control, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: April 4, 2000.

Chuck Clarke,

Regional Administrator, Region 10.

40 CFR Part 62 of the Code of Federal Regulations is amended as follows:

PART 62—[AMENDED]

1. The authority citation for Part 62 continues to read as follows:

Authority: 42 U.S.C. 7401–7642.

Subpart N—Idaho

2. Subpart N is amended by adding § 62.3110 and an undesignated center heading to read as follows:

* * * * *

Metals, Acid Gases, Organic Compounds, Particulates and Nitrogen Oxide Emissions From Existing Hospital/Medical/Infectious Waste Incinerators

§ 62.3110 Identification of plan.

(a) The Idaho Division of Environmental Quality submitted to the Environmental Protection Agency a State Plan for the control of air emissions from Hospital/Medical/Infectious Waste Incinerators on December 16, 1999.

(b) Identification of Sources: The Idaho State Plan applies to all existing HMIWI facilities for which construction was commenced on or before June 20, 1996, as described in 40 CFR part 60, subpart Ce. (This plan does not apply to facilities on tribal lands).

(c) The effective date for the portion of the plan applicable to existing Hospital/Medical/Infectious Waste Incinerators is June 20, 2000.

[FR Doc. 00–9648 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 62

[Docket No. OR–03–0001; FRL–6580–9]

Approval and Promulgation of State Plans for Designated Facilities and Pollutants: Oregon; Negative Declaration

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: EPA publishes regulations under Sections 111(d) and 129 of the Clean Air Act (CAA) requiring states to submit plans to EPA. These plans show how states intend to control the emissions of the designated pollutants from designated facilities. Federal regulations provide that when no such designated facilities exist within a state's boundaries, the affected state may submit a letter of ''negative declaration'' instead of a control plan. On October 20, 1998, the State of Oregon submitted a negative declaration adequately certifying that there are no hospital/medical/infectious waste incinerators (HMIWI) located within its boundaries. On November 6, 1998, Oregon submitted a clarification to their negative declaration, indicating one of their sources to be a co-combustor, and the rest to be crematories, both categories which are considered exempt from this emission guideline (EG.) EPA is approving Oregon's negative declaration.

DATES: This action will be effective on June 20, 2000 without further notice, unless EPA receives relevant adverse comments by May 22, 2000. If EPA receives such comments, then it will publish a timely withdrawal of the direct final rule in the **Federal Register** and inform the public that this rule will not take effect.

ADDRESSES: Written comments should be addressed to: Catherine Woo, US EPA, Region X, Office of Air Quality (OAQ–107), 1200 Sixth Avenue, Seattle, Washington 98101.

Copies of materials submitted to EPA may be examined during normal business hours at the following location: US EPA, Region X, Office of Air Quality, 1200 Sixth Avenue, Seattle, Washington 98101.

FOR FURTHER INFORMATION CONTACT: Catherine Woo, US EPA, Region X, Office of Air Quality (OAQ–107), 1200 Sixth Avenue, Seattle, Washington 98101, (206) 553–1814.

SUPPLEMENTARY INFORMATION: Throughout this document, whenever we, us or our is used, this refers to EPA. Information regarding this action is presented in the following order:

I. What Action is EPA Taking Today?
II. Why is Oregon Required to Submit a Negative Declaration?
III. When Did the Requirements for Existing HMIWIs First Become Known?
IV. When Did Oregon Submit Its Negative Declaration?
V. How Does This Approval Affect Sources Located in Indian Country?
VI. Administrative Requirements

I. What Action is EPA Taking Today?

We are approving the State of Oregon's negative declaration of air emissions from HMIWIs. This negative declaration fulfills the requirements of Sections 111(d) and 129 of the CAA for existing HMIWIs.

EPA is publishing this action without prior proposal because the Agency views this as a noncontroversial action and anticipates no adverse comments. However, in the proposed rules section of this **Federal Register** publication, EPA is publishing a separate document that will serve as the proposal to approve the Oregon negative declaration should relevant adverse comments be filed. This action will be effective on June 20, 2000 without further notice, unless EPA receives relevant adverse comments by May 22, 2000.

If EPA receives such comments, then it will publish a timely withdrawal in the **Federal Register** informing the public that this direct final rule will not take effect. All public comments received will then be addressed in a subsequent final rule based on the proposed rule. EPA will not institute a second comment period. Parties interested in commenting should do so at this time. If no such comments are received, the public is advised that this rule will be effective on June 20, 2000 and no further action will be taken on the proposed rule.

II. Why is Oregon Required to Submit a Negative Declaration?

Section 111 of the CAA, ''Standards of Performance for New Stationary Sources,'' authorizes us to set air emissions standards for certain categories of sources. These standards are called New Source Performance Standards (NSPS). When a NSPS is promulgated for new sources, Section 111(d) also requires that we publish an EG applicable to the control of the same pollutant from existing (designated) facilities. States with designated facilities must then develop a State Plan to adopt the EG into the State's body of regulations. If a State does not have a particular designated facility located within its boundaries, EPA requires that a negative declaration be submitted in lieu of a State Plan for that designated facility (see 40 CFR 62.06). Oregon does not have any designated facilities within its boundaries, so it is required to submit a negative declaration.

III. When Did the Requirements for Existing HMIWIs First Become Known?

On June 26, 1996 (see 61 FR 31736), EPA proposed HMIWIs as designated facilities. EPA specified particulate matter, opacity, sulfur dioxide, hydrogen chloride, oxides of nitrogen, carbon monoxide, lead, cadmium, mercury, and dioxins and dibenzofurans as designated pollutants by proposing Emission Guidelines (EG) for existing HMIWIs. These guidelines were published in final form as 40 CFR Part 60, Subpart Ce, on September 15, 1997 (see 62 FR 48348).

IV. When Did Oregon Submit Its Negative Declaration?

On October 20, 1998, the Oregon Department of Environmental Quality submitted a letter to us certifying that there are no existing HMIWIs subject to 40 CFR Part 60, Subpart Ce. On November 8, 1998, Oregon sent a clarifying letter to indicate exempt

sources within its jurisdiction. EPA is publishing this negative declaration today, as public notification of Oregon's exemption from submitting a State Plan, as required under 40 CFR Part 60, Subpart B. However, in the unlikely event that a designated source is discovered within the State of Oregon, this source will be subject to the requirements of a Federal Plan (to be promulgated.) If the State chooses to do so, it can submit a State Plan for any newly discovered designated sources as well. At the time of submittal, the State Plan will need to be at least as protective as those requirements promulgated by the EPA.

V. How Does This Approval Affect Sources Located in Indian Country?

Oregon's jurisdiction does not cover facilities located in Indian Country. Since this action is approving Oregon's declaration that there are no HMIWI facilities within its jurisdiction, this action does not affect Indian Country. However, if there are any sources located in Indian Country, they will be subject to the Federal plan, once promulgated. The EPA plans to promulgate a Federal Plan which will cover sources located in Indian Country and sources for which there is no approved State Plan (or no approved negative declaration). Because there is no Federal Plan yet, existing HMIWI sources in Indian Country are not currently subject to any federal requirements.

VI. Administrative Requirements

A. General Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action,'' and therefore is not subject to review by the Office of Management and Budget. This action merely approves state law as meeting federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it 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). For the same reason, this rule also does not significantly or uniquely affect the communities of tribal governments, as specified by Executive Order 13084 (63 FR 27655, May 10, 1998). This rule 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, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it merely approves a state rule implementing a federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing State Plan submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a State Plan submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a State Plan submission, to use VCS in place of a State Plan submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. As required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996), in issuing this rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct. EPA has complied with Executive Order 12630 (53 FR 8859, March 15, 1988) by examining the takings implications of the rule in accordance with the ''Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings'' issued under the executive order. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

B. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this 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 rule is not a ''major rule'' as defined by 5 U.S.C. 804(2).

C. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by June 20, 2000. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 62

Environmental protection, Administrative practice and procedure, Air pollution control, Intergovernmental relations, Methane, Municipal Solid Waste Landfills, Non-methane organic compounds, Reporting and recordkeeping requirements.

Dated: April 4, 2000.

Chuck Clarke,

Regional Administrator, Region X.

40 CFR is amended as follows:

1. The authority citation for part 62 continues to read as follows:

Authority: 42 U.S.C. 7401–7642.

Subpart MM—Oregon

2. Section 62.9350 is amended by adding paragraphs (b)(6) and (c)(6) to read as follows:

§ 62.9350 Identification of plan.

* * * * *

(b) * * *

(6) Control of metals, acid gases, organic compounds, particulates and nitrogen oxide emissions from existing Hospital/Medical/Infectious Waste Incinerators was submitted by the Oregon Department of Environmental Quality on October 20, 1998, and November 6, 1998.

(c) * * *

(6) Existing Hospital/Medical/Infectious Waste Incinerators.

* * * * *

3. Section 62.9515 and an undesignated center heading are added to Subpart MM to read as follows:

Metals, Acid Gases, Organic Compounds, Particulates and Nitrogen Oxide Emissions From Existing Hospital/Medical/Infectious Waste Incinerators

§ 62.9515 Identification of Sources—Negative Declaration.

On October 20, 1998, and November 6, 1998, the Oregon Department of Environmental Quality submitted a letter certifying that there are no existing Hospital/Medical/Infectious Waste Incinerators in the State subject to the Emission Guidelines under part 60, subpart B, of this chapter.

[FR Doc. 00–10033 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AD–FRL–6582–3]

National Emission Standards for Hazardous Air Pollutants for Source Categories

AGENCY: Environmental Protection Agency (EPA).

ACTION: Interpretative rule.

SUMMARY: This action clarifies that all stationary combustion turbines are subject to the provisions of Subpart B—Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections 112(g) and 112(j) (i.e., case-by-case maximum achievable control technology (MACT) determinations).

DATES: Effective April 21, 2000.

FOR FURTHER INFORMATION CONTACT: For further information, contact Mr. Sims Roy, Combustion Group, Emission Standards Division (MD–13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number: (919) 541–5263, facsimile:(919) 541–5450, electronic mail address: roy.sims@epa.gov.

SUPPLEMENTARY INFORMATION: *Regulated entities.* All new stationary combustion turbines, which meet the criteria for major sources, are the regulated entities addressed by this interpretative rule. However, this interpretative rule does not subject these entities to new or additional rule requirements; it merely resolves confusion which appears to exist in some cases over whether such sources are covered under 40 CFR part 63, Subpart B—Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections 112(g) and 112(j).

I. What Is the Background for This Interpretative Rule

Subpart B requires ''case-by-case'' determinations of MACT for major sources constructed after June 29, 1998. It appears that there is confusion regarding the applicability of subpart B to new stationary combustion turbines in some situations. This interpretative rule resolves this confusion by clarifying that all new stationary combustion turbines, regardless of configuration, end use, or location, are subject to subpart B, provided they also meet the definition of a major source.

Stationary combustion turbines were included on the list of source categories under section 112(c)(5) of the Clean Air Act (CAA) for the development of emission standards, thus, EPA is currently developing national emission standards for hazardous air pollutants (NESHAP) for this source category. Proposal of the NESHAP is anticipated in late 2000, with promulgation in early 2002.

Electric utility steam generating units, on the other hand, are excluded from subpart B and the development of emission standards under section 112, unless or until such time as they are added to the source category list under section 112(c)(5) of the CAA. Since, among other uses, stationary gas turbines may be used to generate electricity, confusion has arisen whether stationary combustion turbines used to generate electricity are considered ''electric utility steam generating units.''

An ''electric utility steam generating unit'' is defined in subpart B as follows:

> Electric utility steam generating unit means any fossil fuel fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A unit that co-generates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electric output to any utility power distribution system for sale shall be considered an electric utility steam generating unit.

The phrase ''steam generating unit'' in the term ''electric utility steam generating unit'' is critical to understanding which types of combustion units are covered by this definition and which types are not. For example, this definition clearly covers a conventional fossil fuel fired steam generating unit (e.g., coal-fired boiler) which extracts heat from the combustion of fuel and generates steam for use in a steam turbine which, in turn, provides shaft power to spin an electric generator and generate electricity.

This definition does not cover a stationary combustion turbine which extracts shaft power from the combustion of fuel and spins an electric generator to generate electricity. The combustion turbine does not extract heat to generate steam; in fact, there is no steam generating unit at all in this example. Hence, the definition ''electric utility steam generating unit'' does not include stationary combustion turbines, and such turbines are subject to case-by-case MACT determinations.

The confusion surrounds combined cycle systems. A combined cycle system, consistent with the meaning of the word ''combined,'' is a combination of a stationary combustion turbine and a waste heat recovery unit.

In a combined cycle system, a combustion turbine extracts shaft power from the combustion of fuel and spins an electric generator to generate electricity. The hot exhaust gases from the combustion turbine are then routed to a separate ''waste heat recovery unit.'' The waste heat recovery unit extracts heat from the gases and generates steam for use in a steam turbine which, in turn, provides shaft power to spin an electric generator and generate electricity.

The combustion turbine in a combined cycle system does not extract heat to generate steam. It is not a ''steam generating unit,'' and it is not an ''electric utility steam generating unit.'' New combustion turbines in combined cycle systems, therefore, must undergo case-by-case MACT determinations.

The waste heat recovery unit in a combined cycle system, however, does generate steam. It is an electric utility steam generating unit. New waste heat recovery units in combined cycle systems, therefore, are excluded from subpart B (i.e., case-by-case MACT determination).

While new waste heat recovery units in combined cycle systems are excluded from case-by-case MACT, in many cases this is a moot point since they are not an emission source. The sole emission source, in the type of combined cycle system outlined above, is the combustion turbine. The emissions from the combustion turbine pass through the waste heat recovery unit, but the waste heat recovery unit is not a source of additional emissions.

There is another type of combined cycle system, however, in which the waste heat recovery unit does contribute additional emissions. In these types of combined cycle systems, fuel is burned in the duct, through the use of ''duct

burners,'' just before the gases enter the waste heat recovery unit.

These duct burners are analogous to the burners in steam generating units (i.e., boilers). Their only purpose is to burn fuel to generate more heat for extraction by the waste heat recovery unit in order for it to generate more steam. As a result, duct burners (where they are used) are considered part of the waste heat recovery unit in a combined cycle system, just as the burners in a boiler are considered part of the boiler.

As outlined above, the waste heat recovery unit in a combined cycle system is an electric utility steam generating unit. Duct burners in these types of systems, therefore, are also excluded from subpart B (i.e., case-by-case MACT determination).

II. What Additional Information Is Available?

The EPA is developing NESHAP for combustion turbines. This effort has lead to a collection of information regarding the performance, as well as the costs, associated with the use of various technologies to reduce emissions of hazardous air pollutants (HAP) from stationary combustion turbines.

With this clarification that new stationary combustion turbines are subject to subpart B, EPA is making available two memoranda, ''Hazardous Air Pollutant (HAP) Emission Control Technology for New Stationary Combustion Turbines'' and ''Oxidation Catalyst Costs for New Stationary Combustion Turbines,'' which compile and summarize the information collected by EPA. These memoranda may be of assistance and as a result, help to expedite the process of case-by-case MACT determinations. These memoranda may be obtained by contacting EPA as shown under **FOR FURTHER INFORMATION CONTACT** or downloaded directly by logging on to the following EPA website: http://www.epa.gov/ttn/uatw/combust/turbine.

III. What Are the Impacts Associated With This Interpretative Rule?

Subpart B applies to all new major stationary sources for which emission standards have not been developed except electric utility steam generating units. As a result, subpart B applies to new major source stationary combustion turbines.

This interpretative rule merely clarifies this point, it does not subject new stationary combustion turbines to any new or additional regulatory requirements. As a result, there are no impacts associated with this interpretative rule.

IV. Administrative Requirements

Section 553 of the Administrative Procedure Act, 5 U.S.C. 553(b)(B), provides that, when an agency for good cause finds that notice and public procedure are impracticable, unnecessary or contrary to the public interest, the agency may issue a rule without providing notice and an opportunity for public comment. We have determined that there is good cause for issuing today's interpretative rule without prior proposal and opportunity for comment because we are merely clarifying the applicability of Subpart B—Requirements for Control Technology Determinations for Major Sources in Accordance With Clean Air Act Sections 112 (g) and 112 (j). Thus, notice and public procedure are unnecessary, and we find that this constitutes good cause under 5 U.S.C. 553(b)(B).

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action'' and, therefore, is not subject to review by the Office of Management and Budget. Because we have made a ''good cause'' finding that this action is not subject to notice-and-comment requirements under the Administrative Procedure Act or any other statute, it is not subject to the regulatory flexibility provisions of the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*), or to sections 202 and 205 of the Unfunded Mandates Reform Act of 1995 (UMRA) (Public Law 104–4).

In addition, this action does not significantly or uniquely affect small governments or impose a significant intergovernmental mandate, as described in sections 203 and 204 of UMRA. This interpretative rule also does not significantly or uniquely affect the communities of tribal governments, as specified by Executive Order 13084 (63 FR 27655, May 10, 1998). This interpretative rule 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, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999).

This interpretative rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant. This action does not involve technical standards; thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This interpretative rule also does not involve special consideration of environmental justice related issues as required by Executive Order 12898 (59 FR 7629, February 16, 1994).

In issuing this interpretative rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct, as required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996). The EPA has complied with Executive Order 12630 (53 FR 8859, March 15, 1988) by examining the takings implications of the interpretative rule in accordance with the ''Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings'' issued under the Executive Order. This interpretative rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). The EPA's compliance with these statutes and Executive Orders for the underlying rule is discussed in the March 29, 1996 **Federal Register** document (61 FR 14029).

The Congressional Review Act (5 U.S.C. 801 *et seq.*), as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. Section 808 allows the issuing agency to make a rule effective sooner than otherwise provided by the Congressional Review Act if the agency makes a good cause finding that notice and public procedure is impracticable, unnecessary or contrary to the public interest. This determination must be supported by a brief statement (5 U.S.C. 808(2)).

As stated previously, we have made such a good cause finding, including the reasons therefor, and established an effective date of April 21, 2000.

The EPA will submit a report containing this interpretative 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 interpretative 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 63

Environmental protection, Air emissions control, Hazardous air pollutants, Combustion turbines.

Dated: April 13, 2000.

Robert Perciasepe,

Assistant Administrator, Office of Air and Radiation.

[FR Doc. 00–9925 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

GENERAL SERVICES ADMINISTRATION

41 CFR Parts 301–51, 301–52, 301–54, 301–70, 301–71 and 301–76

[FTR Amendment 92]

RIN 3090–AH24

Federal Travel Regulation; Mandatory Use of the Travel Charge Card

AGENCY: Office of Governmentwide Policy, GSA.

ACTION: Final rule.

SUMMARY: This final rule amends Federal Travel Regulation (FTR) Amendment 90 published in the **Federal Register** on Wednesday, January 19, 2000 (65 FR 3054) concerning payment by the Government of expenses connected with official Government travel. This final rule further implements the requirements of Public Law 105–264.

DATES: This final rule is effective April 21, 2000, and applies to payment of expenses in connection with official Government travel performed on or after May 1, 2000.

FOR FURTHER INFORMATION CONTACT: Jim Harte, Office of Governmentwide Policy, Travel and Transportation Management Policy Division, at (202) 501–1538.

SUPPLEMENTARY INFORMATION:

A. Background

Pursuant to Public Law 105–264, subsection 2(a), the Administrator of General Services is required to issue regulations requiring Federal employees to use the travel charge card established pursuant to the United States Travel and Transportation Payment and Expense Control System, or any Federal contractor-issued travel charge card, for all payments of expenses of official Government travel. Additionally, Public Law 105–264 requires the Administrator of General Services to issue regulations on reimbursement of travel expenses and collection of delinquent amounts upon written request of a Federal contractor.

The General Services Administration (GSA), after an analysis of additional data, has:

(1) Determined that certain relocation expenses (excluding en route travel and househunting expenses) are not technically ''travel'' expenses and, therefore, are not covered under the provisions of the statute.

(2) Established the date of May 1, 2002, for agencies to reach a seven-calendar day limit for reviewing travel claims.

(3) Permitted an agency to either calculate late payment fees using the Prompt Payment Act Interest Rate or a flat amount based on an agency average of travel claims, but not less than the prompt payment amount.

(4) Deleted health insurance from consideration as disposable pay.

B. Regulatory Flexibility Act

This final rule is not required to be published in the **Federal Register** for notice and comment; therefore, the Regulatory Flexibility Act does not apply.

C. Executive Order 12866

GSA has determined that this final rule is not a significant regulatory action for the purposes of Executive Order 12866 of September 30, 1993.

D. Paperwork Reduction Act

The Paperwork Reduction Act does not apply because this final rule does not impose recordkeeping or information collection requirements, or the collection of information from offerors, contractors, or members of the public which require the approval of the Office of Management and Budget (OMB) under 44 U.S.C. 501 *et seq.*

E. Small Business Regulatory Enforcement Fairness Act

This final rule is also exempt from congressional review prescribed under 5 U.S.C. 801 since it relates solely to agency management and personnel.

List of Subjects in 41 CFR Parts 301–51, 301–52, 301–54, 301–70, 301–71, and 301–76

Government employees, Travel and transportation expenses.

For the reasons set forth in the preamble, 41 CFR Chapter 301 is amended as follows:

PART 301–51—PAYING TRAVEL EXPENSES

1. The authority citation for 41 CFR part 301–51 continues to read as follows:

Authority: 5 U.S.C. 5707. Subpart A is issued under the authority of Sec. 2, Pub. L. 105–264, 112 Stat. 2350 (5 U.S.C. 5701 note); 40 U.S.C. 486(c).

2. Section 301–51.2 is amended by adding paragraph (l) to read as follows:

§ 301–51.2 What official travel expenses and/or classes of employees are exempt from the mandatory use of the Government contractor-issued travel charge card?

* * * * *

(l) Relocation allowances prescribed in chapter 302 of this title, except en-route travel and househunting trip expenses.

PART 301–52—CLAIMING REIMBURSEMENT

3. The authority citation for 41 CFR part 301–52 continues to read as follows:

Authority: 5 U.S.C. 5707; 40 U.S.C. 486(c); Sec. 2, Pub. L. 105–264, 112 Stat. 2350 (5 U.S.C. 5701 note).

4. Sections 301–52.17 and 301–52.18 are revised to read as follows:

§ 301–52.17 Within how many calendar days after I submit a proper travel claim must my agency reimburse my allowable expenses?

Your agency must reimburse you within 30 calendar days after you submit a proper travel claim to your agency's designated approving office. Your agency must ensure that it uses a satisfactory recordkeeping system to track submission of travel claims. For example, travel claims submitted by mail, in accordance with your agency's policy, could be annotated with the time and date of receipt by your agency. Your agency could consider travel claims electronically submitted to the designated approving office as submitted on the date indicated on an e-mail log, or on the next business day if submitted after normal working hours. However, claims for the following relocation allowances are exempt from this provision:

(a) Transportation and storage of household goods and professional books, papers and equipment;

(b) Transportation of mobile home;

(c) Transportation of a privately owned vehicle;

(d) Temporary quarters subsistence expense, when not paid as lump sum;

(e) Residence transaction expenses;

(f) Relocation income tax allowance;

(g) Use of a relocation services company;

(h) Home marketing incentive payments; and

(i) Allowance for property management services.

§ 301–52.18 Within how many calendar days after I submit a travel claim must my agency notify me of any error that would prevent payment within 30 calendar days after submission?

Your agency must notify you as soon as practicable after you submit your travel claim of any error that would prevent payment within 30 calendar days after submission and must provide the reason(s) why your travel claim is not proper. However, not later than May 1, 2002, agencies must achieve a maximum time period of seven working days for notifying you that your travel claim is not proper.

5. Section 301–52.20 is revised to read as follows:

§ 301–52.20 How are late payment fees calculated?

Your agency must either:

(a) Calculate late payment fees using the prevailing Prompt Payment Act Interest Rate beginning on the 31st day after submission of a proper travel claim and ending on the date on which payment is made; or

(b) Reimburse you a flat fee of not less than the prompt payment amount, based on an agencywide average of travel claim payments; and

(c) In addition to the fee required by paragraphs (a) and (b) of this section, your agency must also pay you an amount equivalent to any late payment charge that the card contractor would have been able to charge you had you not paid the bill.

PART 301–54—COLLECTION OF UNDISPUTED DELINQUENT AMOUNTS OWED TO THE CONTRACTOR ISSUING THE INDIVIDUALLY BILLED TRAVEL CHARGE CARD

6. The authority citation for 41 CFR part 301–54 continues to read as follows:

Authority: 5 U.S.C. 5707; 40 U.S.C. 486(c); Sec. 2, Pub. L. 105–264, 112 Stat. 2350 (5 U.S.C. 5701 note).

7. Section 301–54.2 is revised to read as follows:

§ 301–54.2 What is disposable pay?

Disposable pay is your compensation remaining after the deduction from your earnings of any amounts required by law to be withheld. These deductions do not include discretionary deductions such as savings bonds, charitable contributions, *etc.* Deductions may be made from any type of pay you receive from your agency, *e.g.,* basic pay, special pay, retirement pay, or incentive pay.

PART 301–70—INTERNAL POLICY AND PROCEDURE REQUIREMENTS

8. The authority citation for 41 CFR part 301–70 continues to read as follows:

Authority: 5 U.S.C. 5707; 40 U.S.C. 486(c); Sec. 2, Pub. L. 105–264, 112 Stat. 2350 (5 U.S.C. 5701 note).

9. Section 301–70.704 is amended by adding a note at the end of the section to read as follows:

§ 301–70.704 What expenses and/or classes of employees are exempt from the mandatory use of the Government contractor-issued travel charge card?

* * * * *

Note to § 301–70.704: Relocation allowances prescribed in chapter 302 of this title, except en-route travel and househunting trip expenses are not covered by this requirement.

PART 301–71—AGENCY TRAVEL ACCOUNTABILITY REQUIREMENTS

10. The authority citation for 41 CFR part 301–71 continues to read as follows:

Authority: 5 U.S.C. 5707; 40 U.S.C. 486(c); Sec. 2, Pub. L. 105–264, 112 Stat. 2350 (5 U.S.C. 5701 note).

11. Section 301–71.204 is revised to read as follows:

§ 301–71.204 Within how many calendar days after the submission of a proper travel claim must we reimburse the employee's allowable expenses?

You must reimburse the employee within 30 calendar days after the employee submits a proper travel claim to the agency's designated approving office. You must use a satisfactory recordkeeping system to track submission of travel claims. For example, travel claims submitted by mail, in accordance with agency policy, could be annotated with the time and date of receipt by the agency. You could consider travel claims electronically submitted to the designated approving office as submitted on the date indicated on an e-mail log, or on the next business day if submitted after normal working hours. However, claims for the following relocation allowances are exempt from this provision:

(a) Transportation and storage of household goods and professional books, papers and equipment;

(b) Transportation of mobile home;

(c) Transportation of a privately owned vehicle;

(d) Temporary quarters subsistence expense, when not paid as lump sum;

(e) Residence transaction expenses;

(f) Relocation income tax allowance;

(g) Use of a relocation services company;

(h) Home marketing incentive payments; and

(i) Allowance for property management services.

12. Section 301–71.208 is revised to read as follows:

§ 301–71.208 Within how many calendar days after submission of a proper travel claim must we notify the employee of any errors in the claim?

You must notify the employee as soon as practicable after the employee's submission of the travel claim of any error that would prevent payment within 30 calendar days after submission and provide the reason(s) why the claim is not proper. However, not later than May 1, 2002, you must achieve a maximum time period of seven working days for notifying an employee that his/her travel claim is not proper.

13. Section 301–71.210 is revised to read as follows:

§ 301–71.210 How do we calculate late payment fees?

Late payment fees are calculated either by:

(a) Using the prevailing Prompt Payment Act Interest Rate beginning on the 31st day after submission of a proper travel claim and ending on the date on which payment is made; or

(b) A flat fee, of not less than the prompt payment amount, based on an agencywide average of travel claim payments; and

(c) In addition to the fee required by paragraphs (a) and (b) of this section, you must also pay an amount equivalent to any late payment charge that the card contractor would have been able to charge had the employee not paid the bill. Payment of this additional fee will be based upon the effective date that a late payment charge would be allowed under the agreement between the employee and the card contractor.

PART 301–76—COLLECTION OF UNDISPUTED DELINQUENT AMOUNTS OWED TO THE CONTRACTOR ISSUING THE INDIVIDUALLY BILLED TRAVEL CHARGE CARD

14. The authority citation for 41 CFR part 301–76 continues to read as follows:

Authority: 5 U.S.C. 5707; 40 U.S.C. 486(c); Sec. 2, Pub. L. 105–264, 112 Stat. 2350 (5 U.S.C. 5701 note).

15. Section 301–76.2 is revised to read as follows:

§ 301–76.2 What is disposable pay?

Disposable pay is the part of the employee's compensation remaining after the deduction of any amounts required by law to be withheld. These deductions do not include discretionary deductions such as savings bonds, charitable contributions, etc. Deductions may be made from any type of pay, *e.g.,* basic pay, special pay, retirement pay, or incentive pay.

Dated: April 13, 2000.

David J. Barram,

Administrator of General Services.

[FR Doc. 00–9774 Filed 4–20–00; 8:45 am]

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DEPARTMENT OF ENERGY

48 CFR Parts 919 and 952

RIN 1991–AB45

Acquisition Regulations: Mentor-Protege Program

AGENCY: Department of Energy.

ACTION: Final rule.

SUMMARY: The Department of Energy (DOE) is amending its acquisition regulations to encourage DOE prime contractors to assist small disadvantaged firms certified by the Small Business Administration under Section 8(a) of the Small Business Act (8(a)), other small disadvantaged businesses, Historically Black Colleges and Universities and other minority institutions of higher learning, women-owned small businesses and small business concerns owned and controlled by service disabled veterans in enhancing their capabilities to perform contracts and subcontracts for DOE and other Federal agencies. The program seeks to foster long-term business relationships between DOE prime contractors and these small business entities and minority institutions of higher learning and to increase the overall number of these small business entities and minority institutions that receive DOE contract and subcontract awards.

EFFECTIVE DATE: This rule will take effect May 22, 2000.

FOR FURTHER INFORMATION CONTACT: Eugene Tates, Mentor-Protege Program, U.S. Department of Energy, Office of Small and Disadvantaged Business Utilization, 1000 Independence Avenue, SW, Washington, DC 20585, (202) 586–4556; or Robert M. Webb, U.S. Department of Energy, Office of Procurement and Assistance Management, 1000 Independence Avenue, SW, Washington, DC 20585, (202) 586–8264.

SUPPLEMENTARY INFORMATION:

I. Background
II. Resolution of Comments
III. Procedural Requirements
A. Review Under Executive Order 12866
B. Review Under Executive Order 12988
C. Review Under the Regulatory Flexibility Act
D. Review Under the Paperwork Reduction Act
E. Review Under the National Environmental Policy Act
F. Review Under Executive Order 13132
G. Review Under the Unfunded Mandates Reform Act of 1995
H. Treasury and General Government Appropriation Act, 1999
I. Congressional Notification

I. Background

On June 9, 1995, DOE published final guidelines for its Mentor-Protege Pilot Initiative (60 FR 30529). The purpose of the Initiative was to develop a program that encouraged DOE prime contractors to help energy-related small disadvantaged, 8(a), and women-owned small businesses in enhancing their business and technical capabilities to ensure full participation in the mission of DOE. In addition, the Initiative sought to foster the establishment of long term business relationships between these small business entities and DOE prime contractors and to increase the overall number of these small business entities eligible to receive DOE contract and subcontract awards. In order to achieve the goal of the Initiative, DOE prime contractors entered into formal agreements with qualified small businesses to provide developmental assistance. In many cases, this assistance has enabled small businesses to benefit from the vast wealth of knowledge acquired by large, successful firms doing business with DOE.

The success of the DOE business mentoring relationships and the continuing need to develop small disadvantaged business, 8(a) firms and women-owned small businesses capabilities to perform contracts and subcontracts for DOE led DOE to propose the creation of a permanent DOE Mentor-Protege Program. DOE published a notice of proposed rulemaking on December 6, 1999 (64 FR 68072), which proposed a program having the same goals and objectives as the original DOE Mentor-Protege Pilot Initiative. Some refinements were proposed to provide additional incentives for prime contractor participation in the Mentor-Protege Program. After carefully considering the public comments received on the notice of proposed rulemaking, DOE today publishes a final rule.

II. Resolution of Comments

Fourteen comments were received in response to the proposed rule. The comments and DOE's responses are as follows:

Comment: It is unclear whether or not DOE would reimburse Mentors for costs incurred by providing developmental assistance to Protege firms.

Response: The Mentor-Protege rule is clear on this issue. DOE has stated throughout the rule that developmental assistance costs are allowable if they are incurred by the Mentor in the performance of a DOE contract spelled out in the Mentor-Protege Agreement and are otherwise allowable in accordance with the cost principles applicable to that contract.

Comment: Do existing Mentor-Protege Agreements developed under the DOE Mentor-Protege Pilot Initiative have to be amended when this rule becomes effective?

Response: Existing agreements do not have to be amended. The new rule applies only to new agreements.

Comment: The rule does not cover small business concerns owned and controlled by service disabled veterans.

Response: DOE has revised the rule to include small business concerns owned and controlled by service disabled veterans, as defined in the Veterans Entrepreneurship and Small Business Development Act of 1999, Pub. L. No. 106–50.

Comment: Which small disadvantaged businesses, other than 8(a) firms, are eligible to participate in the Program?

Response: All small disadvantaged businesses that meet the eligibility requirements in paragraphs (a)(2)–(4) of § 919.7007 are eligible to participate.

Comment: Why, under § 919.7008(d) of the rule, does DOE only permit protests regarding the small business size of a firm, and not a firm's status as a small disadvantaged business, etc.?

Response: Small disadvantaged business status cannot be protested under this rule because the DOE Mentor-Protege Program is not limited to small disadvantaged businesses. Even if a firm is not a small disadvantaged business, it could still qualify as a small business.

Comment: A prospective Mentor should be required under § 919.7005 to provide evidence that the business is currently performing a DOE contract which contains a subcontracting plan.

Response: DOE can identify its current contractors, so there is no need for such a requirement.

Comment: DOE should allow designees of the chief executive officers of Mentor and Protege firms to execute the Mentor-Protege Agreements.

Response: DOE agrees that delegation is appropriate for larger, Mentor firms, but it would not be necessary for smaller, Proteges. Therefore, in § 919.7009, DOE allows the Mentor firm's chief executive officer to designate another company official to execute the Mentor-Protege Agreement.

Comment: DOE should delete the procedure in proposed § 919.7010(f) for completing performance in the case of withdrawal or termination by either party to the Agreement.

Response: DOE has deleted the procedure for completing performance because the terms of awarded subcontracts will still be binding in the event of Agreement termination.

Comment: DOE's request for a description of developmental assistance to be provided to Protege firms under proposed § 919.7010(c) is duplicated by DOE's request for an explanation of how the developmental assistance will increase subcontracting opportunities for the Protege under proposed § 919.7010(j).

Response: DOE disagrees with this comment. The mere description of the planned developmental assistance required by paragraph (c) does not explain how such assistance is expected to increase subcontracting opportunities of the Protege firm. These are separate provisions that need to be discussed separately in the Agreement.

Comment: Under what specific conditions could DOE terminate its recognition of a Mentor-Protege Agreement?

Response: DOE does not attempt to specify in this rule the conditions or situations that would warrant termination of DOE's recognition of an approved DOE Mentor-Protege agreement. That is left for case-by-case decision.

Comment: Which contracting officer is responsible for oversight if the Mentor has more than one DOE contract?

Response: The contracting officer for each contract identified in the Mentor-Protege Agreement, under § 919.7010(k), is the official responsible for oversight of the contract under his/her responsibility.

Comment: DOE should delete the word ''field'' as used in § 919.7013 in the term ''field technical program manager'' because technical program managers could be located in either the field or DOE headquarters.

Response: DOE agrees and deletes the word ''field'' from § 919.7013 and § 919.7010(j).

Comment: The proposed rule would add an unnecessary layer of requirements, administered from DOE Headquarters, on contractors who already have programs that accomplish the goals of improving relationships with small, small disadvantaged, women-owned, and minority institutions.

Response: DOE disagrees and thinks the program established by these regulations provides additional incentives for its contractors to provide assistance to the potential Protege firms. The program's reporting requirements in § 919.7013 are necessary for proper program evaluation.

Comment: DOE should change the Protege eligibility requirement in § 919.7007(a)(3) that a firm must have been in business for at least two years to no more than one year. In today's high-tech economy, a one-year old company is considered ''established.''

Response: The highly technical nature of DOE's global mission requires that a Protege have at least two years of business experience.

III. Procedural Requirements

A. Review Under Executive Order 12866

Today's regulatory action has been determined not to be a ''significant regulatory action'' under Executive Order 12866, ''Regulatory Planning and Review,'' (58 FR 51735, October 4, 1993). Accordingly, this rule was not subject to review under that Executive Order by the Office of Information and Regulatory Affairs of the Office of Management and Budget (OMB).

B. Review Under Executive Order 12988

With respect to the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, ''Civil Justice Reform,'' 61 FR 4729 (February 7, 1996), imposes on Executive agencies the general duty to adhere to the following requirements: (1) Eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; and (3) provide a clear legal standard for affected conduct rather than a general standard and promote simplification and burden reduction.

With regard to the review required by section 3(a), section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) Clearly specifies the subject law's preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in section 3(a) and section 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that this final rule meets the relevant standards of Executive Order 12988.

C. Review Under the Regulatory Flexibility Act

The Regulatory Flexibility Act of 1980, 5 U.S.C. 601 *et seq.*, requires preparation of an initial regulatory flexibility analysis for any rule that must be proposed for public comment and that is likely to have significant economic impact on a substantial number of small entities. However, the analysis requirement does not apply if the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. The entities to which this rulemaking would apply are large business and small business firms that receive a form of incentive for assuming the role of Mentor to 8(a) firms, other small disadvantaged businesses, small women-owned businesses, Historically Black Universities and Colleges, and other minority institutions of higher learning, and small business concerns owned and controlled by disabled veterans. It is expected that under this rule the protege entities would directly benefit from the forms of mentoring provided for in the rule. There would not be an adverse economic impact on contractors or subcontractors. Accordingly, DOE certifies that this rule would not have a significant economic impact on a substantial number of small entities, and therefore, no regulatory flexibility analysis has been prepared.

D. Review Under the Paperwork Reduction Act

This rule would require DOE contractors serving as mentors to submit semi-annual progress reports to the DOE Mentor-Protege Program Manager at DOE Headquarters (see § 919.7013). The information in the progress reports is necessary to determine if the schedules and developmental assistance levels contained in Mentor-Protege Agreements are being met. Performance under the Agreements is the basis for

awarding incentive fees to mentor firms. DOE submitted the proposed collection of information to the Office of Management and Budget for review and approval under the Paperwork Reduction Act, 44 U.S.C. 3501, *et seq.* The Office of Management and Budget has not yet approved the collection of information in this rule. 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 (5 CFR 1320.5(b)).

E. Review Under the National Environmental Policy Act

DOE has concluded that this rule falls into a class of actions which would not individually or cumulatively have significant impact on the human environment, as determined by DOE's regulations (10 CFR part 1021, subpart D) implementing the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 *et seq.*). Specifically, this rule is categorically excluded from NEPA review because the amendments to the DEAR would be strictly procedural (categorical exclusion A6). Therefore, this rule does not require an environmental impact statement or environmental assessment pursuant to NEPA.

F. Review Under Executive Order 13132

Executive Order 13132 (64 FR 43255, August 4, 1999) imposes certain requirements on agencies formulating and implementing policies or regulations that preempt State law or that have other federalism implications. Agencies are required to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and carefully assess the necessity for such actions. DOE has examined today's rule and has determined that it does 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. No further action is required by Executive Order 13132.

G. Review Under the Unfunded Mandates Reform Act of 1995

The Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4) generally requires a Federal agency to perform a detailed assessment of costs and benefits of any rule imposing a federal mandate with costs to State, local or tribal governments, or to the private sector of $100 million or more. This rulemaking would only affect private sector entities, and the impact is less than $100 million.

H. Treasury and General Government Appropriations Act, 1999

Section 654 of the Treasury and General Government Appropriation, 1999 (Pub. L. 105–277) requires Federal Agencies to issue a Family Policymaking Assessment for any proposed rule that may affect family well being. Today's rule would not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE concluded that it is not necessary to prepare a Family Policymaking Assessment.

I. Congressional Notification

As required by 5 U.S.C. 801, DOE will submit to Congress a report regarding the issuance of today's final rule. The report will state that it has been determined that the rule is not a ''major rule,'' as defined by 5 U.S.C. 804.

List of Subjects in 48 CFR Parts 919 and 952

Government procurement.

Issued in Washington, DC on April 17, 2000.

Richard H. Hopf,

Director, Office of Procurement and Assistance Management.

For the reasons set out in the preamble, Chapter 9 of Title 48 of the Code of Federal Regulations is amended as set forth below.

PART 919—SMALL BUSINESS PROGRAMS

1. The authority citation for Parts 919 and 952 is revised to read as follows:

Authority: 40 U.S.C. 486 (c); 42 U.S.C. 7101, *et seq.*; 42 U.S.C. 2201; 50 U.S.C. 2401, *et seq.*

2. A new subpart 919.70 is added in Subchapter D to read as follows:

Subpart 919.70—The Department of Energy Mentor-Protege Program

Sec.

919.7001 Scope of subpart.
919.7002 Definitions.
919.7003 General policy.
919.7004 General prohibitions.
919.7005 Eligibility to be a Mentor.
919.7006 Incentives for DOE contractor participation.
919.7007 Eligibility to be a Protege.
919.7008 Selection of Proteges.
919.7009 Process for participation in the program.
919.7010 Contents of Mentor-Protege Agreement.
919.7011 Developmental assistance.
919.7012 Review and approval process of agreement by OSDBU.
919.7013 Reports.
919.7014 Solicitation provision.

Subpart 919.70—The Department of Energy Mentor-Protege Program

919.7001 Scope of subpart.

The Department of Energy (DOE) Mentor-Protege Program is designed to encourage DOE prime contractors to assist small disadvantaged firms certified by the Small Business Administration (SBA) under Section 8(a) of the Small Business Act (8(a)), other small disadvantaged businesses, women-owned small businesses, Historically Black Colleges and Universities, and other minority institutions of higher learning, and small business concerns owned and controlled by service disabled veterans in enhancing their capabilities to perform contracts and subcontracts for DOE and other Federal agencies. The program seeks to foster long-term business relationships between these small business entities and DOE prime contractors, and to increase the overall number of these small business entities that receive DOE contract and subcontract awards.

919.7002 Definitions.

Historically Black Colleges and Universities (HBCUs) means an institution determined by the Secretary of Education to meet the requirements of 34 CFR 608.2.

Other minority institutions of higher learning means an institution determined by the Secretary of Education to meet the requirements of 20 U.S.C. 1067k.

Small business concern owned and controlled by service-disabled veterans means a small business concern as defined in Public Law 106–50, Veterans Entrepreneurship and Small Business Development Act of 1999.

Small disadvantaged business means a small business concern owned and controlled by socially and economically disadvantaged individuals that meets the requirements of 13 CFR part 124, subpart B.

Women-owned small business means a small business concern that meets the requirements of 15 U.S.C. 637(d)(3)(D).

919.7003 General policy.

(a) DOE contractors eligible under 48 CFR 919.7005 may enter into agreements with businesses certified by the SBA in the 8(a) Program, other small disadvantaged businesses, women-owned small businesses, HBCUs, other minority institutions of higher learning, and small business concerns owned and controlled by service disabled veterans to provide those firms appropriate

developmental assistance to enhance the capabilities of Proteges.

(b) Costs incurred by a Mentor to provide developmental assistance, as described in 919.7011, are allowable only to the extent that they are incurred in performance of a contract identified in the Mentor-Protege Agreement and are otherwise allowable in accordance with the cost principles applicable to that contract.

(c) Headquarters Office of Small and Disadvantaged Business Utilization (OSDBU) is the DOE Program Manager for the Mentor-Protege Program.

919.7004 General prohibitions.

DOE will not reimburse the costs of a Mentor in providing any form of developmental assistance to a Protege except as provided in 919.7003(b).

919.7005 Eligibility to be a Mentor.

To be eligible for recognition by DOE as a Mentor, an entity must be performing at least one contract for DOE.

919.7006 Incentives for DOE contractor participation.

(a) Under cost-plus-award fee contracts, approved Mentor firms may earn award fees associated with their performance as a Mentor. The award fee plan may include provision for the evaluation of the contractor's utilization of 8(a) firms, other small disadvantaged businesses, women-owned small businesses, HBCUs, other minority institutions of higher learning and small business concerns owned and controlled by service disabled veterans. DOE may evaluate the Mentor's performance in the DOE Mentor-Protege Program under any Mentor-Protege Agreement(s) as a separate element of the award fee plan.

(b) Mentors shall receive credit for subcontracts awarded pursuant to their Mentor-Protege Agreements toward subcontracting goals contained in their subcontracting plan.

919.7007 Eligibility to be a Protege.

(a) To be eligible for selection as a Protege, a firm must:

(1) Be a small business certified under Section 8(a) of the Small Business Act by SBA, other small disadvantaged business, a women-owned small business, HBCU, or any other minority institution of higher learning, or a small business concern owned and controlled by service disabled veterans;

(2) Be eligible for receipt of government contracts;

(3) Have been in business for at least two (2) years prior to application for enrollment into the Mentor-Protege Program; and

(4) Be able to certify as a small business according to the Standard Industrial Code for the services or supplies to be provided by the Protege under its subcontract with the Mentor.

(b) A prospective Mentor may rely in good faith on written representations by a prospective Protege that the Protege meets the requirements in paragraph (a) of this section.

919.7008 Selection of Proteges.

(a) A Mentor firm is solely responsible for selecting one or more Protege entities from firms eligible under 48 CFR 919.7007.

(b) A Mentor may have more than one Protege; however, a Protege may have only one Mentor.

(c) The selection of Protege firms by Mentor firms may not be protested, except as provided in paragraph (d) of this section.

(d) Only protests regarding the small business size status of a firm to be a Protege will be considered and shall be submitted to the DOE Office of Small and Disadvantaged Business Utilization for resolution. If that office is unable to resolve a protest, it will refer the matter to the Small Business Administration for resolution in accordance with 13 CFR part 121.

919.7009 Process for participation in the program.

A prospective Mentor must submit the following to the DOE Mentor-Protege Program Manager.

(a) A statement that it is eligible, as of the date of application, for the award of Federal contracts;

(b) A statement that it is currently performing at least one contract for DOE;

(c) The DOE contract number, type of contract, period of performance (including options), title of technical program effort, name of DOE technical program manager (including contact information) and the DOE contracting activity; and

(d) An original and two copies of the Mentor-Protege Agreement signed by the chief executive officer or designee of the Mentor firm and the chief executive officer of the Protege firm.

919.7010 Contents of Mentor-Protege Agreement.

The proposed Mentor-Protege Agreement must contain:

(a) Names, addresses and telephone numbers of Mentor and Protege firms and a point of contact within each firm who will oversee the Agreement;

(b) Requirements for the Mentor firm or the Protege firm to notify the other entity, DOE Headquarters OSDBU, and the contracting officer in writing at least 30 days in advance of the Mentor firm's or the Protege firm's intent to voluntarily terminate or withdraw from the Mentor-Protege Agreement (such termination would not terminate any existing subcontract between the Mentor and the Protege);

(c) A description of the form of developmental assistance program that will be provided by the Mentor to the Protege firm, including a description of any subcontract work, and a schedule for providing the assistance and the criteria for evaluation of the Protege's developmental success (48 CFR 919.7011);

(d) A listing of the number and types and estimated amount of subcontracts to be awarded to the Protege firm;

(e) Term of the Agreement;

(f) Procedures to be invoked should DOE terminate its recognition of the Agreement for good cause (such termination of DOE recognition would not constitute a termination of the subcontract between the Mentor and the Protege);

(g) Provision for the Mentor firm to submit to the DOE Mentor-Protege Program Manager a ''lessons learned'' evaluation developed by the Mentor at the conclusion of the Mentor-Protege Agreement;

(h) Provision for the submission by the Protege firm of a ''lessons learned'' evaluation to the DOE Mentor-Protege Program Manager at the conclusion of the Mentor-Protege Agreement;

(i) Description of how the development assistance will potentially increase subcontracting opportunities for the Protege firm;

(j) Provision for the Mentor firm to brief the DOE Mentor-Protege Program Manager, the technical program manager(s), and the contracting officer at the conclusion of each year in the Mentor-Protege Program regarding program accomplishments as pertains to the approved Agreement (where possible, this review may be incorporated into the normal program review for the Mentor's contract);

(k) Recognition that costs incurred by a Mentor to provide developmental assistance, as described in 48 CFR 919.7011, are allowable only to the extent that they are incurred in performance of a contract identified in the Mentor-Protege Agreement and are otherwise allowable in accordance with the cost principles applicable to that contract (the DOE Mentor-Protege Program has no appropriation for paying for developmental assistance); and

(l) Other terms and conditions, as appropriate.

919.7011 Developmental assistance.

(a) The forms of developmental assistance a Mentor may provide to a Protege include, but are not limited to:

(1) Management guidance relating to:

(i) Financial management,

(ii) Organizational management,

(iii) Overall business management planning,

(iv) Business development, and

(v) Marketing assistance;

(2) Engineering and other technical assistance;

(3) Noncompetitive award of subcontracts under DOE or other Federal contracts where otherwise authorized;

(4) Award of subcontracts in the Mentor's commercial activities;

(5) Progress payments based on costs;

(6) Rent-free use of facilities and/or equipment owned or leased by Mentor; and

(7) Temporary assignment of Mentor personnel to the Protege for purposes of training.

(b) Costs incurred by a Mentor to provide developmental assistance, as described in paragraph (a) of this section, are allowable only to the extent provided at 48 CFR 919.7003(b).

919.7012 Review and approval process of agreement by OSDBU.

(a) OSDBU will review the proposed Mentor-Protege Agreement under 48 CFR 919.7010 and will complete its review and assessment no later than 30 days after receipt. OSDBU will provide a copy of its assessment to the cognizant DOE technical program manager and contracting officer for review and concurrence.

(b) If OSDBU approves the Agreement, the Mentor may implement the developmental assistance program.

(c) Upon finding deficiencies that DOE considers correctable, the OSDBU will notify the Mentor and request information to be provided within 30 days that may correct the deficiencies. The Mentor may then provide additional information for reconsideration. The review of any supplemental material will be completed within 30 days after receipt by the OSDBU and the Agreement either approved or disapproved.

919.7013 Reports.

(a) Prior to performing an evaluation of a Mentor's performance under its Mentor-Protege Agreement for use in award fee evaluations, the Mentor-Protege Program Manager must consult with the cognizant DOE technical program manager and must provide a copy of the performance evaluation comments regarding the technical effort and Mentor-Protege development to the contracting officer.

(b) The DOE Mentor-Protege Program Manager must submit semi-annual reports to the cognizant contracting officer regarding the participating Mentor's performance in the Program for use in the award fee determination process.

(c) The Mentor firm must submit progress reports to the DOE Mentor-Protege Program Manager semi-annually.

919.7014 Solicitation provision.

The cognizant contracting officer must insert the provision at 952.219–70, DOE Mentor-Protege Program, in all solicitations with an estimated value in excess of the simplified acquisition threshold.

PART 952—SOLICITATION PROVISIONS AND CONTRACT CLAUSES

3. A new subsection 952.219–70, DOE Mentor-Protege Program is added as follows:

952.219–70 DOE Mentor-Protege program.

In accordance with 919.7014 insert the following provision in applicable solicitations.

DOE Mentor-Protege Program

(May 2000)

The Department of Energy has established a Mentor-Protege Program to encourage its prime contractors to assist firms certified under section 8(a) of the Small Business Act by SBA, other small disadvantaged businesses, women-owned small businesses, Historically Black Colleges and Universities and Minority Institutions, other minority institutions of higher learning and small business concerns owned and controlled by service disabled veterans in enhancing their business abilities. If the contract resulting from this solicitation is awarded on a cost-plus-award fee basis, the contractor's performance as a Mentor may be evaluated as part of the award fee plan. Mentor and Protege firms will develop and submit ''lessons learned'' evaluations to DOE at the conclusion of the contract. Any DOE contractor that is interested in becoming a Mentor should refer to the applicable regulations at 48 CFR 919.70 and should contact the Department of Energy's Office of Small and Disadvantaged Business Utilization.

[FR Doc. 00–9981 Filed 4–20–00; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

48 CFR Part 970

RIN 1991–AB02

Acquisition Regulation: Financial Management Clauses for Management and Operating (M&O) Contracts

AGENCY: Department of Energy.

ACTION: Final rule.

SUMMARY: The Department of Energy (DOE) amends its Acquisition Regulation to designate certain Department of Energy Acquisition Regulation (DEAR) M&O contract clauses and Federal Acquisition Regulation (FAR) clauses as Standard Financial Management Clauses to be included in M&O contracts unless the Chief Financial Officer (CFO) concurs in a deviation. Additionally, this final rule will revise selected existing financial management clauses and add financial management related clauses.

DATES: This final rule is effective May 22, 2000.

FOR FURTHER INFORMATION CONTACT: Michael L. Righi, Office of Policy (MA–51), Department of Energy, 1000 Independence Avenue, SW., Washington, D.C. 20585; 202–586–8175 (phone); 202–586–0545 (facsimile); or *michael.l.righi@pr.doe.gov* (Internet).

SUPPLEMENTARY INFORMATION

I. Background
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G. Unfunded Mandates Reform Act of 1995
H. Review Under Small Business Regulatory Enforcement Fairness Act of 1996

I. Background

On November 18, 1998, the Department of Energy (DOE or Department) published in the **Federal Register** (63 FR 64024) a Notice of Proposed Rulemaking to amend the DEAR to designate certain Department of Energy Acquisition Regulation (DEAR) M&O contract clauses and Federal Acquisition Regulation (FAR) clauses as Standard Financial Management Clauses to be included in M&O contracts unless the Chief Financial Officer (CFO) concurs in a deviation. Additionally, this Notice of Proposed Rulemaking proposed to revise selected existing financial

management clauses and to add financial management related clauses.

The Notice of Proposed Rulemaking solicited comments on all aspects of the proposed rulemaking. Today's final rule amends the DEAR as proposed in the Notice of Proposed Rulemaking. The contracting officer must apply the changes this rule makes to solicitations issued on or after the effective date of this rule and may apply the changes to existing solicitations. Because this rule's changes are already incorporated in the majority of the Department's management and operating contracts, the contracting officer should incorporate the changes into existing contracts as soon as practicable, but in no case later than one year from the effective date of this rule.

Since publication of the Notice of Proposed Rulemaking, the President signed the National Nuclear Security Administration Act (NNSA) Act into law (Pub.L. 106–65). The NNSA Act reorganized DOE by drawing together various national security-related components of DOE and placing them under an Administrator who is the new DOE Under Secretary for Nuclear Security. Existing procurement regulations before March 1, 2000, including 48 CFR part 970, continue in effect by operation of law with regard to NNSA (50 U.S.C. 2401, note, 2484). Consistent with the NNSA Act and various delegations of authority under the NNSA Act, including the authority to issue procurement regulations subject to approval by the Secretary, today's final regulatory amendments to part 970 revise the authority citation to include the citation for the NNSA Act.

II. Discussion of Public Comments

The Department received 11 comments from three commenters. None of the issues raised in the comments warrants extended treatment in this rulemaking. Instead, the Department prepared a comment response document that addressed each comment and sent a copy to each of the commenters. A copy of the comment response document is available upon request from Michael L. Righi, Office of Policy (MA–51), Department of Energy, 1000 Independence Avenue, SW, Washington, D.C. 20585.

III. Procedural Requirements

A. Review Under Executive Order 12866

Today's regulatory action has been determined not to be a ''significant regulatory action'' under Executive Order 12866, ''Regulatory Planning and Review,'' (58 FR 51735, October 4, 1993). Accordingly, today's action was not subject to review under the Executive Order by the Office of Information and Regulatory Affairs of the Office of Management and Budget.

B. Review Under Executive Order 12988

With respect to the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, ''Civil Justice Reform,'' 61 FR 4729 (February 7, 1996), imposes on Executive agencies the general duty to adhere to the following requirements: (1) Eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; and (3) provide a clear legal standard for affected conduct rather than a general standard and promote simplification and burden reduction. With regard to the review required by section 3(a), section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) Clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to review regulations in light of applicable standards in section 3(a) and section 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, the proposed regulations meet the relevant standards of Executive Order 12988.

C. Review Under the Regulatory Flexibility Act

This rule was reviewed under the Regulatory Flexibility Act of 1980, Pub. L. 96–354, which requires preparation of a regulatory flexibility analysis for any rule which is likely to have a significant economic impact on a substantial number of small entities. This rule would only apply to M&O contractors, which are all large entities. DOE certifies that this rule will not have a significant economic impact on a substantial number of small entities and, therefore, no regulatory flexibility analysis has been prepared.

D. Review Under the Paperwork Reduction Act

No new information collection requirements subject to the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*, are imposed by today's regulatory action.

E. Review Under Executive Order 13132

Executive Order 13132 (64 FR 43255, August 4, 1999) imposes certain requirements on agencies formulating and implementing policies or regulations that preempt State law or that have federalism implications. Agencies are required to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and carefully assess the necessity for such actions. DOE has examined today's rule and has determined that it does not preempt State law and does 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. No further action is required by Executive Order 13132.

F. Review Under the National Environmental Policy Act

Pursuant to the Council on Environmental Quality Regulations (40 CFR Parts 1500–1508), the Department of Energy has established guidelines for its compliance with the provisions of the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 *et seq.*). Pursuant to appendix A of subpart D of 10 CFR part 1021, National Environmental Policy Act Implementing Procedures (57 FR 15122, 15152, April 24, 1992) (Categorical Exclusion A6), the Department of Energy has determined that this rule is categorically excluded from the need to prepare an environmental impact statement or environmental assessment.

G. Review Under the Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 requires each Agency to assess the effects of Federal regulatory action on State, local, and tribal governments and the private sector. The Department has determined that today's regulatory action does not impose a Federal mandate on State, local, or tribal governments or on the private sector.

H. Review Under Small Business Regulatory Enforcement Fairness Act of 1996

As required by 5 U.S.C. 801, the Department of Energy will report to

Congress promulgation of the rule prior to its effective date. The report will state that it has been determined that the rule is not a ''major rule'' as defined by 5 U.S.C. 804(3).

List of Subjects in 48 CFR Part 970

Government procurement.

Issued in Washington, D.C. on April 7, 2000.

Richard H. Hopf,

Director, Office of Procurement and Assistance Management.

For the reasons set out in the preamble, Chapter 9 of Title 48 of the Code of Federal Regulations is amended as set forth below.

PART 970—DOE MANAGEMENT AND OPERATING CONTRACTS

1. The authority citation for Part 970 is revised to read as follows:

Authority: Atomic Energy Act of 1954 (42 U.S.C. 2201); Department of Energy Organization Act (42 U.S.C. 7101, *et seq.*); National Nuclear Security Administration Act (50 U.S.C. 2401, *et seq.*).

2. Section 970.3201 is revised to read as follows:

970.3201 General.

It is the policy of the DOE to finance management and operating contracts through advance payments and the use of special financial institution accounts.

3. Section 970.3202 is amended by revising paragraphs (b) and (c) to read as follows:

970.3202 Advance payments.

* * * * *

(b) Advance payments shall be made under a payments cleared financing arrangement for deposit in a special financial institution account or, at the option of the Government, by direct payment or other payment mechanism to the contractor.

(c) Prior to providing any advance payments, the contracting officer shall enter into an agreement with the contractor and a financial institution regarding a special financial institution account where the advanced funds will be deposited by the Government. Such agreement shall:

(1) Provide that DOE shall retain title to the unexpended balance of funds in the special financial institution account including collections, if any, deposited by the contractor;

(2) Provide that the title in paragraph (c)(1) of this section shall be superior to any claim or lien of the financial institution of deposit or others; and

(3) Incorporate all applicable requirements, as determined by the Office of Chief Financial Officer.

* * * * *

4. Section 970.3270 is revised to read as follows:

970.3270 Standard financial management clauses.

(a) The following DEAR and FAR clauses are standard financial management clauses that shall be included in all management and operating contracts: DEAR 970.5204–9, Accounts, records, and inspection; DEAR 970.5204–15, Obligation of funds; DEAR 970.5204–16, Payments and advances; DEAR 970.5204–20, Management controls; DEAR 970.5204–92, Liability with respect to Cost Accounting Standards; DEAR 970.5204–93, Work for others funding authorization; FAR 52.230–2, Cost Accounting Standards; and FAR 52.230–6, Administration of Cost Accounting Standards.

(b) The following clauses are standard financial management clauses that shall be included in management and operating contracts with integrated accounting systems: DEAR 970.5204–90, Financial management system; and DEAR 970.5204–91, Integrated accounting.

(c) Any deviations from the standard financial management clauses specified in paragraphs (a) and (b) of this section require the approval of the Head of the Contracting Activity and the written concurrence of the Department's Chief Financial Officer.

5. Section 970.3271 is removed and reserved.

970.3271 [Removed and Reserved]

6. Section 970.5204–9 is amended by revising the introductory paragraph; clause title; and paragraphs (a) (including the note), (b), (d), and (f) to read as follows:

970.5204–9 Accounts, records, and inspection.

As prescribed in 970.0407 and 970.3270, insert the following clause.

Accounts, Records, and Inspection (May 2000)

(a) *Accounts.* The contractor shall maintain a separate and distinct set of accounts, records, documents, and other evidence showing and supporting: all allowable costs incurred; collections accruing to the contractor in connection with the work under this contract, other applicable credits, and fee accruals under this contract; and the receipt, use, and disposition of all Government property coming into the possession of the contractor under this contract. The system of accounts employed by the contractor shall be satisfactory to DOE and in accordance with generally accepted accounting principles consistently applied.

Note: *If the contract includes the clause for ''Price Reduction for Defective Cost or Pricing Data'' set forth at FAR 52.215–22, paragraph (a) above should be modified by adding the words ''or anticipated to be incurred'' after the words ''allowable costs incurred.''*

(b) *Inspection and audit of accounts and records.* All books of account and records relating to this contract shall be subject to inspection and audit by DOE or its designees in accordance with the provisions of Clause ____, Access to and ownership of records, at all reasonable times, before and during the period of retention provided for in paragraph (d) of this clause, and the contractor shall afford DOE proper facilities for such inspection and audit.

* * * * *

(d) *Disposition of records.* Except as agreed upon by the Government and the contractor, all financial and cost reports, books of account and supporting documents, system files, data bases, and other data evidencing costs allowable, collections accruing to the contractor in connection with the work under this contract, other applicable credits, and fee accruals under this contract, shall be the property of the Government, and shall be delivered to the Government or otherwise disposed of by the contractor either as the contracting officer may from time to time direct during the progress of the work or, in any event, as the contracting officer shall direct upon completion or termination of this contract and final audit of accounts hereunder. Except as otherwise provided in this contract, including provisions of Clause ____, Access to and ownership of records, all other records in the possession of the contractor relating to this contract shall be preserved by the contractor for a period of three years after final payment under this contract or otherwise disposed of in such manner as may be agreed upon by the Government and the contractor.

* * * * *

(f) *Inspections.* The DOE shall have the right to inspect the work and activities of the contractor under this contract at such time and in such manner as it shall deem appropriate.

* * * * *

7. Section 970.5204–13 is amended by revising the clause date and clause paragraph (d)(15) to read as follows (note following paragraph (d)(15) remains unchanged).

970.5204–13 Allowable costs and fixed-fee (management and operating contracts).

* * * * *

Allowable costs and fixed-fee (management and operating Contracts) (May 2000)

* * * * *

(d) * * *

(15) Establishment and maintenance of financial institution accounts in connection with the work hereunder, including, but not limited to, service charges, the cost of disbursing cash, necessary guards, cashiers, and paymasters. If payments to employees

are made by check, facilities and arrangements for cashing checks may be provided without expense to the employees, subject to the approval of the contracting officer.

* * * * *

8. Section 970.5204–15 is revised to read as follows:

970.5204–15 Obligation of funds.

As prescribed in 970.1508(c) and 970.3270, insert the following clause.

Obligation of Funds (May 2000)

(a) *Obligation of funds.* The amount presently obligated by the Government with respect to this contract is ____ dollars ($____). Such amount may be increased unilaterally by DOE by written notice to the contractor and may be increased or decreased by written agreement of the parties (whether or not by formal modification of this contract). Estimated collections from others for work and services to be performed under this contract are not included in the amount presently obligated. Such collections, to the extent actually received by the contractor, shall be processed and accounted for in accordance with applicable requirements imposed by the contracting officer pursuant to the Laws, regulations, and DOE directives clause of this contract. Nothing in this paragraph is to be construed as authorizing the contractor to exceed limitations stated in financial plans established by DOE and furnished to the contractor from time to time under this contract.

(b) *Limitation on payment by the Government.* Except as otherwise provided in this contract and except for costs which may be incurred by the contractor pursuant to the clause entitled ''Termination,'' or costs of claims allowable under the contract occurring after completion or termination and not released by the contractor at the time of financial settlement of the contract in accordance with the clause entitled ''Payments and Advances,'' payment by the Government under this contract on account of allowable costs shall not, in the aggregate, exceed the amount obligated with respect to this contract, less the contractor's fee. Unless expressly negated in this contract, payment on account of those costs excepted in the preceding sentence which are in excess of the amount obligated with respect to this contract shall be subject to the availability of:

(1) collections accruing to the contractor in connection with the work under this contract and processed and accounted for in accordance with applicable requirements imposed by the contracting officer pursuant to the Laws, regulations, and DOE directives clause of this contract, and

(2) other funds which DOE may legally use for such purpose, provided DOE will use its best efforts to obtain the appropriation of funds for this purpose if not otherwise available.

(c) *Notices—Contractor excused from further performance.* The contractor shall notify DOE in writing whenever the unexpended balance of available funds (including collections available under paragraph (a) of this clause), plus the contractor's best estimate of collections to be received and available during the ____ day period hereinafter specified, is in the contractor's best judgment sufficient to continue contract operations at the programmed rate for only ____ days and to cover the contractor's unpaid fee, and outstanding encumbrances and liabilities on account of costs allowable under the contract at the end of such period. Whenever the unexpended balance of available funds (including collections available under paragraph (a) of this clause), less the amount of the contractor's fee then earned but not paid, is in the contractor's best judgment sufficient only to liquidate outstanding encumbrances and liabilities on account of costs allowable under this contract, the contractor shall immediately notify DOE and shall make no further encumbrances or expenditures (except to liquidate existing encumbrances and liabilities), and, unless the parties otherwise agree, the contractor shall be excused from further performance (except such performance as may become necessary in connection with termination by the Government) and the performance of all work hereunder will be deemed to have been terminated for the convenience of the Government in accordance with the provisions of the clause entitled ''Termination.''

(d) *Financial plans; cost and encumbrance limitations.* In addition to the limitations provided for elsewhere in this contract, DOE may, through financial plans, such as Approved Funding Programs, or other directives issued to the contractor, establish controls on the costs to be incurred and encumbrances to be made in the performance of the contract work. Such plans and directives may be amended or supplemented from time to time by DOE. The contractor agrees

(1) to comply with the specific limitations (ceilings) on costs and encumbrances set forth in such plans and directives,

(2) to comply with other requirements of such plans and directives, and

(3) to notify DOE promptly, in writing, whenever it has reason to believe that any limitation on costs and encumbrances will be exceeded or substantially underrun.

Note: *This paragraph (d) may be omitted in contracts which expressly or otherwise provide a contractual basis for equivalent controls in a separate clause.*

(e) *Government's right to terminate not affected.* The giving of any notice under this clause shall not be construed to waive or impair any right of the Government to terminate the contract under the provisions of the clause entitled ''Termination.''

9. Section 970.5204–16 is amended by: Revising the introductory paragraph; clause title; clause paragraphs (a) (notes remain unchanged); last sentence of alternate paragraph (a) that follows note 2; paragraphs (c), (d) (including note 3), (e) (including note 4); adding alternate paragraph (e) following note 4; revising paragraphs (f) and (i) to read as follows:

970.5204–16 Payments and advances.

As prescribed in 970.3270, insert the following clause.

Payments and Advances (May 2000)

(a) *Installments of fixed-fee.* The fixed-fee payable under this contract shall become due and payable in periodic installments in accordance with a schedule determined by the contracting officer. Fixed-fee payments shall be made by direct payment or withdrawn from funds advanced or available under this contract, as determined by the contracting officer. The contracting officer may offset against any such fee payment the amounts owed to the Government by the contractor, including any amounts owed for disallowed costs under this contract. No fixed-fee payment may be withdrawn against the payments cleared financing arrangement without prior written approval of the contracting officer.

* * * * *

(a) * * * No base fee or award fee pool amount earned payment may be withdrawn against the payments cleared financing arrangement without prior written approval of the contracting officer.

* * * * *

(c) *Special financial institution account—use.* All advances of Government funds shall be withdrawn pursuant to a payments cleared financing arrangement prescribed by DOE in favor of the financial institution or, at the option of the Government, shall be made by direct payment or other payment mechanism to the contractor, and shall be deposited only in the special financial institution account referred to in the Special Financial Institution Account Agreement, which is incorporated into this contract as Appendix____. No part of the funds in the special financial institution account shall be commingled with any funds of the contractor or used for a purpose other than that of making payments for costs allowable and, if applicable, fees earned under this contract or payments for other items specifically approved in writing by the contracting officer. If the contracting officer determines that the balance of such special financial institution account exceeds the contractor's current needs, the contractor shall promptly make such disposition of the excess as the contracting officer may direct.

(d) *Title to funds advanced.* Title to the unexpended balance of any funds advanced and of any special financial institution account established pursuant to this clause shall remain in the Government and be superior to any claim or lien of the financial institution of deposit or others. It is understood that an advance to the contractor hereunder is not a loan to the contractor, and will not require the payment of interest by the contractor, and that the contractor acquires no right, title or interest in or to such advance other than the right to make expenditures therefrom, as provided in this clause.

Note 3: *The following paragraph (e) shall be included in management and operating contracts with integrated accounting systems.*

(e) *Review and approval of costs incurred.* The contractor shall prepare and submit annually as of September 30, a ''Statement of Costs Incurred and Claimed'' (Cost Statement) for the total of net expenditures accrued (*i.e.,* net costs incurred) for the

period covered by the Cost Statement. The contractor shall certify the Cost Statement subject to the penalty provisions for unallowable costs as stated in sections 306(b) and (i) of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 256), as amended. DOE, after audit and appropriate adjustment, will approve such Cost Statement. This approval by DOE will constitute an acknowledgment by DOE that the net costs incurred are allowable under the contract and that they have been recorded in the accounts maintained by the contractor in accordance with DOE accounting policies, but will not relieve the contractor of responsibility for DOE's assets in its care, for appropriate subsequent adjustments, or for errors later becoming known to DOE.

Note 4: *The following paragraph (e) shall be included in management and operating contracts without integrated accounting systems.*

(e) *Certification and penalties.* The contractor shall prepare and submit a ''Statement of Costs Incurred and Claimed'' (Cost Statement) for the total of net expenditures incurred for the period covered by the Cost Statement. It is anticipated that this will be an annual submission unless otherwise agreed to by the contracting officer. The contractor shall certify the Cost Statement subject to the penalty provisions for unallowable costs as stated in sections 306(b) and (i) of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 256), as amended.

(f) *Financial settlement.* The Government shall promptly pay to the contractor the unpaid balance of allowable costs and fee upon termination of the work, expiration of the term of the contract, or completion of the work and its acceptance by the Government after:

(1) Compliance by the contractor with DOE's patent clearance requirements, and

(2) The furnishing by the contractor of:

(i) An assignment of the contractor's rights to any refunds, rebates, allowances, accounts receivable, collections accruing to the contractor in connection with the work under this contract, or other credits applicable to allowable costs under the contract;

(ii) A closing financial statement;

(iii) The accounting for Government-owned property required by the clause entitled ''Property''; and

(iv) A release discharging the Government, its officers, agents, and employees from all liabilities, obligations, and claims arising out of or under this contract subject only to the following exceptions:

(A) Specified claims in stated amounts or in estimated amounts where the amounts are not susceptible to exact statement by the contractor;

(B) Claims, together with reasonable expenses incidental thereto, based upon liabilities of the contractor to third parties arising out of the performance of this contract; provided that such claims are not known to the contractor on the date of the execution of the release; and provided further that the contractor gives notice of such claims in writing to the contracting officer promptly, but not more than one (1) year after the contractor's right of action first accrues. In addition, the contractor shall provide prompt notice to the contracting officer of all potential claims under this clause, whether in litigation or not (see also Contract Clause ____, DEAR 970.5204–31, ''Insurance—Litigation and Claims'');

(C) Claims for reimbursement of costs (other than expenses of the contractor by reason of any indemnification of the Government against patent liability), including reasonable expenses incidental thereto, incurred by the contractor under the provisions of this contract relating to patents; and

(D) Claims recognizable under the clause entitled, Nuclear Hazards Indemnity Agreement.

(3) In arriving at the amount due the contractor under this clause, there shall be deducted,

(i) any claim which the Government may have against the contractor in connection with this contract, and

(ii) deductions due under the terms of this contract, and not otherwise recovered by or credited to the Government. The unliquidated balance of the special financial institution account may be applied to the amount due and any balance shall be returned to the Government forthwith.

* * * * *

(i) *Collections.* All collections accruing to the contractor in connection with the work under this contract, except for the contractor's fee and royalties or other income accruing to the contractor from technology transfer activities in accordance with this contract, shall be Government property and shall be processed and accounted for in accordance with applicable requirements imposed by the contracting officer pursuant to the Laws, regulations, and DOE directives clause of this contract and, to the extent consistent with those requirements, shall be deposited in the special financial institution account or otherwise made available for payment of allowable costs under this contract, unless otherwise directed by the contracting officer.

* * * * *

10. Section 970.5204–20 is amended by revising the introductory paragraph, clause title, and paragraph (a) to read as follows:

970.5204–20 Management controls.

In accordance with 970.0901 and as prescribed in 970.3270, the following clause shall be used in management and operating contracts:

Management Controls (May 2000)

(a) The contractor shall be responsible for maintaining, as an integral part of its organization, effective systems of management controls for both administrative and programmatic functions. Management controls comprise the plan of organization, methods, and procedures adopted by management to reasonably ensure that: the mission and functions assigned to the contractor are properly executed; efficient and effective operations are promoted; resources are safeguarded against waste, loss, mismanagement, unauthorized use, or misappropriation; all encumbrances and costs that are incurred under the contract and fees that are earned are in compliance with applicable clauses and other current terms, conditions, and intended purposes; all collections accruing to the contractor in connection with the work under this contract, expenditures, and all other transactions and assets are properly recorded, managed, and reported; and financial, statistical, and other reports necessary to maintain accountability and managerial control are accurate, reliable, and timely. The systems of controls employed by the contractor shall be documented and satisfactory to DOE. Such systems shall be an integral part of the contractor's management functions, including defining specific roles and responsibilities for each level of management, and holding employees accountable for the adequacy of the management systems and controls in their areas of assigned responsibility. The contractor shall, as part of the internal audit program required elsewhere in this contract, periodically review the management systems and controls employed in programs and administrative areas to ensure that they are adequate to provide reasonable assurance that the objectives of the systems are being accomplished and that these systems and controls are working effectively.

* * * * *

11. Section 970.5204–90 is added to read as follows:

970.5204–90 Financial management system.

As prescribed in 970.3270, insert the following clause.

Financial Management System (May 2000)

The contractor shall maintain and administer a financial management system that is suitable to provide proper accounting in accordance with DOE requirements for assets, liabilities, collections accruing to the contractor in connection with the work under this contract, expenditures, costs, and encumbrances; permits the preparation of accounts and accurate, reliable financial and statistical reports; and assures that accountability for the assets can be maintained. The contractor shall submit to DOE for written approval an annual plan for new financial management systems and/or subsystems and major enhancements and/or upgrades to the currently existing financial systems and/or subsystems. The contractor shall notify DOE thirty (30) days in advance of any planned implementation of any substantial deviation from this plan and, as requested by the contracting officer, shall submit any such deviation to DOE for written approval before implementation.

12. Section 970.5204–91 is added to read as follows:

970.5204–91 Integrated accounting.

As prescribed in 970.3270, insert the following clause.

Integrated Accounting (May 2000)

Integrated accounting procedures are required for use under this contract. The contractor's financial management system shall include an integrated accounting system that is linked to DOE's accounts through the use of reciprocal accounts and that has electronic capability to transmit monthly and year-end self-balancing trial balances to the Department's Primary Accounting System for reporting financial activity under this contract in accordance with requirements imposed by the contracting officer pursuant to the Laws, regulations, and DOE directives clause of this contract.

13. Section 970.5204–92 is added to read as follows:

970.5204–92 Liability With respect to cost accounting standards.

As prescribed in 970.3270, insert the following clause.

Liability with Respect to Cost Accounting Standards (May 2000)

(a) The contractor is not liable to the Government for increased costs or interest resulting from its failure to comply with the clauses of this contract entitled, ''Cost Accounting Standards,'' and ''Administration of Cost Accounting Standards,'' if its failure to comply with the clauses is caused by the contractor's compliance with published DOE financial management policies and procedures or other requirements established by the Department's Chief Financial Officer or Procurement Executive.

(b) The contractor is not liable to the Government for increased costs or interest resulting from its subcontractors' failure to comply with the clauses at FAR 52.230–2, ''Cost Accounting Standards,'' and FAR 52.230–6, ''Administration of Cost Accounting Standards,'' if the contractor includes in each covered subcontract a clause making the subcontractor liable to the Government for increased costs or interest resulting from the subcontractor's failure to comply with the clauses; and the contractor seeks the subcontract price adjustment and cooperates with the Government in the Government's attempts to recover from the subcontractor.

14. Section 970.5204–93 is added to read as follows:

970.5204–93 Work for others funding authorization.

As prescribed in 970.3270, insert the following clause.

Work for Others Funding Authorization (May 2000)

Any uncollectible receivables resulting from the contractor utilizing contractor corporate funding for reimbursable work shall be the responsibility of the contractor, and the United States Government shall have no liability to the contractor for the contractor's uncollected receivables. The contractor is permitted to provide advance payment utilizing contractor corporate funds for reimbursable work to be performed by the contractor for a non-Federal entity in instances where advance payment from that entity is required under the Laws, regulations, and DOE directives clause of this contract and such advance cannot be obtained. The contractor is also permitted to provide advance payment utilizing contractor corporate funds to continue reimbursable work to be performed by the contractor for a Federal entity when the term or the funds on a Federal interagency agreement required under the Laws, regulations, and DOE directives clause of this contract have elapsed. The contractor's utilization of contractor corporate funds does not relieve the contractor of its responsibility to comply with all requirements for Work for Others applicable to this contract.

[FR Doc. 00–9633 Filed 4–20–00; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018–AF80

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Parts 224, 226, and 424

[Docket No. 000330090–0090–01]

RIN 0648–XA51

Endangered and Threatened Wildlife and Plants; Notice of Change of Jurisdiction for Coastal Cutthroat Trout

AGENCIES: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce; Fish and Wildlife Service (FWS), Interior.

ACTION: Transfer of agency jurisdiction.

SUMMARY: The Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS) have, in the past, jointly managed coastal cutthroat trout (*Oncorhynchus clarki clarki*) under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (ESA). This document is to alert interested parties that, effective November 22, 1999, the FWS assumed all ESA regulatory jurisdiction over coastal cutthroat. The only exception is that NMFS will retain ESA jurisdiction over the endangered Umpqua River cutthroat trout Evolutionary Significant Unit (ESU) until the agencies complete a final determination on the proposed de-listing of this ESU. The change in jurisdiction results from a joint agency determination that coastal cutthroat trout spend the majority of their life cycle in fresh water habitat.

DATES: The finding announced in this document was made on November 22, 1999.

ADDRESSES: Questions concerning this document should be submitted to the Supervisor, Fish and Wildlife Service, Oregon State Office, 2600 SE 98th Avenue, Suite 100, Portland, Oregon 97266; or to, Garth Griffin, National Marine Fisheries Service, Northwest Region, Protected Resources Division, 525 NE Oregon Street, Suite 500, Portland, OR 97232–2737.

FOR FURTHER INFORMATION CONTACT: Rollie White, Fish and Wildlife Service, telephone 503–231–6179, fax 503–231–6195; or, Garth Griffin, National Marine Fisheries Service, telephone 503–231–2005, fax 503–230–5435.

SUPPLEMENTARY INFORMATION: In the past, ESA jurisdiction over the coastal cutthroat trout has been shared by the FWS and NMFS, although NMFS has a history of conducting status reviews on sea-run forms of cutthroat trout (61 FR 41514, August 9, 1996; 64 FR 16397, April 5, 1999). During the status review for Umpqua River sea-run cutthroat trout, both agencies agreed that NMFS would handle ESA responsibilities for this species in the Umpqua River Basin (FWS, 1994). Since that time, the matter of agency jurisdiction has arisen for the various cutthroat life forms in other west coast basins. At issue is the question of appropriate jurisdiction for a species with both diadromous (i.e., migrating between fresh-and saltwater) and resident (*i.e.,* freshwater-dwelling) life forms. Salmonid species exhibiting the former life forms have generally been managed by NMFS while the latter forms have typically been under the jurisdiction of the FWS. The change in jurisdiction announced in this Notice is based on a determination that coastal cutthroat trout spend the majority of their life cycle in fresh water habitat.

On April 5, 1999, the agencies published a joint proposal to list the southwestern Washington/Columbia River cutthroat trout ESU as a threatened species and to de-list the Umpqua River ESU under the ESA (64 FR 16397). In that proposal, we announced that a decision would be made about which agency would have sole jurisdiction over the species. On November 22, 1999, the Directors of NMFS and the FWS signed a joint letter determining that the FWS shall assume all ESA regulatory jurisdiction over coastal cutthroat trout. For the FWS, applicable ESA regulations would include those promulgated in 50 CFR

part 17. For NMFS the applicable ESA regulations would include those promulgated in 50 CFR part 222, 226 and 424.

In making this decision, the agencies recognized that certain ESA responsibilities pertaining to the Umpqua River ESU should be retained by NMFS for a short time so that pending rulemaking and consultation issues can be efficiently concluded prior to FWS assuming complete jurisdiction for the species. Because the original status review and listing decisions for this ESU were conducted by NMFS, the final de-listing assessment will continue to be conducted by NMFS. The results of this assessment have been announced in a **Federal Register** document [1] and, in accordance with section 4(a)(2)(B) of the ESA, will require FWS' concurrence on any de-listing determination for the Umpqua River ESU. Also, NMFS will continue to conduct ESA section 7 consultations for this ESU until publication of a final determination.

In addition, the agencies have determined that the FWS would conclude the final listing determination for southwestern Washington/Columbia River cutthroat trout populations in light of their proposed listing status. FWS has, therefore, assumed sole ESA regulatory responsibilities (*e.g.,* conferencing requirements) for addressing these populations. Final listing determinations for the Southwestern Washington/Columbia River and Umpqua River populations are expected to be completed by April 2000. Regardless, both agencies will continue to coordinate activities such as section 7 consultations and Habitat Conservation Plans involving watersheds shared by coastal cutthroat trout and salmonid species under NMFS jurisdiction (*e.g.,* steelhead, coho, and chinook salmon).

References Cited

A complete list of all references cited herein is available on request from the Fish and Wildlife Service (See **ADDRESSES** section).

Author

The primary author of this document is Rollie White, Fish and Wildlife Service, (see **ADDRESSES** section).

Authority

The authority for this action is the Endangered Species Act (16 U.S.C. 1531 *et seq.*).

[1] See the **Federal Register** issue of April 19, 2000 I.D. 121198A).

Dated: April 12, 2000.

Cynthia U. Barry,

Acting Regional Director, Region 1, Fish and Wildlife Service.

Dated: April 7, 2000.

Penelope D. Dalton,

Assistant Administrator for Fisheries, National Marine Fisheries Service.

[FR Doc. 00–9737 Filed 4–20–00; 8:45 am]

BILLING CODE 4310–55–U

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 622

[I.D. 041700B]

Fisheries of the Caribbean, Gulf of Mexico, and South Atlantic; Reef Fish Fishery of the Gulf of Mexico; Closure of the Commercial Red Snapper Component

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Closure.

SUMMARY: NMFS closes the commercial fishery for red snapper in the exclusive economic zone (EEZ) of the Gulf of Mexico. NMFS has determined that the spring portion of the annual commercial quota for red snapper will be reached on May 8, 2000. This closure is necessary to protect the red snapper resource.

DATES: Closure is effective noon, local time, May 8, 2000, until noon, local time, on September 1, 2000.

FOR FURTHER INFORMATION CONTACT: Dr. Roy Crabtree, 727–570–5305.

SUPPLEMENTARY INFORMATION: The reef fish fishery of the Gulf of Mexico is managed under the Fishery Management Plan for the Reef Fish Resources of the Gulf of Mexico (FMP). The FMP was prepared by the Gulf of Mexico Fishery Management Council and is implemented under the authority of the Magnuson-Stevens Fishery Conservation and Management Act by regulations at 50 CFR part 622. Those regulations set the commercial quota for red snapper in the Gulf of Mexico at 4.65 million lb (2.11 million kg) for the current fishing year, January 1 through December 31, 2000. The red snapper commercial fishing season is split into two time periods, the first commencing at noon on February 1 with two-thirds of the annual quota (3.06 million lb (1.39 million kg)) available, and the second commencing at noon on September 1 with the remainder of the annual quota available. During the commercial season, the red snapper commercial fishery opens at noon on the first of each month and closes at noon on the 10th of each month, until the applicable commercial quotas are reached.

Under 50 CFR 622.43(a), NMFS is required to close the commercial fishery for a species or species group when the quota for that species or species group is reached, or is projected to be reached, by publishing a notification to that effect in the **Federal Register**. Based on current statistics, NMFS has determined that the available commercial quota of 3.06 million lb (1.39 million kg) for red snapper will be reached when the fishery closes at noon on May 8, 2000. Accordingly, the commercial fishery in the EEZ in the Gulf of Mexico for red snapper will remain closed until noon, local time, on September 1, 2000. The operator of a vessel with a valid reef fish permit having red snapper aboard must have landed and bartered, traded, or sold such red snapper prior to noon, local time, May 8, 2000.

During the closure, the bag and possession limits specified in 50 CFR 622.39(b) apply to all harvest or possession of red snapper in or from the EEZ in the Gulf of Mexico, and the sale or purchase of red snapper taken from the EEZ is prohibited. In addition, the bag and possession limits for red snapper apply on board a vessel for which a commercial permit for Gulf reef fish has been issued, without regard to where such red snapper were harvested. However, the bag and possession limits for red snapper apply only when the recreational quota for red snapper has not been reached and the bag and possession limit has not been reduced to zero. The prohibition on sale or purchase does not apply to sale or purchase of red snapper that were harvested, landed ashore, and sold prior to noon, local time, May 8, 2000, and were held in cold storage by a dealer or processor.

Classification

This action is taken under 50 CFR 622.43(a) and is exempt from review under Executive Order 12866.

Dated: April 17, 2000.

Bruce Morehead,

Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 00–10027 Filed 4–20–00; 8:45 am]

BILLING CODE 3510–22–F

Proposed Rules

Federal Register
Vol. 65, No. 78
Friday, April 21, 2000

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 HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Parts 10, 201, 250, 290, 310, 329, 341, 361, 369, 606, and 610

[Docket No. 00N–0086]

Amendment of Regulations Regarding Certain Label Statements on Prescription Drugs; Republication

Editorial Note: FR Doc. 00-8737 was originally published at page 18934 in the issue of Monday April 10, 2000. In that publication some text was incorrectly printed. The corrected document is republished below in its entirety.

AGENCY: Food and Drug Administration, HHS.

ACTION: Proposed rule.

SUMMARY: The Food and Drug Administration (FDA) is proposing to amend its regulations to require the labels of prescription drugs to bear the statement ''Rx only'' instead of the statement ''Caution: Federal law prohibits dispensing without prescription'' and to remove the requirement that certain habit-forming drugs bear the statement ''Warning—May be habit forming.'' The agency is also proposing to add a new section to the regulations to make clear that these habit-forming drugs must be dispensed by prescription only. The agency is taking this action to implement changes made by the Food and Drug Administration Modernization Act of 1997 (FDAMA).

DATES: Submit written comments by June 26, 2000.

ADDRESSES: Submit written comments to the Dockets Management Branch (HFA–305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852.

FOR FURTHER INFORMATION CONTACT: For information regarding human drugs:

Jerry Phillips, Center for Drug Evaluation and Research (HFD–400), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301–827–3246.

For information regarding biologics:

Robert A. Yetter, Center for Biologics Evaluation and Research (HFM–10), Food and Drug Administration, 1401 Rockville Pike, Rockville, MD 20852–1448, 301–827–0373.

SUPPLEMENTARY INFORMATION:

I. The Modernization Act

On November 21, 1997, President Clinton signed into law the Modernization Act (Public Law 105–115). Section 126 of the Modernization Act amended section 503(b)(4) of the Federal Food, Drug, and Cosmetic Act (the act) (21 U.S.C. 353(b)(4)) to require, at a minimum, that, prior to dispensing, the label of prescription drugs bear the symbol ''Rx only'' instead of the statement ''Caution: Federal law prohibits dispensing without prescription.'' The new label statement may be printed as either ''Rx only'' or ''℞ only.''[1] Section 126 of the Modernization Act also repealed section 502(d) of the act (21 U.S.C. 352(d)), which provided that a drug or device containing certain enumerated narcotic or hypnotic (habit-forming) substances or their derivatives was misbranded unless its label bore the name and quantity of the substance and the statement ''Warning—May be habit forming.''

II. Description of the Proposed Rule

The proposed rule would amend parts 10, 201, 250, 310, 329, 361, 606, and 610 (21 CFR parts 10, 201, 250, 310, 329, 361, 606, and 610) by removing the requirement that prescription drugs be labeled with ''Caution: Federal law prohibits dispensing without prescription'' and adding in its place a requirement that prescription drugs be labeled with ''Rx only'' or ''℞ only.''

The proposed rule would amend parts 201 and 369 (21 CFR part 369) by removing the requirement that certain habit-forming drugs bear the statement ''Warning—May be habit forming.''

The proposed rule would remove part 329. Part 329 was issued under repealed section 502(d) of the act. Section 329.1 designates as habit-forming certain derivatives of the habit-forming substances listed in section 502(d) of the act. Section 329.10 elaborates on the labeling requirement of section 502(d) of the act.

Section 329.20 exempts certain habit-forming drugs from the prescription-dispensing requirements of the act. This section has not been substantively revised in more than 30 years. It is now out of date. Except as discussed elsewhere in this section, none of the drug ingredients listed as exempt in § 329.20 are currently marketed over-the-counter (OTC) or have any legal basis to be marketed OTC.

The proposed rule would amend part 290 (21 CFR part 290), by adding new §§ 290.1 and 290.2. Section 290.1 is being added to make clear the agency's determination that a drug that is a controlled substance listed in Schedule II, III, IV, or V of the Federal Controlled Substances Act (CSA) or implementing regulations must, unless otherwise determined by the agency, be dispensed by prescription only as required by section 503(b)(1) of the act. Section 503(b)(1) provides that a drug that ''because of its toxicity or other potentiality for harmful effect, or the method of its use, or the collateral measures necessary to its use,'' or a drug which ''is limited by an approved application under section 505 of the act to use under the professional supervision of a practitioner licensed by law to administer such drug,'' shall be dispensed only upon a prescription of a practitioner licensed by law to administer such drug. Generally, a drug that meets the criteria for control under Schedule II, III, IV, or V of the CSA (see 21 U.S.C. 812) would also meet the standard for prescription dispensing under section 503(b)(1) of the act. Drugs included in Schedule I of the CSA cannot be lawfully marketed in the United States.

Section 290.2 retains the exemption from the prescription-dispensing requirement in § 329.20 for small amounts of codeine in combination with other nonnarcotic active medicinal ingredients. Small amounts of codeine in combination with other nonnarcotic active medicinal ingredients, for example, cough syrup with codeine, may be marketed OTC under a final monograph for cold and cough products. (See § 341.14 (21 CFR 341.14)). For the reason stated above, no other exemptions are warranted at this

[1] The ℞ symbol appears in bold in this document because of type-setting limitations, however, it should not be bolded when used on the product's label.

time for the other narcotic drugs listed in § 329.20(a). Also, an exemption under § 290.2 is not needed for the chlorobutanol preparations described in § 329.20 because chlorobutanol is not a scheduled substance under the CSA. The epinephrine product described in § 329.20(c) cannot be lawfully marketed at this time.

The proposed rule would also revise § 341.14 to refer to the exemption at § 290.2, rather than § 329.20 which is being removed.

III. Implementation

A guidance for industry entitled ''Implementation of Section 126 of the Food and Drug Administration Modernization Act of 1997—Elimination of Certain Labeling Requirements'' (63 FR 39100, July 21, 1998) is available on the Internet at http://www.fda.gov/cder/guidance/index.htm or http://www.fda.gov/cber/guidelines.htm. The guidance indicates that, for the time periods and under the circumstances stated in this section, in the exercise of its enforcement discretion, FDA does not intend to object if a sponsor does not comply with the new labeling requirements of section 126 of the Modernization Act. The guidance advises that FDA does not intend to object if a sponsor of a currently approved product implements the new requirements of section 126 of the Modernization Act at the time of the next revision of its labels, or by February 19, 2003, whichever comes first, and reports these minor changes in the next annual report. For pending (unapproved) full or abbreviated applications received by the agency prior to February 19, 1998, sponsors should comply with the new labeling requirements by the time of the next revision of their labels or by February 19, 2003, whichever comes first. The guidance also advises that full or abbreviated applications received by FDA after February 19, 1998, should provide labels and labeling in compliance with the new labeling requirements.

IV. Environmental Impact

The agency has determined under 21 CFR 25.30(h) through (k) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

V. Analysis of Impacts

FDA has examined the impacts of the proposed rule under Executive Order 12866 and the Regulatory Flexibility Act (5 U.S.C. 601–612), and the Unfunded Mandates Reform Act of 1995 (Public Law 104–4). Executive Order 12866 directs agencies to assess all costs and benefits of available regulatory alternatives and, when regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity). The agency believes that this proposed rule is consistent with the regulatory philosophy and principles identified in the Executive Order. The agency's guidance document explains that FDA will exercise its enforcement discretion in a manner that will permit companies to implement the required label changes at the time of the next revision of their labels, or by February 19, 2003, whichever comes first. Because almost all labels would typically be reprinted within this timeframe, this enforcement strategy will eliminate any significant costs that would otherwise be associated with the rule. As a result, the proposed rule is not a significant action as defined by the Executive Order.

The Regulatory Flexibility Act requires agencies to analyze regulatory options to minimize any significant impact on a substantial number of small entities. The agency certifies that the proposed rule would not have a significant impact on a substantial number of small entities because the 5-year implementation period will allow companies to make the necessary label changes during the normal course of business. Therefore, under the Regulatory Flexibility Act, no further analysis is required. The Unfunded Mandates Reform Act (in section 202) requires that agencies prepare an assessment of anticipated costs and benefits before proposing any rule that may result in an expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of $100 million or more in any one year (adjusted annually for inflation). Because this rule does not impose any mandates on State, local, or tribal governments, or the private sector that will result in an expenditure of $100 million or more in any one year, FDA is not required to perform a cost-benefit analysis under the Unfunded Mandates Reform Act.

VI. Paperwork Reduction Act of 1995

FDA tentatively concludes that this proposed rule contains no collections of information. Therefore, clearance by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (Public Law 104–13) is not required. The revised labeling information is supplied by the Modernization Act (changing ''Caution: Federal law prohibits dispensing without prescription'' to ''Rx only'' or ''℞ only''). According to 5 CFR 1320.3(c)(2), the public disclosure of information originally supplied by the Federal Government to the recipient for the purpose of disclosure to the public is not considered a collection of information.

VII. Request for Comments

Interested persons may, on or before June 26, 2000, submit to the Dockets Management Branch (address above) written comments regarding this proposal. Two copies of any comments are to be submitted, except that individuals may submit one copy. Comments are to be identified with the docket number found in brackets in the heading of this document. Received comments may be seen in the office above between 9 a.m. and 4 p.m., Monday through Friday.

VIII. Proposed Effective Date

FDA proposes that any final rule that may issue based on this proposal become effective 60 days after publication of the final rule. For information on implementation, see the discussion in section III of this document.

List of Subjects

21 CFR Part 10

Administrative practice and procedure, News media.

21 CFR Part 201

Drugs, Labeling, Reporting and recordkeeping requirements.

21 CFR Part 250

Drugs.

21 CFR Parts 290 and 329

Drugs, Labeling.

21 CFR Part 310

Administrative practice and procedure, Drugs, Labeling, Medical devices, Reporting and recordkeeping requirements.

21 CFR Part 341

Labeling, Over-the-counter drugs.

21 CFR Part 361

Medical research, Prescription drugs, Radiation protection.

21 CFR Part 369

Labeling, Medical devices, Over-the-counter drugs.

21 CFR Part 606

Blood, Labeling, Laboratories, Reporting and recordkeeping requirements.

21 CFR Part 610

Biologics, Labeling, Reporting and recordkeeping requirements.

Therefore, under the Federal Food, Drug, and Cosmetic Act, and the Food and Drug Administration Modernization Act, and under authority delegated to the Commissioner of Food and Drugs, it is proposed that chapter I of Title 21 be amended as follows:

PART 10—ADMINISTRATIVE PRACTICES AND PROCEDURES

1. The authority citation for 21 CFR part 10 is revised to read as follows:

Authority: 5 U.S.C. 551–558, 701–706; 15 U.S.C. 1451–1461; 21 U.S.C. 141–149, 321–397, 467f, 679, 821, 1034; 28 U.S.C. 2112; 42 U.S.C. 201, 262, 263b, 264.

§ 10.50 [Amended]

2. Section 10.50 *Promulgation of regulations and orders after an opportunity for a formal evidentiary public hearing* is amended by removing and reserving paragraph (c)(7).

PART 201—LABELING

3. The authority citation for 21 CFR part 201 continues to read as follows:

Authority: 21 U.S.C. 321, 331, 351, 352, 353, 355, 358, 360, 360b, 360gg-360ss, 371, 374, 379e; 42 U.S.C. 216, 241, 262, 264.

§ 201.10 [Amended]

4. Section 201.10 *Drugs; statement of ingredients* is amended in paragraph (a) by removing the phrase ''as 'Warning—May be habit forming' ''.

5. Section 201.16 is revised to read as follows:

§ 201.16 Drugs; Spanish-language version of certain required statements.

An increasing number of medications restricted to prescription use only are being labeled solely in Spanish for distribution in the Commonwealth of Puerto Rico where Spanish is the predominant language. Such labeling is authorized under § 201.15(c). One required warning, the wording of which is fixed by law in the English language, could be translated in various ways, from literal translation to loose interpretation. The statutory nature of this warning requires that the translation convey the meaning properly to avoid confusion and dilution of the purpose of the warning. Section 503(b)(4) of the Federal Food, Drug, and Cosmetic Act requires, at a minimum, that the label bear the statement ''Rx only.'' The Spanish-language version of this must be ''Solamente Rx''.

§ 201.100 [Amended]

6. Section 201.100 *Prescription drugs for human use* is amended in paragraph (b)(1) by removing the phrase '' 'Caution: Federal law prohibits dispensing without prescription' '' and adding in its place the phrase '' 'Rx only' ''.

§ 201.120 [Amended]

7. Section 201.120 *Prescription chemicals and other prescription components* is amended in paragraph (b)(2) by removing the phrase '' 'Caution: Federal law prohibits dispensing without prescription' '' and adding in its place the phrase '' 'Rx only' ''.

§ 201.122 [Amended]

8. Section 201.122 *Drugs for processing, repacking, or manufacturing* is amended in the introductory text, first sentence, by removing the phrase '' 'Caution: Federal law prohibits dispensing without prescription' '' and adding in its place the phrase '' 'Rx only' ''.

§ 201.306 [Amended]

9. Section 201.306 *Potassium salt preparations intended for oral ingestion by man* is amended in paragraph (b)(1) by removing the word ''caution''.

PART 250—SPECIAL REQUIREMENTS FOR SPECIFIC HUMAN DRUGS

10. The authority citation for 21 CFR part 250 continues to read as follows:

Authority: 21 U.S.C. 321, 336, 342, 352, 353, 355, 361(a), 362(a) and (c), 371, 375(b).

§ 250.100 [Amended]

11. Section 250.100 *Amyl nitrite inhalant as a prescription drug for human use* is amended in paragraph (b) by removing the phrase ''legend 'Caution: Federal law prohibits dispensing without prescription.' '' and adding in its place the phrase ''statement 'Rx only.' ''.

§ 250.101 [Amended]

12. Section 250.101 *Amphetamine and methamphetamine inhalers regarded as prescription drugs* is amended in paragraph (b) by removing the phrase ''legend 'Caution: Federal law prohibits dispensing without prescription.' '' and adding in its place the phrase ''statement 'Rx only.' ''.

§ 250.105 [Amended]

13. Section 250.105 *Gelsemium-containing preparations regarded as prescription drugs* is amended by removing the phrase '' 'Caution: Federal law prohibits dispensing without prescription.' '' from the last sentence and adding in its place the phrase '' 'Rx only.' ''.

§ 250.108 [Amended]

14. Section 250.108 *Potassium permanganate preparations as prescription drugs* is amended in paragraph (c)(1) by removing the phrase ''legend, 'Caution: Federal law prohibits dispensing without prescription. ' '' and adding in its place the phrase ''statement 'Rx only.' '' and in paragraph (c)(2) by removing the phrase '', 'Caution: Federal law prohibits dispensing without prescription.' '' and adding in its place the phrase '' 'Rx only.' ''.

§ 250.201 [Amended]

15. Section 250.201 *Preparations for the treatment of pernicious anemia* is amended in paragraph (d) by removing the phrase ''legend 'Caution—Federal law prohibits dispensing without prescription.' '' and adding in its place the phrase ''statement 'Rx only.' ''.

§ 250.250 [Amended]

16. Section 250.250 *Hexachlorophene, as a component of drug and cosmetic products* is amended in the last sentence of paragraph (c)(1) by removing the phrase ''legend 'Caution: Federal law prohibits dispensing without a prescription,' '' and adding in its place the phrase ''statement 'Rx only,' '' and in paragraph (c)(4)(i) by removing the phrase ''prescription legend'' and adding in its place the phrase ''statement 'Rx only' ''.

PART 290—CONTROLLED DRUGS

17. The authority citation for 21 CFR part 290 continues to read as follows:

Authority: 21 U.S.C. 352, 353, 355, 371.

18. Section 290.1 is added to subpart A to read as follows:

§ 290.1 Controlled substances.

Any drug that is a controlled substance listed in schedule II, III, IV, or V of the Federal Controlled Substances Act or implementing regulations must be dispensed by prescription only as required by section 503(b)(1) of the Federal Food, Drug, and Cosmetic Act unless specifically exempted in § 290.2.

19. Section 290.2 is added to subpart A to read as follows:

§ 290.2 Exemption from prescription requirements.

The prescription-dispensing requirements of section 503(b)(1) of the Federal Food, Drug, and Cosmetic Act are not necessary for the protection of

the public health with respect to a compound, mixture, or preparation containing not more than 200 milligrams of codeine per 100 milliliters or per 100 grams that also includes one or more nonnarcotic active medicinal ingredients in sufficient proportion to confer upon the compound, mixture, or preparation valuable medicinal qualities other than those possessed by codeine alone.

PART 310—NEW DRUGS

20. The authority citation for 21 CFR part 310 continues to read as follows:

Authority: 21 U.S.C. 321, 331, 351, 352, 353, 355, 360b-360f, 360j, 361(a), 371, 374, 375, 379e; 42 U.S.C. 216, 241, 242(a), 262, 263b-263n.

§ 310.103 [Amended]

21. Section 310.103 *New drug substances intended for hypersensitivity testing* is amended in paragraph (a)(3)(i) by removing the phrase '' 'Caution: Federal law prohibits dispensing without a prescription' '' and adding in its place the phrase '' 'Rx only' ''.

PART 329—HABIT–FORMING DRUGS

22. Part 329 is removed.

PART 341—COLD, COUGH, ALLERGY, BRONCHODILATOR, AND ANTIASTHMATIC DRUG PRODUCTS FOR OVER–THE–COUNTER HUMAN USE

23. The authority citation for 21 CFR part 341 continues to read as follows:

Authority: 21 U.S.C. 321, 351, 352, 353, 355, 360, 371.

§ 341.14 [Amended]

24. Section 341.14 *Antitussive active ingredients* is amended in paragraph (a)(2) by removing ''§§ 329.20(a) and 341.40'' and adding in its place ''§ 290.2''.

PART 361—PRESCRIPTION DRUGS FOR HUMAN USE GENERALLY RECOGNIZED AS SAFE AND EFFECTIVE AND NOT MISBRANDED: DRUGS USED IN RESEARCH

25. The authority citation for 21 CFR part 361 continues to read as follows:

Authority: 21 U.S.C. 321, 351, 352, 353, 355, 371; 42 U.S.C. 262.

§ 361.1 [Amended]

26. Section 361.1 *Radioactive drugs for certain research uses* is amended in paragraph (f)(1) by removing the phrase '' 'Caution: Federal law prohibits dispensing without prescription' '' and adding in its place the phrase '' 'Rx only' ''.

PART 369—INTERPRETATIVE STATEMENTS RE WARNINGS ON DRUGS AND DEVICES FOR OVER–THE–COUNTER SALE

27. The authority citation for 21 CFR part 369 continues to read as follows:

Authority: 21 U.S.C. 321, 331, 351, 352, 353, 355, 371.

§ 369.22 [Removed]

28. Section 369.22 is removed.

PART 606—CURRENT GOOD MANUFACTURING PRACTICE FOR BLOOD AND BLOOD COMPONENTS

29. The authority citation for 21 CFR part 606 continues to read as follows:

Authority: 21 U.S.C. 321, 331, 351, 352, 355, 360, 360j, 371, 374; 42 U.S.C. 216, 262, 263a, 264.

30. Section 606.121 is amended by revising paragraph (c)(8)(i) to read as follows:

§ 606.121 Container label.

* * * * *

(c) * * *

(8) * * *

(i) ''Rx only.''

* * * * *

PART 610—GENERAL BIOLOGICAL PRODUCTS STANDARDS

31. The authority citation for 21 CFR part 610 continues to read as follows:

Authority: 21 U.S.C. 321, 351, 352, 353, 355, 360, 371; 42 U.S.C. 216, 262, 263, 263a, 264.

§ 610.60 [Amended]

32. Section 610.60 *Container label* is amended in paragraph (a)(6) by removing the phrase '' 'Caution: Federal law prohibits dispensing without prescription,' '' and adding in its place the phrase '' 'Rx only' ''.

§ 610.61 [Amended]

33. Section 610.61 *Package label* is amended in paragraph (s) by removing the phrase '' 'Caution: Federal law prohibits dispensing without prescription,' '' and adding in its place the phrase '' 'Rx only' ''.

Dated: March 31, 2000.

Margaret M. Dotzel,

Acting Associate Commissioner for Policy.

[FR Doc. 00–8737 Filed 4–7–00; 8:45 am]
BILLING CODE 4160–01–F

Editorial Note: FR Doc. 00–8737 which was originally published in the issue of Monday, April 10, 2000, at page 18934 is being republished in its entirety in the issue of April, 2000, because of typesetting errors.

[FR Doc. 00–8737 Filed 4–20–00; 8:45 am]
BILLING CODE 1505–01–F

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[VA084/101–5045b; FRL–6563–1]

Approval and Promulgation of Air Quality Implementation Plans; Virginia; Proposed Revised Format for Materials Being Incorporated by Reference; Proposed Approval of Recodification of the Virginia Administrative Code

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA proposes to approve the State Implementation Plan (SIP) revision submitted by the Virginia Department of Environmental Quality. These submittals include miscellaneous revisions and recodification of Virginia's air pollution control regulations. This proposed recodification reorganizes and renumbers the Virginia SIP to match the numbering system set forth in the Virginia Administrative Code. EPA also proposes to revise the format of regulations for materials submitted by Virginia that are incorporated by reference (IBR) into their respective State implementation plans (SIPs). The regulations affected by this format change have all been previously submitted by the respective State agency and approved by EPA.

In the Final Rules section of this **Federal Register**, EPA is approving the State's SIP submittal as a direct final rule without prior proposal because the Agency views this as a noncontroversial submittal and anticipates no adverse comments. A detailed rationale for the approval is set forth in the direct final rule and a Technical Support Document (TSD) prepared in support of this rulemaking action. A copy of the TSD is available, upon request, from the EPA Regional Office listed in the **ADDRESSES** section of this document. If no adverse comments are received in response to this action, no further activity is contemplated. If EPA receives adverse comments, the direct final rule will be withdrawn and all public comments received will be addressed in a subsequent final rule based on this proposed rule. EPA will not institute a second comment period. Any parties interested in commenting on this action should do so at this time.

DATES: Comments must be received in writing by May 22, 2000.

ADDRESSES: Written comments should be addressed to Marcia L. Spink, Mailcode 3AP20, U.S. Environmental

Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103. Copies of the documents relevant to this action are available for public inspection during normal business hours at the Air Protection Division, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103; and the Virginia Department of Environmental Quality, 629 East Main Street, Richmond, Virginia, 23219.

FOR FURTHER INFORMATION CONTACT: Harold A. Frankford, (215) 814–2108 at the EPA Region III address above, or by e-mail at fankford.harold@epa.gov.

SUPPLEMENTARY INFORMATION: For further information, please see the information provided in the direct final action, with the same title, that is located in the ''Rules and Regulations'' section of this **Federal Register** publication.

Dated: March 6, 2000.

Bradley M. Campbell,

Regional Administrator, Region III.

[FR Doc. 00–9536 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[CA 031–0174b; FRL–6580–4]

Approval and Promulgation of Implementation Plans; California State Implementation Plan Revision, Lake County Air Quality Management District and San Joaquin Valley Unified Air Pollution Control District

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is approving revisions to the California State Implementation Plan. The revisions concern rules from the following: Lake County Air Quality Management District (LCAQMD) and San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD). The rules control particulate matter (PM) emissions from open burning or processes identified by a weight rate throughput.

The intended effect of this action is to regulate emissions of PM in accordance with the requirements of the Clean Air Act, as amended in 1990 (CAA or the Act). In the Final Rules section of this **Federal Register**, the EPA is approving the state's SIP revision as a direct final rule without prior proposal because the Agency views this as a noncontroversial revision and anticipates no adverse comments. A detailed rationale for this approval is set forth in the direct final rule. If no relevant adverse comments are received, no further activity is contemplated in relation to this rule. If EPA receives relevant adverse comments, the direct final rule will not take effect and all public comments received will be addressed in a subsequent final rule based on this proposed rule. EPA will not institute a second comment period on this rule. Any parties interested in commenting on this rule should do so at this time.

DATES: Comments must be received in writing by May 22, 2000.

ADDRESSES: Comments should be addressed in writing to: Andrew Steckel, Rulemaking Office (AIR–4), Air Division, U.S. Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105.

Copies of the rule revisions and EPA's evaluation report of each rule are available for public inspection at EPA's Region IX office during normal business hours. Copies of the submitted rule revisions are also available for inspection at the following locations:

Rulemaking Office (AIR–4), Air Division, U.S. Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105.

Environmental Protection Agency, Air Docket (6102), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460.

California Air Resources Board, Stationary Source Division, Rule Evaluation Section, 2020 ''L'' Street, Sacramento, CA 95812.

Lake County Air Quality Management District, 883 Lakeport Boulevard, Lakeport, CA 95453.

San Joaquin Valley Unified Air Pollution Control District, 1990 East Gettysburg Street, Fresno, CA 93726.

FOR FURTHER INFORMATION CONTACT: Al Petersen, Rulemaking Office, (AIR–4), Air Division, U.S. Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, CA 94105, Telephone: (415) 744–1135.

SUPPLEMENTARY INFORMATION: This document concerns the following rules: LCAQMD Section (Rule) 226.5, Fire Season—Burn Ban; LCAQMD Section (Rule) 431.5, [Non-Agricultural Burning]; LCAQMD Section (Rule) 433, [Exemption—Residential]; Lake County Section (Rule) 1150, Wildland Vegetation Management Burning; and SJVUAPCD Rule 4202, Particulate Matter—Emission Rate. These rules were adopted on September 13, 1988, June 13, 1989, July 15, 1997, December 6, 1988, and December 17, 1992, respectively, and were submitted by the California Air Resources Board (CARB) to EPA on July 23, 1999, March 26, 1990, March 10, 1998, February 7, 1989, and September 28, 1994, respectively. For further information, see the direct final action that is located in the Rules section of this **Federal Register**.

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

Dated: March 30, 2000.

Laura Yoshii,

Acting Regional Administrator, Region IX.

[FR Doc. 00–9651 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[IN99–1b; FRL–6573–6]

Approval and Promulgation of Implementation Plan; Indiana

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing to approve revisions to particulate matter (PM) emissions regulations for Dubois County, Indiana, which the Indiana Department of Environmental Management (IDEM) submitted to EPA on February 3, 1999, as amendments to its State Implementation Plan (SIP). The revisions include relaxation of some PM limits, elimination of limits for boilers which are no longer operating, updating facility names, and changing some boiler fuel types. Air quality dispersion modeling provided by IDEM shows that this SIP revision will not have an adverse effect on PM air quality.

DATES: EPA must receive written comments on this proposed rule by May 22, 2000.

ADDRESSES: You should mail written comments to: J. Elmer Bortzer, Chief, Regulation Development Section, Air Programs Branch (AR–18J), U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604.

You may inspect copies of the State submittal and EPA's analysis of it at: Regulation Development Section, Air Programs Branch (AR–18J), U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604.

FOR FURTHER INFORMATION CONTACT: David Pohlman, Environmental Scientist, Regulation Development Section, Air Programs Branch (AR–18J), U.S. Environmental Protection Agency,

Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 886–3299.

SUPPLEMENTARY INFORMATION: Throughout this document wherever ''we,'' ''us,'' or ''our'' are used we mean EPA.

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I. What Action is EPA Taking Today?

We are proposing to approve revisions to PM emissions regulations for Dubois County, Indiana, which IDEM submitted to EPA on February 3, 1999, as amendments to its SIP. The revisions include relaxation of some PM limits, elimination of limits for boilers which are no longer operating, updating facility names, and changing some boiler fuel types.

II. Where can I Find More Information About This Proposal and the Corresponding Direct Final Rule?

For additional information see the direct final rule published in the rules section of this **Federal Register**.

Dated: March 28, 2000.

Francis X. Lyons,

Regional Administrator, Region 5.

[FR Doc. 00–9921 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 62

[Docket No. CT–055–7214b; FRL–6577–2]

Approval and Promulgation of State Plans for Designated Facilities and Pollutants: Connecticut; Plan for Controlling MWC Emissions From Existing MWC Plants

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) proposes to approve the sections 111(d)/129 State Plan submitted by the Connecticut Department of Environmental Protection (DEP) on October 1, 1999. This State Plan is for carrying out and enforcing provisions that are at least as protective as the Emissions Guidelines (EGs) applicable to existing Municipal Waste Combustors (MWCs) units with capacity to combust more than 250 tons/day of municipal solid waste (MSW).

The Connecticut DEP submitted the Plan to satisfy certain Federal Clean Air Act requirements. In the Final Rules section of the **Federal Register**, EPA is approving the Connecticut State Plan submittal as a direct final rule without a prior proposal. EPA is doing this because the Agency views this action as a noncontroversial submittal and anticipates that it will not receive any significant, material, and adverse comments. A detailed rationale for the approval is set forth in the direct final rule elsewhere in the **Federal Register**. If EPA does not receive any significant, material, and adverse comments to this rule, then the approval will become final without further proceedings. If EPA receives adverse comments, the direct final rule will be withdrawn and EPA will address all public comments received in a subsequent final rule based on this proposed rule. EPA will not begin a second comment period.

DATES: EPA must receive comments in writing by May 22, 2000.

ADDRESSES: You should address your written comments to: Mr. John Courcier, Acting Manager, Air Permits Unit, Office of Ecosystem Protection (CAP), U.S. EPA, One Congress Street, Suite 1100, Boston, Massachusetts 02114–2023.

Copies of documents relating to this proposed rule are available for public inspection during normal business hours at the following locations. The interested persons wanting to examine these documents should make an appointment with the appropriate office at least 24 hours before the day of the visit.

Environmental Protection Agency, Air Permits Unit, Office of Ecosystem Protection, Suite 1100 (CAP), One Congress Street, Boston, Massachusetts 02114–2023.

Connecticut Department of Environmental Protection, Bureau of Air Management, Planning and Standards Division, 79 Elm Street, Hartford, Connecticut 06106–5127, (860) 424–3026.

FOR FURTHER INFORMATION CONTACT: John Courcier, Office of Ecosystem Protection (CAP), EPA–New England, Region 1, Boston, Massachusetts 02203, (617) 918–1659, or by e-mail at *courcier.john@epa.gov.* While the public may forward questions to EPA via e-mail, it must submit comments on this proposed rule according to the procedures outlined above.

SUPPLEMENTARY INFORMATION: See the information provided in the Direct Final action of the same title which is found in the Rules section of this **Federal Register**.

Dated: March 31, 2000.

Mindy S. Lubber,

Regional Administrator, EPA New England.

[FR Doc. 00–9653 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 62

[Docket No. ID–02–0001; FRL–6580–5]

Approval and Promulgation of Hospital/Medical/Infectious Waste Incinerators State Plan for Designated Facilities and Pollutants: Idaho

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The EPA proposes to approve the State of Idaho's section 111(d) State Plan for controlling emissions from existing Hospital/Medical/Infectious Waste Incinerators (HMIWI). The plan was submitted on December 16, 1999, to fulfill the requirements of sections 111(d) and 129 of the Clean Air Act. The State Plan adopts and implements the Emissions Guidelines applicable to existing HMIWIs, and establishes emission limits and controls for sources constructed on or before June 20, 1996.

In the final rules section of this **Federal Register**, the EPA is approving Idaho's State Plan as a direct final rule without prior proposal because the Agency views this as a noncontroversial action and anticipates no relevant adverse comments. A detailed rationale for the approval is set forth in the direct final rule. If no relevant adverse comments are received in response to this action, EPA will not take action on this proposed rule. If the EPA receives relevant adverse comments, EPA will withdraw the direct final rule and it will not take effect. EPA will then address all public comments received in a subsequent final rule based on this proposed rule. The EPA will not institute a second comment period on this action.

DATES: Written comments must be received by May 22, 2000.

ADDRESSES: Written comments should be addressed to: Catherine Woo, US EPA, Region X, Office of Air Quality (OAQ–107), 1200 Sixth Avenue, Seattle, WA 98101.

Copies of the State submittal are available for public review during normal business hours at the following locations. Persons wanting to examine these documents should make an appointment with the appropriate office

at least 24 hours before the day of the visit.

Environmental Protection Agency, Region X, Office of Air Quality, 1200 Sixth Avenue, Seattle, WA 98101.

Idaho Division of Environmental Quality, 1410 N. Hilton, Boise, ID 83720 (Contact Tim Teater at 208–373–0457 for an appointment at IDEQ).

FOR FURTHER INFORMATION CONTACT: Catherine Woo, Office of Air Quality (OAQ–107), US EPA, Region X, 1200 Sixth Avenue, Seattle, WA 98101, (206) 553–1814.

SUPPLEMENTARY INFORMATION: For additional information see the direct final action which is published in the Rules section of this **Federal Register**.

Dated: April 4, 2000.

Chuck Clarke,

Regional Administrator, Region 10.

[FR Doc. 00–9649 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 62

[Docket No. ID–03–0001; FRL–6583–7]

Approval and Promulgation of State Plans for Designated Facilities and Pollutants: Oregon; Negative Declaration

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The EPA proposes to approve the Clean Air Act (CAA), Sections 111(d) and 129 negative declaration submitted by the Oregon Department of Environmental Quality on October 20, 1998, and November 6, 1998. This negative declaration adequately certifies that there are no Hospital/Medical/Infectious Waste Incinerators (HMIWI) located within its boundaries.

In the final rules section of this **Federal Register**, the EPA is approving Oregon's negative declaration as a direct final rule without prior proposal because the Agency views this as a noncontroversial action and anticipates no relevant adverse comments. A detailed rationale for the approval is set forth in the direct final rule. If no relevant adverse comments are received in response to this action, EPA will not take action on this rule. If the EPA receives relevant adverse comments, EPA will withdraw the direct final rule and it will not take effect. EPA will then address all public comments received in a subsequent final rule based on this proposed rule. The EPA will not institute a second comment period on this action.

DATES: Written comments must be received by May 22, 2000.

ADDRESSES: Written comments should be addressed to: Catherine Woo, US EPA, Region X, Office of Air Quality (OAQ–107), 1200 Sixth Avenue, Seattle, WA 98101.

Copies of the State negative declaration are available for public review during normal business hours at the following locations. Persons wanting to examine these documents should make an appointment with the appropriate office at least 24 hours before the day of the visit.

Environmental Protection Agency, Region X, Office of Air Quality, 1200 Sixth Avenue, Seattle, WA 98101.

Oregon Department of Environmental Quality, 811 SW Sixth Avenue, Portland, OR 97204.

Contact Kathleen Craig at 503–229–6833, for an appointment at ODEQ.

FOR FURTHER INFORMATION CONTACT: Catherine Woo, Office of Air Quality (OAQ–107), US EPA, Region X, 1200 Sixth Avenue, Seattle, WA 98101, (206) 553–1814.

SUPPLEMENTARY INFORMATION: For additional information see the direct final action which is published in the Rules Section of this **Federal Register**.

Dated: April 4, 2000.

Chuck Clarke,

Regional Administrator, Region X.

[FR Doc. 00–10034 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

49 CFR Parts 222 and 229

[Docket No. FRA–1999–6439, Notice No. 5; Docket No. FRA–1999–6440]

RIN 2130–AA71

Use of Locomotive Horns at Highway-Rail Grade Crossings

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION: Technical conference on proposed rule.

SUMMARY: On January 13, 2000 (65 FR 2230), FRA published a Notice of Proposed Rulemaking (NPRM) on the Use of Locomotive Horns at Highway-Rail Grade Crossings (Docket No. FRA–1999–6439). On the same date FRA released a Draft Environmental Assessment (DEIS)(Docket No. FRA–1999–6440) pertaining to the proposals contained in the NPRM. A number of public hearings in these proceedings have been held throughout the country, and more have been scheduled prior to the close of the comment period on May 26, 2000. FRA has determined that, in addition to the public hearings, a technical conference addressing locomotive horn acoustics would be helpful to FRA in developing a final rule in this proceeding. Accordingly, FRA is scheduling a technical conference on locomotive horn acoustics to be held on May 10, 2000, in Washington, DC.

DATES: 1. A technical conference will be held on Wednesday, May 10, 2000 beginning at 9:00 a.m.

2. Deadline to register for participation in the technical conference is close of business on Friday, May 5, 2000. Please see Public Participation Procedures in **SUPPLEMENTARY INFORMATION** section of this document for registration details.

ADDRESSES: 1. *Technical conference:* FRA Headquarters, 7th floor conference room, 1120 Vermont Avenue, NW, Washington, DC.

2. *FRA Docket Clerk:* Federal Railroad Administration Docket Clerk, Office of Chief Counsel, Mail Stop 10, FRA, 1120 Vermont Avenue, NW, Washington, DC 20590. E-mail address for the FRA Docket Clerk is renee.bridgers@fra.dot.gov.

SUPPLEMENTARY INFORMATION:

Technical Conference

The technical conference is meant to address specific technical issues that might not be addressed in written comments or through oral comments presented at public hearings. The issues to be addressed will focus on the technical attributes of, variations to, and potential modifications of train horns. Among the issues which may be discussed are tone and decibel levels, sound dispersion and direction, horn placement and shrouding, horn sounding sequence and duration, and whistle board placement and positive train control (as it relates to horn use). Additional subjects within the scope of locomotive horn acoustics may be also be addressed. A transcript of the technical conference will be taken and placed in the public docket of this proceeding.

Public Participation Procedures

Any person wishing to participate in the technical conference should notify the FRA Docket Clerk by mail or by e-mail by close of business on May 5,

2000. The notification of intent to participate should identify the organization the person represents (if any), the names of all participants from that organization planning to participate, and a phone number at which the registrant can be reached. FRA reserves the right to limit active conference participation to those persons who have registered in advance.

Issued in Washington, DC on April 18, 2000.

Grady C. Cothen, Jr.,

Deputy Associate Administrator for Safety Standards and Program Development.

[FR Doc. 00–10043 Filed 4–20–00; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 679

[Docket No. 000331092–0092–01; I.D. 030100F]

RIN 0648–AM42

Fisheries of the Exclusive Economic Zone Off Alaska; License Limitation Program for the Scallop Fishery

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; request for comments.

SUMMARY: NMFS proposes regulations to implement Amendment 4 to the Fishery Management Plan for the Scallop Fishery off Alaska (FMP), which would create a license limitation program (scallop LLP) for the scallop fishery. If adopted, this program would limit the number of participants and reduce fishing capacity in the scallop fishery off Alaska. This action is proposed to achieve the conservation and management goals for the scallop fishery and is intended to further the objectives of the FMP.

DATES: Comments on the proposed rule must be submitted on or before June 5, 2000.

ADDRESSES: Comments on this proposed rule should be submitted to Sue Salveson, Assistant Regional Administrator, Sustainable Fisheries Division, Alaska Region, NMFS, P.O. Box 21668, Juneau, AK 99802–1668, Attn: Lori Gravel. Comments may also be sent via facsimile (fax) to 907–586–7465. Comments will not be accepted if submitted via e-mail or Internet. Courier or hand delivery of comments may be made to NMFS in the Federal Building, Room 453, Juneau, AK. Copies of Amendment 4 to the Scallop FMP, and the Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis (EA/RIR/IRFA) prepared for the amendment are available from the North Pacific Fishery Management Council, 605 West 4th Ave., Suite 306, Anchorage, AK 99501–2252; telephone 907–271–2809.

FOR FURTHER INFORMATION CONTACT: Gretchen Harrington, 907–586–7228, or gretchen.harrington@noaa.gov.

SUPPLEMENTARY INFORMATION: The North Pacific Fishery Management Council (Council) prepared the FMP under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). Under the FMP, management of all aspects of the scallop fishery, except limited access, is delegated to the State of Alaska (State). Federal regulations governing the scallop fishery appear at 50 CFR parts 600 and 679. State regulations governing the scallop fishery appear in the Alaska Administrative Code (AAC) at 5 AAC Chapter 38—Miscellaneous Shellfish.

State regulations establish guideline harvest levels (GHL) for different scallop registration areas, fishing seasons, open and closed fishing areas, observer coverage requirements, bycatch limits, gear restrictions, and measures to limit processing efficiency (including a ban on the use of mechanical shucking machines and a limitation on crew size). The gear regulations limit vessels to using no more than two, 15–ft (4.5 m) dredges, except in Cook Inlet (State Registration Area H) where vessels are limited to using a single 6–ft (1.8 m) scallop dredge.

The Council has submitted Amendment 4 for Secretarial review, and a Notice of Availability of the amendment was published March 8, 2000 (65 FR 12500) with comments on the FMP amendment invited through May 8, 2000. Comments may address the FMP amendment, the proposed rule, or both, but must be received by May 8, 2000, to be considered in the approval/disapproval decision on the FMP amendment.

Management Background and Need for Action

Historic Management of the Scallop Fishery

The scallop resource off Alaska has been commercially exploited for more than 30 years. Weathervane scallop stocks off Alaska were first commercially explored by a few vessels in 1967. The fishery grew rapidly over the next 2 years with about 19 vessels harvesting almost 2 million lb (907.2 metric tons (mt)) of shucked meats. Since then, vessel participation and harvests have fluctuated greatly, but have remained below the peak participation and harvests experienced in the late 1960s. Between 1969 and 1991, about 40 percent of the annual scallop harvest came from State waters. Since 1991, Alaska scallop harvests have increasingly occurred in Federal waters. Before 1990, about two-thirds of the scallop harvest was taken off Kodiak Island and about one-third from the Yakutat area, with harvests from other areas making minor contributions to overall landings. The increased harvests in the 1990s occurred with new exploitation in the Bering Sea. The fishery has occurred almost exclusively in Federal waters in recent years, but some fishing in State waters occurs off Yakutat, Dutch Harbor, and Adak.

Before the early 1990s, the Council concluded that the State's scallop management program provided sufficient conservation and management of the Alaska scallop resource and did not need to be duplicated by Federal regulation. The State concurred with this position under the premise that all vessels participating in the Alaska scallop fishery were registered under the laws of the State and fell under the State's management jurisdiction.

Initial Federal Involvement in the Fishery

By 1992, fishery participants and management agencies developed growing concerns about excessive fishing capacity and exploitation in the scallop fishery. The Council was presented with information indicating that the stocks of weathervane scallops were fully exploited and that any increase in fishing effort could be detrimental to the stocks. Information indicated that dramatic changes in age composition had occurred during the period 1980–1990, with commensurate declines in harvest. In the early 1990s, many fishermen abandoned historical fishing areas and searched for new areas to maintain catch levels. Increased numbers of small scallops were reported in the catch. These events raised conservation concerns because scallops are highly susceptible to local depletion and boom/bust cycles worldwide.

The perceived need to limit access to the fishery was the primary motivation for the Council to begin its consideration of Federal management of the scallop fishery in 1992. The Council believed that Federal action was necessary because existing State statutes precluded a State vessel moratorium

and, at that time, the State did not have authority under the Magnuson-Stevens Act to restrict access in Federal waters. The Council began analysis of a variety of options for Federal management of the scallop fishery in Federal waters off Alaska, and a vessel moratorium was proposed as an essential element of a Federal management regime to stabilize the size and capacity of the scallop fleet while the Council considered permanent limited entry alternatives for the fishery. In September 1993, the Council tentatively identified its preferred alternative for a Federal FMP for the scallop fishery—a Federal vessel moratorium and shared management authority with the State. A draft FMP and analysis were released to the public in November 1993.

In April 1994, the Council and its advisory bodies reviewed the draft FMP, received public testimony, and adopted the draft FMP for the scallop fishery, which proposed to establish a vessel moratorium and delegate most other routine management measures to the State. Under the draft FMP, non-limited access measures would be delegated to the State based on the premise that all vessels fishing for scallops in the Federal waters off Alaska also would be registered with the State. The Council recognized the potential problem of unregistered vessels fishing in Federal waters, but noted that all vessels fishing for scallops in Federal waters were registered in Alaska and that no information was available to indicate that vessels would not continue to register with the State.

Unregulated Fishing and the Closure of Federal Waters

During the time proposed regulations to implement the Council's proposed FMP were being developed, a vessel, which was presumed to have canceled its State registration, began fishing for scallops in Federal waters in the Prince William Sound Registration Area. The State previously had closed these waters to fishing by State-registered vessels because the GHL level of 50,000 lb (22.7 mt) of shucked meats had been taken. The State was unable to stop this uncontrolled fishing activity due to uncertainty whether the vessel was fishing outside State jurisdiction. The U.S. Coast Guard boarded the vessel in question and was informed that 54,000 lb (24.5 mt) of shucked scallop meats were on board. This amount, combined with the 50,000 lb (22.7 mt) of shucked meats already taken by State-registered vessels meant that the State's GHL for the Prince William Sound Registration Area was exceeded by over 100 percent.

On February 17, 1995, the Council held an emergency teleconference to address concerns about uncontrolled fishing for scallops in Federal waters by vessels fishing outside the States's jurisdiction. The Council requested that NMFS implement an emergency rule to close Federal waters to fishing for scallops to prevent overfishing of the scallop stocks. NMFS approved the Council's request and closed Federal waters off Alaska to fishing for scallops by emergency rule on February 23, 1995 (60 FR 11054, March 1, 1995).

After the unregulated fishing event that warranted the emergency rule, the Council and NMFS determined that the Council's draft FMP was no longer appropriate. As a result, the draft FMP was not submitted for review by NMFS. To respond to the need for Federal management of the scallop fishery once the emergency rule expired, the Council prepared a second draft FMP and adopted it. That FMP was subsequently approved by NMFS on July 26, 1995. The only management measure authorized and implemented under the FMP was an interim 1 year closure of Federal waters off Alaska to fishing for scallops (60 FR 42070, August 15, 1995). The interim closure prevented uncontrolled fishing for scallops in Federal waters while the Council developed a Federal scallop management program. The Council recommended this approach because the suite of alternative management measures necessary to support a controlled fishery for scallops in Federal waters could not be prepared, reviewed, and implemented before the emergency rule expired.

Amendment 1: State-Federal Management Regime

During 1995, the Council prepared Amendment 1 to the FMP to replace the interim closure with a joint State-Federal management regime. Amendment 1 was approved by NMFS on July 10, 1996 (61 FR 38099). Amendment 1 established a joint State-Federal management regime under which NMFS implemented Federal scallop regulations that duplicated most State scallop regulations, including definitions of scallop registration areas and districts, scallop fishing seasons, closed waters, gear restrictions, efficiency limits, crab bycatch limits, scallop catch limits, inseason adjustments, and observer coverage requirements. This joint State-Federal management regime was designed as a temporary measure to prevent unregulated fishing in Federal waters until changes in the Magnuson-Stevens Act would enable the Council to delegate management of the fishery to the State. Federal waters were re-opened to fishing for scallops on August 1, 1996.

Amendment 2: Vessel Moratorium

On March 5, 1997, NMFS approved Amendment 2 to the FMP, which established a temporary moratorium on the entry of new vessels into the scallop fishery in Federal waters off Alaska. NMFS published a final rule implementing the vessel moratorium on April 11, 1997 (62 FR 17749). To qualify its owner for a moratorium permit, a vessel must have made a legal landing of scallops during 1991, 1992, or 1993, or during at least 4 separate years from 1980 through 1990. The moratorium remains in effect through June 30, 2000, or until replaced by a permanent limited access system. Eighteen vessel owners qualified for moratorium permits under the Federal vessel moratorium.

Amendment 3: Delegate Management Authority to the State

While the joint State-Federal management regime established under Amendment 1 enabled NMFS to reopen the EEZ to fishing for scallops, it proved to be cumbersome in practice. Every management action, including inseason openings and closures, had to be coordinated so that State and Federal actions were simultaneously effective. State scallop managers were constrained in their ability to rapidly implement management decisions because they had to coordinate each action with NMFS and provide sufficient lead-time for publication of the action in the **Federal Register**.

The purpose of maintaining duplicate regulations at the State and at the Federal level was to prevent unregulated fishing by vessels not registered under the laws of the State. By 1997, the State-Federal management regime established under Amendment 1 no longer was necessary to prevent unregulated fishing for scallops in Federal waters because the Sustainable Fisheries Act of 1996 amended section 306 of the Magnuson-Stevens Act to provide authority for the FMP to delegate to the State management responsibility for the scallop fishery in Federal waters off Alaska.

Amendment 3 delegated to the State the authority to manage all aspects of the scallop fishery in Federal waters, except limited access, including the authority to regulate vessels not registered under the laws of the State. The final rule implementing Amendment 3 was published on July 17, 1998 (63 FR 38501). Amendment 3 simplified scallop management in the

Federal waters off Alaska by eliminating the unnecessary duplication of regulations at the State and Federal levels.

Amendment 5: Essential Fish Habitat (EFH)

Amendment 5 to the FMP responds to new EFH requirements of section 303 of the Magnuson-Stevens Act. The notice of approval of Amendment 5 was published on April 26, 1999 (64 FR 20216). This amendment describes and identifies EFH for the scallop fishery, includes provisions to minimize to the extent practicable adverse effects on such habitat caused by fishing, and identifies other actions to encourage the conservation and enhancement of such habitat.

Amendment 6: Overfishing Definitions

Amendment 6, also required by recent changes in the Magnuson-Stevens Act, amended the FMP by redefining overfishing, optimum yield (OY), and maximum sustainable yield for the scallop resource. Amendmentse 6 was approved on March 3, 1999 (64 FR 11390). This amendment improved management of the scallop fisheries by providing the tools to (1) prevent overfishing; (2) achieve OY on a continuing basis; and (3) minimize bycatch. Amendment 6 also added information to the FMP on the State's bycatch monitoring and reduction programs such as at-sea catch sampling, area closures, bycatch limits, and gear restrictions.

Amendment 4: License Limitation Program

The Council adopted Amendment 4 to the FMP in February 1999. If approved and implemented as proposed, an LLP would replace the existing Federal moratorium program on the entry of new vessels to the scallop fishery, which is scheduled to expire on June 30, 2000.

The Council designed Amendment 4 in response to extensive public testimony that the scallop fishery suffered from excessive harvesting capacity. In 1996, members of the scallop industry submitted a proposal to the Council for an LLP. Industry members proposed an LLP to limit access to the fishery because they believed that they would suffer economic hardship if latent moratorium permits were activated. ''Latent'' permits refer to permits for vessels that received a moratorium permit but that currently are not active in the fishery. Public testimony indicated that fishermen could not break even (i.e., their average costs of fishing for scallops would not at least equal their average gross income from scallops landed), if the number of vessels fishing for scallops increased. This conclusion is supported by the economic analysis in the EA/RIR/IRFA for Amendment 4 and is demonstrated by recent participation in the fishery of an average of nine vessels since 1995.

Beginning February 1998, the Council reviewed participation, and other data from the scallop fishery, considered public testimony, and developed a problem statement and alternatives for analysis of an LLP to replace the existing vessel moratorium.

The Council developed six alternatives and two options for the LLP. These alternatives ranged from no action to a program that would issue nine licenses, which is half the number of moratorium permits. The alternatives and options are described in the EA/RIR/IRFA (see **ADDRESSES**). Under the Council's preferred alternative the qualification criteria for initial allocation of licences, if adopted, would result in a total of nine licenses. The Council adopted the most restrictive alternative and options to create an LLP that would reduce the number of participants in the fishery and eliminate growth in harvesting capacity. The Council's intention is to reduce effort to approach a sustainable fishery with maximum net benefits to the Nation, as required by the Magnuson-Stevens Act. This proposed rule would implement the Council's preferred alternative and options.

Operational Aspects

1. General

The LLP would limit access to the commercial scallop fisheries in the exclusive economic zone (EEZ) off Alaska. A qualified person who applies as prescribed would receive a license(s) that would authorize that person to catch and retain scallops. Initial allocation of licenses would be based on the eligibility qualifications discussed here.

2. Nature of Scallop LLP Licenses and Qualification Periods

A scallop LLP license is a permit that grants the person named on the license (i.e., the license holder) the privilege of catching and retaining scallops in Federal waters off Alaska. Once initially issued using criteria discussed here, a scallop LLP license would be transferable, subject to NMFS approval, to an eligible transferee(s). Each license would specify certain endorsements and limitations, including the name and address of the license holder, the maximum length overall (MLOA) of the vessel on which the license could be used, and (as appropriate) limitations on scallop dredging gear that could be deployed from the vessel. A scallop LLP license would represent a privilege (not a property right) that could be amended or revoked at any time without compensation.

A scallop LLP license would be initially issued to an eligible applicant who held, on February 8, 1999 (the date of Council action), either a State or Federal moratorium permit and who used the permit to make legal landings of scallops in the qualifying period. The qualifying period for the scallop LLP would be from January 1, 1996, through October 9, 1998. Legal landings of scallops would have to be made in at least 2 of the 3 calendar years during this period. A legal landing is defined in regulations (§ 679.2) as a landing in compliance with Federal and State commercial fishing regulations in effect at the time of the landing.

A license would authorize the license holder to catch and retain scallops in Federal waters off Alaska. The license holder could be an individual or a corporate person consistent with the definition of ''person'' in the Magnuson-Stevens Act, and the license holder would not be required to be on board a vessel when it is catching and retaining scallops. An original copy of the scallop LLP license would be required to be onboard the vessel at that time. Although a scallop LLP license would not be vessel specific, the length overall of any vessel that is catching and retaining scallops under the terms of the license would be constrained by the MLOA specified on the license. In addition, the license would specify any gear limitations. The license also would be transferable, subject to NMFS review and approval of an application to transfer the license and the eligibility of the proposed transferee to receive a license by transfer.

A scallop LLP license would replace the existing scallop moratorium permit and would require possession of a moratorium permit as a criterion for a license. To qualify for a Federal scallop moratorium permit, a vessel must have made a minimum of 1 legal landing of scallops harvested from any waters off Alaska during 1991, 1992, or 1993, or during at least 4 separate years from 1980 through 1990 (§ 679.4(g)(3)).

The State moratorium qualification period was established either for a Statewide moratorium permit or a Cook Inlet moratorium permit. For the Statewide moratorium qualification period, a vessel owner must have harvested and landed at least 1,000 lb

(0.45 mt) of scallops from State waters during 1995 or 1996, and during each of at least 4 years between 1984 and 1996, inclusive. For the Cook Inlet moratorium qualification period, a person must have harvested and landed at least 1,000 lbs (0.45 mt) of scallops from Cook Inlet during 1994 or 1996, and during each of at least 3 years between 1984 and 1996, inclusive.

The scallop LLP eligibility criteria that require an applicant to have held a moratorium permit and to have made legal landings of scallops during the scallop LLP qualifying period are designed to account for past and recent participation in the scallop fishery. A key criterion for qualifying for a scallop LLP license is being named on a State or Federal moratorium permit. Hence, persons who were eligible for a vessel moratorium permit but did not apply or receive one could not now be eligible for a scallop LLP license. Also, the proposed requirement to have an original scallop LLP license on board while catching and retaining scallops would prevent a license holder from using more than one vessel at once for that purpose, unless the license holder was named on more than one license (see ''ownership caps'' below).

3. Gear Endorsements

Generally, the proposed scallop LLP licenses would have no area or gear endorsements. Scallop LLP licenses would authorize their holders to catch and retain scallops in all waters off Alaska that are open for scallop fishing. However, licenses premised on the legal landings of scallops harvested only from Cook Inlet (State Registration Area H) during the qualifying period would have a gear endorsement that would limit allowable gear to a single 6–foot (1.8 m) dredge when fishing for scallops in any area. Otherwise, licenses premised on the legal landings of scallops harvested from other areas outside Cook Inlet during the qualifying period would have no gear endorsement. Existing State regulations limit gear size to two 15–foot (4.5 m) dredges in all other areas. The purpose of this restriction is to prevent expansion in overall fishing capacity by not allowing relatively small operations in Cook Inlet to increase their fishing capacity. Persons who qualified from Cook Inlet scallop harvests would be allowed to operate in any area open to scallop fishing.

4. Vessel Length

The length overall (LOA) of a vessel is defined at § 679.2. Each scallop LLP license would specify the maximum LOA (MLOA) of a vessel that could be used under the authority of the license. The specified MLOA would be equal to the LOA of the longest vessel used by the applicant to make legal scallop landings during the qualifying years. The purpose of the MLOA provision is to restrict growth of harvesting capacity in the fishery, thus furthering the goals of the LLP.

5. Harvest Requirements

A legal landing is defined at § 679.2 as a landing in compliance with Federal and State commercial fishing regulations in effect at the time of the landing. Only legal landings of scallops would qualify the applicant for a scallop LLP license. To qualify for a scallop license, the applicant would be required to have used his/her moratorium permit on a qualified vessel to make one legal landing of scallops in each of any 2 calendar years from January 1, 1996, through October 9, 1998.

6. Scallop LLP License Recipients

A license would be issued only to an eligible applicant meeting the eligibility criteria described here. In addition, an eligible applicant would have to have been eligible on February 8, 1999 (the date of final Council action on the LLP), to document a fishing vessel under Chapter 121 of Title 46, U.S.C. This law establishes criteria regarding the citizenship of a person who may own a U.S. fishing vessel. The proposed regulation would require that the same citizenship standards apply to the eligibility for a scallop LLP license. Actual ownership of a fishing vessel under this statute on February 8, 1999, however, would not be required.

7. Application Process for Scallop LLP Licenses

A one-time application period of no less than 15 days would be specified by notification in the **Federal Register**. If the LLP is approved, NMFS anticipates that the application period for LLP licenses will be in May or June of 2000. All applications for licenses would have to be submitted during the time period specified for applying for a license. Applications postmarked after the ending date for the application period would be denied.

To evaluate and verify an applicant's eligibility claim, NMFS would compile an official LLP record for the scallop LLP containing information on qualified persons who hold moratorium permits and used the permits to participate in the scallop fishery during the qualifying period. The official scallop LLP record would contain only complete and verifiable information that would be used for the purpose of determining eligibility for a license, including information on vessels that participated in the scallop fishery during the relevant time periods, vessel ownership, and the dates, location, and numbers of qualifying landings of scallops made by those vessels.

If a scallop LLP application is submitted during the application period, NMFS would compare the claims on the application with the official LLP record. If the claims on the application are supported by the information in the official LLP record, the application would be approved and, following the expiration of the application period, the licence could be issued. If the claims are not verified using information in the official LLP record, the applicant would be so notified and would be provided 60 days to submit information (or evidence) to support the unverified claims. For example, an applicant could provide State fish tickets to verify legal landings not found in the official LLP record. Or, an applicant could provide a sales contract verifying vessel ownership. Unsubstantiated or incompletely verified claims would not be accepted. If an applicant demonstrates that the claims submitted in the application are correct and sufficient to qualify the applicant for a license, NMFS could issue a license to the applicant at the conclusion of the evidentiary period.

If information in the application is not substantiated or verified at the conclusion of the 60-day evidentiary period, NMFS would issue an initial administrative determination (IAD) including reasons why the application is not accepted. Applicants then would be provided with an opportunity to appeal that IAD to the NMFS Office of Administrative Appeals, under § 679.43.

During the pendency of an administrative adjudication leading to a final agency action, NMFS would issue an interim (temporary, non-transferable) licence to an applicant who was authorized to participate in the fishery in the year before the IAD is issued and who makes a credible claim to eligibility under the scallop LLP regulations. A decision to withhold an interim licence could be appealed to the Office of Administrative Appeals. An applicant who was issued a license the previous year would be eligible for a non-transferable interim license pending the final resolution of his or her claim pursuant to the license renewal provisions of 5 U.S.C. 558. The non-transferable interim license would authorize the applicant to catch and retain scallops and would be effective until final agency action. At that time, the person who appealed would receive either a transferable license, or no

license, depending on the final agency action.

8. Transfer Process for Scallop LLP Licenses

The transfer process for scallop LLP licenses would enable a license holder to request a transfer of an LLP license to any person (designated transferee) who meets the eligibility requirements. Eligibility requirements would include (1) the designated transferee being eligible to document a fishing vessel under Chapter 121, Title 46, U.S.C., (2) the parties to the transfer having no fines, civil penalties, other payments due and outstanding, or outstanding permit sanctions resulting from Federal fishing violations, and (3) the transfer not causing the designated transferee to exceed a two-license limit contained in the Council's preferred alternative (see ''Ownership Caps'' below).

A complete application would have to be submitted to the Administrator, Alaska Region, NMFS (Regional Administrator) for approval before a transfer could occur. Application forms would be available on request. NMFS would return incomplete applications to the applicant and would identify specific information that is necessary to make the application complete. Information that would be required in the application includes (1) identification information for all parties to the transfer, (2) identification number of the license to be transferred, (3) declaration that the designated transferee is a U.S. Citizen, (5) a copy of the contract or sales agreement for the transfer, (6) other information the Regional Administrator may require, and (7) the notarized signatures of the parties to the transfer.

This proposed rule also would provide for transfers pursuant to requests by court order, operation of law, or the terms of a security agreement. This provision considers that some transfers might not be voluntarily requested by the license holder. Under those circumstances, the Regional Administrator would review the information in the transfer application or other document and determine whether the requested transfer would conflict with other provisions of the scallop LLP regulations.

9. Ownership Caps

A person, corporation, or entity would be prohibited from holding more than two scallop licenses at one time. A person who holds two scallop licenses could not receive an additional scallop license by transfer until the number of scallop licenses which that person holds is less than two.

The two-license ownership cap is intended to prevent, as required by national standard 4 of the Magnuson-Stevens Act, any person from obtaining an excessive share of harvest privileges in the scallop fishery. The Council determined that holding more than two scallop LLP licenses would constitute an excessive share in the context of this relatively small fishery.

Consistency With Section 303(b)(6) of the Magnuson-Stevens Act

Any FMP or FMP amendment that establishes a limited access system to achieve OY must take into account the factors listed in section 303(b)(6) of the Magnuson-Stevens Act. These factors include (1) present participation in the fishery, (2) historical fishing practices in, and dependence on, the fishery, (3) the economics of the fishery, (4) the capability of fishing vessels in the fishery to engage in other fisheries, (5) the cultural and social framework relevant to the fishery and any affected fishing communities, and (6) any other relevant considerations.

The administrative record for the scallop LLP is replete with examples of the Council considering the issues enumerated in the section 303(b)(6) guidelines. The requirement for a moratorium permit and the qualifying period requirement is an example of the Council balancing present participation in the fishery and historical practices in, and dependence on, the fishery. The Council chose legal landings in multiple years, 1996 through 1998, as the qualification for present participation.

The economics of the fishery was taken into account primarily through the breakeven analysis. The breakeven analysis in the EA/RIR/IRFA provides an estimate of the scallop harvest necessary to cover annual operating and fixed costs of typical scallop fishing vessels and indicates relative profitability of an average vessel in the scallop fishery. The analysis demonstrates that the breakeven point depends primarily on two factors, the exvessel price paid for scallops and the total landings of scallops. Based on the analysis, the Council estimated that about nine vessels would be able to operate in the fishery at the breakeven level assuming total landings of 1.3 million lb (590 mt) and an exvessel price of $6.02 per lb. More vessels would be able to participate at the breakeven level if harvest quotas or prices increased and fewer if they decreased. Recent landings (1996–97) have been less than the assumed breakeven volume although the average price has been slightly higher than the assumed breakeven exvessel price. Based on these recent data, only about six vessels could participate in the fishery at the breakeven level.

Overcapitalization in the industry and excessive harvesting capacity is an endemic condition in many fisheries that reduces the value of those fisheries to the Nation and potentially leads to other biological and efficiency problems. Authorizing more vessels to operate in the scallop fishery than could on average breakeven, arguably would be authorizing excess harvesting capacity. The Council took this matter into account in consideration of the economics of the fishery. Hence, the Council's recommended qualification criteria likely would result in more vessels qualified to operate in the scallop fishery especially in years of low scallop abundance; however, significantly fewer would be authorized under the LLP than under the current moratorium.

The concern for the capability of a vessel displaced from one fishery to enter another fishery is for the individual owner of that displaced vessel and not the fishery as a whole. Most vessels in the scallop fisheries are unique; making the necessary modifications to them so that they could enter other fisheries may be prohibitive. Some of the vessels that participate in the Alaska scallop fishery also participate in scallop fisheries in other regions of the country. Therefore, vessels that do not qualify for a license under this LLP program may qualify for licenses to fish for scallops in other regions, such as the Atlantic scallop fishery.

The Council carefully evaluated the cultural and social framework relevant to the scallop fishery, and the impacts of the scallop LLP on coastal communities. Public testimony before the Council exemplified the need for a limited access program to ensure a valuable and productive scallop fishery in the future.

Fisheries Impact Statement

Section 303(a)(9) of the Magnuson-Stevens Act requires any FMP or FMP amendment to include a fishery impact statement, which assesses, specifies, and describes the likely effects of the proposed conservation and management measures on participants in the affected fisheries, fishing communities, and participants in fisheries in adjacent areas.

The scallop LLP would place limitations on current participants in the affected fisheries. First, current participants in the Cook Inlet scallop

fishery would be limited to using a single 6–ft (1.8 m) dredge in all waters. Second, vessel replacements and upgrades would be limited by the MLOA specified on the license. Third, and most important, current participants would have to meet the specific eligibility criteria of the LLP to receive a license authorizing participation in the scallop fishery.

Although the scallop LLP would exclude some current participants who did not fish during the qualifying period, these excluded persons could gain access to the affected fisheries by obtaining a license through transfer. Likewise, new entrants into the fishery can obtain a licence through transfer.

The GHLs for the affected fisheries are not expected to change if the scallop LLP were implemented. Implementation of the scallop LLP also would not affect fishery product flow, total revenues derived from the affected fisheries, or regional distribution of vessel ownership. The scallop LLP will ameliorate, but not totally eliminate, overcapacity, overcapitalization, and vessel safety concerns perpetuated under status quo management.

Due to the geographical location of the affected fisheries, no scallop fisheries exist in adjacent areas under the authority of other regional fishery management councils. However, participants in fisheries in other areas could face increased pressures from new entrants excluded from the affected fisheries. This increased pressure is expected to be nominal, in any case, because of the increasingly small number of open access scallop fisheries available in the EEZ off the coast of the United States. In fact, the scallop LLP is intended to prevent just the opposite effect (i.e., a surge of new entrants to the scallop fisheries in the EEZ off Alaska) resulting from persons who have been excluded from fisheries in other parts of the EEZ.

Classification

At this time, NMFS has not determined that this proposed rule is consistent with the national standards of the Magnuson-Stevens Act and other applicable laws. NMFS, in making that determination, will take into account the data, views, and comments received during the comment period.

This proposed rule has been determined to be not significant for purposes of E.O. 12866.

The Council prepared an EA/RIR/IRFA for the scallop LLP, which describes the management background, the purpose and need for action, the management alternatives, and the socio-economic impacts of the alternatives. It estimates the total number of small entities affected by this action, and analyzes the economic impact on those small entities as required by the Regulatory Flexibility Act. The IRFA describes the economic impacts this proposed rule, if adopted, would have on small entities. A summary of the IRFA follows:

All fishing operations that would be affected by this proposed rule are considered to be small entities. The proposed rule would apply to any entity that wanted to fish for scallops after June 30, 2000. NMFS estimates this number to be 18. The two principal impacts on small fishing enterprises due to this proposal would be an exclusion of some existing scallop vessels from the fishery and a limitation on the entry of new vessels.

The LLP may restrict the ability of new, small entities to enter the fishery, although access is not denied because the licenses would be transferable. New entrants could purchase licenses, however, this would increase the entry costs into the scallop fishery. Alternatively, small fishing firms owning non-qualifying vessels may experience a decrease in value of their investment to the extent that the vessel's opportunities have been limited. The impact of license limitation is to restrict the opportunities of some vessel owners, yet offer a stabilized economic environment for affected small businesses that qualify for continued participation in the Alaska scallop fishery. The benefits would accrue to vessels remaining in the fishery by preventing a further erosion of per-vessel net returns and operating efficiency.

The scallop LLP also would impact those small entities that only fished inside of Cook Inlet during the qualifying period by limiting the size of dredge the vessel could operate in the future to a single 6–ft (1.8 m) dredge. Those small entities could use their licenses to harvest scallops statewide and would not be limited to harvesting scallops in Cook Inlet.

No known Federal rules duplicate, overlap, or conflict with the proposed rule. The LLP would supersede the existing Federal moratorium program for the scallop fisheries.

This proposed rule would impose recordkeeping and reporting requirements on affected vessels by requiring collection of information through license and transfer applications. These requirements are necessary to provide information to NMFS for the implementation and management of the scallop LLP.

The Council considered the following alternatives that could reduce economic impacts on small entities.

The Council considered alternatives ranging from complete open access to a variety of limited entry programs with ranges from 9–11 vessels. The combinations of individual vessels that would qualify under the alternatives also varies. The Council also considered different criteria for area endorsements that would have resulted in different vessels gaining access to different fishing areas. Because this proposed rule would address allocation of a limited resource, alternatives that would minimize economic impacts on any one small entity would necessarily increase economic impacts on all other small entities. The Council's preferred alternative to address the overcapitalized scallop fishery would affect small entities more negatively than the alternatives that were not preferred.

Options for vessel reconstruction and replacement include:

No restrictions on reconstruction or replacement; MLOA of 120 percent of the LOA of the vessel on January 23, 1993; and MLOA of 120 percent of the LOA of the vessel on which the permit was used in 1996 or 1997. The Council's preferred alternative would not allow increases in vessel length. The MLOA would be the LOA of the qualifying vessel on February 8, 1999, unless the moratorium permit was used on a longer vessel in the recent qualifying period, in which case the MLOA would be limited to the LOA of the longest vessel used in the recent qualifying period.

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act (PRA), unless that collection of information displays a valid Office of Management and Budget (OMB) Control Number.

This proposed rule contains collection-of-information requirements subject to review and approval by OMB under the PRA. These collection-of-information requirements have been submitted to OMB for approval. Public reporting burden for this collection of information is estimated to be an average of 2 hours per response for an application for initial issuance, 1 hour per response for an application for transfer, and 4 hours per response for an appeal. These response times include the time for reviewing instructions, searching existing data sources, gathering and maintaining the data

needed, and completing and reviewing the collection of information.

Public comment is sought regarding: Whether this proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; the accuracy of the burden estimate; ways to enhance the quality, utility, and clarity of the information to be collected; and ways to minimize the burden of the collection of information, including through the use of automated collection techniques or other forms of information technology. Send comments on these or any other aspects of the collection of information to NMFS (see **ADDRESSES**), and to OMB at the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC. 20503 (Attn: NOAA Desk Officer).

The President has directed Federal agencies to use plain language in their communications with the public, including regulations. To comply with that directive, we seek public comment on any ambiguity or unnecessary complexity arising from the language used in this proposed rule.

List of Subjects in 50 CFR Part 679

Alaska, Fisheries, Reporting and record keeping requirements.

Dated: April 13, 2000.

Andrew A. Rosenberg,

Deputy Asst. Administrator for Fisheries, National Marine Fisheries Service.

For reasons set out in the preamble, 50 CFR part 679 is proposed to be amended as follows:

PART 679—FISHERIES OF THE EXCLUSIVE ECONOMIC ZONE OFF ALASKA

1. The authority citation for part 679 continues to read as follows:

Authority: 16 U.S.C. 773 *et seq.*, 1801 *et seq.*, and 3631 *et seq.*

2. In § 679.1, paragraphs (j)(3) and (j)(4) are added to read as follows:

§ 679.1 Purpose and scope.

* * * * *

(j) * * *

(3) Regulations in this part implement the license limitation program for the commercial scallop fishery in the EEZ off Alaska.

(4) Regulations in this part govern the commercial fishing for scallops by vessels of the United States using authorized gear within the EEZ off Alaska.

3. In § 679.2, the definition for ''Scallop License'' is added in alphabetical order and the definitions ''Eligible applicant'', ''License holder'', ''Maximum LOA (MLOA)''paragraph (1) and the first sentence in paragraph (2) introductory text, and ''Official LLP record''are revised, and in the definition''Qualified Person'', paragraph (2) is revised and paragraph (3) is added to read as follows:

§ 679.2 Definitions.

* * * * *

Eligible applicant means a qualified person who submitted an application during the application period announced by NMFS and:

(1) For a groundfish license or crab species license, who owned a vessel on June 17, 1995, from which the minimum number of documented harvests of license limitation groundfish or crab species were made in the relevant areas during the qualifying periods specified in § 679.4(k)(4) and (k)(5), unless the fishing history of that vessel was transferred in conformance with the provisions in paragraph (2) of this definition; or

(2) For a groundfish license or crab species license, to whom the fishing history of a vessel from which the minimum number of documented harvests of license limitation groundfish or crab species were made in the relevant areas during the qualifying periods specified in § 679.4(k)(4) and (k)(5) has been transferred or retained by the express terms of a written contract that clearly and unambiguously provides that the qualifications for a license under the LLP have been transferred or retained; or

(3) For a crab species license, who was an individual who held a State of Alaska permit for the Norton Sound king crab summer fishery in 1993 and 1994, and who made at least one harvest of red or blue king crab in the relevant area during the period specified in § 679.4(k)(5)(ii)(G), or a corporation that owned or leased a vessel on June 17, 1995, that made at least one harvest of red or blue king crab in the relevant area during the period in § 679.4(k)(5)(ii)(G), and that was operated by an individual who was an employee or a temporary contractor; or

(4) For a scallop license, who qualifies for scallop license as specified at § 679.4(g)(2) of this part; or

(5) Who is an individual that can demonstrate eligibility pursuant to the provisions of the Rehabilitation Act of 1973 at 29 U.S.C. 794 (a).

* * * * *

License holder means the person who is named on a currently valid groundfish license, crab species license, or scallop license.

* * * * *

Maximum LOA (MLOA) means:

(1) With respect to the scallop license limitation program, the MLOA is equal to the length overall on February 8, 1999, of the longest vessel used to make legal landings of scallops during the scallop LLP qualification period January 1, 1996, through October 9, 1998, specified at § 679.4(g)(2)(iii) of this part.

(2) With respect to the groundfish and crab species license limitation program, the LOA of the vessel on June 24, 1992, unless the vessel was less than 125 ft (38.1 m) on June 24, 1992, then 1.2 times the LOA of the vessel on June 24, 1992, or 125 ft (38.1 m), whichever is less. * * *

* * * * *

Official LLP record means the information prepared by the Regional Administrator about vessels that were used to participate in the groundfish or crab fisheries during qualified periods for the groundfish and crab License Limitation Program (LLP) specified at § 679.4(k) and in the scallop fisheries during the qualifying periods for the scallop LLP specified at § 679.4(g). Information in the official LLP record includes vessel ownership information, documented harvests made from vessels during the qualification periods, and vessel characteristics. The official LLP record is presumed to be correct for the purpose of determining eligibility for licenses. An applicant for a license under the LLP will have the burden of proving that information submitted in an application that is inconsistent with the official LLP record is correct.

* * * * *

Qualified Person means:

* * * * *

(2) *With respect to the groundfish and crab species license limitation program*, a person who was eligible on June 17, 1995, to document a fishing vessel under Chapter 121, Title 46, U.S.C.

(3) *With respect to the scallop license limitation program*, a person who was eligible on February 8, 1999, to document a fishing vessel under Chapter 121, Title 46, U.S.C.

* * * * *

Scallop license means a license issued by NMFS that authorizes the license holder to catch and retain scallops pursuant to the conditions specified on the license.

* * * * *

4. In § 679.4, paragraph (g) is revised to read as follows:

§ 679.4 Permits.

* * * * *

(g) *Scallop License Limitation Program (LLP).*--(1) *General requirements.* In addition to the permit and licensing requirements prescribed in this part, each vessel within the EEZ off Alaska that is catching and retaining scallops, must have an original scallop LLP license on board at all times it is catching and retaining scallops. This scallop LLP license, issued by NMFS, authorizes the person named on the license to catch and retain scallops in compliance with regulations of the State of Alaska and only with a vessel that does not exceed the MLOA specified on the license and the gear designation specified on the license.

(2) *Qualifications for a scallop LLP license.* A scallop LLP license will be issued to an eligible applicant who:

(i) Is a qualified person;

(ii) Was named on a State of Alaska scallop moratorium permit or Federal scallop moratorium permit on February 8, 1999;

(iii) Used the moratorium permit held on February 8, 1999 to make legal landings of scallops in each of any 2 calendar years from January 1, 1996, through October 9, 1998; and

(iv) Submitted a complete application for a scallop license during the application period specified pursuant to paragraph (g)(4) of this section.

(3) *Scallop license conditions and endorsements.* A scallop license authorizes the license holder to catch and retain scallops only if the vessel length and gear used do not exceed the vessel length and gear endorsements specified on the license.

(i) An MLOA will be specified on the scallop license equal to the LOA on February 8, 1999, of the longest vessel used to make legal landings of scallops during the scallop LLP qualifying period specified in paragraph (g)(2)(iii) of this section.

(ii) If the eligible applicant was a moratorium permit holder with a Scallop Registration Area H (Cook Inlet) endorsement and did not make a legal landing of scallops caught outside of Area H during the qualification period specified in paragraph (g)(2)(iii) of this section, the license will have a gear endorsement restricting gear to a single 6 ft (1.8 m) dredge in all areas.

(4) *Application for a scallop license.* (i) *General.* The Regional Administrator will issue a scallop license to an applicant if a complete application is submitted by or on behalf of the applicant during the specified application period, and if that applicant meets all the criteria for eligibility in this part. An application that is postmarked or hand delivered after the ending date for the application period for the scallop LLP specified in the **Federal Register** will be denied. An application form will be sent to the last known address of the person identified as an eligible applicant by the official LLP record. An application form may be requested from the Regional Administrator.

(ii) *Application Period.* For the scallop license, an application period of no less than 15 days will be specified by notification in the **Federal Register** and other information sources deemed appropriate by the Regional Administrator.

(iii) *Contents of application.* To be complete, an application for a scallop license must be signed and dated by the applicant, or the individual representing the applicant, and contain the following information, as applicable:

(A) Scallop Moratorium Permit number under which legal landings of scallops were made during the qualification period specified in paragraph (g)(2)(iii) of this section;

(B) Name, business address, telephone number, FAX number, and social security number or tax ID number of the applicant, and whether the applicant is a U.S. citizen or a U.S. business;

(C) Name of the managing company, if any;

(D) Evidence of legal landings in the qualifying years and registration areas;

(E) For the vessel(s) being used as basis for eligibility for a license, the name, state registration number (e.g., ADF&G number), the USCG documentation number, and valid evidence of the LOA on February 8, 1999, of the longest vessel used by the applicant during the qualification period specified in paragraph (g)(2)(iii) of this section.

(iv) *Successor-in-interest.* If an applicant is applying as the successor-in-interest to an eligible applicant, an application, to be complete, also must contain valid evidence proving the applicant's status as a successor-in-interest to that eligible applicant and:

(A) Valid evidence of the death of that eligible applicant at the time of application, if the eligible applicant was an individual; or

(B) Valid evidence that the eligible applicant is no longer in existence at the time of application, if the eligible applicant is not an individual.

(v) *Application evaluation.* The Regional Administrator will evaluate an application submitted during the specified application period and compare all claims in the application with the information in the official LLP record. Claims in the application that are consistent with information in the official LLP record will be accepted by the Regional Administrator. Inconsistent claims in the application, unless verified by evidence, will not be accepted. An applicant who submits inconsistent claims, or an applicant who fails to submit the information specified in paragraphs (g)(4)(iii) and (g)(4)(iv) of this section, will be provided a 60-day evidentiary period pursuant to paragraph (g)(4)(vii) of this section to submit the specified information, submit evidence to verify his or her inconsistent claims, or submit a revised application with claims consistent with information in the official LLP record. An applicant who submits claims that are inconsistent with information in the official LLP record has the burden of proving that the submitted claims are correct.

(vi) *Additional information or evidence.* The Regional Administrator will evaluate additional information or evidence to support an applicant's inconsistent claims submitted within the 60-day evidentiary period pursuant to paragraph (g)(4)(vii) of this section. If the Regional Administrator determines that the additional information or evidence meets the applicant's burden of proving that the inconsistent claims in his or her application are correct, the official LLP record will be amended and the information will be used in determining whether the applicant is eligible for a license. However, if the Regional Administrator determines that the additional information or evidence does not meet the applicant's burden of proving that the inconsistent claims in his or her application is correct, the applicant will be notified by an initial administrative determination, pursuant to paragraph (g)(4)(viii) of this section, that the applicant did not meet the burden of proof to change the information in the official LLP record.

(vii) *60-day evidentiary period.* The Regional Administrator will specify by letter a 60-day evidentiary period during which an applicant may provide additional information or evidence to support the claims made in his or her application, or to submit a revised application with claims consistent with information in the official LLP record, if the Regional Administrator determines that the applicant did not meet the burden of proving that the information on the application is correct through evidence provided with the application. Also, an applicant who fails to submit information as specified in paragraphs (g)(4)(iii) and (g)(4)(iv) of this section will have 60 days to provide that information. An applicant will be limited to one 60-day evidentiary period. Additional information or evidence, or a revised application,

received after the 60-day evidentiary period specified in the letter has expired will not be considered for purposes of the initial administrative determination.

(viii) *Initial administrative determinations (IAD).* The Regional Administrator will prepare and send an IAD to the applicant following the expiration of the 60-day evidentiary period if the Regional Administrator determines that the information or evidence provided by the applicant fails to support the applicant's claims and is insufficient to rebut the presumption that the official LLP record is correct, or if the additional information, evidence, or revised application is not provided within the time period specified in the letter that notifies the applicant of his or her 60-day evidentiary period. The IAD will indicate the deficiencies in the application, including any deficiencies with the information, the evidence submitted in support of the information, or the revised application. The IAD will also indicate which claims cannot be approved based on the available information or evidence. An applicant who receives and IAD may appeal pursuant to § 679.43. An applicant who avails himself or herself of the opportunity to appeal an IAD will not receive a transferable license until after the final resolution of that appeal.

(ix) *Issuance of a non-transferable license.* The Regional Administrator will issue a non-transferable license to the applicant on issuance of an IAD if required by the license renewal provisions of 5 U.S.C. 558. A non-transferable license authorizes a person to catch and retain scallops as specified on the non-transferable license, and will have the specific endorsements and designations based on the claims in his or her application. A non-transferable license will expire upon final agency action.

(5) *Transfer of a Scallop License.* (i) *General.* The Regional Administrator will approve the transfer of a scallop license if a complete transfer application is submitted to Restricted Access Management, Alaska Region, NMFS, and if the transfer meets all the eligibility criteria as specified in paragraph (g)(5)(ii) of this section. An application form may be requested from the Regional Administrator.

(ii) *Eligibility criteria for transfers.* A scallop license can be transferred if:

(A) The designated transferee is eligible to document a fishing vessel under Chapter 121, Title 46, U.S.C.;

(B) The parties to the transfer do not have any fines, civil penalties, other payments due and outstanding, or outstanding permit sanctions resulting from Federal fishing violations;

(C) The transfer will not cause the designated transferee to exceed the license cap in § 679.7(i); and

(D) The transfer does not violate any other provision specified in the part.

(iii) *Contents of transfer application.* To be complete, an application for a scallop license transfer must be signed by the licence holder and the designated transferee, or the individuals representing them, and contain the following information, as applicable:

(A) Name, business address, telephone number, FAX number, and social security number or tax ID number, of the license holder and of the designated transferee;

(B) License number and total price being paid for the license;

(C) Certification that the designated transferee is a U.S. Citizen, or a U.S. corporation, partnership, or other association;

(D) A legible copy of a contract or sales agreement that specifies the license to be transferred, the license holder, the designated transferee, the monetary value or the terms of the license transfer; and

(E) Other information the Regional Administrator deems necessary for measuring program performance.

(iv) *Incomplete applications.* The Regional Administrator will return an incomplete transfer application to the applicant and identify any deficiencies if the Regional Administrator determines that the application does not meet all the criteria identified in paragraph (g)(5) of this section.

(v) *Transfer by court order, operation of law, or as part of a security agreement.* The Regional Administrator will transfer a scallop license based on a court order, operation of law, or a security agreement if the Regional Administrator determines that the transfer application is complete and the transfer will not violate any of the provisions of this section.

5. In § 679.7, paragraphs (i)(3), and (i)(7) are revised, and new paragraphs (i)(1)(iv) and (i)(8) are added to read as follows:

§ 679.7 Prohibitions.

* * * * *

(i) * * *

(1) * * *

(iv) Hold more than two scallop licenses in the name of that person at any time.

* * * * *

(3) Conduct directed fishing for crab species without an original valid crab license, except as provided in § 679.4(k)(2)

* * * * *

(7) Lease a groundfish, crab species, or scallop license; or

(8) Catch and retain scallops:

(i) Without an original valid scallop license on board;

(ii) Using a vessel with a MLOA greater than that specified on the scallop license;

(iii) Using dredge gear contrary to a gear limitation specified on the scallop license.

6. In § 679.43, paragraphs (a) and (p) are revised to read as follows:

§ 679.43 Determinations and appeals.

(a) *General.* This section describes the procedure for appealing initial administrative determinations made under part 679 of this title.

* * * * *

(p) *Issuance of a non-transferable license.* A non-transferable license will be issued to a person upon acceptance of his or her appeal of an initial administrative determination denying an application for a license for license limitation groundfish, crab species under § 679.4(k) or scallops under § 679.4(g). This non-transferable license authorizes a person to conduct directed fishing for groundfish, crab species, or catch and retain scallops and will have specific endorsements and designations based on the person's claims in his or her application for a license. This non-transferable license expires upon the resolution of the appeal.

[FR Doc. 00–9749 Filed 4–20–00; 8:45 am]

BILLING CODE 3510–22–F

Notices

Federal Register
Vol. 65, No. 78
Friday, April 21, 2000

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

Food Safety and Inspection Service

[Docket No. 00–015N]

Codex Alimentarius Commission: Twenty-fourth Session of the Codex Committee on Fish and Fishery Products

AGENCY: Office of the Under Secretary for Food Safety, USDA.

ACTION: Notice of public meeting and request for comments.

SUMMARY: The Office of the Under Secretary for Food Safety, U.S. Department of Agriculture (USDA), and the Food and Drug Administration (FDA), are sponsoring a public meeting on May 10, 2000, to provide information and receive public comments on agenda items that will be discussed at the Twenty-fourth Session of the Codex Committee on Fish and Fishery Products (CCFFP), which will be held in Alesund, Norway, June 5–9, 2000. The Under Secretary for Food Safety and FDA recognize the importance of providing interested parties the opportunity to obtain background information on the Twenty-fourth Session of the CCFFP and to address items on the agenda.

DATES: The public meeting is scheduled for Wednesday, May 10, 2000, from 9 a.m. to 12 noon.

ADDRESSES: The public meeting will be held in the FDA, Office of Seafood, Conference Room, 1110 Vermont Avenue, NW, Suite 1110, Washington, DC 20005. To receive copies of the documents referenced in this notice, contact the FSIS Docket Clerk, U.S. Department of Agriculture, Food Safety and Inspection Service, Room 102, Cotton Annex, 300 12th Street, SW., Washington, DC 20250–3700. The documents will also be accessible via the World Wide Web at the following address: *http://www.fao.org/waicent/faoinfo/economic/esn/codex.* Send comments, in triplicate, to the FSIS Docket Clerk and reference Docket # 00–015N. All comments submitted in response to this notice will be available for public inspection in the Docket Clerk's Office between 8:30 a.m. and 4:30 p.m., Monday through Friday.

FOR FURTHER INFORMATION CONTACT: Patrick J. Clerkin, Associate U.S. Manager for Codex, U.S. Codex Office, Food Safety and Inspection Service, Room 4861, South Building, 1400 Independence Avenue SW., Washington, DC 20250–3700, Telephone (202) 205–7760, Fax (202) 720–3157. Persons requiring a sign language interpreter or other special accommodations should notify Mr. Clerkin at the above number.

SUPPLEMENTARY INFORMATION:

Background

Codex was established in 1962 by two United Nations organizations, the Food and Agriculture Organization (FAO) and the World Health Organization (WHO). Codex is the major international organization for encouraging fair international trade in food and protecting the health and economic interests of consumers. Through adoption of food standards, codes of practice, and other guidelines developed by its committees, and by promoting their adoption and implementation by governments, Codex seeks to ensure that the world's food supply is sound, wholesome, free from adulteration, and correctly labeled.

The Codex Committee on Fish and Fishery Products was established to elaborate codes and standards for fish and fishery products. The Government of Norway hosts this Committee and will chair the Committee meeting.

Issues To Be Discussed at the Public Meeting

Agenda items will be described and discussed at the May 10, 2000, public meeting. Attendees will have the opportunity to pose questions and offer comments.

The provisional agenda items to be discussed during the public meeting are:

1. Matters Referred by the Codex Alimentarius Commission and other Codex committees,
2. Weight Determination of Quick Frozen Shrimps and Prawns,
3. Inclusion of Additional Species in the Standards for Fish and Fishery Products; Chilean Langostino,
4. Proposed Draft Code of Practice for Fish and Fishery Products at Step 4,
5. Draft Standard for Dried Salted Anchovies; Government Comments at Step 7,
6. Draft Standard for Crackers from Marine and Freshwater Fish, Crustacean, and Molluscan Shellfish at Step 7,
7. Proposed Draft Standard for Salted Atlantic Herring and Salted Sprats at Step 4,
8. Proposed Draft Standard for Smoked Fish at Step 4,
9. Proposed Draft Standard for Molluscan Shellfish at Step 4,
10. Model Certificate for Fish and Fishery Products,
11. Discussion Paper on the Development of a Standard for Scallops,
12. Discussion Paper on the Development of a Standard for Sturgeon Caviar,
13. Discussion Paper on the Use of Chlorinated Water.

Each issue listed will be fully described in documents distributed, or to be distributed, by the Norway Secretariat. Members of the public may access or request copies of these documents (see **ADDRESSES**).

Additional Public Notification

Public awareness of all segments of rulemaking and policy development is important. Consequently, in an effort to better ensure that minorities, women, and persons with disabilities are aware of this notice, FSIS will announce it and provide copies of this **Federal Register** publication in the FSIS Constituent Update. FSIS provides a weekly FSIS Constituent Update, which is communicated via fax to over 300 organizations and individuals. In addition, the update is available on-line through the FSIS web page located at http://www.fsis.usda.gov. The update is used to provide information regarding FSIS policies, procedures, regulations, **Federal Register** notices, FSIS public meetings, recalls, and any other types of information that could affect or would be of interest to our constituents/stakeholders. The constituent fax list consists of industry, trade, and farm groups, consumer interest groups, allied health professionals, scientific professionals, and other individuals that have requested to be included. Through

these various channels, FSIS is able to provide information to a much broader, more diverse audience. For more information and to be added to the constituent fax list, fax your request to the Congressional and Public Affairs Office, at (202) 720–5704.

Done at Washington, DC on: April 18, 2000.

Patrick J. Clerkin,

Associate U.S. Manager for Codex Alimentarius.

[FR Doc. 00–9987 Filed 4–20–00; 8:45 am]

BILLING CODE 3410–DM–P

COMMITTEE FOR PURCHASE FROM PEOPLE WHO ARE BLIND OR SEVERELY DISABLED

Procurement Lists; Proposed Additions and Deletions

AGENCY: Committee for Purchase From People Who Are Blind or Severely Disabled.

ACTION: Proposed additions to and deletions from Procurement List.

SUMMARY: The Committee has received proposals to add to the Procurement List commodities and services to be furnished by nonprofit agencies employing persons who are blind or have other severe disabilities, and to delete commodities previously furnished by such agencies.

COMMENTS MUST BE RECEIVED ON OR BEFORE: May 22, 2000.

ADDRESSES: Committee for Purchase From People Who Are Blind or Severely Disabled, Crystal Gateway 3, Suite 310, 1215 Jefferson Davis Highway, Arlington, Virginia 22202–4302.

FOR FURTHER INFORMATION CONTACT: Louis R. Bartalot (703) 603–7740.

SUPPLEMENTARY INFORMATION: This notice is published pursuant to 41 U.S.C. 47(a) (2) and 41 CFR 51–2.3. Its purpose is to provide interested persons an opportunity to submit comments on the possible impact of the proposed actions.

Additions

If the Committee approves the proposed additions, all entities of the Federal Government (except as otherwise indicated) will be required to procure the commodities and services listed below from nonprofit agencies employing persons who are blind or have other severe disabilities.

I certify that the following action will not have a significant impact on a substantial number of small entities. The major factors considered for this certification were:

1. The action will not result in any additional reporting, recordkeeping or other compliance requirements for small entities other than the small organizations that will furnish the commodities and services to the Government.

2. The action will result in authorizing small entities to furnish the commodities and services to the Government.

3. There are no known regulatory alternatives which would accomplish the objectives of the Javits-Wagner-O'Day Act (41 U.S.C. 46–48c) in connection with the commodities and services proposed for addition to the Procurement List. Comments on this certification are invited. Commenters should identify the statement(s) underlying the certification on which they are providing additional information.

The following commodities and services have been proposed for addition to Procurement List for production by the nonprofit agencies listed:

Commodities

Computer Accessories
- 6150–00–NIB–0005 (Surge Protectors)
- 6150–00–NIB–0006 (Surge Protectors)
- 7045–00–NIB–0052 (CD Jewel Cases)
- 7045–00–NIB–0053 (Computer Maintenance Products)
- 7045–00–NIB–0056 (Computer Maintenance Products)
- 7045–00–NIB–0057 (Computer Maintenance Products)
- 7045–00–NIB–0076 (Keyboard Drawers)
- 7045–00–NIB–0077 (Anti-Glare Screens)
- 7045–00–NIB–0103 (CD Jewel Cases)
- 7045–00–NIB–0104 (CD Jewel Cases)
- 7045–00–NIB–0105 (Keyboard Drawers)
- 7045–00–NIB–0106 (Keyboard Drawers)
- 7045–00–NIB–0107 (Computer Maintenance Products)
- 7045–00–NIB–0108 (Computer Maintenance Products)
- 7045–00–NIB–0111 (Anti-Glare Screens)
- 7045–00–NIB–0112 (Anti-Glare Screens)
- 7045–00–NIB–0113 (Computer Maintenance Products)
- 7045–00–NIB–0121 (Desktop Media Storage)
- 7045–00–NIB–0123 (Desktop Media Storage)
- 7045–00–NIB–0124 (Desktop Media Storage)
- 7045–00–NIB–0125 (Desktop Media Storage)
- 7045–00–NIB–0126 (Desktop Media Storage)
- 7045–00–NIB–0129 (Desktop Media Storage)
- 7045–00–NIB–0131 (Desktop Media Storage)

NPA: Wiscraft Inc.—Wisconsin Enterprises for the Blind, Milwaukee, Wisconsin

Electronic Components
- 7420–00–NIB–0014 (Palm-Sized Portfolio w/Calculator)
- 7420–00–NIB–0015 (9″ x 12″ Portfolio w/ Calculator)
- 7420–00–NIB–0016 (Flip-Up Calculator)
- 7420–00–NIB–0017 (10-Digit Calculator)
- 7420–00–NIB–0018 (12-Digit Calculator)
- 7420–00–NIB–0019 (Mouse Pad w/ Calculator)
- 7420–00–NIB–0020 (Mouse Pad w/ Calculator/Disk Holder)
- 7420–00–NIB–0021 (Clipboard w/ Calculator)

NPA: Industries for the Blind, Inc., Milwaukee, Wisconsin

Protector and Sleeve Transparencies
- 7510–00–NIB–0176 (Protector, Transparency, Flip-Frame)
- 7510–00–NIB–0177 (Protector, Transparency, Flip-Frame w/Pre-View)
- 7510–00–NIB–0178 (Sleeve, Transparency)

NPA: Industries of the Blind, Inc., Greensboro, North Carolina

Services

Janitorial/Custodial, Indiana Air National Guard, Hulman International Airport, Terre Haute, Indiana

NPA: Child-Adult Resource Services, Inc., Rockville, Indiana

Janitorial/Custodial, Naval and Marine Corps Reserve Center, 1620 East Saginaw Street, Lansing, Michigan

NPA: Peckham Vocational Industries, Inc., Lansing, Michigan

Laundry Service, Veterans Affairs Medical Center, 800 Zorn Avenue, Louisville, Kentucky

NPA: C. G. M. Services, Inc., Louisville, Kentucky

Deletions

I certify that the following action will not have a significant impact on a substantial number of small entities. The major factors considered for this certification were:

1. The action will not result in any additional reporting, recordkeeping or other compliance requirements for small entities.

2. The action will result in authorizing small entities to furnish the commodities to the Government.

3. There are no known regulatory alternatives which would accomplish the objectives of the Javits-Wagner-O'Day Act (41 U.S.C. 46–48c) in connection with the commodities proposed for deletion from the Procurement List.

The following commodities have been proposed for deletion from the Procurement List:

Ink, Marking Stencil, Opaque
- 7510–00–183–7697
- 7510–00–183–7698

Disinfectant-Detergent, General Purpose
- 7930–01–393–6753

Enamel
- 8010–01–331–6120

Louis R. Bartalot,

Deputy Director (Operations).

[FR Doc. 00–9998 Filed 4–20–00; 8:45 am]

BILLING CODE 6353–01–P

COMMITTEE FOR PURCHASE FROM PEOPLE WHO ARE BLIND OR SEVERELY DISABLED

Procurement List; Additions

AGENCY: Committee for Purchase From People Who Are Blind or Severely Disabled.

ACTION: Additions to the Procurement List.

SUMMARY: This action adds to the Procurement List commodities and services to be furnished by nonprofit agencies employing persons who are blind or have other severe disabilities.

EFFECTIVE DATE: May 22, 2000.

ADDRESSES: Committee for Purchase From People Who Are Blind or Severely Disabled, Crystal Gateway 3, Suite 310, 1215 Jefferson Davis Highway, Arlington, Virginia 22202–4302.

FOR FURTHER INFORMATION CONTACT: Louis R. Bartalot (703) 603–7740.

SUPPLEMENTARY INFORMATION: On October 29, 1999, January 14, March 3, and 10, 2000, the Committee for Purchase From People Who Are Blind or Severely Disabled published notices (64 FR 58378 and 65 FR 2373, 11548, 12969) of proposed additions to the Procurement List.

After consideration of the material presented to it concerning capability of qualified nonprofit agencies to provide the commodities and services and impact of the additions on the current or most recent contractors, the Committee has determined that the commodities and services listed below are suitable for procurement by the Federal Government under 41 U.S.C. 46–48c and 41 CFR 51–2.4.

I certify that the following action will not have a significant impact on a substantial number of small entities. The major factors considered for this certification were:

1. The action will not result in any additional reporting, recordkeeping or other compliance requirements for small entities other than the small organizations that will furnish the commodities and services to the Government.

2. The action will not have a severe economic impact on current contractors for the commodities and services.

3. The action will result in authorizing small entities to furnish the commodities and services to the Government.

4. There are no known regulatory alternatives which would accomplish the objectives of the Javits-Wagner-O'Day Act (41 U.S.C. 46–48c) in connection with the commodities and services proposed for addition to the Procurement List.

Accordingly, the following commodities and services are hereby added to the Procurement List:

Commodities

Paper Holder & Micro Note Holder
7510–00–NIB–0385 (Micro Note Holder)
7510–00–NIB–0386 (Paper Holder)
Tab, Hanging File Folder
7510–01–375–0502
7510–01–375–4510

Services

Base Supply Center, Key West Naval Air Station, Key West, Florida
Customization & Distribution of Navy Recruiting Promotional Merchandise, Department of the Navy, FISC Norfolk, Detachment Washington DC, Washington, DC
Grounds Maintenance, Veterans Affairs Medical Center, 800 Zorn Avenue, Louisville, Kentucky
Grounds Maintenance, National Oceanic and Atmospheric Administration, Western Regional Center (WRC), 7600 Sand Point Way N.E., Seattle, Washington
Installation Support Services, Basewide, Fort Hood, Texas
Janitorial/Custodial, U.S. Army Reserve Center, 4655 N. Lexington Avenue, Arden Hills, Minnesota,
Switchboard Operation, Department of Veterans Affairs Medical Center, 510 East Stoner Avenue, Shreveport, Louisiana

This action does not affect current contracts awarded prior to the effective date of this addition or options that may be exercised under those contracts.

Louis R. Bartalot,

Deputy Director (Operations).

[FR Doc. 00–9999 Filed 4–20–00; 8:45 am]

BILLING CODE 6353–01–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–423–602]

Industrial Phosphoric Acid From Belgium: Extension of Time Limit for Preliminary Results of Antidumping Duty Administrative Review

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: April 21, 2000.

FOR FURTHER INFORMATION CONTACT: Frank Thomson at (202) 482–4793 or Nithya Nagarajan at (202) 482–5253, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Ave, NW, Washington, DC 20230.

Time Limits

Statutory Time Limits

Section 751(a)3)(A) of the Tariff Act of 1930, as amended (''the Act''), requires the Department to make a preliminary determination within 245 days after the last day of the anniversary month of an order or finding for which a review is requested and a final determination within 120 days after the date on which the preliminary determination is published. However, if it is not practicable to complete the preliminary results of review within this time period, section 751(a)(3)(A) of the Act allows the Department to extend the time limit for the preliminary determination to a maximum of 365 days and for the final results to 180 days (or 300 days if the Department does not extend the time limit for the preliminary results) from the date of publication of the preliminary results.

Background

On October 1, 1999, the Department published a notice of initiation of administrative review of the antidumping duty order on industrial phosphoric acid from Belgium, covering the period August 1, 1998 through July 31, 1999 (64 FR 53318). The preliminary results are currently due no later than May 3, 2000.

Extension of Time Limit for Preliminary Results of Review

We determine that it is not practicable to complete the preliminary results of this review within the original time limit. Therefore the Department is extending the time limit for completion of the preliminary results until no later than June 17, 2000. *See* Decision Memorandum from Tom Futtner to Holly A. Kuga, dated April 13, 2000, which is on file in the Central Records Unit, Room B–099 of the main Commerce building. We intend to issue the final results no later than 120 days after the publication of the preliminary results notice.

This extension is in accordance with section 751(a)(3)(A) of the Act.

Dated: April 13, 2000.

Holly A. Kuga,

Acting Deputy Assistant Secretary, Import Administration, Group II.

[FR Doc. 00–9995 Filed 4–20–00; 8:45 am]

BILLING CODE 3510–DS–M

DEPARTMENT OF COMMERCE

International Trade Administration

University of North Dakota; Notice of Decision on Application for Duty-Free Entry of Scientific Instrument

This decision is made pursuant to Section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Pub. L. 89–651, 80 Stat. 897; 15 CFR part 301). Related records can be viewed between 8:30 a.m. and 5 p.m. in Room 4211, U.S. Department of Commerce, 14th and Constitution Avenue, N.W., Washington, D.C.

Docket Number: 00–003. Applicant: University of North Dakota, Grand Forks, ND 58202–7129. Instrument: Scanning Tunneling Microscope, Model STM 25. Manufacturer: Omicron Associates, Germany. Intended Use: See notice at 65 FR 11986, March 7, 2000.

Comments: None received. Decision: Approved. No instrument of equivalent scientific value to the foreign instrument, for such purposes as it is intended to be used, is being manufactured in the United States. Reasons: The foreign instrument provides: (1) ability to operate at temperatures as low as 25°K, (2) a vibrationally-isolated vacuum chamber capable to 10 $^{-11}$ mbar and (3) conduction of electron-tunneling spectroscopy measurements using the STM. The National Institute of Standards and Technology and a university research center for advanced microstructure devices advise that (1) these capabilities are pertinent to the applicant's intended purpose and (2) they know of no domestic instrument or apparatus of equivalent scientific value to the foreign instrument for the applicant's intended use (comparable case).

We know of no other instrument or apparatus of equivalent scientific value to the foreign instrument which is being manufactured in the United States.

Frank W. Creel,

Director, Statutory Import Programs Staff.

[FR Doc. 00–9996 Filed 4–20–00; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

Applications for Duty-Free Entry of Scientific Instruments

Pursuant to Section 6(c) of the Educational, Scientific and Cultural Materials Importation Act of 1966 (Pub. L. 89–651; 80 Stat. 897; 15 CFR part 301), we invite comments on the question of whether instruments of equivalent scientific value, for the purposes for which the instruments shown below are intended to be used, are being manufactured in the United States.

Comments must comply with 15 CFR 301.5(a)(3) and (4) of the regulations and be filed within 20 days with the Statutory Import Programs Staff, U.S. Department of Commerce, Washington, D.C. 20230. Applications may be examined between 8:30 a.m. and 5 p.m. in Room 4211, U.S. Department of Commerce, 14th Street and Constitution Avenue, N.W., Washington, D.C.

Docket Number: 00–007. Applicant: University of Wisconsin-Milwaukee, 1900 E. Kenwood Boulevard, Room B30, Milwaukee, WI 53211. Instrument: Scanning Tunneling Microscope, Model STM 25DH. Manufacturer: Omicron Vakuumphysik GmbH, Germany. Intended Use: The instrument is intended to be used for the growth of epitaxial semiconductors by molecular beam epitaxy technique and characterization in situ with variable temperature scanning tunneling microscopy, reflection high energy electron diffraction, low energy electron diffraction and Auger electron spectroscopy. The ultimate goal of this project is to investigate and understand the processes at atomic level and to control and manipulate the motion of atoms on surfaces so that the more sophisticated device structures can be made. Application accepted by Commissioner of Customs: March 24, 2000.

Docket Number: 00–008. Applicant: University of Delaware Department of Chemical Engineering, Colburn Laboratory, 150 Academy Street, Newark, DE 19716. Instrument: Electron Microscope, Model JEM–2010F. Manufacturer: JEOL Ltd., Japan. Intended Use: The instrument is intended to be used for the study of the microstructure of metals, ceramics, semiconductors, superconductors, zeolites, polymers, colloids and biomaterials to obtain structural and compositional information on the materials. In addition, the instrument will be used for the training of faculty, staff and graduate students in the graduate course Transmission Electron Microscopy in Materials Science (MASC 823). Application accepted by Commissioner of Customs: April 3, 2000.

Frank W. Creel,

Director, Statutory Import Programs Staff.

[FR Doc. 00–9997 Filed 4–20–00; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

Export Trade Certificate of Review

AGENCY: International Trade Administration, Commerce.

ACTION: Notice of Revocation of Export Trade Certificate of Review No.89–00008.

SUMMARY: The Secretary of Commerce issued an export trade certificate of review to FEXCORP. Because this certificate holder has failed to file an annual report as required by law, the Secretary is revoking the certificate. This notice summarizes the notification letter sent to FEXCORP.

FOR FURTHER INFORMATION CONTACT: Morton Schnabel, Director, Office of Export Trading Company Affairs, International Trade Administration, 202/482–5131. This is not a toll-free number.

SUPPLEMENTARY INFORMATION: Title III of the Export Trading Company Act of 1982 (''the Act'') (Pub. L. No. 97–290, 15 U.S.C. 4011–21) authorizes the Secretary of Commerce to issue export trade certificates of review. The regulations implementing Title III (''the Regulations'') are found at 15 CFR part 325 (1997). Pursuant to this authority, a certificate of review was issued on June 12, 1989 to FEXCORP.

A certificate holder is required by law to submit to the Department of Commerce annual reports that update financial and other information relating to business activities covered by its certificate (Section 308 of the Act, 15 U.S.C. 4018, Section 235.14(a) of the Regulations, 15 CFR 325.14(a)). The annual report is due within 45 days after the anniversary date of the issuance of the certificate of review (Sections 325.14(b) of the Regulations, 15 CFR 325.14 (b)). Failure to submit a complete annual report may be the basis for revocation (Sections 325.10(a) and 325.14(c) of the Regulations, 15 CFR 325.10(a) (3) and 325.14(c)).

On June 7, 1999, the Department of Commerce sent to FEXCORP a letter containing annual report questions with a reminder that its annual report was due on July 27, 1999. Additional reminders were sent on September 9, 1999 and on November 8, 1999. The Department has received no written response to any of these letters.

On January 11, 2000,and in accordance with Section 325.10(c)(1) of the Regulations, (15 CFR 325.10(c)(1)), the Department of Commerce sent a letter by certified mail to notify FEXCORP that the Department was

formally initiating the process to revoke its certificate for failure to file an annual report. In addition, a summary of this letter allowing FEXCORP thirty days to respond was published in the **Federal Register** on January 19, 2000 at 63 FR 42614. Pursuant to 325.10(c) (2) of the Regulations (15 CFR 325.10(c) (2)), the Department considers the failure of FEXCORP to respond to be an admission of the statements contained in the notification letter.

The Department has determined to revoke the certificate issued to FEXCORP for its failure to file an annual report. The Department has sent a letter, dated April 13, 2000, to notify FEXCORP International Inc. of its determination. The revocation is effective thirty (30) days from the date of publication of this notice. Any person aggrieved by this decision may appeal to an appropriate U.S. district court within 30 days from the date on which this notice is published in the **Federal Register** (325.10(c) (4) and 325.11 of the Regulations, 15 CFR 324.10(c) (4) and 325.11 of the Regulations, 15 CFR 325.10(c) (4) and 325.11).

Dated: April 18, 2000.

Morton Schnabel,

Director, Office of Export Trading Company Affairs.

[FR Doc. 00–9993 Filed 4–20–00; 8:45 am]

BILLING CODE 3510–DR–P

DEPARTMENT OF COMMERCE

International Trade Administration

Export Trade Certificate of Review

ACTION: Notice of Application.

SUMMARY: The Office of Export Trading Company Affairs (''OETCA''), International Trade Administration, Department of Commerce, has received an application for an Export Trade Certificate of Review. This notice summarizes the conduct for which certification is sought and requests comments relevant to whether the Certificate should be issued.

FOR FURTHER INFORMATION CONTACT: Morton Schnabel, Director, Office of Export Trading Company Affairs, International Trade Administration, (202) 482–5131 (this is not a toll-free number) or E-mail at oetca@ita.doc.gov.

SUPPLEMENTARY INFORMATION: Title III of the Export Trading Company Act of 1982 (15 U.S.C. 4001–21) authorizes the Secretary of Commerce to issue Export Trade Certificates of Review. A Certificate of Review protects the holder and the members identified in the Certificate from state and federal government antitrust actions and from private, treble damage antitrust actions for the export conduct specified in the Certificate and carried out in compliance with its terms and conditions. Section 302(b)(1) of the Act and 15 CFR 325.6(a) require the Secretary to publish a notice in the **Federal Register** identifying the applicant and summarizing its proposed export conduct.

Request for Public Comments

Interested parties may submit written comments relevant to the determination whether a Certificate should be issued. If the comments include any privileged or confidential business information, it must be clearly marked and a nonconfidential version of the comments (identified as such) should be included. Any comments not marked privileged or confidential business information will be deemed to be nonconfidential. An original and five copies, plus two copies of the nonconfidential version, should be submitted no later than 20 days after the date of this notice to: Office of Export Trading Company Affairs, International Trade Administration, Department of Commerce, Room 1104H, Washington, DC 20230, or transmitted by E-mail to oetca@ita.doc.gov. Information submitted by any person is exempt from disclosure under the Freedom of Information Act (5 U.S.C. 552). However, nonconfidential versions of the comments will be made available to the applicant if necessary for determining whether or not to issue the Certificate. Comments should refer to this application as ''Export Trade Certificate of Review, application number 00–00002.'' A summary of the application follows.

Summary of the Application

Applicant: CONSOL Energy Inc. (''CEI''), 1800 Washington Road, Pittsburgh, Pennsylvania 15241.

Contact: William G. Rieland, Vice President, Sales, Telephone: (412) 831–4032.

Application No.: 00–00002.

Date Deemed Submitted: April 7, 2000.

Member (in addition to applicant): AMCI Export Corporation, Latrobe, PA.

CEI seeks a Certificate to cover the following specific Export Trade, Export Markets, and Export Trade Activities and Methods of Operations.

Export Trade

Product

Bituminous coal.

Export Markets

The Export Markets include all parts of the world except the United States, (the fifty states of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands).

The proposed Export Trade Certificate of Review would extend antitrust protection to CEI to conduct the following export trade activities:

1. Gathering and sharing market intelligence about CEI's and member's mutual international competition and the outcome of purchasing decisions in foreign bituminous coal markets;

2. Allocating market opportunities between CEI and member. As sales opportunities arise in foreign countries CEI and member would jointly determine which company is best served to bid for the business. CEI and member would not compete against each other as foreign opportunities develop;

3. Jointly determining the appropriate price that the bidding member would apply to each foreign business opportunity;

4. Predetermine which of CEI's or member's coal production sources would be offered for sale on each foreign business opportunity;

5. Jointly developing logistical arrangements in order to move the bituminous coal to predetermined markets. These activities would include jointly arranging shipment schedules with railroads, barge carriers, vessel loading terminals, unloading terminals and ocean vessel owners; and

6. CEI and member would jointly negotiate vessel rates in order to improve the transportation economics of export bituminous coal shipments to their foreign customers.

Dated: April 14, 2000.

Morton Schnabel,

Director, Office of Export Trading Company Affairs.

[FR Doc. 00–9994 Filed 4–20–00; 8:45 am]

BILLING CODE 3510–DR–P

DEPARTMENT OF COMMERCE

National Institute of Standards and Technology

AGENCY: National Institute of Standards and Technology Commerce, Commerce.

ACTION: Notice of government owned inventions available for licensing.

SUMMARY: The invention listed below is owned in whole or in part by the U.S. Government, as represented by the Department of Commerce. The Department of Commerce's ownership interest in the invention is available for licensing in accordance with 35 U.S.C. 207 and 37 CFR Part 404 to achieve expeditious commercialization of results of Federally funded research and development.

FOR FURTHER INFORMATION CONTACT: Technical and licensing information on this invention may be obtained by writing to: National Institute of Standards and Technology, Office of Technology Partnerships, Building 820, Room 213, Gaithersburg, MD 20899; Fax 301–869–2751. Any request for information should include the NIST Docket No. and Title for the relevant invention as indicated below.

SUPPLEMENTARY INFORMATION: NIST may enter into a Cooperative Research and Development Agreement (''CRADA'') with the licensee to perform further research on the inventions for purposes of commercialization. The invention available for licensing is:

NIST Docket Number: 99–016/025US.

Title: Device for Stable Speed Determination in Machining.

Abstract: The device utilizes a non-contact force actuator to drive a machine-tool with a train of impulsive forces having a known, time-varying frequency to identify the speeds least likely to produce chatter (regenerative vibrations). This can be done in real time without the need for exhaustive cutting tests. The machine-tool spindle and a non-contact magnetic force actuator are used to produce the time-varying impulse train. This impulse train has significant energy at the spindle speed and its harmonics. As the spindle speed is ramped up from zero to the maximum speed, those speeds that maximize the dynamic response of the tool are the speeds that minimize regenerative chatter. The device is suitable for integration with the machine-tool controller, and could potentially allow the optimal speeds for each tool to be downloaded and stored for later use in NC programming.

Dated: April 17, 2000.

Karen H. Brown,

Deputy Director.

[FR Doc. 00–10007 Filed 4–20–00; 8:45 am]

BILLING CODE 3510–13–M

DEPARTMENT OF COMMERCE

National Institution of Standards and Technology

Announcing a Meeting of the National Conference on Weights and Measures

AGENCY: National Institute of Standards and Technology, Commerce.

ACTION: Notice of Meeting.

SUMMARY: The 85th Annual Meeting of the National Conference on Weights and Measures will be held July 16 through July 20, 2000, at the Omni Richmond Hotel, 100 South Street, Richmond, VA. The meeting is open to the public. The National Conference on Weights and Measures is an organization of weights and measures enforcement officials of the states, counties, and cities of the United States, other government officials and representatives of business, industry, trade associations, and consumer organizations. Conference members meet twice a year to develop weights and measures laws and to discuss subjects that relate to the field of weights and measures technology and administration. Pursuant to (15 U.S.C. 272(B)(6)), the National Institute of Standards and Technology acts as a sponsor of the National Conference on Weights and Measures in order to promote uniformity among the states in the complex of laws, regulations, methods, and testing equipment that comprises regulatory control by the states of commercial weighing and measuring devices and practices.

DATES: The meeting will be held July 16–July 20, 2000, 8:00 a.m.–5:00 p.m.

ADDRESSES: Omni Richmond Hotel located at 100 South Street, Richmond, VA 23219.

FOR FURTHER INFORMATION CONTACT: Henry V. Oppermann, Chief, NIST, Office of Weights and Measures, 100 Bureau Drive, Stop 2350, Gaithersburg, MD 20899–2350. Telephone (301) 975–4005, or E-mail owm@nist.gov.

Dated: March 17, 2000.

Karen H. Brown,

Deputy Director, NIST.

[FR Doc. 00–10006 Filed 4–20–00; 8:45 am]

BILLING CODE 3510–13–M

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[I.D. 041700C]

Bluefin Tuna Statistical Documents

ACTION: Proposed collection; comment request.

SUMMARY: The Department of Commerce, as part of its continuing effort to reduce paperwork and respondent burden, 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, Public Law 104–13 (44 U.S.C. 3506(c)(2)(A)).

DATES: Written comments must be submitted on or before June 20, 2000.

ADDRESSES: Direct all written comments to Linda Engelmeier, Departmental Forms Clearance Officer, Department of Commerce, Room 5027, 14th and Constitution Avenue NW, Washington DC 20230 (or via Internet at lengelme@doc.gov).

FOR FURTHER INFORMATION CONTACT: Requests for additional information or copies of the information collection instrument(s) and instructions should be directed to Christopher Rogers, Highly Migratory Species Management Division (F/SF1), Office of Sustainable Fisheries, NMFS, 1315 East-West Highway, Silver Spring, MD 20910 (301–713–2347).

SUPPLEMENTARY INFORMATION:

I. Abstract

Under the provisions of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 *et seq.*), NOAA is responsible for management of the nation's marine fisheries. In addition, NOAA must comply with the United States' obligations under the Atlantic Tunas Convention Act of 1975 (16 U.S.C. 971 *et seq.*) to implement recommendations by the International Commission for the Conservation of Atlantic Tunas (ICCAT). In order to monitor landings and trade in bluefin tuna, the National Marine Fisheries Service (NMFS) collects information through the bluefin tuna statistical document (BSD) program recommended by ICCAT. BSDs are required for lawful import of bluefin tuna products into countries that are contracting parties to ICCAT. By exchanging information collected through the BSD program, ICCAT members can monitor catch of

Atlantic bluefin tuna in relation to applicable country quotas for contracting parties and assess the extent to which catch by non-contracting parties could undermine the effectiveness of ICCAT's stock rebuilding program for Atlantic bluefin tuna.

II. Method of Collection

Importers and commercial fish dealers who import or export bluefin tuna are required to obtain a tuna dealer permit from NMFS (approved under a separate collection: 0648–0202). Permitted dealers must obtain original BSDs from import shipments, complete the importer certification section and mail or fax the completed BSD to NMFS. Exporters must obtain numbered, non-transferable BSDs from NMFS, complete the landings information and exporter certification sections, mail or fax a copy of the completed BSD to NMFS, and attach the original BSD to the export shipment. In certain cases, the landings and export information must be validated by a government official or an accredited non-government institution. For the most part, U.S. catches of bluefin tuna are tagged upon landing (approved under a separate collection: 0648–0239) and such tagged bluefin are exempt from the BSD validation requirement. In order for a non-governmental institution to be accredited to provide validations it must submit a request for such authority.

III. Data

OMB Number: 0648–0040.

Form Number: None.

Type of Review: Regular submission.

Affected public: Businesses and other for-profit institutions.

Estimated Number of Respondents: 50.

Estimated Time Per Response: An average of 20 minutes for completing a BSD upon import, export or re-export of bluefin tuna into or from the United States (range of 5 minutes for BSDs listing tagged fish to 2 hours for BSDs requiring validation); 2 hours for a request for accreditation from a non-governmental institution.

Estimated Total Annual Burden Hours: 500.

Estimated Total Annual Cost to Public: $500.

IV. Request for Comments

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 (including hours and cost) of the proposed collection of information; (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 respondents, including through the use of automated collection techniques or other forms of information technology.

Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval of this information collection; they also will become a matter of public record.

Dated: April 13, 2000.

Linda Engelmeier,

Departmental Forms Clearance Officer, Office of Chief Information Officer.

[FR Doc. 00–10025 Filed 4–20–00; 8:45 am]

BILLING CODE 3510–22–F

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[I.D. 032000E]

New England Fishery Management Council; Public Meeting

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of cancellation of a public meeting.

SUMMARY: The New England Fishery Management Council (Council) has cancelled the public meeting of its Research Steering and Experimental Fisheries Committee that was scheduled for Tuesday and Wednesday, April 25–26, 2000, at 9:00 and 8:30 a.m., respectively. The meetings were announced in the **Federal Register** on March 27, 2000.

FOR FURTHER INFORMATION CONTACT: Paul J. Howard, Executive Director, New England Fishery Management Council; telephone: 978–465–0492.

SUPPLEMENTARY INFORMATION: The initial notice published on March 27, 2000 (65 FR 16186). The meeting will be rescheduled at a later date and announced in the **Federal Register**.

Dated: April 17, 2000.

Richard W. Surdi,

Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 00–10026 Filed 4–20–00; 8:45 am]

BILLING CODE 3510–22–F

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[I.D. 041400C]

New England Fishery Management Council; Public Meetings

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of public meetings.

SUMMARY: The New England Fishery Management Council (Council) is scheduling four public meetings in May, 2000: two joint meetings of its Groundfish Committee and Advisory Panel; a meeting of the Groundfish Committee and Advisory Panel, in conjunction with the Council's Scallop Committee; and a joint Habitat Committee and Advisory Panel meeting. Recommendations from these groups will be brought to the full Council for formal consideration and action, if appropriate.

DATES: The meetings will be held between Monday, May 8, 2000 and Tuesday, May 23, 2000. See **SUPPLEMENTARY INFORMATION** for specific dates and times.

ADDRESSES: The meetings will be held in York Harbor, ME and Peabody, MA. See **SUPPLEMENTARY INFORMATION** for specific locations.

FOR FURTHER INFORMATION CONTACT: Paul J. Howard, Executive Director, New England Fishery Management Council; (978) 465–0492.

SUPPLEMENTARY INFORMATION:

Meeting Dates and Times

Monday, May 8, 2000, 9:30 a.m. and Tuesday, May 9, 2000, 8:30 a.m.—Joint Groundfish Committee and Advisory Panel Meeting

Location: York Harbor Inn, Route 1A, P.O. Box 573, York Harbor, ME 03911; telephone: (207) 363–5119.

The committee and advisors will conduct a joint meeting to continue development of management options for Amendment 13 to the Northeast Multispecies Fishery Management Plan (FMP). They will continue review of current overfishing definitions and control rules for the multispecies complex, examine the assumptions and policy decisions in those rules, and develop recommendations for the biological goals of the amendment. They also will review existing management measures and identify their strengths and weaknesses. Suggestions for improvements to those measures will be

developed. They may consider options for developing an area management system, or for developing a sector allocation system. The committee and advisors also may organize into subcommittees that will be tasked to develop specific management options for consideration by the full committee. These tasks will be based on broad approaches to management selected by the committee. The subcommittees may meet individually during the meeting to begin work on these management options. The discussions at the subcommittee level will be reported back to the committee at this meeting or at future meetings.

Monday May 15, 2000, 8:30 a.m. and Tuesday, May 16, 2000, 9:30 a.m.—Joint Habitat Committee and Advisory Panel Meeting

Location: Holiday Inn, One Newbury Street, Route One, Peabody, MA 01960; telephone: (978) 535–4600.

The committee will review the 2000 Habitat Annual Review Report and develop recommendations for consideration by the Council. There also will be discussions about upcoming amendments to the Sea Scallop and Groundfish FMPs.

Monday, May 22, 2000, 9:30 a.m.—Joint Groundfish Committee and Advisory Panel Meeting

Location: Holiday Inn, One Newbury Street, Route One, Peabody, MA 01960; telephone: (978) 535–4600.

The committee and advisors will conduct a joint meeting to continue development of management options for Amendment 13 to the Northeast Multispecies FMP. If not completed at earlier meetings, they will continue their review of current overfishing definitions and control rules for the multispecies complex, examine the assumptions and policy decisions in those rules, and develop recommendations for the biological goals of the amendment. They also will review existing management measures and possibly develop alternatives. They may consider options for developing an area management system, or for developing a sector allocation management system. The committee and advisors may also organize into subcommittees that will be reported back to the Groundfish Committee at this meeting or at future meetings.

Tuesday, May 23, 2000 at 8:30 a.m.—Joint Groundfish Committee and Advisory Panel and Scallop Committee Meeting

Location: Holiday Inn, One Newbury Street, Route One, Peabody, MA 01960; telephone: (978) 535–4600.

The panel and committees will discuss Amendment 10 to the Scallop FMP. Amendment 10 considers new area rotation systems to improve scallop yield, changes to the FMP annual review process and timing, modifications to the crew size limit, and possible scallop trawl gear modifications to improve size selection. The purpose of this meeting will be to evaluate draft Amendment 10 alternatives, identify potential impacts, and recommend modifications to these conceptual alternatives so that they are recognized and managed. There is a possibility that these issues will not be fully developed for discussion, in which case the Groundfish Committee and Advisors will continue their discussion of Amendment 13 alternatives and the Scallop Oversight Committee meeting will be cancelled. If this occurs, the Council will notify interested parties through a notice mailing.

Although non-emergency issues not contained in this agenda may come before this Council for discussion, those issues may not be the subject of formal Council action during this meeting. Council action will be restricted to those issues specifically listed in this notice and any issues arising after publication of this notice that require emergency action under section 305(c) of the Magnuson-Stevens Fishery Conservation and Management Act, provided the public has been notified of the Council's intent to take final action to address the emergency.

Special Accommodations

This meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to Paul J. Howard (see **ADDRESSES**) at least 5 days prior to the meeting dates.

Dated: April 17, 2000.

Richard W. Surdi,

Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 00–10028 Filed 4–20–00; 8:45 am]

BILLING CODE 3510–22–F

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[I.D. 040300B]

Marine Mammals; File No. 738–1454–03

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Issuance of permit amendment.

SUMMARY: Notice is hereby given that Permit No. 738–1454 issued to Ms. Carole Conway, Genomic Variation Laboratory, Department of Animal Science, Meyer Hall, University of California, Davis, CA 95616–3322, was amended to allow import and export of blue whale samples from/to Mexico and other locations [worldwide] where the species is found.

ADDRESSES: The amendment and related documents are available for review upon written request or by appointment in the following offices:

Permits and Documentation Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Room 13130 Silver Spring, MD 20910 (301/713–2289); and

Regional Administrator, Southwest Region, NMFS, 501 West Ocean Blvd., Suite 4200, Long Beach, CA 90802–4213 (562/980–4001).

FOR FURTHER INFORMATION CONTACT: Ruth Johnson (301/713–2289).

SUPPLEMENTARY INFORMATION: The subject amendment has been issued under the authority of the Marine Mammal Protection Act of 1972, as amended (16 U.S.C. 1361 *et seq.*), the Regulations Governing the Taking and Importing of Marine Mammals (50 CFR part 216), the Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. 1531 *et seq.*), and the regulations governing endangered and threatened marine species(50 CFR parts 222–226).

Issuance of this permit, as required by the ESA, was based on a finding that such permit (1) was applied for in good faith, (2) will not operate to the disadvantage of the endangered species which is the subject of this permit, and (3) is consistent with the purposes and policies set forth in section 2 of the ESA.

Dated: April 14, 2000.

Ann D. Terbush,

Chief, Permits and Documentation Division, Office of Protected Resources, National Marine Fisheries Service.

[FR Doc. 00–10024 Filed 4–20–00; 8:45 am]

BILLING CODE 3510–22–F

DEPARTMENT OF DEFENSE

Corps of Engineers, Department of the Army

Notice of Intent (NOI) To Prepare a Environmental Impact Statement for the Lower Guadalupe River Flood Protection Project, San Jose and Santa Clara, CA

AGENCY: The U.S. Army Corps of Engineers, DoD.

ACTION: Notice of intent.

SUMMARY: The U.S. Army Corps of Engineers (USACE), San Francisco District, has received an application for a Department of the Army authorization from the Santa Clara Valley Water District (SCVWD) to construct portions of the Lower Guadalupe River Flood Protection Project (LGRP). The project is located on the Guadalupe River in the cities of San Jose and Santa Clara, California, between Interstate 880 and the Union Pacific Railroad (UPRR) bridge in the Community of Alviso and on Alviso Slough from the UPRR bridge to the terminus of Alviso Slough with San Francisco Bay. In accordance with the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 *et seq.*), the U.S. Army Corps of Engineers has determined that the proposed action may have a significant impact on the human environment and therefore requires the preparation of an environmental impact statement (EIS). A combined environmental impact report (EIR)/EIS will be prepared with the USACE as the federal lead agency and the SCVWD as the local lead agency under the California Environmental Quality Act (CEQA).

The LGRP was authorized by SCVWD to provide flood protection, environmental protection, and public access opportunities, and will be designed and constructed to ensure that the channel improvements are operated and managed to convey design floodflows in the Guadalupe River from Interstate 880 to San Francisco Bay. The LGRP is also incorporating measures to avoid existing fish and wildlife habitat, to protect special status species, and to meet conditions for water quality certification under the Clean Water Act.

1. A scoping meeting is scheduled for May 3, 2000, from 6 to 8:30 p.m.

2. Please submit any written comments by May 19, 2000.

ADDRESSES: 1. The scoping meeting will be held at the Silicon Valley Conference Center, 2161 North First Street, San Jose, California 95113,

2. Mail comments to: Robert F. Smith, U.S. Army Corps of Engineers, 333 Market Street, CESPN–OR–R, San Francisco, CA, 94105–2197, or

3. Santa Clara Valley Water District, 5750 Almaden Expressway, San Jose, CA, 95118–3686.

FOR FURTHER INFORMATION CONTACT:

1. Robert Smith, (415) 977–8450, or electronic mail: *rsmith@spd.usace.army.mil*.

2. Lower Guadalupe River Flood Protection Project, (408) 265–2607 Ext. 2724, or electronic mail: heynoah@scvwd.dst.ca.us.

SUPPLEMENTARY INFORMATION: The Lower Guadalupe River Flood Protection Project (LGRP) reach is located within the cities of San Jose and Santa Clara, California, between Interstate 880 and the UPRR bridge in Alviso and on Alviso Slough from the UPRR bridge to the terminus of Alviso Slough with San Francisco Bay. The primary project area is located along approximately 6.5 miles of the lower Guadalupe River and 4.0 miles along Alviso Slough. The LGRP reach receives runoff from a highly urbanized region comprising a steep upper watershed, an urban residential and light commercial zone (the upper Guadalupe River), and a significantly developed and encroaching downtown commercial zone. Storm drainage from these areas and from within the project area is also discharged into the lower Guadalupe River, adding to the runoff volume.

The LGRP is being implemented along the Guadalupe River from Interstate 880 to the UPRR bridge in Alviso, California. The Downtown Guadalupe River Project, located upstream of the LGRP, is scheduled to be completed by the end of 2002. Once the downtown project is completed, the result will be an increase of peak floodflows that are able to reach the lower river reach. Because the lower Guadalupe River does not currently have the ability to convey the expected design flood event, floodway modifications will be designed and constructed to ensure that the channel improvements are operated and managed to convey the design floodflow with a peak of 20,000 cubic feet per second (cfs) at Alviso.

The Guadalupe River, located primarily in the cities of San Jose and Santa Clara south of San Francisco Bay, drains an area of about 160 square miles into the Bay. The primary project area is located along approximately 4.6 miles of the lower Guadalupe River between Interstate 880 and UPRR bridge in Alviso.

Reasonable Alternataives

The following is a brief description of the range of alternatives that will be evaluated in the draft EIR/EIS. The SCVWD has not yet identified a proposed action and will evaluate the environmental impacts of each alternative at an equal level of detail to satisfy the requirements of NEPA.

Alternative 1: Dredging from Montague Expressway to UPRR. Dredging is a construction method that removes channel-bottom material. To meet the flood-protection objective of the LGRP, the excavation of all or most of the material would be required between the inboard levee toes in a depth of 2.5–5 meters (8.2–16.4feet)—from the Montague Expressway bridge to the UPRR bridge. Initial hydraulic modeling indicates this would increase the capacity of the river sufficiently to convey the design flow within the existing levees, including providing freeboard. Numerous, potentially major constraints have been identified for this alternative that will need to be evaluated more extensively, including the following:

- Impacts on approximately 16.2 hectares (40 acres) of aquatic habitat and 1.21 hectares (3 acres) of riparian forest and other habitat areas.
- Regular Dredging would be required to maintain the initially dredged cross sections.
- Structural modifications may be required to bridge piers that would become more exposed than in their current condition.
- The Hetch Hetchy Adqueduct and other utilities may need to be relocated.
- The order-of-magnitude cost to implement the initial dredging is estimated to be $41 million, which excludes any bridge modifications. Maintenance dredging would be expected to be performed on a scheduled 10-year frequency.

Alternative 2: Bypass Culvert(s). This alternative would involve the construction of a structure that will convey the flows that exceed the existing capacity of the lower Guadalupe River to a downstream discharge location. The anticipated structure would be a reinforced concrete box constructed within one of the existing levees, with an invert that follows the toe of the levee. It is expected to extend from a location immediately downstream of the U.S. 101 bridge to a location shortly downstream of the UPRR bridge. The dimensions would range from 10 to 15 meters (32.8 to 49.2 feet) wide and between 3.5 and 5 meters (11.5 and 16.4 feet) high. A few potentially major constraints have been identified for this alternative that will be evaluated more extensively, including:

- Constructing the bypass at several bridges, which potentially would involve property acquisition at some of the bridges; and
- Interferences and the consequent relocations of existing utilities, including the Hetch Hetchy Aqueduct.

The order-of-magnitude cost to implement this alternative is estimated to be $200 million; maintenance costs have not yet been quantified.

Alternative 3: Floodwalls, Bypasses, and Aggressive Vegetation Management. This alternative would involve the construction of 1- to 7-meter-high (3.28-

to 23-foot-high) reinforced concrete walls to contain the design flows and provide freeboard. There are a number of configurations that may be appropriate for the LGRP, with the most cost-effective configuration appearing to be one that would maximize the use of the existing right-of-way (ROW) by placing the floodwalls a short distance inside the ROW, along with the removal of the existing levees to provide additional conveyance capacity and the reduction of the floodwall heights.

To allow for maintenance access from the bridge access points to the channel, ramps will be needed over the walls, which in turn will necessitate jobs in the wall and result in a conveyance constriction. This alternative is therefore expected to also include two other measures: Aggressive management of vegetation in the channel and construction of up to four bridge bypasses (Highway 237, Tasman, Montague, and Trimble). Numerous potentially major constraints have been identified for this alternative that will be evaluated more extensively, including:

- Extensive foundation systems that will be required to support free-standing floodwalls, or the use of walls considerably farther inside the ROW that are partially supported by the existing and/or improved levees;
- Effects on channel habitat, wildlife movement and escapement during flood events;
- Interferences and the consequent relocations of existing utilities;
- Modifications to the other bridges that may be required to ensure that freeboard continues across them (*i.e.*, at the floodwall's termination at each bridge); and
- Flood-fighting access would possibly be significantly limited should the entire ROW become dedicated to flood conveyance (*i.e.*, with the walls placed alongside the outside of the ROW, no room is left for access along the ROW that is also outside the flood waters).

The order-of-magnitude cost to implement this alternative is estimated to be $100 million; maintenance costs have not yet been quantified.

Alternative 4: Channel Modification, All Concrete, from Montague Expressway to UPRR. This alternative would involve the excavation of the inboard toe of the existing levees, construction of a vertical or near-vertical wall at the inside of the existing levee, and construction of a concrete apron at the resulting channel bench. This improvement would be constructed between Montague Expressway and the UPRR bridge. In places, it is expected that the wall portion would need to be extended up to provide a short-height floodwall, that a bypass would be required at Highway 237, and that the alternative would include selective removal of sediment. The work for this alternative is not expected to encroach into wetlands areas, as it is anticipated to be entirely constructed above the existing levee toe. No major constraints have been identified for this alternative at this time. The order-of-magnitude cost to implement this alternative is estimated to be $81 million; maintenance costs have not yet been quantified.

Alternative 5: Channel Modification, Alternate Materials, from Montague Expressway to UPRR. This alternative would be similar to Alternative 4 above and would also involve the excavation of the inboard toe of the existing levees and construction of a vertical or near-vertical wall with an apron at the resulting channel bench. However, the wall and apron would not be straight planes of concrete, they would be constructed of some alternate material(s), such as interlocking blocks, mechanically stabilized earth (MSE), gabions (gravity wall constructed of stacked wire baskets filled with rocks), or deep-rooting vegetation (biostabilization). These improvements would also be constructed between Montague Expressway and the UPRR bridge and would require selective removal of sediment, a short-height floodwall, and construction of a bypass at Highway 237 (as under Alternative 4). Further analysis would be performed during the next stage of the project to determine the materials and configuration that provide a balance of cost, hydraulic function, appearance, and other project objectives. Initial hydraulic and structural analyses suggest that, to provide the desired water-surface lowering, it is expected that this alternative would also include selective management of vegetation in the channel. No major constraints have been identified for this alternative at this time. The order-of-magnitude cost to implement this alternative is estimated to be $65 million; maintenance costs have not yet been quantified.

Alternative 6: No Action. District staff has performed a number of maintenance activities along the lower Guadalupe River, including sediment removal, debris removal, and vegetation control, with these activities constrained in the past 10 years because of increasing natural resources regulatory requirements and the increasing concerns over sensitive natural resources areas. Nonetheless, maintenance activities performed in the past will continue to be needed and performed on the lower Guadalupe River. Further LGRP analysis will determine the extent of this work, and the extent to which some or all of this work is appropriately considered part of the No-Action Alternative.

Alviso Baylands: Each of the action alternatives 1–5, described above, would also include an Alviso baylands flood control component that is intended to reduce the flooding potential on Alviso Slough near the community of Alviso. The focus of the LGRP in Alviso is primarily to address the Guadalupe River contribution to flood conditions in the area. Six components are currently being considered:

- Extension of improved levees adjacent to Alviso Slough to its terminus in the Bay;
- Extension of Alternative 1 dredging in Alviso Slough to its terminus in the Bay.
- Construction of setback levees west of Alviso Slough to the Bay that provides an auxiliary overflow conveyance system;
- Construction of an engineered overflow structure from Alviso Slough to flood easements in Cargill ponds for flood storage or conveyance (two components considered);
- Construction of a phased solution with an engineered overflow to Cargill ponds, flood easements in Cargill ponds west of Alviso Slough isolation of Alviso and pond A8D from LGRP design floods and improvements to the New Chicago Marsh source canal flow control mechanisms; and
- Tidal restoration of the existing salt ponds adjacent to Alviso Slough by phasing out salt production, breaching salt pond levees, and allowing tidal processes to reestablish.

Proposed Scoping Process

This NOI initiates the scoping process whereby the USACE and SCVWD will refine the scope of issues to be addressed in the draft EIR/EIS and identify potential significant environmental issues related to the proposed action.

a. Issues to be analyzed in depth: The resources for which potential adverse effects were identified include:

- River Geomorphology. Operation of the LGRP could result in changes in river geomorphology in the subreaches downstream of Interstate 880. Post-project monitoring would focus on channel incision and sediment deposition.
- Biological Resources. Construction of the LGRP could, depending on the

alternative, require removal of some shaded riverine aquatic cover and disturbance of the river channel, impacts to wildlife habitat, possible effects on escape areas for wildlife during storm events, and possible effects on wildlife movements. Such activities could result in adverse effects on fish habitat during and after construction. Anadromous fish to be evaluated are steelhead, which is listed as threatened under the Endangered Species Act, and chinook salmon.

• Water Quality. Potential construction-related effects on water quality include temperature changes, turbidity, and possible disturbance and mobilization of mercury present in the sediments.

• Air Quality. Earthmoving associated with constructing Alternative 2 could result in increased PM10 (particulate matter less than 10 microns in diameter) emissions.

• Transportation and Traffic. Project construction could result in temporary construction-related traffic congestion.

• Hazardous Materials. Potential construction-related effects on areas surrounding the river would be disturbance and mobilization of mercury and other contaminants present in the area soils and in the groundwater.

• Cultural Resources. Several cultural resource sites exist along the lower Guadalupe River and, depending on the alternative, these sites might be disturbed during LGRP construction. In addition, unknown cultural resources could be discovered and disturbed during construction operations.

b. Affected federal, state and local agencies, affected Indian tribes, and other interested private organizations and parties are invited to comment on the proposal to prepare the draft EIR/EIS and on the scope of issues to be included therein.

c. The USACE and SCVWD will consult local, state, and federal agencies with regulatory or implementation responsibility for, or expertise in, the resources in the area of investigation. These include, but are not limited to, the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and U.S. Environmental Protection Agency; the State Historic Preservation Officer, California Department of Fish and Game, California Environmental Protection Agency, Regional Water Quality Control Boards, State Lands Commission, San Francisco Bay Conservation and Development Commission, and California Department of Transportation; and the City of San Jose and San Jose Redevelopment Agency. The USACE will conduct an environmental review of the project in accordance with:

• National Environmental Policy Act,
• Section 404 of Clean Water Act,
• Section 10 of Rivers & Harbors Act,
• Endangered Species Act,
• Magnuson-Stevens Act Provisions; Essential Fish Habitat,
• Clean Air Act,
• National Historic Preservation Act,
• Fish and Wildlife Coordination Act,
• Coastal Zone Management Act.

d. Meetings with interested persons will be held during the scoping period and after release of the draft EIR/EIS. Coordination with federal and state agencies, tribal governments, and local governments will take place throughout the entire process as necessary.

e. On May 3, 2000, a scoping meeting will be held in the community to describe the LGRP and solicit suggestions, recommendations, and comments to help refine the issues, measures, and alternatives to be addressed in the draft EIR/EIS. Specific locations, dates, and times of the meeting(s) will be published in local newspaper(s) or other media, and provided to those persons receiving this notice and those who call or write after seeing a published version.

f. A 45-day period will be provided for public review and comment on the draft EIR/EIS. All interested persons should respond to this notice and provide a current address if they wish to be notified of the draft EIR/EIS. A 30-day public review period will be provided for review and comment on the final EIR/EIS.

Availability

The draft EIR/EIS is expected to be available for a 45-day public review and comment period in fall 2000. The final EIR/EIS is expected to be available for a 30-day review period in March 2001.

(Authority: 40 CFR part 1501.7)

Dated: April 17, 2000.

Calvin C. Fong,

Chief, Regulatory Branch.

[FR Doc. 00–9990 Filed 4–20–00; 8:45 am]

BILLING CODE 3710–19–M

DEPARTMENT OF THE NAVY

Notice of Change in Disposal of Buildings and Land at Closed Military Installation; Former Naval Station Puget Sound (Sand Point), Seattle, WA

AGENCY: Department of the Navy, DOD.

ACTION: Notice.

SUMMARY: This Notice provides information on the surplus property at the former Naval Station Puget Sound (Sand Point), Seattle, Washington.

SUPPLEMENTARY INFORMATION: In 1991, Naval Station Puget Sound (Sand Point), Seattle, Washington, was designated for closure pursuant to the Defense Base Closure and Realignment Act of 1990, Public Law 101–510, as amended. On September 20, 1995, approximately 126 acres of land and facilities, located at Sand Point were determined surplus to the needs of the federal Government and available for use by state and local governments, representatives of the homeless and other interested parties. Approximately 11 acres were designated to be a federal transfer to the National Oceanic and Atmospheric Administration (NOAA). NOAA declined the transfer and subsequently the City of Seattle requested the property for park and recreation purposes and submitted an application for the property under the Federal Lands-to-Parks Program of the National Park Service.

Surplus Property Description

The following is a listing of the additional land and facilities at the former Naval Station Puget Sound (Sand Point), Seattle, Washington, that have been declared surplus to the needs of the federal Government:

Land

Approximately 11 acres of improved and unimproved fee simple land at the former Naval Station Puget Sound (Sand Point), Seattle, Washington, located in King County, in the northeastern portion of the City of Seattle, Washington. Area is immediately available.

Buildings

The following is a summary of the facilities located on the above described land.

— Warehouse/storage facilities (1 structure). Comments: Approx. 115,000 square feet.
— Miscellaneous paved areas.
— Utility facilities. Comments: Electrical, steam, water, sewage

FOR FURTHER INFORMATION CONTACT: Richard A. Engel, Director, Department of the Navy, Real Estate Operations Division, Naval Facilities Engineering Command, 1322 Patterson Ave. SE, Suite 1000, Washington Navy Yard, DC 20374–5065, telephone (202) 685–9203 or Mike Brady, Director, Real Estate, Engineering Field Activity, Northwest, Naval Facilities Engineering Command, 19917 7th Avenue NE, Poulsbo, WA 98370–7570, telephone (360) 396–0908.

Dated: April 11, 2000.

J. L. Roth,

Lieutenant Commander, Judge Advocate General's Corps, U.S. Navy, Federal Register Liaison Officer.

[FR Doc. 00–9949 Filed 4–20–00; 8:45 am]

BILLING CODE 3810–FF–P

DEPARTMENT OF ENERGY

Chicago Operations Office, Office of Industrial Technologies, Notice of the Chemicals Industry of the Future Solicitation

AGENCY: Chicago Operations Office, DOE.

ACTION: Notice of financial assistance solicitation availability.

SUMMARY: The U.S. Department of Energy (DOE) is announcing its intention to solicit applications for financial assistance for cost shared research and development of technologies that will enhance economic competitiveness, reduce energy consumption and reduce environmental impacts of the U.S. chemical industry. The DOE Office of Industrial Technologies (OIT) seeks industry cost-shared projects involving at least two chemical industry companies per project that address research needs identified in Technology Vision 2020: The U.S. Chemical Industry ''vision document'' and the subsequent Vision 2020 technology roadmaps. These documents can be found on the OIT web-site located at *http://www.oit.doe.gov/chemicals/.* DOE is interested in projects that focus on applied research that lead to the development and successful completion of pilot-scale operations. Projects of most interest will be those that demonstrate broad chemical industry applicability, and which will yield large and replicable energy savings.

DATES: The complete solicitation document will be available on or about May 31, 2000. The deadline for submission of applications will be identified in the solicitation and should occur during August, 2000.

ADDRESSES: Copies of the solicitation, when issued, can be obtained from the DOE Chicago Operations Office, Acquisition and Assistance Home Page at *http://www.ch.doe.gov/business/ACQ.htm* under the heading ''current solicitations,'' Solicitation No. DE–SC02–00CH11040. Access to this Home Page will also be possible through a hot-link from the OIT Chemicals web-site.

FOR FURTHER INFORMATION CONTACT: John Motz at (630) 252–2152; by mail at U.S. Department of Energy, 9800 South Cass Avenue, Argonne, IL 60439–4899; by facsimile at (630) 252–5045; or by electronic mail at john.motz@ch.doe.gov

SUPPLEMENTARY INFORMATION:

Background

DOE through its Office of Industrial Technologies (OIT) supports industries in their efforts to increase energy efficiency, reduce waste and increase productivity. The goal of OIT is to accelerate the development and use of advanced energy efficient, renewable and pollution prevention technologies that benefit industry, the environment, and U.S. energy security. OIT's core program is the Industries of the Future (IOF) initiative that focuses on basic materials and processing industries such as the chemical industry.

Research and Development Solicitation Topics

Responsive projects will cross-cut several technological and methodological roadmap areas including, but not limited to, catalysis, separations, new process chemistry, reaction engineering, materials of construction, computational fluid dynamics, and computational chemistry. Specific attention should be given to system integration and process operation and control development. The outcome of these projects should be pilot-scale demonstrations that will lead to full-scale demonstration and commercialization of process technology. The technology development project proposed must show a high probability of commercialization beyond a single company. For this reason, the proposers will need to describe the path to commercialization that will impact more than one company's process applications; the technology must show a broad applicability in its proposed configuration or in a similar adaptation to other chemical industry applications.

Type and Number of Anticipated Awards

Awards under this solicitation will be cooperative agreements with a term of up to three years. DOE is planning to allocate approximately $4 million in fiscal year 2001 for the selected projects, subject to the availability of funds. It is estimated that three to six projects will be selected for cost-shared cooperative agreements. Total estimated Government funding for the solicitation is approximately $12 million for the maximum three-year period, subject to the availability of funds.

Application Requirements

The projects must include teams that comprise multi-disciplinary expertise from corporate research, process engineering, technology development groups or companies, and new business development organizations within and outside chemical companies. Applications that do not propose a teaming arrangement of at least two chemical industry companies will not be evaluated. Teams shall be led by chemical companies, but may include partners from chemical product/raw material suppliers, chemical customers, equipment suppliers, engineering firms, software and consulting firms, universities, National Laboratories, and research institutes.

Applicants will be required to cost share a minimum of 50% of the total project costs to be incurred under the proposed project to be eligible for award under this solicitation.

In addition to the foregoing, other evaluation and selection criteria will be developed in accordance with 10 CFR 600.10—Form and Content of Applications and 10 CFR 600.13—Merit Review.

Issued in Argonne, Illinois on April 11, 2000.

John D. Greenwood,

Acquisition and Assistance Group Manager

[FR Doc. 00–9982 Filed 4–20–00; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket Nos. OA97–111–001, OA97–112–001 and OA97–124–001]

Cinergy Services, Inc.; Notice of Filing

April 14, 2000.

Take notice that on March 20, 2000, Cinergy Services, Inc. (Cinergy), as agent for and on behalf of the Cinergy Operating Companies, PSI Energy, Inc. and The Cincinnati Gas & Electric Company, submitted its compliance filing pursuant to the Commission's February 29, 2000 Order in Allegheny Power Service Company, *et al.,* 90 FERC ¶ 61,224.

Cinergy states that it has served a copy of its filing upon Hoosier Energy Rural Electric Cooperative, Inc., Southern Indiana Gas and Electric Company and Indiana Municipal Power Agency.

Any person desiring to be heard or to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 888

First Street, N.E., Washington, D.C. 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). All such motions and protests should be filed on or before April 24, 1999. Protests will be considered by the Commission to determine the appropriate action to be taken, but will not serve to make protestants parties to the proceedings. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection. This filing may also be viewed on the Internet at http://www.ferc.fed.us/online/rims.htm (call 202–208–2222 for assistance).

David P. Boergers,

Secretary.

[FR Doc. 00–9947 Filed 4–20–00; 8:45 am]

BILLING CODE 6717–01–M

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. EG00–125–000, et al.]

ANP Bellingham Energy Company, et al.; Electric Rate and Corporate Regulation Filings

April 11, 2000.

Take notice that the following filings have been made with the Commission:

1. ANP Bellingham Energy Company

[Docket No. EG00–125–000]

Take notice that on April 5, 2000, ANP Bellingham Energy Company (Applicant), a Delaware corporation, whose address is 10000 Memorial Drive, Suite 500, Houston, Texas 77024, filed with the Federal Energy Regulatory Commission an application for determination of exempt wholesale generator status pursuant to part 365 of the Commission's regulations.

Applicant intends to construct an approximate 550 MW natural gas-fired combined cycle independent power production facility in Bellingham, Massachusetts (the Facility). The Facility is currently under development and will be owned by Applicant. Electric energy produced by the Facility will be sold by Applicant to the wholesale power market in the northeast United States.

Comment date: May 2, 2000, in accordance with Standard Paragraph E at the end of this notice. The Commission will limit its consideration of comments to those that concern the adequacy or accuracy of the application.

2. ANP Blackstone Energy Company

[Docket No. EG00–126–000]

Take notice that on April 5, 2000, ANP Blackstone Energy Company (Applicant), a Delaware corporation, whose address is 10000 Memorial Drive, Suite 500, Houston, Texas 77024, filed with the Federal Energy Regulatory Commission an application for determination of exempt wholesale generator status pursuant to part 365 of the Commission's regulations.

Applicant intends to construct an approximate 550 MW natural gas-fired combined cycle independent power production facility in Blackstone, Massachusetts (the Facility). The Facility is currently under development and will be owned by Applicant. Electric energy produced by the Facility will be sold by Applicant to the wholesale power market in the northeast United States

Comment date: May 2, 2000, in accordance with Standard Paragraph E at the end of this notice. The commission will limit its consideration of comments to those that concern the adequacy or accuracy of the application.

3. Wabash Valley Power Association and American Municipal Power Ohio, Inc. v. American Electric Power Services Corporation; Indiana Municipal Power Agency v. American Electric Power Service Corporation

[Docket Nos. EL99–66–001 and EL99–72–001]

Take notice that on April 4, 2000, American Electric Power Service Corporation (AEP), on the tendered for filing its refund report in response to the Commission's order of March 16, 2000. AEP also filed revised tariff sheets reflecting changes in its loss factors that had been inadvertently omitted from its settlement filing on December 10, 1999.

Copies of the filing were served upon all intervenors and all parties that signed the settlement agreement.

Comment date: May 4, 2000, in accordance with Standard Paragraph E at the end of this notice.

4. Connexus Energy

[Docket No. ER00–1900–001]

Take notice that on April 5, 2000, Connexus Energy (Connexus) submitted for filing substitute tariff sheets to replace supplements, filed on March 23, 2000, to Connexus Energy Rate Schedule FERC No. 1. Connexus states that the purpose of the filing is to change the proposed effective date of the Amendment to the All Requirements Contract, and associated revised Schedule V, between Connexus Energy and Elk River Municipal Utilities.

The substitute tariff sheets provide for an effective date of January 1, 2000. Connexus requests waiver of the prior notice requirement.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

5. Otter Tail Power Company

[Docket No. ER00–2105–000]

Take notice that on April 4, 2000, Otter Tail Power Company (OTP) tendered for filing a Service Agreement between OTP and Public Service Company of Colorado (PSCO). The Service Agreement allows PSCO to purchase capacity and/or energy under OTP's Coordination Sales Tariff.

Comment date: April 25, 2000, in accordance with Standard Paragraph E at the end of this notice.

6. PJM Interconnection, L.L.C.

[Docket No. ER00–2106–000]

Take notice that on April 4, 2000, 1999, PJM Interconnection, L.L.C. (PJM) tendered for filing a notice of cancellation of Conoco Power Marketing Inc.' (formerly DuPont Power Marketing Inc.) membership in PJM.

PJM requests a waiver and effective date of April 5, 2000 for the notice of cancellation.

PJM states that it served a copy of its filing on all of the members of PJM, including the withdrawing company, and each of the electric regulatory commissions within the PJM control area.

Comment date: April 25, 2000, in accordance with Standard Paragraph E at the end of this notice.

7. Entergy Services, Inc.

[Docket No. ER00–2107–000]

Take notice that on April 4, 2000, Entergy Services, Inc., on behalf of Entergy Arkansas, Inc., Entergy Gulf States, Inc., Entergy Louisiana, Inc., Entergy Mississippi, Inc., and Entergy New Orleans, Inc., (collectively, the Entergy Operating Companies) tendered for filing a Non-Firm Point-to-Point Transmission Service Agreement and a Short-Term Firm Point-to-Point Transmission Service Agreement both between Entergy Services, Inc. as agent for the Entergy Operating Companies, and Conoco Power Marketing, Inc.

Entergy Services requests an effective date of March 28, 2000 for the Service Agreement.

Comment date: April 25, 2000, in accordance with Standard Paragraph E at the end of this notice.

8. Minnesota Power, Inc.

[Docket No. ER00–2108–000]

Take notice that on April 5, 2000, Minnesota Power, Inc. tendered for filing a signed Firm Point-to-Point Transmission Service Agreement with Northern States Power Company under its Firm Point-to-Point Transmission Service to satisfy its filing requirements under this tariff.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

9. Sierra Pacific Power Company

[Docket No. ER00–2109–000]

Take notice that on April 5, 2000, Sierra Pacific Power Company tendered for filing pursuant to Section 205 of the Federal Power Act, an executed Network Integration Service Agreement (Service Agreement) between Sierra Pacific Power Company and the City of Fallon. The Service Agreement is being filed in compliance with Section 29.5 of Sierra Pacific Resources Operating Utilities Open Access Transmission Tariff.

Sierra has requested that the Commission accept the Service Agreement and permit service thereunder be effective as of March 8, 2000.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

10. Sierra Pacific Power Company

[Docket No. ER00–2110–000]

Take notice that on April 5, 2000, Sierra Pacific Power Company tendered for filing pursuant to 18 CFR part 35 of the Commission's Rules and Regulations, a Notice of Cancellation of Agreement for Electric Service Agreement Between Sierra Pacific Power Company and City of Fallon to be effective as of March 8, 2000.

This Notice of Cancellation is filed pursuant to the notice of termination of the Electric Service Agreement given to Sierra Pacific Power Company by the City of Fallon.

Copies of the filing were served upon the City of Fallon, the Public Utilities Commission of Nevada and the Nevada Attorney General's Bureau of Consumer Protection.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

11. Allegheny Energy Service Corporation, on behalf of Allegheny Energy Supply Company, LLC

[Docket No. ER00–2112–000]

Take notice that on April 5, 2000, Allegheny Energy Service Corporation on behalf of Allegheny Energy Supply Company, LLC (Allegheny Energy Supply) filed Amendment No. 1 to Supplement No. 6 to the Market Rate Tariff to incorporate a Netting Agreement with Southern Company Energy Marketing L.P. into the tariff provisions.

Allegheny Energy Supply requests a waiver of notice requirements to make the Amendment effective as of March 14, 2000 or such other date as ordered by the Commission.

Copies of the filing have been provided to the Public Utilities Commission of Ohio, the Pennsylvania Public Utility Commission, the Maryland Public Service Commission, the Virginia State Corporation Commission, the West Virginia Public Service Commission, and all parties of record.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

12. Allegheny Energy Service Corporation, on behalf of Allegheny Energy Supply Company LLC

[Docket No. ER00–2113–000]

Take notice that on April 5, 2000, Allegheny Energy Service Corporation on behalf of Allegheny Energy Supply Company, LLC (Allegheny Energy Supply Company) filed Amendment No. 2 to Supplement No. 23 to complete the filing requirement for one (1) new Customer of the Market Rate Tariff under which Allegheny Energy Supply offers generation services. Allegheny Energy requests a waiver of notice requirements to make service available as of January 7, 2000 to New York State Electric & Gas Corporation.

Copies of the filing have been provided to the Public Utilities Commission of Ohio, the Pennsylvania Public Utility Commission, the Maryland Public Service Commission, the Virginia State Corporation Commission, the West Virginia Public Service Commission, and all parties of record.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

13. Allegheny Energy Service Corporation on behalf of Allegheny Energy Supply Company, LLC

[Docket No. ER00–2114–000]

Take notice that on April 5, 2000, Allegheny Energy Service Corporation on behalf of Allegheny Energy Supply Company, LLC (Allegheny Energy Supply) filed Supplement No. 35 to add one (1) new Customer to the Market Rate Tariff under which Allegheny Energy Supply offers generation services.

Allegheny Energy Supply requests a waiver of notice requirements to make service available as of March 7, 2000 to NewEnergy, Inc.

Copies of the filing have been provided to the Public Utilities Commission of Ohio, the Pennsylvania Public Utility Commission, the Maryland Public Service Commission, the Virginia State Corporation Commission, the West Virginia Public Service Commission, and all parties of record.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

14. Alliant Energy Corporate Services, Inc.

[Docket No. ER00–2115–000]

Take notice that on April 5, 2000, Alliant Energy Corporate Services, Inc. tendered for filing executed Service Agreements for short-term firm point-to-point transmission service and non-firm point-to-point transmission service, establishing El Paso Merchant Energy, LP as a point-to-point Transmission Customer under the terms of the Alliant Energy Corporate Services, Inc. transmission tariff.

Alliant Energy Corporate Services, Inc. requests an effective date of March 22, 2000.

A copy of this filing has been served upon the Illinois Commerce Commission, the Minnesota Public Utilities Commission, the Iowa Department of Commerce, and the Public Service Commission of Wisconsin.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

15. Alliant Energy Corporate Services, Inc.

[Docket No. ER00–2116–000]

Take notice that on April 5 , 2000, Alliant Energy Corporate Services, Inc. (Alliant Energy) tendered for filing executed Service Agreements for short-term firm point-to-point transmission service and non-firm point-to-point transmission service, establishing Wisconsin Public Power Inc. as a point-to-point Transmission Customer under the terms of the Alliant Energy Corporate Services, Inc. transmission tariff.

Alliant Energy Corporate Services, Inc. requests an effective date of April 1, 2000, and accordingly, seeks waiver of the Commission's notice requirements.

A copy of this filing has been served upon the Illinois Commerce

Commission, the Minnesota Public Utilities Commission, the Iowa Department of Commerce, and the Public Service Commission of Wisconsin.

16. ANP Bellingham Energy Company

[Docket No. ER00–2117–000]

Take notice that on April 5, 2000, ANP Bellingham Energy Company tendered for filing pursuant to Rules 205 and 207 of the Commission's Rules of Practice and Procedure (18 CFR 385.205 and 385.207) a petition seeking waivers and blanket approvals under various regulations of the Commission, and an order accepting its FERC Electric Rate Schedule No. 1 for filing, to be effective on the date of the Commission's order on such petition.

FERC Electric Rate Schedule No. 1 provides for the sale of energy and capacity at agreed prices.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

17. ANP Blackstone Energy Company

[Docket No. ER00–2118–000]

Take notice that on April 5, 2000, ANP Blackstone Energy Company tendered for filing pursuant to Rules 205 and 207 of the Commission's Rules of Practice and Procedure (18 CFR 385.205 and 385.207) a petition seeking waivers and blanket approvals under various regulations of the Commission, and an order accepting its FERC Electric Rate Schedule No. 1 for filing, to be effective on the date of the Commission's order on such petition.

FERC Electric Rate Schedule No. 1 provides for the sale of energy and capacity at agreed prices.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

18. Duke Energy Corporation

[Docket No. ER00–2119–000]

Take notice that on April 5, 2000, Duke Energy Corporation (Duke), tendered for filing a Service Agreement with Statoil Energy Services, Inc., for Transmission Service under Duke's Open Access Transmission Tariff.

Duke requests that the proposed Service Agreement be permitted to become effective on March 14, 2000.

Duke states that this filing is in accordance with Part 35 of the Commission's Regulations and a copy has been served on the North Carolina Utilities Commission.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

19. Duke Energy Corporation

[Docket No. ER00–2120–000]

Take notice that on April 5, 2000, Duke Energy Corporation (Duke), tendered for filing a Service Agreement with Statoil Energy Services, Inc., for Non-Firm Transmission Service under Duke's Open Access Transmission Tariff.

Duke requests that the proposed Service Agreement be permitted to become effective on March 14, 2000.

Duke states that this filing is in accordance with Part 35 of the Commission's Regulations and a copy has been served on the North Carolina Utilities Commission.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

20. Southwest Power Pool, Inc.

[Docket No. ER00–2122–000]

Take notice that on April 4, 2000, Southwest Power Pool, Inc. (SPP) filed a Notice of Cancellation. Effective March 22, 2000, Rate Schedule Nos. 65 and 135, effective date June 1, 1998 and October 15, 1998, respectively, and filed with the Federal Energy Regulatory Commission by Southwest Power Pool, Inc. are to be canceled.

Notice of the proposed cancellation has been served upon Sonat Power Marketing L.P. (Sonat), El Paso Power Services Company (EP Power Services), and El Paso Merchant Energy, L.P. (successor-in-interest to both Sonat and EP Power Services).

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

21. Central Maine Power Company

[Docket No. ER00–2123–000]

Take notice that on April 5, 2000, Central Maine Power Company (CMP) tendered for filing notice of termination of its Wholesale Market Tariff, Power Sales Tariff, and Voluntary Umbrella Service Agreements.

CMP states that the purpose of this filing is to terminate tariffs and voluntary umbrella service agreements, because CMP has sold its generation assets and is no longer in the business of providing energy.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

22. Montana Power Company

[Docket No. ER00–2124–000]

Take notice that on April 5, 2000, Montana Power Company (Montana Power), tendered for filing Amendment #1 to the Power Purchase Agreement between Montana Power and the Department of Water and Power of the City of Los Angeles (LADWP), a long-term service agreement under Montana Power's Market-Based Rate Tariff, FERC Electric Tariff, Original Volume No. 6 (Service Agreement). Pursuant to the terms of the Service Agreement, LADWP has assigned all of its rights and obligations under the Service Agreement to Duke Energy Trading and Marketing, L.L.C. (DETM). Thus, Amendment #1 to the Service Agreement was entered into by and between Montana Power and DETM. Amendment #1 amends the Service Agreement to allow, but not require, Montana Power to make available energy and capacity to DETM at Alternate Points of Delivery when Montana Power chooses to do so after a timely request from DETM. Except as modified in Amendment #1, all provisions of the Service Agreement remain in full force and effect.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

23. PJM Interconnection, L.L.C.

[Docket No. ER00–2125–000]

Take notice that on April 5, 2000, PJM Interconnection, L.L.C. (PJM), tendered for filing revised pages to the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C., to clarify the confidentiality provisions in Section 18.17 of that agreement.

PJM requests an effective date of June 5, 2000.

Copies of this filing were served upon all PJM Members and the state electric regulatory commissions in the PJM Control Area.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

24. Public Service Company of New Mexico

[Docket No. ER00–2127–000]

Take notice that on April 5, 2000, Public Service Company of New Mexico (PNM), tendered for filing pursuant to Section 35.15 of the Regulations to the Federal Energy Regulatory Commission, 18 CFR 35.15, Notices of Cancellation of various Electric Power Sale, Purchase, and Tariff Service Agreements.

Pursuant to PNM's filing, the following agreements are to be canceled: Contract for Purchase of Energy between PNM and Western Area Power Administration, dated January 1, 1994; Power Sales Agreement between PNM and Imperial Irrigation District, dated March 10, 1992; Amendment Number Four to the Agreement for Electric Service between PNM and the Division

of Colorado River Resources, dated February 10, 1977; Service Agreement between PNM and Washington Water Power Company dated June 1, 1992 under Washington Water Power Company's FERC Electric Tariff Original Volume No. 4; Service Agreement between PNM and Montana Power Company dated May 1, 1982 under Montana Power Company's FERC Electric Tariff Original Volume No. 1; and Service Agreement between PNM and PacifiCorp (formerly Pacific Power and Light company, (PP&L)) dated September 27, 1984 under PP&L's FERC Electric Tariff Original volume No. 3, Service Schedule PPL–3. PNM's filing is available for public inspection at its offices in Albuquerque, New Mexico.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

25. Sierra Pacific Power Company

[Docket No. ER00–2128–000]

Take notice that on April 5, 2000, Sierra Pacific Power Company (Sierra) tendered for filing Service Agreements (Service Agreements) with Coral Power, L.L.C., for both Non-Firm and Short-Term Firm Point-to-Point Transmission Service under Sierra Pacific Resources Operating Companies FERC Electric Tariff Original Volume No. 1, Open Access Transmission Tariff (Tariff).

Sierra filed the executed Service Agreements with the Commission in compliance with Sections 13.4 and 14.4 of the Tariff and applicable Commission regulations. Sierra also submitted revised Sheet No. 173 (Attachment E) to the Tariff, which is an updated list of all current subscribers.

Sierra requests waiver of the Commission's notice requirements to permit an effective date of April 6, 2000 for Attachment E, and to allow the Service Agreements to become effective according to their terms.

Copies of this filing were served upon the Public Utilities Commission of Nevada, the Public Utilities Commission of California and all interested parties.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

26. Duke Energy Corporation

[Docket No. ER00–2130–000]

Take notice that on April 5, 2000, Duke Energy Corporation (Duke), tendered for filing a Service Agreement with NCEMC, for Transmission Service under Duke's Open Access Transmission Tariff.

Duke requests that the proposed Service Agreement be permitted to become effective on February 16, 2000.

Duke states that this filing is in accordance with Part 35 of the Commission's Regulations and a copy has been served on the North Carolina Utilities Commission.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

27. Duke Energy Corporation

[Docket No. ER00–2131–000]

Take notice that on April 5, 2000, Duke Energy Corporation (Duke), tendered for filing a Service Agreement with PECO Energy Company, for Transmission Service under Duke's Open Access Transmission Tariff.

Duke requests that the proposed Service Agreement be permitted to become effective on February 16, 2000.

Duke states that this filing is in accordance with Part 35 of the Commission's Regulations and a copy has been served on the North Carolina Utilities Commission.

Comment date: April 26, 2000, in accordance with Standard Paragraph E at the end of this notice.

28. PG&E Dispersed Generating Company, LLC

[Docket No. ER00–2134–000]

Take notice that on April 6, 2000, PG&E Dispersed Generating Company, LLC (PG&E Dispersed Gen), tendered for filing, pursuant to Section 205 of the Federal Power Act, and Part 35 of the Commission's Regulations, a Petition for authorization to make sales of capacity, energy, and certain Ancillary Services at market-based rates, and to reassign transmission capacity.

Comment date: April 27, 2000, in accordance with Standard Paragraph E at the end of this notice.

29. Consumers Energy Company

[Docket No. ER00–2135–000]

Take notice that on April 6, 2000 Consumers Energy Company (Consumers), tendered for filing a Facilities Agreement Between Consumers and Alpena Power Generation, LLC, (Alpena), dated March 21, 2000. Under the Facilities Agreement, Consumers is to construct, operate and maintain various facilities needed in connection with the operation of four generating stations being built by Alpena.

Consumers requests that the Facilities Agreement be allowed to become effective within 60 days of filing.

Copies of the filing were served upon Alpena and upon the Michigan Public Service Commission.

Comment date: April 27, 2000, in accordance with Standard Paragraph E at the end of this notice.

30. Public Service Company of Colorado

[Docket No. ER00–2138–000]

Take notice that on April 6, 2000, Public Service Company of Colorado tendered for filing a revision to Exhibit B to its Power Supply Agreement with Yampa Valley Electric Association as contained in Public Service's Rate Schedule FERC No. 54.

Public Service requests an effective date of March 10, 2000 for this filing.

Comment date: April 27, 2000, in accordance with Standard Paragraph E at the end of this notice.

31. MidAmerican Energy Company

[Docket No. ER00–2139–000]

Take notice that on April 6, 2000, MidAmerican Energy Company (MidAmerican), 666 Grand Avenue, Des Moines, Iowa 50309, tendered for filing with the Commission a Firm Transmission Service Agreement with Constellation Power Source, Inc. (Constellation), dated March 10, 2000, entered into pursuant to MidAmerican's Open Access Transmission Tariff.

MidAmerican requests an effective date of March 10, 2000, for the Agreement with Constellation, and accordingly seeks a waiver of the Commission's notice requirement.

MidAmerican has served a copy of the filing on Constellation, the Iowa Utilities Board, the Illinois Commerce Commission and the South Dakota Public Utilities Commission.

Comment date: April 27, 2000, in accordance with Standard Paragraph E at the end of this notice.

32. California Independent System Operator Corporation

[Docket No. ER00–2140–000]

Take notice that on April 6, 2000, the California Independent System Operator Corporation, tendered for filing a Scheduling Coordinator Agreement between the ISO and Cucamonga Electric Corp., for acceptance by the Commission.

The ISO states that this filing has been served on Cucamonga Electric Corp., and the California Public Utilities Commission.

The ISO is requesting waiver of the 60-day notice requirement to allow the Scheduling Coordinator Agreement to be made effective as of March 27, 2000.

Comment date: April 27, 2000, in accordance with Standard Paragraph E at the end of this notice.

33. Northern Indiana Public Service Company

[Docket No. ER00–2152–000]

Take notice that on April 6, 2000, Northern Indiana Public Service Company (Northern Indiana) tendered for filing notice that it's canceling the following Service Agreement, effective on April 6, 2000:

Service Agreement between Northern Indiana Public Service Company and Stand Energy Corporation dated February 4, 1997.

For the reasons set forth in Northern Indiana's Transmittal Letter to the Commission and in an April 6, 2000 letter to Stand Energy Corporation, Northern Indiana believes that good cause is shown for such cancellation to be effective as of April 6, 2000. Northern Indiana states that the requested cancellation due to the defaults and financial incapacity of Stand Energy Corporation will not affect other purchasers under Northern Indiana's Power Sales Tariff.

Comment date: April 27, 2000, in accordance with Standard Paragraph E at the end of this notice.

Standard Paragraphs

E. Any person desiring to be heard or to protest such filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). All such motions or protests should be filed on or before the comment date. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of these filings are on file with the Commission and are available for public inspection. This filing may also be viewed on the Internet at http://www.ferc.fed.us/ online/rims.htm (call 202–208–2222 for assistance).

David P. Boergers,

Secretary.

[FR Doc. 00–9946 Filed 4–20–00; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. EC00–74–000, et al.]

Statoil Energy Trading, Inc., et al.; Electric Rate and Corporate Regulation Filings

April 14, 2000.

Take notice that the following filings have been made with the Commission:

1. Statoil Energy Trading, Inc.

[Docket No. EC00–74–000]

Take notice that on April 7, 2000, pursuant to section 203 of the Federal Power Act, 16 U.S.C. 824b (1994), and Part 33 of the Commission's regulations, 18 CFR part 33, Statoil Energy Trading, Inc. (SETI) tendered for filing an application for Commission approval of the disposition of jurisdictional facilities to Constellation Power Source, Inc. The jurisdictional facilities being transferred are SETI's wholesale electric power sales agreements and associated books and records.

Comment date: May 8, 2000, in accordance with Standard Paragraph E at the end of this notice.

2. Duke Energy Vermillion, LLC

[Docket No. EG00–108–000]

Take notice that on April 13, 2000, Duke Energy Vermillion, LLC (Duke Vermillion) filed a modification with the Federal Energy Regulatory Commission (the Commission) to its Application for Commission Determination of Exempt Wholesale Generator Status which was filed in the above-referenced docket on March 2, 2000.

Duke Vermillion requests that the reference to ''gas storage'' activities be stricken from its Application. Duke Vermillion has also requested expedited consideration of its Application as modified.

Comment date: April 27, 2000, in accordance with Standard Paragraph E at the end of this notice. The Commission will limit its consideration of comments to those that concern the adequacy or accuracy of the application.

3. Duke Energy Madison, LLC

[Docket No. EG00–109–000]

Take notice that on April 13, 2000, Duke Energy Madison, LLC (Duke Madison) filed a modification with the Federal Energy Regulatory Commission (the Commission) to its Application for Commission Determination of Exempt Wholesale Generator Status which was filed in the above-referenced docket on March 2, 2000.

Duke Madison requests that the reference to ''gas storage'' activities be stricken from its Application. Duke Madison has also requested expedited consideration of its Application as modified.

Comment date: April 27, 2000, in accordance with Standard Paragraph E at the end of this notice. The Commission will limit its consideration of comments to those that concern the adequacy or accuracy of the application.

4. Hays Energy Limited Partnership

[Docket No. EG00–128–000]

Take notice that on April 12, 2000, Hays Energy Limited Partnership (Applicant), a Delaware limited partnership, whose address is 10000 Memorial Drive, Suite 500, Houston, Texas 77024, filed with the Federal Energy Regulatory Commission an application for determination of exempt wholesale generator status pursuant to part 365 of the Commission's regulations.

Applicant intends to construct an approximate 1,100 MW natural gas-fired combined cycle independent power production facility in Hays County, Texas (the Facility). The Facility is currently under development and will be owned and operated by Applicant. Electric energy produced by the Facility will be sold initially by Applicant to the Lower Colorado River Authority.

Comment date: May 5, 2000, in accordance with Standard Paragraph E at the end of this notice. The Commission will limit its consideration of comments to those that concern the adequacy or accuracy of the application.

5. Meiya Electric Asia, Ltd.

[Docket No. EG00–129–000]

Take notice that on April 13, 2000, Meiya Electric Asia, Ltd. (MEA) with its principal office at 608 St. James Court, St. Dennis Street, Port Louis, Mauritius filed with the Federal Energy Regulatory Commission an application for determination of exempt wholesale generator status pursuant to Part 365 of the Commission's regulations.

MEA is a company organized under the laws of Mauritius. MEA will be engaged, directly or indirectly through an affiliate as defined in Section 2(a)(11)(B) of the Public Utility Holding Company Act of 1935, exclusively in owning, or both owning and operating a coal-fired co-generation facility consisting of three 75 ton coal fired boilers and two 12 MW steam turbine generators and incidental facilities located within the Jiangsu Province, PRC; selling electric energy at wholesale and engaging in project development activities with respect thereto.

Comment date: May 5, 2000, in accordance with Standard Paragraph E at the end of this notice. The Commission will limit its consideration of comments to those that concern the adequacy or accuracy of the application.

6. PSEG Rongjiang Hydropower Ltd.

[Docket No. EG00–130–000]

Take notice that on April 13, 2000, PSEG Rongjiang Hydropower Ltd. (PRHP) with its principal office at 608 St. James Court, St. Denis Street, Port Louis, Mauritius filed with the Federal Energy Regulatory Commission an application for determination of exempt wholesale generator status pursuant to Part 365 of the Commission's regulations.

PRHP is a company organized under the laws of Mauritius. PRHP will be engaged, directly or indirectly through an affiliate as defined in Section 2(a)(11)(B) of the Public Utility Holding Company Act of 1935, exclusively in owning, or both owning and operating a hydropower electric generating facility consisting of three 18 megawatt hydro-turbine generators and incidental facilities located along the Rongjiang River, Liuzhou Prefecture, Guangxi Zhuang Autonomous Region, PRC; selling electric energy at wholesale and engaging in project development activities with respect thereto.

Comment date: May 5, 2000, in accordance with Standard Paragraph E at the end of this notice. The Commission will limit its consideration of comments to those that concern the adequacy or accuracy of the application.

7. TXU Energy Trading Company

[Docket Nos. ER99–3333–003, EL00–69–000 and ER00–2178–000]

Take notice that on April 11, 2000, TXU Energy Trading Company (TXU ET) filed a notice of change in status, revision to its rate schedule, and a request for waiver of certain code of conduct requirements to reflect the advent of retail competition and electric industry restructuring in Texas.

Copies of the filing have been served on all customers under TXU ET's current rate schedule.

Comment date: May 2, 2000, in accordance with Standard Paragraph E at the end of this notice.

8. ISO New England Inc.

[Docket No. ER00–749–002]

Take notice that on April 11, 2000, ISO New England Inc. tendered for filing with the Commission, information regarding Market Rule 15 corrective actions for the period from December 8, 1999 through March 21, 1999 in the above-referenced proceeding for informational purposes only.

9. ISO New England Inc.

[Docket No. ER00–2198–000]

Take notice that on April 10, 2000, ISO New England Inc. tendered for filing with the Commission for informational purposes only a revised Code of Conduct and Ethics Policy for ISO New England Inc.

Standard Paragraphs

E. Any person desiring to be heard or to protest such filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). All such motions or protests should be filed on or before the comment date. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of these filings are on file with the Commission and are available for public inspection. This filing may also be viewed on the Internet at http://www.ferc.fed.us/online/rims.htm (call 202–208–2222 for assistance).

David P. Boergers,

Secretary.

[FR Doc. 00–9944 Filed 4–20–00; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. EG00–127–000, et al.]

Trigen-Syracuse Energy Corporation , et al.; Electric Rate and Corporate Regulation Filings

April 13, 2000.

Take notice that the following filings have been made with the Commission:

1. Trigen-Syracuse Energy Corporation

[Docket No. EG00–127–000]

Take notice that on April 10, 2000, Trigen-Syracuse Energy Corporation, 56 Industrial Drive, Syracuse, New York 13204 (Applicant), filed with the Federal Energy Regulatory Commission (Commission) an Application for Determination of Exempt Wholesale Generator Status pursuant to Part 365 of the Commission's Regulations.

Applicant is a Delaware corporation that owns and operates a cogeneration facility in Syracuse, New York (the Facility), and is engaged exclusively in the generation of electric energy for sale at wholesale. The Facility consists of one coal-fired topping cycle cogeneration facility, with a power production capacity of approximately 80 megawatts, and associated equipment. No rate or charge for, or in connection with, the construction of the Facility, or for electric energy produced thereby (other than any portion of a rate or charge that represents recovery of the cost of a wholesale rate or charge), was in effect under the laws of any State of the United States on October 24, 1992. Copies of this application have been served upon the New York Public Service Commission and the Securities and Exchange Commission.

Comment date: May 4, 2000, in accordance with Standard Paragraph E at the end of this notice.

2. Pacific Gas and Electric Company

[Docket Nos. ER98–495–015, ER98–1614–006 and ER98–2145–006]

Take notice that on April 10, 2000, Pacific Gas and Electric Company (PG&E) filed a refund report in compliance with the Offer of Settlement filed in the above-referenced dockets on November 12, 1999 and approved by the Federal Energy Regulatory Commission (Commission) by letter order on January 14, 2000.

Comment date: May 1, 2000, in accordance with Standard Paragraph E at the end of this notice.

3. Entergy Services, Inc.

[Docket No. ER00–2132–000]

Take notice that on April 6, 2000, Entergy Services, Inc., acting as agent for Entergy Gulf States, Inc. (Entergy Gulf States), tendered for filing an unexecuted Interconnection and Operating Agreement (the Agreement), between Entergy Gulf States and Calcasieu Power, LLC.

Comment date: April 27, 2000, in accordance with Standard Paragraph E at the end of this notice.

4. The Dayton Power and Light Company

[Docket No. ER00–2156–000]

Take notice that on April 10, 2000 The Dayton Power and Light Company (Dayton) submitted service agreements establishing Conectiv Energy Supply, Inc. and Delmarva Power & Light Company as customers under the terms of Dayton's Open Access Transmission Tariff.

Copies of this filing were served upon establishing Conectiv Energy Supply,

Inc. and Delmarva Power & Light Company and the Public Utilities Commission of Ohio.

Comment date: May 1, 2000, in accordance with Standard Paragraph E at the end of this notice.

5. Commonwealth Edison Company

[Docket No. ER00–2157–000]

Take notice that on April 10, 2000, Commonwealth Edison Company (ComEd) submitted for filing an Interconnection Agreement with Des Plaines Green Land Development, L.L.C. (Des Plaines).

ComEd requests an effective date of April 11, 2000 and accordingly seeks waiver of the Commission's notice requirements.

Copies of the filing were served on Des Plaines and the Illinois Commerce Commission.

Comment date: May 1, 2000, in accordance with Standard Paragraph E at the end of this notice.

6. Wisconsin Public Service Corporation

[Docket No. ER00–2158–000]

Take notice that on April 10, 2000, Wisconsin Public Service Corporation (WPSC) tendered for filing an Energy Exchange Agreement between Wisconsin Public Service Corporation and Madison Gas & Electric Company. WPSC also filed a certificate of concurrence executed by Madison Gas and Electric Company (MG&E).

WPSC requests that the Agreement be made effective May 2, 2000.

Copies of the filing were served upon Madison Gas and Electric Company and the Public Service Commission of Wisconsin.

Comment date: May 1, 2000, in accordance with Standard Paragraph E at the end of this notice.

7. Niagara Mohawk Power Corporation

[Docket No. ER00–2163–000]

Take notice that on April 10, 2000, Niagara Mohawk Power Corporation tendered for filing notice that effective April 20, 2000, Niagara Mohawk Power Corporation's Form Transmission Service Agreement, designated as Rate Schedule FERC No. 188, effective date August 31, 1993, and any supplements thereto, and filed with the Federal Energy Regulatory Commission by Niagara Mohawk is to be canceled.

Notice of the proposed cancellation has been served upon Consolidated Edison Company of New York, Inc.

Comment date: May 1, 2000, in accordance with Standard Paragraph E at the end of this notice.

8. Montaup Electric Company

[Docket No. ER00–2164–000]

Take notice that on April 10, 2000, Montaup Electric Company (Montaup) tendered for filing a modification and a notice of cancellation of an October 24, 1997 agreement, as amended on July 14, 1998, (Agreement) by and between Montaup and The Pascoag Fire District (Pascoag).

Montaup states that the purpose of this filing is to reflect the recent agreement between Montaup and Pascoag to effectuate an early termination of the Agreement under which Montaup currently supplies system capacity and energy to Pascoag.

Copies of the filing were served upon Pascoag, Montaup's jurisdictional customers and upon affected state agencies.

Comment date: May 1, 2000, in accordance with Standard Paragraph E at the end of this notice.

9. Allegheny Energy Service Corporation, on Behalf of Allegheny Energy Supply Company, LLC

[Docket No. ER00–2166–000]

Take notice that on April 10, 2000, Allegheny Energy Service Corporation on behalf of Allegheny Energy Supply Company, LLC (Allegheny Energy Supply), tendered for filing Amendment No. 5 to Supplement No. 9 to the Market Rate Tariff to incorporate a Netting Agreement with Williams Energy Marketing & Trading Company into the tariff provisions.

Allegheny Energy Supply Company requests a waiver of notice requirements to make the Amendment effective as of March 31, 2000.

Copies of the filing have been provided to the Public Utilities Commission of Ohio, the Pennsylvania Public Utility Commission, the Maryland Public Service Commission, the Virginia State Corporation Commission, the West Virginia Public Service Commission, and all parties of record.

Comment date: May 1, 2000, in accordance with Standard Paragraph E at the end of this notice.

10. Allegheny Energy Service Corporation, on Behalf of Allegheny Energy Supply Company, LLC

[Docket No. ER00–2165–000]

Take notice that on April 10, 2000, Allegheny Energy Service Corporation on behalf of Allegheny Energy Supply Company, LLC (Allegheny Energy Supply Company), tendered for filing Amendment No. 6 to Supplement No. 9 to complete the filing requirement for one (1) new Customer of the Market Rate Tariff under which Allegheny Energy Supply offers generation services.

Allegheny Energy requests a waiver of notice requirements to make service available as of November 24, 1999, to Cinergy Services, Inc.

Copies of the filing have been provided to the Public Utilities Commission of Ohio, the Pennsylvania Public Utility Commission, the Maryland Public Service Commission, the Virginia State Corporation Commission, the West Virginia Public Service Commission, and all parties of record.

Comment date: May 1, 2000, in accordance with Standard Paragraph E at the end of this notice.

11. Allegheny Energy Service Corporation, on Behalf of Monongahela Power Company, The Potomac Edison Company, and West Penn Power Company (Allegheny Power)

[Docket No. ER00–2167–000]

Take notice that on April 10, 2000, Allegheny Energy Service Corporation on behalf of Monongahela Power Company, The Potomac Edison Company and West Penn Power Company (Allegheny Power), tendered for filing Supplement No. 76 to add Orion Power MidWest to Allegheny Power's Open Access Transmission Service Tariff which has been accepted for filing by the Federal Energy Regulatory Commission in Docket No. ER96–58–000.

The proposed effective date under the Service Agreements is April 7, 2000 or a date ordered by the Commission.

Copies of the filing have been provided to the Public Utilities Commission of Ohio, the Pennsylvania Public Utility Commission, the Maryland Public Service Commission, the Virginia State Corporation Commission, and the West Virginia Public Service Commission.

Comment date: May 1, 2000, in accordance with Standard Paragraph E at the end of this notice.

12. Allegheny Energy Service Corporation on Behalf of Allegheny Energy Supply Company, LLC

[Docket No. ER00–2168–000]

Take notice that on April 10, 2000, Allegheny Energy Service Corporation on behalf of Allegheny Energy Supply Company, LLC (Allegheny Energy Supply), tendered for filing Supplement No. 37 to add one (1) new Customer to the Market Rate Tariff under which Allegheny Energy Supply offers generation services.

Allegheny Energy Supply requests a waiver of notice requirements to make

service available as of March 15, 2000 to Duke Power, a division of Duke Energy Corporation.

Copies of the filing have been provided to the Public Utilities Commission of Ohio, the Pennsylvania Public Utility Commission, the Maryland Public Service Commission, the Virginia State Corporation Commission, the West Virginia Public Service Commission, and all parties of record.

Comment date: May 1, 2000, in accordance with Standard Paragraph E at the end of this notice.

13. Allegheny Energy Service Corporation on Behalf of Allegheny Energy Supply Company, LLC

[Docket No. ER00–2169–000]

Take notice that on April 10, 2000, Allegheny Energy Service Corporation on behalf of Allegheny Energy Supply Company, LLC (Allegheny Energy Supply), tendered for filing Supplement No. 36 to add one (1) new Customer to the Market Rate Tariff under which Allegheny Energy Supply offers generation services.

Allegheny Energy Supply requests a waiver of notice requirements to make service available as of April 7, 2000 to Cinergy Capital & Trading, Inc.

Copies of the filing have been provided to the Public Utilities Commission of Ohio, the Pennsylvania Public Utility Commission, the Maryland Public Service Commission, the Virginia State Corporation Commission, the West Virginia Public Service Commission, and all parties of record.

Comment date: May 1, 2000, in accordance with Standard Paragraph E at the end of this notice.

14. The Dayton Power and Light Company

[Docket No. ER00–2170–000]

Take notice that on April 10, 2000, The Dayton Power and Light Company (Dayton), tendered for filing service agreements establishing British Columbia Power Exchange Corporation, Madison Gas & Electric Co., as a customer under the terms of Dayton's Market-Based Sales Tariff.

Dayton requests an effective date of one day subsequent to this filing for the service agreements. Accordingly, Dayton requests waiver of the Commission's notice requirements.

Copies of this filing were served upon British Columbia Power Exchange Corporation, Madison Gas & Electric Co. and the Public Utilities Commission of Ohio.

Comment date: May 1, 2000, in accordance with Standard Paragraph E at the end of this notice.

15. The Dayton Power and Light Company

[Docket No. ER00–2171–000]

Take notice that on April 10, 2000, The Dayton Power and Light Company (Dayton), tendered for filing service agreements establishing with Conectiv Energy Supply, Inc., as customers under the terms of Dayton's Open Access Transmission Tariff.

Dayton requests an effective date of one day subsequent to this filing for the service agreements. Accordingly, Dayton requests waiver of the Commission's notice requirements.

Copies of this filing were served upon with Conectiv Energy Supply, Inc., and the Public Utilities Commission of Ohio.

Comment date: May 1, 2000, in accordance with Standard Paragraph E at the end of this notice.

16. The Dayton Power and Light Company

[Docket No. ER00–2172–000]

Take notice that on April 10, 2000, The Dayton Power and Light Company (Dayton), tendered for filing service agreements establishing Conectiv Energy Supply, Inc., as a customer under the terms of Dayton's Market-Based Sales Tariff.

Dayton requests an effective date of one day subsequent to this filing for the service agreements. Accordingly, Dayton requests waiver of the Commission's notice requirements.

Copies of this filing were served upon Conectiv Energy Supply, Inc. and the Public Utilities Commission of Ohio.

Comment date: May 1, 2000, in accordance with Standard Paragraph E at the end of this notice.

17. Entergy Services, Inc.

[Docket No. ER00–2133–000]

Take notice that on April 6, 2000, Entergy Services, Inc., on behalf of Entergy Arkansas, Inc., tendered for filing an Interconnection and Operating Agreement with Union Power Partners, L.P. (UPP), and a Generator Imbalance Agreement with UPP.

Comment date: April 27, 2000, in accordance with Standard Paragraph E at the end of this notice.

Standard Paragraphs

E. Any person desiring to be heard or to protest such filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). All such motions or protests should be filed on or before the comment date. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of these filings are on file with the Commission and are available for public inspection. This filing may also be viewed on the Internet at http://www.ferc.fed.us/online/rims.htm (call 202–208–2222 for assistance).

David P. Boergers,

Secretary.

[FR Doc. 00–9945 Filed 4–20–00; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Sunshine Act Meeting

April 18, 2000.

The following notice of meeting is published pursuant to section 3(a) of the government in the sunshine act (Pub. L. No. 94–409), 5 U.S.C 552B:

AGENCY HOLDING MEETING: Federal Energy Regulatory Commission.

DATE AND TIME: April 25, 2000, 10 a.m.

PLACE: Room 2C, 888 First Street, N.E., Washington, D.C. 20426.

STATUS: Open.

MATTERS TO BE CONSIDERED: Agenda, * Note—Items listed on the agenda may be deleted without further notice.

CONTACT PERSON FOR MORE INFORMATION: David P. Boergers, Secretary, telephone (202) 208–0400; for a recording listing items stricken from or added to the meeting, call (202) 208–1627.

This is a list of matters to be considered by the commission. It does not include a listing of all papers relevant to the items on the agenda; however, all public documents may be examined in the reference and information center.

Consent Agenda—Hydro

740TH—Meeting April 25, 2000, Regular Meeting (10 a.m.)

CAH–1.
Omitted

CAH–2.
Docket#, P–10536, 007, Public Utility District No. 1 of Okanogan County, Washington

CAH–3.
Docket#, P–2496, 043, Eugene Water and Electric Board

Other#S, P–2496, 024, Eugene Water and Electric board; P–2496, 039, Eugene Water and Electric Board; P–2496, 042, Eugene Water and Electric Board
CAH–4.
Docket#, P–2609, 013, Curtis/Palmer Hydroelectric Company LP and International Paper Company
CAH–5.
Docket#, P–11243, 016, Cordova Electric Cooperative, Inc.
CAH–6.
Docket#, P–2709, 015, Monongahela Power Company, the Potomac Edison Company and West Penn Power Company

Consent Agenda—Electric

CAE–1.
Docket#, ER00–1770, 000, Conectiv Energy Supply, Inc.
CAE–2.
Docket#, ER00–1737, 000, Virginia Electric & Power Company
CAE–3.
Docket#, ER00–1641, 000, California Power Exchange Corporation
Other#S, ER00–1642, 000, California Power Exchange Corporation
CAE–4.
Docket#, ER00–1723, 000, New England Power Pool
CAE–5.
Docket#, ER00–1789, 000, Wisconsin Electric Power Company
CAE–6.
Omitted
CAE–7.
Docket#, ER00–1806, 000, Amergen Vermont, LLC
CAE–8.
Docket#, ER00–1807, 000, Pacific Gas and Electric Company
Other#S, ER97–320, 000, Pacific Gas and Electric Company
CAE–9.
Docket#, ER00–1820, 000, Commonwealth Edison Company and Commonwealth Edison Company of Indiana
CAE–10.
Docket#, ER00–1830, 000, El Segundo Power, LLC
CAE–11.
Docket#, ER00–1666, 000, North American Electric Reliabililty Council
CAE–12.
Omitted
CAE–13.
Docket#, ER99–3603, 000, Pacific Gas and Electric Company
CAE–14.
Docket#, ER99–2326, 003, Pacific Gas and Electric Company
Other#S, EL99–68, 003, Pacific Gas and Electric Company
CAE–15.
Docket#, ER00–1534, 000, Ocean State Power, II
Other#S, ER00–1535, 000, Ocean State Power
CAE–16.
Docket#, ER00–1743, 000, Entergy Services, Inc.
CAE–17.
Docket#, ER00–1638, 000, Central Maine Power Company
Other#S, ER00–1638, 001, Central Maine Power Company; ER00–26, 000, Central Maine Power Company; ER00–604, 000, Central Maine Power Company; ER00–982, 000, Central Maine Power Company; ER99–238, 000, Central Maine Power Company; ER97–1326, 000, Central Maine Power Company; EL00–44, 000, Central Maine Power Company
CAE–18.
Docket#, ER00–1717, 000, Reliant Energy Shelby County, LP
Other#S, ER00–1742, 000, Madison Windpower, LLC; ER00–1746, 000, DTE Georgetown, LLC; ER00–1779, 000, Union Power Partners, L.P.; ER00–1792, 000, Liberty Generating Company, LLC; ER00–1803, 000, South Eastern Generating Corporation; ER00–1804, 000, Panda Leesburg Power Partners, L.P.; ER00–1805, 000, Panda Midway Power Partners, L.P.; ER00–1814, 000, Avista Turbine Power, Inc.; ER00–1844, 000, Lamar Power Partners, LP; ER00–1851, 000, Pleasant Hill Marketing, LLC; ER00–1858, 000, New Hampshire Electric Cooperative, Inc.; ER00–1858, 001, New Hampshire Electric Cooperative, Inc.
CAE–19.
Omitted
CAE–20.
Docket#, ER99–4560, 001, Idaho Power Company
CAE–21.
Docket#, ER99–3092, 000, Central Maine Power Company
Other#S, ER99–3094, 000, Central Maine Power Company
CAE–22.
Omitted
CAE–23.
Docket#, RM95–9, 010, Open Access Same-Time Information System and Standards of Conduct
CAE–24.
Omitted
CAE–25. Omitted
CAE–26.
Docket#, ER00–536, 001, Southwestern Public Service Corporation
CAE–27.
Docket#, ER00–951, 002, California Power Exchange Corporation
CAE–28.
Docket#, EL00–40, 000, Dighton Power Associates Limited Partnership, FPL Energy, L.L.C., Southern Energy New England, L.L.C. and Southern Energy Kendall, L.L.C. v. ISO New England Inc.
CAE–29.
Docket#, EL00–42, 000 PJM Interconnection, L.L.C.
CAE–30.
Docket#, EL00–54, 000 UNICOM Investments, Inc.
CAE–31.
Docket#, EL00–45, 000 Wisconsin Public Power, Inc. v. Wisconsin Power & Light Company and Alliant Energy, Inc.
CAE–32.
Docket#, EL00–34, 000, Exxonmobil Chemical Company and Exxonmobil Refining & Supply Company v. Entergy Gulf States, Inc.
CAE–33.
Omitted
CAE–34.
Docket#, ER99–4400, 000, Southern Operating Companies
Other#s ER99–4400, 001, Southern Operating Companies
ER99–4450, 000, Georgia Power Company

Consent Agenda—Miscellaneous

CAM–1.
Docket#, RM00–8, 000, Revision of Public Reference Room Procedures for Records Request

Consent Agenda—Gas and Oil

CAG–1.
Docket#, RP00–223, 000, Northern Natural Gas Company
CAG–2.
Omitted
CAG–3.
Docket#, RP97–288, 003, Transwestern Pipeline Company
CAG–4.
Docket#, RP00–234, 000, CNG Transmission Corporation
CAG–5.
Docket#, RP00–237, 000, Columbia Gas Transmission Corporation
CAG–6.
Docket#, RP00–238, 000, Columbia Gulf Transmission Company
CAG–7.
Docket#, RP00–233, 000, Midwestern Gas Transmission Company
CAG–8.
Docket#, RP00–226, 000, Mississippi Canyon Gas Pipeline, LLC
CAG–9.
Docket#, RP00–239, 000, Pine Needle LNG Company, LLC
CAG–10.
Omitted
CAG–11.
Omitted
CAG–12.
Docket#, RP00–229, 000, Tennessee Gas Pipeline Company
CAG–13.
Omitted
CAG–14.
Docket#, RP00–219, 000, Northwest Pipeline Corporation
CAG–15.
Docket#, RP97–431, 000, Natural Gas Pipeline Company of America
CAG–16.
Docket#, RS92–11, 027, Texas Eastern Transmission Corporation
CAG–17.
Docket#, RP99–477, 002, North American Energy Conservation, Inc. v. CNG Transmission Corporation
CAG–18.
Omitted
CAG–19.
Omitted
CAG–20.
Docket#, PR00–5, 000, Coral-Mexico Pipeline, L.L.C.
CAG–21.
Docket#, RP99–274, 004, Kern River Gas Transmission Company
CAG–22.
Docket#, MG99–27, 001, Panhandle Eastern Pipe Line Company
Other#s, MG99–28, 001, Southwest Gas Storage Company
MG99–29, 001, Trunkline Gas Company
MG99–30, 001, Trunkline LNG Company

CAG–23.
Omitted
CAG–24.
Docket#, CP00–14, 000, Buccaneer Gas Pipeline Company, L.L.C.
Other#s, CP00–15, 000, Buccaneer Gas Pipeline Company, L.L.C.
CP00–16, 000, Buccaneer Gas Pipeline Company, L.L.C.
CAG–25.
Docket#, CP00–45, 000, Eastern Shore Natural Gas Company
CAG–26.
Docket#, CP00–6, 000, Gulfstream Natural Gas System, L.L.C.
Other#s, CP00–7, 000, Gulfstream Natural Gas System, L.L.C.
CP00–8, 000, Gulfstream Natural Gas System, L.L.C.
CAG–27.
Omitted
CAG–28.
Docket#, CP96–684, 001, Interenergy Sheffield Processing Company, Bear Paw Energy, L.L.C.
CAG–29.
Omitted
CAG–30.
Docket#, RP99–471, 001, Williams Field Services Group, Inc. v. El Paso Natural Gas Company
CAG–31.
Docket#, CP97–315, 003, Independence Pipeline Company
Other#s, CP97–319, 002, ANR Pipeline Company
CP97–320, 001, Independence Pipeline Company
CP97–321, 001, Independence Pipeline Company
CP98–200, 002, National Fuel Gas Supply Corporation
CP98–540, 002, Transcontinental Gas Pipe Line Corporation
CAG–32.
Docket#, CP96–687, 002, Iroquois Gas Transmission System

Hydro Agenda

H–1.
Reserved

Electric Agenda

E–1.

Reserved

Oil and Gas Agenda

I.

Pipeline Rate Matters

PR–1.

Reserved

II.

Pipeline Certificate Matters

PC–1.

Reserved

David P. Boergers,

Secretary.

[FR Doc. 00–10204 Filed 4–19–00; 3:51 pm]

BILLING CODE 6717–01–P

ENVIRONMENTAL PROTECTION AGENCY

[FRL–6582–7]

Agency Information Collection Activities: Proposed Collection; Comment Request; Information Collection Request for the National Listing of Advisories

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*), this document announces that EPA is planning to submit the following new Information Collection Request (ICR) to the Office of Management and Budget (OMB): Information Collection Request for the National Listing of Advisories (EPA ICR Number 1959.01). Before submitting the ICR to OMB for review and approval, EPA is soliciting comments on specific aspects of the proposed information collection as described below.

DATES: Comments must be submitted on or before June 20, 2000.

ADDRESSES: Jeffrey Bigler, U.S. Environmental Protection Agency, Office of Science and Technology, 401 M Street SW., Maildrop 4305, Washington, DC 20460, (202) 260–1305, by e-mail at bigler.jeff@epa.gov, or download a copy off the Internet at http://www.epa.gov/icr and refer to EPA ICR No. 1959.01.

FOR FURTHER INFORMATION CONTACT: Jeffrey Bigler at EPA, (202) 260–1305, by e-mail at bigler.jeff@epa.gov.

SUPPLEMENTARY INFORMATION:

Affected Entities

Entities potentially affected by this action are those which issue fish consumption advisories within their state, territory, or tribal jurisdictions.

Title

Information Collection Request for the National Listing of Advisories (EPA ICR Number 1959.01). This is a request for a new collection.

Abstract

Release of chemical contaminants into our Nation's waters from industrial pollution, sprawling urbanization, and introduction of new pesticides in agriculture poses potentially serious public health problems. Recent studies have confirmed that adverse health effects can result from consumption of chemically-contaminated fish from contaminated waters. These adverse affects have been one of EPA's long standing concerns. They are also directly related to such Clean Water Act responsibilities as water quality standards, surface water quality, and to the Agency's effort to ensure that the waters of the United States are both ''fishable'' and ''swimmable.'' Based on results from the 1998 National Listing of Fish and Wildlife Advisories (NLFWA) database, fish consumption advisories have been issued by 47 states and from 100 to 200 new advisories are issued every year nationwide.

EPA believes there is a need to maintain and improve the existing quality and availability of public information concerning fish advisories, which includes but is not limited to monitoring and risk assessment activities and the issuance of advisories. Primary responsibility for these activities lies with each state, territory, or tribal jurisdiction, however, several agencies often share responsibilities for these activities. Consequently, EPA's Office of Water will conduct an annual fish advisory survey which will be sent to environmental and health officials from state, territorial, and tribal agencies specifically responsible for the issuance of fish advisories. This survey will collect information (electronically via the Internet and on paper) on the location of advisories and agencies and persons responsible for maintaining and issuing advisories for lakes and rivers, and for estuarine and coastal marine waterbodies. Responses to the questionnaire (either on paper or electronically via the Internet) are needed to assess public health risks of consuming chemically-contaminated fish, and to make this information available to the public.

The EPA will use the information to update existing advisory information in the EPA's National Listing of Fish and Wildlife Advisories (NLFWA) electronic database which has archived fish advisory data since 1994. The results of the nationwide data collection effort are shared with the states, territories, tribes, other federal agencies and the general public through access to the NLFWA database which can be queried for specific information and through distribution of the annual Fish Advisory Fact Sheet via the Internet. Results of this and past surveys will be available at EPA's NLFWA web site (http://www.epa.gov/OST/fish/). Information from these surveys has stimulated nationwide dialogue on fish consumption advisories involving agencies and the public. This information is being used to identify and clarify issues that will lead to the continued development of national guidance to assist states on sampling

and analysis, risk assessment procedures, risk management practices, and risk communication procedures that will further protect human health.

The purpose of the new collection is two-fold. First, the survey is needed to continue to collect and update quantitative information on the number of advisories issued by states, territories, and tribes annually, including detailed information on species sampled, chemical contaminants involved, waterbodies under advisory (including freshwater, estuarine, and marine waterbodies), target populations to which the advisory refers (e.g., pregnant women, nursing mothers, and young children), geographic location of each advisory, and tissue residue data supporting the states' advisories. In addition, the expanded questionnaire portion of the survey will provide information on monitoring procedures used to collect and analyze fish samples, risk assessment methodologies used to evaluate fish tissue residue data and issue advisories, and risk communication procedures used to communicate the human health risks of consuming chemically-contaminated species. From this information, EPA can determine how to most effectively provide assistance to state, territorial, and tribal fish advisory programs to improve effectiveness among jurisdictions through the use of appropriate procedures for sampling, chemical analysis, risk assessment, and risk communication. Completion of this survey is voluntary and the information requested is part of the state public record associated with issuing the advisories. Over the last few years, the states have requested guidance from EPA in their fish advisory programs and a more comprehensive questionnaire will provide the states with the opportunity to identify those advisory areas for which they most need EPA assistance.

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. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15.

The EPA would like to solicit comments to:

(i) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(ii) Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

(iii) Enhance the quality, utility, and clarity of the information to be collected; and

(iv) Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

Burden Statement:

The annual public reporting and record keeping burden for this collection of information is estimated to average 36.5 hours per response. Burden means 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. This includes the time needed to review instructions; develop, acquire, install, and 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 be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

Respondents/Affected Entities: State, territory, and tribal environmental and health agencies (50 states, District of Columbia, 5 territories, and 36 tribal agencies).

Estimated Number of Respondents: 92.

Frequency of Response: Annually.

Estimated Total Annual Hours Burden: 3,358 hours.

Estimated Total Annualized Cost Burden (non-labor costs): $552.00.

Geoffrey H. Grubbs,

Director, Office of Science and Technology.

[FR Doc. 00–10035 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[FRL–6583–9]

Agency Information Collection Activities: Submission for OMB Review; Comment Request; Resource Conservation and Recovery Act (RCRA) Corrective Action Information Request

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*), this document announces that the following Information Collection Request (ICR) has been forwarded to the Office of Management and Budget (OMB) for review and approval: RCRA Corrective Action Information Request (EPA ICR No. 1939.01). The ICR describes the nature of the information collection and its expected burden and cost; where appropriate, it includes the actual data collection instrument.

DATES: Comments must be submitted on or before May 22, 2000.

FOR FURTHER INFORMATION CONTACT: For a copy of the ICR contact Sandy Farmer at EPA by phone at (202) 260–2740, by email at farmer.sandy@epamail.epa.gov, or download off the Internet at http://www.epa.gov/icr and refer to EPA ICR No. 1939.01. For technical questions about the ICR contact Heather Harris at (703) 308–6101.

SUPPLEMENTARY INFORMATION:

Title: Resource Conservation and Recovery Act (RCRA) Corrective Action Information Request (EPA ICR No. 1939.01). This is a new collection.

Abstract: This information collection is in response to an April 15, 1999 request from Congress concerning the RCRA Corrective Action program. Included in this inquiry were certain questions which only the state offices have the information to answer. EPA intends to obtain this information from the states by means of a questionnaire. The questionnaire includes facility specific questions on all RCRA Cleanup Baseline facilities, enforcement orders, state authority, and federal funding. Responses to this request will be mandatory and all information will be used to respond to Congress and to provide an accurate picture of the current state of the program. 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. The OMB control numbers for

EPA's regulations are listed in 40 CFR part 9 and 48 CFR Chapter 15. The **Federal Register** document required under 5 CFR 1320.8(d), soliciting comments on this collection of information was published on 12/16/99; 2 comments were received and discussed in the ICR.

Burden Statement: The annual public reporting and recordkeeping burden for this collection of information is estimated to average 7 hours per response. Burden means 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. This includes the time needed to review instructions; develop, acquire, install, and 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 be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

Respondents/Affected Entities: State environment offices where RCRA Corrective Action is authorized (33).

Estimated Number of Respondents: 1100.

Frequency of Response: One time only.

Estimated Total Annual Hour Burden: 1068 hours.

Estimated Total Annualized Capital and Operating & Maintenance Cost Burden: $0.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the following addresses. Please refer to EPA ICR No. 1939.01 in any correspondence.

Ms. Sandy Farmer, U.S. Environmental Protection Agency, Office of Environmental Information, Collection Strategies Division (2822), 1200 Pennsylvania Ave, NW, Washington, DC 20460;

and

Office of Information and Regulatory Affairs, Office of Management and Budget, Attention: Desk Officer for EPA, 725 17th Street, NW, Washington, DC 20503.

Dated: April 17, 2000.

Oscar Morales,

Director, Collection Strategies Division.

[FR Doc. 00–10036 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[ER–FRL–6253–5]

Environmental Impact Statements and Regulations; Availability of EPA Comments

Availability of EPA Comments Prepared April 3, 2000 Through April 7, 2000 Pursuant to the Environmental Review Process (ERP), Under Section 309 of the Clean Air Act and Section 102(2)(c) of the National Environmental Policy Act as Amended. Requests for copies of EPA comments can be directed to the Office of Federal Activities at (202) 564–7167.

An explanation of the ratings assigned to draft environmental impact statements (EISs) was published in FR dated April 09, 1999 (63 FR 17856).

Draft EISs

ERP No. D–AFS–L65345–WA Rating NR, Deadman Creek Ecosystem Management Projects, Implementation, Kettle Falls Ranger District, Colville National Forest, Ferry County, WA.

Summary: EPA Region X used a screening tool to conduct a limited review of this action. Based upon this screen, EPA does not foresee having any environmental objections to the proposed project. Therefore, EPA will not be conducting a detailed review.

ERP No. D–BLM–K67051–NV Rating EO2, Marigold Mine Expansion Project, Implementation, COE Section 404 Permit, Special-Use-Permit, Humboldt County, NV.

Summary: EPA expressed objections with the project's potential impacts to surface and ground water quality from mine facilities, including the post-closure pit lake; and to air quality, especially from mercury emissions. Additional information was requested regarding impacts to water and air quality, ecological risks, bonding and closure, mitigation measures, and geochemical characterization.

ERP No. D–BLM–L65338–OR Rating EC2, John Day River Management Plan, Implementation, John Day River Basin, Gilliam, Grant, Wheeler, Crook, Harney, Jefferson, Morrow, Sherman, Umatilla, Union and Wasco Counties, OR.

Summary: EPA expressed concern about the degraded environmental conditions in the wild and scenic corridor and the relatively minor adjustments being proposed for land management, which may not be sufficient to protect/enhance the resource values, or comply with state water quality standards. EPA requested that the plan include both implementation and effectiveness monitoring to measure progress in meeting goals/objectives, and to enable BLM and partners to make needed adjustments.

ERP No. D–FHW–G40156–TX Rating EC2, TX–130 Construction, I–35 of Georgetown to I–10 near Seguin, Funding, COE Section 404 Permit, Williamson, Travis, Caldwell, Guadalupe Counties, TX.

Summary: EPA expressed environmental concerns regarding impacts relating to farmlands, relocation/displacement, air quality, wetlands, and cultural resources. EPA requested that additional information on these issues be included in the final document.

ERP No. D–FHW–G40157–TX Rating EC2, Tyler Loop 49 West, Construction from the TX–155 Highway to I–20 Highway, Funding, NPDES and COE Section 404 Permits, Smith County, TX.

Summary: EPA expressed environmental concerns regarding farmland impacts, air quality impacts, and noise impacts. EPA requested that additional information on these issues be incorporated in the final EIS.

ERP No. D–NPS–K65325–CA Rating LO, Merced Wild and Scenic River Comprehensive Management Plan, Implementation, Yosemite National Park and the EL Portal Administrative Site, Tuolumne, Merced, Mono, Mariposa and Madera Counties, CA.

SUMMARY: EPA had no objections to the over all management plan, future concerns might exist for specific tiered projects.

ERP No. DA–AFS–L65155–00 Rating EC2, Northern Spotted Owl Management Plan, Updated Information for Amendment to the Survey and Manage, Protection Buffer and Other Mitigating Measures, Standards and Guidelines (to the Northwest Forest Plan), Late-Successional and Old Growth Forest Related Species Within the Range of the Northern Spotted Owl, OR, WA and CA.

Summary: EPA expressed concern regarding project impacts for those species removed from protection and/or provided less protection than in the original plan. EPA also expressed concern about certain aspects of the proposed management direction for those species that will continue to be covered by these Standards and Guidelines and about the social/economic implications of the plan.

ERP No. DS–COE–H36012–MO Rating EU3, St. Johns Bayou and New Madrid Floodway, Channel Enlargement and Improvement, Flood Control, National Economic Development (NED) Mississippi River & Tributaries, MO.

*Summary:*EPA expressed significant objections regarding the lack of information regarding potential impacts to over 36,000 acres of wetlands in the Mississippi River floodplain. EPA requested that the Corps formally revise the Draft Supplemental EIS to include further development of alternatives, improved wetlands determinations, cumulative impact analysis, water quality impacts, and appropriate mitigation measures.

Final EISs

ERP No. F–FHW–K40216–AZ, AZ–260 Transportation Improvements, between Payson and Heber, Funding, NPDES and COE Section 404 Permits, Gila, Coconino and Navajo Counties, AZ.

Summary: No formal comment letter was sent to the preparing agency.

ERP No. F–NPS–H61020–00, Missouri National Recreational River, General Management Plan, Implementation, Cedar and Dixon Counties, NB and Yakton, Clay and Union Counties, SD.

Summary: EPA has no objections with the General Management Plan described in the FEIS.

Dated: April 18, 2000.

B. Katherine Biggs,

Associate Director, NEPA Compliance Division.

[FR Doc. 00–10029 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[ER–FRL–6253–4]

Environmental Impact Statements; Notice of Availability

Responsible Agency: Office of Federal Activities, General Information (202) 564–7167 or www.epa.gov/oeca/ofa.

Weekly Receipt of Environmental Impact Statements

Filed April 10, 2000 Through April 14, 2000

Pursuant to 40 CFR 1506.9

EIS No. 200108, Draft EIS, AFS, ID, Lakeface-Lamb

Fuel Reduction Project, To Reduce the Risk of Lethal Fires within a Wildland/Urban Interface, Implementation, Idaho Panhandle National Forests, Priest Lake Ranger District, Bonner County, ID, Due: June 05, 2000, Contact: David Asleson (208)

443–2512.

EIS No. 200109, Draft Supplement, AFS, UT, Rhyohite Fuel Ecosystem Rehabilitation Project to the South Spruce Ecosystem Rehabilitation Project, Implementation, Dixie National Forest, Cedar City Ranger District, Iron County, UT, Due: June 05, 2000, Contact: Philip G. Eisenhauer (435) 865–3200.

EIS No. 200110, Final EIS, BLM, WY, South Baggs Natural Gas Development Area, Proposal to Drill and Develop 50 Natural Gas Wells, Application for Permit to Drill and COE Section 404 Permit, Carbon County, WY, Due: May 22, 2000, Contact: Larry Jackson (307) 328–4231.

EIS No. 200111, Draft EIS, SFW, NV, Stillwater National Wildlife Refuge Complex Comprehensive Conservation Plan and Boundary Revision, Implementation, Churchill and Washoe Counties, NV, Due: June 12, 2000, Contact: Don Delong (916) 414–6500.

EIS No. 200112, Revised Final EIS, COE, FL, Lake Okeechobee Regulation Schedule Study, To Maintain or Improve Existing Water Storage, Revised Information, St. Lucie and Caloosahatchee River Estuaries, FL, Due: May 22, 2000, Contact: Elmar Kurzbach (904) 232–2325.

EIS No. 200113, Final EIS, BOP, SC, South Carolina—Federal Correctional Institution, Construct and Operate, Possible Sites: Andrew, Bennettsville, Oliver and Salters, SC, Due: May 22, 2000, Contact: David J. Dorworth (202) 514–6470.

EIS No. 200114, Draft EIS, AFS, PA, East Side Project, Improvements to Timber Management, Transportation System Development and Wildlife Habitat, From Existing Condition (EC) to Desired Future Condition (DFC), Allegheny National Forest, Bradford and Marienville District, Elk, Forest, McKean and Warren Counties, PA, Due: June 05, 2000, Contact: Carl Leland (814) 776–6172.

EIS No. 200115, Draft EIS, AFS, ID, Iron Honey Resource Area Project, Aquatic, Vegetative and Wildlife Habitat Improvement Activities, Implementation, Coeur d'Alene River Ranger District, Idaho Panhandle National Forests, Kootenai and Shoshone Counties, ID, Due: June 05, 2000, Contact: Kerry Arneson (208) 769–3000.

EIS No. 200116, Final EIS, FHW, HI, Puainako Street Extension and Widening, Traffic Circulation Improvements, Funding, South Hilo, Hawaii County, HI, Due: May 22, 2000, Contact: Abraham Wong (808) 541–2700.

EIS No. 200117, Final EIS, SFW, AK, Wolf Lake Area Natural Gas Pipeline Project, Construction, Approval Right-of-Way Grant and COE Section 404 Permit, Kenai National Wildlife Refuge, AK, Due: May 22, 2000, Contact: Brian Anderson (907) 786–3379.

EIS No. 200118, Final EIS, AFS, OR, WA, Pacific Northwest Region Douglas-fir Tussock Moth (orgvia pseudotsugata) Project, To Partially Control an Anticipated Outbreak of Douglas-fir tussock moth, To be Implemented in Nine National Forests in WA and OH, Due: May 22, 2000, Contact: Bill Funk (503) 808–2984.

EIS No. 200119, Draft EIS, AFS, WA, Upper Charley Subwatershed Ecosystem Restoration Projects, Implementation, Pomeroy Ranger District, Umatilla National Forest, Garfield County, WA, Due: June 12, 2000, Contact: Monte Fujishin (509) 843–1891.

EIS No. 200120, Draft EIS, AFS, ID, Brownlee Vegetation and Access Management Project, Implementation, Weiser Ranger District, Payette National Forest, Washington County, ID, Due: June 21, 2000, Contact: John Baglien (208) 549–4200.

EIS No. 200121, Draft EIS, COE, DE, Fenwick Island Feasibility Study, Storm Damage Reduction, In the Community of Fenwick Island, Sussex County, DE, Due: June 05, 2000, Contact: Robert L. Callegari (215) 656–6555.

Amended Notices

EIS No. 200003, Draft EIS, COE, WA, Lower Snake River Juvenile Salmon Migration Feasibility Study, Implementation, To Increase the Survival of Juvenile Anadromous Fish, Snake River, Walla Walla, WA, Due: May 01, 2000, Contact: Lonnie Mettler (509) 527–7268. Published FR on 1–14–2000: CEQ Comment Date has been extended from 03/31/2000 to 05/01/2000.

Dated: April 18, 2000.

B. Katherine Biggs,

Associate Director, NEPA Compliance Division, Office of Federal Activities.

[FR Doc. 00–10030 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[SW–FRL–6583–2]

Notice Proposing To Reissue a Variance From Land Disposal Restrictions Granted to Exxon Mobil Corporation, Billings, MT

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of proposed decision.

SUMMARY: This is a notice to interested parties that EPA is proposing to reissue a no-migration variance for land disposal of hazardous waste to Exxon Mobil Refining & Supply Company Billings Refinery (''Exxon''), a division of Exxon Mobil Corporation, formerly known as Exxon Company U.S.A. Authority for the decision has been delegated to the EPA Regional Administrator. The original July 27, 1993 variance (58 FR 40134) approved under Resource Conservation and Recovery Act regulations (40 CFR 268.6) allowed Exxon to place certain untreated hazardous wastes subject to the RCRA land disposal restrictions (42 U.S.C. 36901 et. seq.) at their Billings (Montana) refinery South Land Treatment Unit (SLTU). In the original variance, the unit was referred to as the New South Land Treatment Unit. Exxon submitted a request to EPA on March 24, 1998 for renewal of this no-migration variance in conjunction with their State of Montana hazardous waste permit reissuance. Exxon also petitioned to amend the variance by adding the newly listed hazardous waste, Petroleum Refinery Primary Oil/Water/Solids Separation Sludge (EPA hazardous waste code F037). The proposed variance reissuance includes the F037 waste stream, ''Primary Sludge,'' generated at the Exxon Billings Refinery.

In granting the original variance, we concluded that Exxon demonstrated to a reasonable degree of certainty that hazardous constituents would not migrate out of the land treatment facility at levels exceeding no-migration criteria for as long as the wastes remain hazardous. We have reviewed the SLTU monitoring data submitted by Exxon for the period the variance was in effect along with other relevant information, and it still supports our original conclusion on Exxon's no-migration demonstration. We also concluded that Exxon adequately met the conditions of the original variance, which were included to ensure compliance with their no-migration demonstration.

The present proposal considered how the terms of the original variance were affected by certain changes in waste application techniques and closure requirements incorporated into the recently issued Montana hazardous waste permit (No. MTHWP–99–02) and one failure to correctly manage a waste stream whose hazardous status had changed during the term of the original variance. We concluded that these factors did not materially affect the overall demonstration of no-migration. The proposed variance reissuance again includes specific conditions tailored to reflect additions of a newly hazardous waste stream (F037), modifications to how no-migration standards apply to specific SLTU monitoring systems, additional monitoring requirements, and improvements to the Exxon waste application tracking system. Certain conditions of the original variance are also included. The full set of variance conditions are presented below.

RCRA regulations require that we provide for public comment on a proposed no-migration variance decision. In addition to seeking written comments through this notice, we have elected to hold a public hearing in Billings, Montana to gather comment on this proposed decision from the local citizens near Exxon's land treatment facility and other interested parties. All comments received will be entered into the public record for this decision making process. Details appear below in the DATES section of this document. A final decision will be made by EPA after considering and responding to public comments. We will then publish a notice in the **Federal Register** of our decision on the reissuance of the variance and the addition of Primary Sludge (F037). Copies of the statement of basis for the proposed decision are available in the record for today's document and can be requested from Tina Diebold at the address or telephone number listed below.

DATES: Comments on the proposed decision must be received on or before June 5, 2000. In addition to the written comments received at EPA's Montana Office, written and oral comments on the proposed decision also will be accepted by the Hearing Officer at the public hearing in Billings, Montana. The public hearing is scheduled for May 23, 2000 from 6 p.m. to 8:30 p.m.

ADDRESSES: Comments on the proposal should be sent to EPA at the following address: Tina Diebold, Mail Code 8MO, Montana Office, U.S. EPA Region VIII, 301 S. Park, Drawer 10096, Helena, Montana 59626–0096. The public hearing will be held at the Parmly Library at 510 North Broadway, Billings, Montana (large, open meeting room on third floor).

A copy of the record supporting this proposal is available to the public at the Parmly Library at 510 North Broadway, Billings, Montana, and is available for public review during regular library hours. Another copy of the record is available in Helena, Montana, at the EPA Region VIII, Montana Operations Office, Federal Building, 301 South Park. The public may make arrangements to view the documents in Helena by calling Tina Diebold at (406) 441–1130. The record is available for inspection in Helena from 8 a.m. to 4 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Tina Diebold, Mail Code 8MO, Montana Office, U.S. EPA Region VIII, 301 S. Park, Drawer 10096, Helena, Montana 59626–0096, at (406) 441–1130.

SUPPLEMENTARY INFORMATION: Wherever ''we'' is used throughout this document, it refers to EPA.

A. What Conditions and Reporting Requirements Are Proposed for the Exxon No-Migration Variance Reissuance?

As part of this reissuance of the no-migration variance and addition of Primary Sludge (F037), we propose that Exxon comply with the following conditions. These conditions are in addition to those required of Exxon under 40 CFR 268.6. EPA would directly enforce these conditions, and a violation of a condition would constitute a violation of the RCRA land disposal restrictions. Unless otherwise notified by EPA, Exxon shall provide the required notices and reports to the EPA Region VIII Montana Operations Office, Federal Building, 301 South Park, Drawer 10096, Helena, MT, 59626. Exxon shall provide a separate copy to the State of Montana of any report or notice required by the variance if the information is not combined with the reports required under its Montana hazardous waste permit. Exxon shall provide copies to the State at the address specified for its Montana hazardous waste permit reporting requirements.

We interpret the no-migration standard to mean that concentrations of hazardous constituents cannot exceed EPA-approved health-based levels in any environmental medium at the boundary of the land disposal unit. Hazardous constituent levels exceeding those presented in Table 1 of this document constitute migration into ground water at the unit boundary, as measured by soil-pore liquid and below

treatment zone (BTZ) soil-core monitoring, and as measured by ground water monitoring under the Exxon Montana hazardous waste permit and as defined below. In the event that Exxon should detect other RCRA hazardous constituents (defined in 40 CFR part 261, appendix VIII) above health-based levels, this event would also be subject to the notification requirements in 40 CFR 268.6(f). Definitions of the unit boundaries (i.e., points of compliance for no-migration purposes) remain the same as in the original variance (57 FR 10478). Metals levels in the SLTU zone of incorporation (ZOI) soils (the top 23 centimeters of the treatment zone) exceeding the limits listed in item 1.a. below are also evidence of a no-migration standard exceedance.

In accordance with 40 CFR 268.6(k), the proposed variance will be valid for up to ten years from the date of EPA approval of the petition, but no longer than the term of Exxon's Montana hazardous waste permit, unless the permit is renewed or reissued.

1. Montana Hazardous Waste Permit Conditions

Exxon must comply with conditions of the Montana hazardous waste permit effective June 28, 1999 (No. MTHWP–99–02) regarding characterization of wastes disposed of at the SLTU, and monitoring of ground water, soil and soil-pore liquids at that unit. Exxon must provide the results of this characterization and monitoring to EPA on the same schedule as they are provided to the State of Montana under Exxon's Montana hazardous waste permit.

In addition, Exxon must follow the monitoring provisions below specific to this variance, which are intended to supplement the existing Montana hazardous waste permit conditions. Exxon may provide the information required as a condition of the variance to EPA in the annual reports required by its Montana hazardous waste permit. Exxon shall submit annual reports for the previous calendar year by April 30.

a. ZOI Metals Loading Limit

Exxon shall determine if any of the following risk limits have been exceeded when it evaluates the annual SLTU ZOI soil samples for the metals loading limits under its Montana hazardous waste permit: 31 mg/kg for antimony; 15 mg/kg for arsenic; 2 mg/kg for beryllium; 140 mg/kg for total chromium; 400 mg/kg for lead; and 7 mg/kg for mercury. In the event one or more of these criteria are exceeded, Exxon may only place wastes on the SLTU areas(s) for which the metals concentrations are less than or equal to the in-soil concentration limits. Exxon shall submit the analytical results and comparisons in an annual report to EPA. Exxon shall report exceedances of these limits to EPA within ten days of receiving the analytical results.

b. Soil-Pore Liquid Monitoring

Exxon shall evaluate the following metals as part of semi-annual SLTU soil-pore lysimeter monitoring requirements under the Montana hazardous waste permit: antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, nickel, selenium, vanadium, and zinc. Samples from each of the three SLTU lysimeters shall be .45-micron filtered prior to analysis for metals. SW–846 [1] or equivalent analytical methods shall be used which can provide reporting limits of .001 mg/l, except .0002 mg/l for mercury. Exxon shall attempt to collect sufficient sample volumes to meet these performance criteria, following the general analytical priority scheme in its Montana hazardous waste permit. Should sample volumes be insufficient, Exxon shall investigate collecting additional sample volumes in a reasonable time frame for metals analysis once the Montana hazardous waste permit conditions have been met. Additionally, analyses of soil-pore organic monitoring constituents shall meet the SW–846 estimated quantitation limits (EQL) specified for water samples in Exxon's Montana hazardous waste permit and as listed in Table 1, to the extent possible.

c. Soil-Pore Liquid Monitoring Evaluation and Reporting

Exxon shall compare the organic hazardous constituents and the metals results to the leachate soil-pore health-based standards identified in Table 1 below. Exxon shall submit the analytical results and comparisons including information on sample volumes collected, analytical methods used, and EQLs achieved for all sample constituents, in an annual report to EPA. Exxon shall report exceedances of these limits to EPA within ten days of receiving the analytical results. Exxon shall notify EPA and the State if sufficient sample volumes cannot be collected or EQLs cannot be achieved in any semi-annual sampling period.

d. BTZ Soil-Core Monitoring

When collecting the five (5) annual soil cores from the SLTU Below Treatment Zone (BTZ) as required by its Montana hazardous waste permit, Exxon shall also collect intermediate level treatment zone soil samples at three depth intervals of 2–2.5 feet below ground surface (bgs), 3–3.5 feet bgs, and 4–4.5 feet bgs and in the BTZ itself (5–5.5 feet bgs), sufficient for analyses of oil and grease and soil pH. Oil and grease and soil pH results shall be reported for the four depth intervals in each of the five soil core samples. Exxon shall use an oil and grease analytical method which can provide detection limits in the range of 10 to 100 mg/kg consistent with the Montana hazardous waste permit. Exxon also shall analyze any BTZ resamples required under the Montana hazardous waste permit for oil and grease and soil pH. Exxon shall submit the results of the annual BTZ sampling (including the pH and oil and grease results from the intermediate levels) in an annual report to EPA. Exxon shall submit the results of any resampling to EPA on the same schedule as provided to the State under Exxon's hazardous waste permit.

e. Evaluation of BTZ Soil-Core Monitoring

Analyses for organic monitoring constituents shall meet soil low-level required EQLs as specified in Exxon's Montana hazardous waste permit and as specified in Table 1 below. Exxon shall compare the results of BTZ soil samples with soil-core health-based standards identified in Table 1 of this document. Exxon shall submit the analytical results and comparisons in an annual report to EPA. Exxon shall report exceedances of these limits to EPA within ten days of receiving the analytical results.

[1] These methods are found in the third edition of ''Test Methods for Evaluating Solid Waste Physical/Chemical Methods,'' EPA, SW–846, which is available from the Government Printing Office (GPO). This compendium of EPA test methods is commonly referred to as ''SW–846'' and we will use this term to refer to the compendium throughout this document.

TABLE 1.—PROPOSED EXXON NO-MIGRATION VARIANCE LEACHATE AND SOIL-CORE STANDARDS

Constituents	Leachate soil-pore standards (mg/l)	Soil-core standards (mg/kg)
I. Volatiles:		
Benzene	.005 (EQL)—MCL	.002 (EQL)
Ethylbenzene	.7—MCL	.65
Toluene	1—MCL	.56
Xylene(s)	10—MCL	9.8
II. Semi-Volatiles:		
Anthracene	10—Risk	620
Benzo(a)anthracene	.0001 (EQL)—Risk	.08 (EQL)
Benzo(b)fluoranthene	.0001(EQL)—Risk	.25 (EQL)
Benzo(a)pyrene	.0002(EQL)—MCL	.41
Chrysene	.0012 (EQL)—Risk	9.3
Fluoranthene	1.4—Risk	300
1-Methylnaphthalene	NS	NS
Naphthalene	1.4—Risk	5.9
Phenanthrene	NS	NS
Pyrene	1—Risk	220
2,4-Dimethyl phenol	.7—Risk	.43
Phenol	21—Risk	5.4
Cresol (o-)	1.8—Risk	.69
III. Metals:		
Antimony	.006—MCL	Not proposed
Arsenic	.05—MCL	Do.
Barium	2—MCL	Do.
Beryllium	.004—MCL	Do.
Cadmium	.005—MCL	Do.
Chromium	.1—MCL	Do.
Lead	.015—MCL	Do.
Mercury	.002—MCL	Do.
Nickel	.7—Risk	Do.
Zinc	10—Risk	Do.
Selenium	.05—MCL	Do.
Vanadium	.24—Risk	Do.

An (EQL) indicates a risk-based standard lying below the expected low-level quantification limit for the routine analytical methods assumed from Exxon's Montana hazardous waste permit. Typical quantification limits would be: SW–846 Method 8260—.005 mg/l aqueous and .005 mg/kg clean soils and Method 8270—.01 mg/l aqueous and .33 mgl/kg clean soil. NS indicates no standard.

2. Annual Benzene Loading Limit

The total amount of benzene that may be disposed of at the SLTU may not exceed a cumulative mass loading of 49 Kg per calendar year. Exxon must determine the benzene content of each wastestream, including each load of Primary Sludge (F037) prior to placement at the land treatment unit. Representative samples of each wastestream must be analyzed for benzene as they are generated during the land application season in accordance with the promulgated edition of SW–846. The term ''as generated'' means each time the wastes are removed from the wastewater system, created through a spill, or a tank is cleaned out, and the wastes are taken or will be taken to the land treatment unit, which may be several times a year. A tracking system must be in place which continually estimates and updates the cumulative benzene waste loading during the operating season. Exxon must submit a summary of these waste analyses demonstrating its compliance with the loading limit to EPA in an annual report. When the 49 Kg benzene limit is reached, Exxon must not dispose of any additional waste containing detectable levels of benzene at the SLTU until the next calendar year. Exxon shall notify EPA when the 49 Kg limit is reached within ten days of receiving the analytical results.

3. Waste Characterization

Exxon must identify in the annual report to EPA the following additional information for each applied waste at the SLTU: the location of waste generation (*e.g.,* Tank 17 sewer, Tank 108 contaminated soil); analytical results of waste determination for any wastes for which the hazardous status was not known when it was generated, mass of waste; application date(s); the hazardous waste code (if any); and the matrix (e.g., soil or sludge). In the report, Exxon must distinguish between the F037 waste generated from the sewer (e.g., ''F037 sewer sludge'') and the F037 waste generated from the Alkyllation Unit Neutralization Basins (*e.g.,* ''F037 lime sludge''). In the annual report, Exxon must also include the total quantity of waste applied at the SLTU during the last operating season and a break down of the total quantity of hazardous and of non-hazardous waste.

4. Application of F037 Sewer Sludge

Exxon's application of Primary Sludge generated from the sewer system (F037 sewer sludge) to the SLTU is restricted to times when Exxon also applies API Separator Sludge (K051). Exxon must combine the F037 sewer sludge with the API Separator Sludge prior to or during application at the SLTU. Exxon shall incorporate this condition in its waste tracking system to ensure that any time F037 sewer sludge is cleared for application to the SLTU, it is accompanied by K051 waste.

5. Application of F037 Lime Sludge

Exxon's application of Primary Sludge generated from the Alkyllation Unit Neutralization Basin (F037 lime sludge) to the SLTU is limited to when it has determined pH adjustment of the ZOI

soils is needed according to the applicable criteria and methods identified in its Montana hazardous waste permit. For the years in which Exxon uses F037 lime sludge to adjust the pH of the ZOI soils at the SLTU, Exxon must submit to EPA the following information in the annual report: pH of the F037 lime sludge applied to the SLTU, and the other measurements and tests used to determine the need for pH adjustment as well as the quantity of F037 lime sludge applied and the quantity of any other substance (*e.g.,* lime) used to adjust the pH of the ZOI soil at the SLTU.

6. Waste Tracking

As part of its waste tracking process, Exxon must confirm receipt of analytical results for any wastes for which the hazardous status is not currently known prior to application of the waste at the SLTU. Exxon must comply with its Montana hazardous waste permit conditions with regard to restrictions on the application of waste to the SLTU, such as any restrictions based on the pH of the waste.

7. Information Requests

Upon request by EPA, Exxon shall provide to the EPA within a reasonable time, any relevant information requested to determine compliance with the conditions of this variance.

8. Access

Exxon shall allow EPA, or authorized representatives, upon the presentation of credentials and other documents as may be required by law to: (a) inspect at reasonable times any records, facilities, equipment (including monitoring and control equipment), practices, or operations related to the disposal of restricted hazardous wastes at the SLTU; and (b) sample or monitor at reasonable times, for the purposes of assuring compliance with the conditions of this variance or to determine migration or as otherwise authorized by RCRA, any wastes intended or proposed for disposal at the SLTU and the soil, air, soil-pore liquids or ground water in or surrounding the SLTU.

Dated: April 13, 2000.

Stephen S. Tuber,

Acting Regional Administrator, Region VIII.

[FR Doc. 00–10039 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[OPPTS–51944; FRL–6554–5]

Certain New Chemicals; Receipt and Status Information

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: Section 5 of the Toxic Substances Control Act (TSCA) requires any person who intends to manufacture (defined by statute to include import) a new chemical (i.e., a chemical not on the TSCA Inventory) to notify EPA and comply with the statutory provisions pertaining to the manufacture of new chemicals. Under sections 5(d)(2) and 5(d)(3) of TSCA, EPA is required to publish a notice of receipt of a premanufacture notice (PMN) or an application for a test marketing exemption (TME), and to publish periodic status reports on the chemicals under review and the receipt of notices of commencement to manufacture those chemicals. This status report, which covers the period from February 28, 2000 to March 17, 2000, consists of the PMNs, pending or expired, and the notices of commencement to manufacture a new chemical that the Agency has received under TSCA section 5 during this time period.

ADDRESSES: Comments may be submitted by mail, electronically, or in person. Please follow the detailed instructions for each method as provided in Unit I. of the **SUPPLEMENTARY INFORMATION**. To ensure proper receipt by EPA, it is imperative that you identify docket control number OPPTS–51944 and the specific PMN number in the subject line on the first page of your response.

FOR FURTHER INFORMATION CONTACT: Barbara Cunningham, Director, Office of Program Management, and Evaluation, Office of Pollution Prevention and Toxics (7401), Office of Pollution Prevention and Toxics, Environmental Protection Agency, Ariel Rios Bldg., 1200 Pennsylvania Ave., NW., Washington, DC 20460; telephone numbers: (202) 554–1404; e-mail address: 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. As such, the Agency has not attempted to describe the specific entities that this action may apply to. Although others may be affected, this action applies directly to the submitter of the premanufacture notices addressed in the action. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed under **FOR FURTHER INFORMATION CONTACT**.

B. How Can I Get Additional Information, Including Copies of this Document and Other Related Documents?

1. *Electronically*. You may obtain copies of this document and certain other available documents from the EPA Internet Home Page at *http://www.epa.gov/*. On the Home Page select ''Laws and Regulations'' and then look up the entry for this document under the ''**Federal Register**—Environmental Documents.'' You can also go directly to the ''**Federal Register**'' listings at *http://www.epa.gov/fedrgstr/*.

2. *In person*. The Agency has established an official record for this action under docket control number OPPTS–51944. The official record consists of the documents specifically referenced in this action, any public comments received during an applicable comment period, and other information related to this action, including any information claimed as confidential business information (CBI). This official record includes the documents that are physically located in the docket, as well as the documents that are referenced in those documents. The public version of the official record does not include any information claimed as CBI. The public version of the official record, which includes printed, paper versions of any electronic comments submitted during an applicable comment period, is available for inspection in the TSCA Nonconfidential Information Center, North East Mall Rm. B–607, Waterside Mall, 401 M St., SW., Washington, DC. The Center is open from noon to 4 p.m., Monday through Friday, excluding legal holidays. The telephone number of the Center is (202) 260–7099.

C. How and to Whom Do I Submit Comments?

You may submit comments through the mail, in person, or electronically. To ensure proper receipt by EPA, it is imperative that you identify docket control number OPPTS–51944 and the specific PMN number in the subject line on the first page of your response.

1. *By mail*. Submit your comments to: Document Control Office (7407), Office of Pollution Prevention and Toxics (OPPT), Environmental Protection Agency, Ariel Rios Bldg., 1200 Pennsylvania Ave., NW., Washington, DC 20460.

2. *In person or by courier*. Deliver your comments to: OPPT Document Control Office (DCO) in East Tower Rm. G–099, Waterside Mall, 401 M St., SW., Washington, DC. The DCO is open from 8 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The telephone number for the DCO is (202) 260–7093.

3. *Electronically*. You may submit your comments electronically by e-mail to: ''oppt.ncic@epa.gov,'' or mail your computer disk to the address identified in this unit. Do not submit any information electronically that you consider to be CBI. Electronic comments must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. Comments and data will also be accepted on standard disks in WordPerfect 6.1/8.0 or ASCII file format. All comments in electronic form must be identified by docket control number OPPTS–51944 and the specific PMN number. Electronic comments may also be filed online at many Federal Depository Libraries.

D. How Should I Handle CBI that I Want to Submit to the Agency?

Do not submit any information electronically that you consider to be CBI. You may claim information that you submit to EPA in response to this document as CBI by marking any part or all of that information as CBI. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. In addition to one complete version of the comment that includes any information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public version of the official record. Information not marked confidential will be included in the public version of the official record without prior notice. If you have any questions about CBI or the procedures for claiming CBI, please consult the person listed under **FOR FURTHER INFORMATION CONTACT**.

E. What Should I Consider as I Prepare My Comments for EPA?

You may find the following suggestions helpful for preparing your comments:

1. Explain your views as clearly as possible.

2. Describe any assumptions that you used.

3. Provide copies of any technical information and/or data you used that support your views.

4. If you estimate potential burden or costs, explain how you arrived at the estimate that you provide.

5. Provide specific examples to illustrate your concerns.

6. Offer alternative ways to improve the notice or collection activity.

7. Make sure to submit your comments by the deadline in this document.

8. To ensure proper receipt by EPA, be sure to identify the docket control number assigned to this action in the subject line on the first page of your response. You may also provide the name, date, and **Federal Register** citation.

II. Why is EPA Taking this Action?

Section 5 of TSCA requires any person who intends to manufacture (defined by statute to include import) a new chemical (i.e., a chemical not on the TSCA Inventory to notify EPA and comply with the statutory provisions pertaining to the manufacture of new chemicals. Under sections 5(d)(2) and 5(d)(3) of TSCA, EPA is required to publish a notice of receipt of a PMN or an application for a TME and to publish periodic status reports on the chemicals under review and the receipt of notices of commencement to manufacture those chemicals. This status report, which covers the period from February 28, 2000 to March 17, 2000, consists of the PMNs, pending or expired, and the notices of commencement to manufacture a new chemical that the Agency has received under TSCA section 5 during this time period.

III. Receipt and Status Report for PMNs

This status report identifies the PMNs, pending or expired, and the notices of commencement to manufacture a new chemical that the Agency has received under TSCA section 5 during this time period. If you are interested in information that is not included in the following tables, you may contact EPA as described in Unit II. to access additional non-CBI information that may be available.

In table I, EPA provides the following information (to the extent that such information is not claimed as CBI) on the PMNs received by EPA during this period: the EPA case number assigned to the PMN; the date the PMN was received by EPA; the projected end date for EPA's review of the PMN; the submitting manufacturer; the potential uses identified by the manufacturer in the PMN; and the chemical identity.

I. 73 PREMANUFACTURE NOTICES RECEIVED FROM: 02/28/00 TO 03/17/00

Case No.	Received Date	Projected Notice End Date	Manufacturer/Importer	Use	Chemical
P–00–0557	02/28/00	05/28/00	CBI	(G) Raw material for can coatings	(G) Epoxy modified saturated polyester resin
P–00–0558	02/28/00	05/28/00	BIC USA Inc.	(G) A colorant for inks	(G) Solvent black 46
P–00–0559	02/28/00	05/28/00	BIC USA Inc.	(G) A colorant for inks	(G) Solvent blue 43
P–00–0564	02/28/00	05/28/00	CBI	(G) Raw material for coil coatings	(G) Saturated polyester resin solid
P–00–0565	02/29/00	05/29/00	Englehard Corporation	(S) A colorant for plastics	(G) Azo violet pigment
P–00–0566	02/29/00	05/29/00	Englehard Corporation	(S) A colorant for plastics	(G) Azo violet pigment
P–00–0567	02/29/00	05/29/00	CBI	(G) Component of coating with open use	(G) Melamine
P–00–0568	02/29/00	05/29/00	CBI	(G) Component of coating with open use	(G) Melamine
P–00–0569	02/29/00	05/29/00	CBI	(G) Component of coating with open use	(G) Melamine
P–00–0570	02/29/00	05/29/00	CBI	(G) Component of coating with open use	(G) Melamine
P–00–0571	02/29/00	05/29/00	CBI	(G) Component of coating with open use	(G) Melamine

I. 73 PREMANUFACTURE NOTICES RECEIVED FROM: 02/28/00 TO 03/17/00—Continued

Case No.	Received Date	Projected Notice End Date	Manufacturer/Importer	Use	Chemical
P–00–0572	02/29/00	05/29/00	CBI	(G) Component of coating with open use	(G) Melamine
P–00–0573	02/29/00	05/29/00	CBI	(S) A raw material to manufacture an agricultural chemical (pesticide or an intermediate to pesticide).	(G) Aryloxyalkanoic acid
P–00–0574	02/28/00	05/28/00	Choisy-Tek (USA) Ltd.	(S) Raw material surfactant for formulators	(S) Glycine, *N*-(carboxymethyl)-*N*-[3-(hexyloxy)propyl]-, branched, momosodium salts
P–00–0575	02/28/00	05/28/00	Choisy-tek (USA) Ltd.	(S) Raw material surfactant for formulators	(S) Glycine, *N*-(3-aminopropyl)-, mono (carboxymethyl) deriv., *N*′-coco alkyl derivs., disodium salts
P–00–0576	02/28/00	05/28/00	Choisy-tek (USA) Ltd.	(S) Raw material surfactant for formulators	(S) β-alanine, *N*-(2-carboxyethyl)-*N*-[3-(dimethylamino)propyl]-, monosodium salt*
P–00–0577	02/28/00	05/28/00	Choisy-tek (USA) Ltd.	(S) Raw material surfactant for formulators	(S) β-alanine, *N*-(2-carboxyethyl)-*N*-[3-(1-methylethoxy)propyl]-, monosodium salt*
P–00–0578	02/29/00	05/29/00	CBI	(G) Coating of coating with open use	(G) Polyester
P–00–0579	02/29/00	05/29/00	CBI	(G) Coating of coating with open use	(G) Polyester
P–00–0580	02/29/00	05/29/00	CBI	(G) Coating of coating with open use	(G) Polyester
P–00–0581	02/29/00	05/29/00	CBI	(G) Coating of coating with open use	(G) Polyester
P–00–0582	02/29/00	05/29/00	CBI	(G) Coating of coating with open use	(G) Polyester
P–00–0583	03/01/00	05/30/00	Johnson Matthey Catalog Company, Inc.	(G) Ink additive	(S) 1-butanaminium, *N,N,N*-tributyl-, hexafluorophosphate(1-)*
P–00–0584	03/01/00	05/30/00	CBI	(G) Open non-dispersive (coatings resin)	(G) Urethane acrylate resin, blocked
P–00–0585	03/01/00	05/30/00	CBI	(S) Edible oil;industrial lubricant	(G) Sunflower triacylglycerol, triacyglyceride of sunflower oil
P–00–0586	03/01/00	05/30/00	CBI	(G) Component of a primer product	(G) Silane coupling agent
P–00–0587	03/01/00	05/30/00	3M Company	(G) Amine curative	(G) Amine terminated resin
P–00–0588	03/03/00	06/01/00	CBI	(G) Adhesive binders	(G) Ketoxime blocked ppdi/polyether prepolymers
P–00–0589	03/03/00	06/01/00	CIBA Specialty Chemicals Corporation	(S) Optical brightner in uv reacting coatings to detect voids in automotive clearcoats; component of security printing in the marking of paper currency, documents	(S) 1*h*-pyrrole-2,5-dione, 1,1′-(1,2-ethanediyl)bis[3,4-diphenyl-*
P–00–0590	03/06/00	06/04/00	Reichhold, Inc.	(S) Polyester binders for baked industrial maintenance finishings	(G) Polyester resin
P–00–0591	03/01/00	05/30/00	Exxon Mobil Chemical Company	(S) Polymerization catalyst	(G) Organometallic compound
P–00–0592	03/06/00	06/04/00	3M Company	(S) Low adhesion backside coating for paper	(G) Siloxyacrylate polymer
P–00–0593	03/06/00	06/04/00	Cognis Corporation	(S) Specialty polymers	(S) Pentadecanedioic acid*
P–00–0594	03/06/00	06/04/00	Cognis Corporation	(S) Specialty polymers	(S) Heptadecanedioic acid*
P–00–0595	03/06/00	06/04/00	Cognis Corporation	(S) Specialty polymers	(S) Octadecanedioic acid*
P–00–0596	03/06/00	06/04/00	Cognis Corporation	(S) Specialty polymers	(S) Eicosanedioic acid*
P–00–0597	03/06/00	06/04/00	Cognis Corporation	(S) Specialty polymers	(S) 5-tetradecenedioic acid, (5*z*)-*
P–00–0598	03/06/00	06/04/00	Cognis Corporation	(S) Specialty polymers	(S) 7-hexadecenedioic acid, (7*z*)-*
P–00–0599	03/06/00	06/04/00	Cognis Corporation	(S) Specialty polymers	(S) 8-heptadecenedioic acid, (8*z*)-*
P–00–0600	03/06/00	06/04/00	Cognis Corporation	(S) Specialty polymers	(S) 9-octadecenedioic acid, (9*z*)-*
P–00–0601	03/06/00	06/04/00	Cognis Corporation	(S) Specialty polymers	(S) 6,9-octadecadienedioic acid, (6*z*,9*z*)-*
P–00–0602	03/06/00	06/04/00	Cognis corporation	(S) Specialty polymers	(S) 9-eicosenedioic acid, (9*z*)-*
P–00–0603	03/06/00	06/04/00	CBI	(S) Film extrusion;tube extrusion;injection molding	(G) Polyolefin-polyamide
P–00–0604	03/06/00	06/04/00	CBI	(S) Film extrusion;tube extrusion;injection molding	(G) Polyolefin-polyamide
P–00–0605	03/06/00	06/04/00	CBI	(G) Acrylic pressure sensitive adhesive	(G) Acrylic graft polymer
P–00–0606	03/06/00	06/04/00	CBI	(G) An open non-dispersive use.	(G) Rosin modified phenolic resin
P–00–0607	03/06/00	06/04/00	CBI	(G) Semiconductor production	(G) Phenolic copolymer
P–00–0608	03/07/00	06/05/00	Choisy-tek (USA) Ltd.	(S) Raw material surfactant for formulators	(S) β-alanine, *N*-(2-carboxyethyl)-*N*-[3-[(2-carboxyethyl)amino]propyl]-n-coco alkyl derivs., monosodium salts*

I. 73 PREMANUFACTURE NOTICES RECEIVED FROM: 02/28/00 TO 03/17/00—Continued

Case No.	Received Date	Projected Notice End Date	Manufacturer/Importer	Use	Chemical
P–00–0609	03/07/00	06/05/00	Basf corp	(S) Plasticizer in concrete	(G) Polyglycolether - polycarboxylate
P–00–0610	03/07/00	06/05/00	3m company	(S) Fiber treatment	(G) Perfluoroalkyl substituted polyurethane
P–00–0611	03/13/00	06/11/00	Basf corp	(S) Plasticizer	(S) Hexanedioic acid, polymer with 2,2-dimethyl-1,3-propanediol and 1,2-propanediol, isononyl ester*
P–00–0612	03/13/00	06/11/00	Basf corp	(S) Plasticizer	(S) Hexanedioic acid, polymer with 2,2-dimethyl-1,3-propanediol and 3-hydroxy-2,2-dimethylpropanoic acid, isononyl ester*
P–00–0613	03/09/00	06/07/00	Lonza Inc.	(G) Commercial emulsifier	(S) 1,2,3-propanetriol, homopolymer, isooctadecanoate
P–00–0614	03/10/00	06/08/00	Strem chemicals, Inc.	(G) Commercial r & d	(G) Metal derivatized tetrasubstituted alkane compound
P–00–0615	03/13/00	06/11/00	CBI	(G) Destructive use	(G) Alkylphenol polyether amine
P–00–0616	03/10/00	06/08/00	Strem chemicals, Inc.	(S) Chemical intermediate for the production of product described in pmn ts-prd408	(G) Derivatized tetrasubstituted alkane
P–00–0617	03/10/00	06/08/00	Strem chemicals, Inc.	(G) Commercial r & d	(G) Metal derivatized tetrasubstituted alkane compound
P–00–0618	03/13/00	06/11/00	CBI	(G) Processing aid	(G) Substituted hydroxy alkane ether
P–00–0619	03/13/00	06/11/00	CBI	(G) Emulsifier	(G) Salt of perfluoro fatty acids
P–00–0620	03/15/00	06/13/00	CBI	(G) Printing ink	(G) Long chain fatty acids, polymer with a polyoxyalkylene and a cyclic diacid
P–00–0621	03/15/00	06/13/00	CBI	(G) Printing ink	(G) Long chain fatty acids, polymer with a polyoxyalkylene and a cyclic diacid
P–00–0622	03/15/00	06/13/00	CBI	(G) Printing ink	(G) Long chain fatty acids, polymer with a polyoxyalkylene and a cyclic diacid
P–00–0623	03/15/00	06/13/00	CBI	(G) Printing ink	(G) Long chain fatty acids, polymer with a polyoxyalkylene and a cyclic diacid
P–00–0624	03/15/00	06/13/00	CBI	(G) Printing ink	(G) Long chain fatty acids, polymer with a polyoxyalkylene and a cyclic diacid
P–00–0625	03/15/00	06/13/00	CBI	(G) Printing ink	(G) Long chain fatty acids, polymer with a polyoxyalkylene and a cyclic diacid
P–00–0626	03/15/00	06/13/00	CBI	(G) Additive for inks and coatings	(G) Polyurethane acrylate ester
P–00–0627	03/14/00	06/12/00	CBI	(G) Semiconductor production	(G) Phenolic copolymer
P–00–0628	03/16/00	06/14/00	CBI	(G) Viscosity index improver	(G) Alkyl methacrylate copolymer
P–00–0629	03/15/00	06/13/00	Finetex, Inc.	(S) Textile fiber lubricant with high thermal stability;dispersant for titanium dioxide, zincoxide, pigments, etc.;plasticizer for selected polymer systems requiring highthermal stability	(S) Benzoic acid, isooctadecyl ester*
P–00–0630	03/16/00	06/14/00	CBI	(G)	(G) Dialkyl formamide
P–00–0631	03/16/00	06/14/00	CBI	(G) Destructive	(G) Alkyl arylaminophenylcarboxylate
P–00–0632	03/17/00	06/15/00	CBI	(G) Component of manufactured consumer article – contained use	(G) Acetamide, *N*-[[[3-(dimethyloctadecylheteromonocycle)-4-hydroxyphenyl] sulfonyl] amino]phenyl]-
P–00–0644	03/17/00	06/15/00	Union carbide corporation	(G) A component of coatings, elastomers and adhesives	(G) Polycaprolactone diol

In table II, EPA provides the following information (to the extent that such information is not claimed as CBI) on the Notices of Commencement to manufacture received:

II. 46 NOTICES OF COMMENCEMENT FROM: 02/28/00 TO 03/17/00

Case No.	Received Date	Commencement/Import Date	Chemical
P–00–0010	03/02/00	02/03/00	(G) Polyurethane
P–00–0018	02/29/00	01/31/00	(S) Benzene, ethenyl-, polymer with 1-butene, (2*e*)-2-butene, (2*z*)-2-butene, cyclopentene, 2-methyl-1-propene and 1,3-pentadiene*
P–00–0019	02/29/00	01/31/00	(S) 4,7-methano-1*h*-indene, 3*a*,4,7,7a-tetrahydro-, polymer with 1-butene, (2*e*)-2-butene, (2*z*)-2-benzene, cyclopentene, ethenylbenzene, ethenylmethylbenzene, 1*h*-indene, (1-methylethenyl)benzene, 2-methyl-1-propene, 1,3-pentadiene and 1-propenylbenzene*

II. 46 NOTICES OF COMMENCEMENT FROM: 02/28/00 TO 03/17/00—Continued

Case No.	Received Date	Commencement/Import Date	Chemical
P–00–0020	02/29/00	01/31/00	(S) 4,7-methano-1*h*-indene, 3*a*,4,7,7a-tetrahydro-, polymer with 1-butene, (2*e*)-2-butene, (2*z*)-2-butene, cyclopentene, ethenylbenzene, ethenylmethylbenzene, 1*h*-indene, 2-methyl-1,3-butadiene, (1-methylethenyl)benzene, 2-methyl-1-propene, 1,3-pentadiene and 1-propenylbenzene*
P–00–0021	02/29/00	01/31/00	(S) 2,5-furandione, polymer with 1-butene, (2*e*)-2-butene, (2*z*)-2-butene, cyclopentene, ethenylbenzene, 2-methyl-1-propene and 1,3-pentadiene*
P–00–0022	02/29/00	01/31/00	(S) Benzene, ethenyl-, polymer with 1-butene, (2*e*)-2-butene, (2*z*)-2-butene, cyclopentene, 2-methyl-1,3-butadiene, 2-methyl-1-propene and 1,3-pentadiene*
P–00–0023	02/29/00	01/31/00	(S) Benzene, ethenyl-, polymer with cyclopentene and 2-methyl-1,3-butadiene*
P–00–0052	03/14/00	02/29/00	(G) 1–(2,5-dimethoxyphenyl)-2-propane derivative
P–00–0059	03/02/00	02/17/00	(S) 2,5-furandione, polymer with 1-butene and ethene*
P–00–0060	03/02/00	02/17/00	(S) 2,5-furandione, polymer with ethene, 5-ethylidenebicyclo[2.2.1]hept-2-ene and 1-propene**
P–00–0081	03/03/00	02/25/00	(G) Acrylic copolymer
P–00–0082	02/29/00	02/11/00	(G) Silicone modified waterborne polyurethane dispersion
P–00–0103	03/15/00	02/22/00	(G) 1,4-butanediol, polymer with 2,4-diisocyanato-1-methylbenzene, 1,2-ethanediamine, polyol and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane
P–00–0107	03/06/00	02/17/00	(G) Acrylic modified polyurethane polymer
P–00–0180	03/17/00	03/09/00	(S) 2,5-furandione, telomer with ethenylbenzene and (1-methylethyl)benzene, 3-(dimethylamino)propyl imide*
P–92–0558	03/06/00	02/07/00	(G) Ethylene interpolymer
P–92–1016	03/06/00	02/03/00	(S) Fatty acids, $C_{16–18}$ and C_{18}-unsaturated branched and linear, sodium salts.
P–94–0963	03/08/00	02/15/00	(G) Polycondensate of aliphatic dicarboxylic acid and alkaediol. polyurethane of aliphatic polyesters
P–95–1115	03/13/00	02/09/00	(S) 1,3-bis(1-hydroxy-2,2-dimethoxyethyl)-2-imidazolidinone*
P–95–2087	02/29/00	05/19/99	(G) Sulfurized vegetable oil
P–97–0455	03/06/00	02/01/00	(S) Fatty acids, $C_{4–24}$-branched, 2,2-dimethyl-1,3-propanediyl ester*
P–98–0065	03/09/00	02/10/00	(S) Poly(oxy-1,2-(ethanediyl), alpha-hydro-omega-hydroxy, monoethers with stearyl alc. distn. lights*
P–98–1264	02/28/00	02/03/00	(G) Acrylated polyol
P–98–1265	02/28/00	02/03/00	(G) Acrylated urethane
P–99–0216	03/10/00	02/21/00	(G) Silica supported magnesium-titanium catalyst
P–99–0849	03/06/00	02/19/00	(G) Stryene / acrylate copolymer aqueous dispersion
P–99–0956	02/28/00	02/20/00	(G) Chromophore substituted polyoxyalkylene
P–99–1007	03/14/00	02/21/00	(G) Polyimide precursor solution
P–99–1038	03/06/00	02/09/00	(G) Acrylate ester
P–99–1039	03/06/00	02/09/00	(G) Silicone bifunctional acrylate
P–99–1049	03/13/00	02/24/00	(G) Alkyl amine
P–99–1097	03/13/00	03/06/00	(S) Benzoic acid, 2-amino-, cyclohexyl ester*
P–99–1155	03/07/00	02/10/00	(G) Fatty-sulfosuccinate
P–99–1179	03/17/00	03/15/00	(G) Dialkylphenol
P–99–1195	03/13/00	03/10/00	(G) Acrylic copolymer
P–99–1209	03/15/00	02/03/00	(G) Alkyd resin
P–99–1227	03/14/00	02/23/00	(G) Stabilized hypochlorite
P–99–1228	03/14/00	02/23/00	(G) Stabilized hypochlorite
P–99–1306	03/10/00	02/29/00	(G) Copolymer of methyl methacrylate, styrene and cyclohexyl maleimide
P–99–1341	03/01/00	02/11/00	(G) Metallic salt of 2 naphthalene carboxylic acid 4,4′ methylene bis [3-hydroxy
P–99–1342	03/01/00	02/15/00	(G) Metallic salt of 2 naphthalene carboxylic acid 4,4′ methylene bis [3-hydroxy
P–99–1348	03/01/00	02/14/00	(G) Metallic salt of b-oxynaphthoic acid
P–99–1384	02/28/00	01/31/00	(G) Lithium salt of disubstituted fluorene
P–99–1386	02/28/00	02/15/00	(G) Dimethyl bis(substituted cylopentadienyl) metallocene
P–99–1390	03/14/00	02/21/00	(G) Alanine, *n*–[3-(acetylamino)-4-[(substituted)azo]phenyl]-*n*-ethyl-, ethyl ester
P–99–1393	02/28/00	02/23/00	(G) Blocked aromatic isocyanate
P–99–1407	02/28/00	02/07/00	(G) Dilithium salt of methane bridged substituted bis cyclopentadiene

List of Subjects

Environmental protection, Chemicals, Premanufacturer notices.

Dated: April 14, 2000.

Deborah A. Williams,

Acting Director, Information Management Division, Office of Pollution Prevention and Toxics.

[FR Doc. 00–10040 Filed 4–20–00; 8:45 am]

BILLING CODE 6560–50–F

ENVIRONMENTAL PROTECTION AGENCY

[PF–937; FRL–6555–6]

Notice of Filing a Pesticide Petition to Establish Tolerances for a Certain Pesticide Chemical in or on Food

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: This notice announces the initial filing of a pesticide petition proposing the establishment of regulations for residues of a certain pesticide chemical in or on various food commodities.

DATES: Comments, identified by docket control number PF–937, must be received on or before May 22, 2000.

ADDRESSES: Comments may be submitted by mail, electronically, or in person. Please follow the detailed instructions for each method as provided in Unit I.C. of the ''SUPPLEMENTARY INFORMATION.'' To ensure proper receipt by EPA, it is imperative that you identify docket control number PF–937 in the subject line on the first page of your response.

FOR FURTHER INFORMATION CONTACT: By mail: Mary L. Waller, EPA, Registration Division (7505C), Office of Pesticide Programs, Environmental Protection Agency, Ariel Rios Bldg., 1200 Pennsylvania Ave., NW., Washington, DC 20460; telephone number: (703) 308–9354; e-mail address: waller.mary@epamail.epa.gov.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this Action Apply to Me?

You may be affected by this action if you are an agricultural producer, food manufacturer or pesticide manufacturer. Potentially affected categories and entities may include, but are not limited to:

Categories	NAICS codes	Examples of potentially affected entities
Industry	111 112 311 32532	Crop production Animal production Food manufacturing Pesticide manufacturing

This listing is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. Other types of entities not listed in the table could also be affected. The North American Industrial Classification System (NAICS) codes have been provided to assist you and others in determining whether or not this action might apply to certain entities. If you have questions regarding the applicability of this action to a particular entity, consult the person listed under ''FOR FURTHER INFORMATION CONTACT.''

B. How Can I Get Additional Information, Including Copies of this Document and Other Related Documents?

1. *Electronically.* You may obtain electronic copies of this document, and certain other related documents that might be available electronically, from the EPA Internet Home Page at http://www.epa.gov/. To access this document, on the Home Page select ''Laws and Regulations'' and then look up the entry for this document under the ''**Federal Register**—Environmental Documents.'' You can also go directly to the **Federal Register** listings at http://www.epa.gov/fedrgstr/.

2. *In person.* The Agency has established an official record for this action under docket control number PF–937. The official record consists of the documents specifically referenced in this action, any public comments received during an applicable comment period, and other information related to this action, including any information claimed as confidential business information (CBI). This official record includes the documents that are physically located in the docket, as well as the documents that are referenced in those documents. The public version of the official record does not include any information claimed as CBI. The public version of the official record, which includes printed, paper versions of any electronic comments submitted during an applicable comment period, is available for inspection in the Public Information and Records Integrity Branch (PIRIB), Rm. 119, Crystal Mall #2, 1921 Jefferson Davis Highway, Arlington, VA, from 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The PIRIB telephone number is (703) 305–5805.

C. How and to Whom Do I Submit Comments?

You may submit comments through the mail, in person, or electronically. To ensure proper receipt by EPA, it is imperative that you identify docket control number PF–937 in the subject line on the first page of your response.

1. *By mail.* Submit your comments to: Public Information and Records Integrity Branch (PIRIB), Information Resources and Services Division (7502C), Office of Pesticide Programs (OPP), Environmental Protection Agency, Ariel Rios Bldg., 1200 Pennsylvania Ave., NW., Washington, DC 20460.

2. *In person or by courier.* Deliver your comments to: Public Information and Records Integrity Branch (PIRIB), Information Resources and Services Division (7502C), Office of Pesticide Programs (OPP), Environmental Protection Agency, Rm. 119, Crystal Mall #2, 1921 Jefferson Davis Highway, Arlington, VA. The PIRIB is open from 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The PIRIB telephone number is (703) 305–5805.

3.*Electronically.* You may submit your comments electronically by e-mail to: *''opp-docket@epa.gov*,'' or you can submit a computer disk as described above. Do not submit any information electronically that you consider to be CBI. Avoid the use of special characters and any form of encryption. Electronic submissions will be accepted in Wordperfect 6.1/8.0 or ASCII file format. All comments in electronic form must be identified by docket control number PF–937. Electronic comments may also be filed online at many Federal Depository Libraries.

D. How Should I Handle CBI That I Want to Submit to the Agency?

Do not submit any information electronically that you consider to be CBI. You may claim information that you submit to EPA in response to this document as CBI by marking any part or all of that information as CBI. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. In addition to one complete version of the comment that includes any information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public version of the official record. Information not marked confidential

will be included in the public version of the official record without prior notice. If you have any questions about CBI or the procedures for claiming CBI, please consult the person identified under ''FOR FURTHER INFORMATION CONTACT.''

E. What Should I Consider as I Prepare My Comments for EPA?

You may find the following suggestions helpful for preparing your comments:

1. Explain your views as clearly as possible.

2. Describe any assumptions that you used.

3. Provide copies of any technical information and/or data you used that support your views.

4. If you estimate potential burden or costs, explain how you arrived at the estimate that you provide.

5. Provide specific examples to illustrate your concerns.

6. Make sure to submit your comments by the deadline in this notice.

7. To ensure proper receipt by EPA, be sure to identify the docket control number assigned to this action in the subject line on the first page of your response. You may also provide the name, date, and **Federal Register** citation.

II. What Action is the Agency Taking?

EPA has received a pesticide petition as follows proposing the establishment and/or amendment of regulations for residues of a certain pesticide chemical in or on various food commodities under section 408 of the Federal Food, Drug, and Comestic Act (FFDCA), 21 U.S.C. 346a. EPA has determined that this petition contains data or information regarding the elements set forth in section 408(d)(2); however, EPA has not fully evaluated the sufficiency of the submitted data at this time or whether the data supports granting of the petition. Additional data may be needed before EPA rules on the petition.

List of Subjects

Environmental protection, Agricultural commodities, Feed additives, Food additives, Pesticides and pests, Reporting and recordkeeping requirements.

Dated: April 12, 2000.

James Jones,

Director, Registration Division, Office of Pesticide Programs.

Summary of Petition

The petitioner summary of the pesticide petition is printed below as required by section 408(d)(3) of the FFDCA. The summary of the petition was prepared by the petitioner and represents the view of the petitioner. EPA is publishing the petition summary verbatim without editing it in any way. The petition summary announces the availability of a description of the analytical methods available to EPA for the detection and measurement of the pesticide chemical residues or an explanation of why no such method is needed.

BASF Corporation

0F6079

EPA has received a pesticide petition 0F6079 from BASF Corporation, Agricultural Products, PO Box 13528, Research Triangle Park, NC 27709 proposing, pursuant to section 408(d) of the Federal Food, Drug, and Cosmetic Act (FFDCA), 21 U.S.C. 346a(d), to amend 40 CFR part 180 by establishing a tolerance for residues of vinclozolin [3-(3,5-dichlorophenyl)-5-methyl-5-vinyl-1,3-oxazolidine-2,4-dione] and metabolites containing the 3,5-dichloroanaline moiety in or on the raw agricultural commodities succulent beans and canola at 2.0, and 1.0 parts per million (ppm) respectively. EPA has determined that the petition contains data or information regarding the elements set forth in section 408(d)(2) of the FFDCA; however, EPA has not fully evaluated the sufficiency of the submitted data at this time or whether the data support granting of the petition. Additional data may be needed before EPA rules on the petition.

A. Residue Chemistry

1. *Plant metabolism*. BASF Corporation notes that metabolism in plants is understood, the residues of concern are vinclozolin [3-(3,5-dichlorophenyl)-5-methyl-5-vinyl-1,3-oxazolidine-2,4-dione] and metabolites containing the 3,5-dichloroanaline moiety.

2. *Analytical method*. The proposed analytical method involves extraction, hydrolysis, distillation, partition, and deriviatization followed by detection of residues by gas chromatography/electron capture detector (gc/ecd). An enforcement method has been published in FDA's Pesticide Analytical Methods, Volume II pg. 876–887.

3. *Magnitude of residues*. Sixteen residue trials were carried out in several major succulent bean producing states; CA, FL, MI, NY, NC, OR, and WI. Residue in the succulent beans ranged from 0.38 ppm to 2.40 ppm and averaged 0.83 ppm.

Four residues trials were carried out in three canola producing provinces of Canada (Alberta, Manitoba, and Saskatchewan) which accounts for 98% of the canola production in Canada. Residues in the canola seeds ranged from 0.044 ppm to 0.360 ppm and averaged 0.17 ppm.

B. Toxicological Profile

1. *Acute toxicity*. The acute toxicity studies place technical vinclozolin in acute toxicity category IV for acute oral (LD_{50} of greater 15,000 milligrams kilograms (mg/kg), acute inhalation LD_{50} of greater than 29.1 mg/L and dermal irritation (slight), and in category III for acute dermal LD_{50} of greater than 2,500 mg/kg and eye irritation (slight). The technical material is a positive skin sensitizer.

2. *Genotoxicty*. A modified Ames test (three studies; point mutation): Negative; Host-Mediated Assay (point mutation): Negative; Mouse Lymphoma Test (point mutation): Negative; *In Vitro* CHO cells (point mutation): Negative; *In Vitro* Cytogenetics-CHO cells (Chromosome Aberrations): Negative; *In Vivo* Dominant Lethal Test-Male NMRI Mouse (Chromosome Aberrations): Negative; Rec Assay (two test; DNA damage and repair): Negative; *In Vitro* unscheduled DNA synthesis (UDS) test using Hepatocyte (DNA damage and repair): Negative; *In Vivo* SCE using Chinese Hamster (DNA damage and repair): Negative. Based on the data present and weight of evidence, BASF concludes that vinclozolin does not pose a mutagenic hazard to humans.

3. *Developmental toxicity*—i. A combination of four developmental studies in rats via oral gavage resulted in dosages of 0, 15, 50, 100, 150, 200, 400, 600, and 1,000 highest dose tested (HDT) mg/kg/day with a developmental toxicity no observed adverse effect level (NOAEL) of 15 mg/kg/day and a maternal toxicity NOAEL equal to or greater than 400 mg/kg/day based on the following:

a. No obvious signs of maternal toxicity were observed at dose levels less than or equal to 400 mg/kg/day.

b. An increased number of fetuses with retarded ossification of thoracic vertebral bodies at dose levels greater than or equal to 200 mg/kg/day and increased number of fetuses with soft tissue variations at dose levels greater than or equal to 400 mg/kg/day, both findings are regarded as unspecific embryo/fetotoxic effects indicating transient delays in development but not indicative of a teratogenic effect.

c. A statistically significant decrease or reduction of the anogenital index (AGI) in males was observed at levels greater than or equal to 50 mg/kg/day.

In a developmental study in rats via dermal exposure for 6 hours/day on intact skin with dosages of 0, 60, 180, and 360 mg/kg/day HDT with a developmental toxicity NOAEL of 60 mg/kg/day and a maternal toxicity NOAEL of 60 mg/kg/day based on the following: Increased absolute liver weights at dose levels greater than 180 mg/kg/day, and decreased anogenital distance and index at dose levels greater than 180 mg/kg/day.

ii. A developmental study in rabbits via oral gavage was conducted with dosages of 0, 20, 80, and 300 mg/kg/day HDT with a developmental toxicity NOAEL of 300 mg/kg/day and a maternal toxicity NOAEL of 300 mg/kg/day based on no signs of maternal or meaningful fetal toxicity at any of the dose levels mentioned.

A second developmental study in rabbits via oral gavage resulted in dosages of 0, 50, 200, and 800 mg/kg/day highest dose tested (HDT) with a developmental toxicity NOAEL of 200 mg/kg/day and a maternal toxicity NOAEL of 50 mg/kg/day based on the following: Severe maternal toxicity with simultaneous change in hematological values changes and high number of abortions at the HDT, and increased absolute and/or relative weights for adrenals in the mid and high dose groups.

4. *Reproductive toxicity*. Two 2–generation reproduction studies in rats were conducted: Study A-dose levels of 0, 2.0, and 4.1 mg/kg/day: Study B-dose levels of 0, 4.9, 30, 96, and 290 mg/kg/day (males) and 0, 5.3, 31, 101, and 290 mg/kg/day (females). The results demonstrated a reproductive NOAEL of 4.9 mg/kg/day based on feminization of males and the ability not to mate at dose levels greater than 100 mg/kg/day and pup effects at 29 mg/kg/day; and with a parental NOAEL of 4.9 mg/kg/day based on general toxicity consistent with previous rat studies at levels greater than 29 mg/kg/day. Study A was performed to clarify an equivocal finding of decreased absolute and relative weight of the epididymides without any morphological correlation in the male FY and FZ generations in Study B. However, EPA stated ''the effects at the 4.9 mg/kg/day dose level was minimal and considered sufficiently close to a NOAEL. The study is acceptable and 4.9 mg/kg/day dose level was considered to be the NOAEL.

5. *Chronic toxicity*—i. A 1–year feeding study in dogs fed dosages of 0, 1.1 , 2.4, 4.9, and 48.7 mg/kg/day with a NOAEL of 2.4 mg/kg/day based on the following effects:

a. Slight anemia and increased serum bilirubin in the 48.7 mg/kg/day dose group HDT.

b. Increased absolute and/or relative weights for the testes, adrenals, liver, spleen, and thyroids in either the 4.9 or 48.7 mg/kg/day dose groups.

c. A dose-related atrophy of the prostate in the 4.9 and 48.7 mg/kg/day dose groups.

d. Microscopic findings in the adrenal and testes in the 48.7 mg/kg/day dose group and liver findings for both male and female dogs in the 48.7 mg/kg/day dose groups and in the females in the 4.9 mg/kg/day dose group, only.

ii. A combination of two chronic feeding and one carcinogenicity study that were performed separately, resulted in rats being fed combined dosages of 0, 1.2, 2.4, 7.0, 23, 71, 143, and 221 mg/kg/day (males) and 0, 1.6, 3.1, 9.0, 29, 88, 180, and 257 mg/kg/day (females) with a NOAEL of 1.2 mg/kg/day (males) and 1.6 mg/kg/day (females) based on the following effects:

a. Decreased body weights in both males and females at dose levels greater than or equal to 23 mg/kg/day with a progression of severity to the upper dose levels.

b. Cataracts with associative histopathology at dose levels greater than or equal 23 mg/kg/day and lenticular changes at dose levels greater than or equal 7.0 mg/kg/day for male and female rats.

c. Hematological and clinical chemistry value changes at dose levels greater than or equal to 71 mg/kg/day with an increase of severity at the higher doses tested.

d. Increased absolute and/or relative weights for adrenals at dose levels greater than or equal 143 mg/kg/day, for the liver at dose levels greater than or equal 71 mg/kg/day, for the testes at dose levels greater than or equal 23 mg/kg/day, and for the ovaries at dose levels greater than or equal 143 mg/kg/day.

e. Microscopic findings were observed in the liver, adrenal, pancreas, testes, ovaries and uterus at dose levels of greater than or equal to 7.0 mg/kg/day with a progression of severity of histological effects in the upper dose levels.

f. An increased incidence of neoplasms occurred at dose levels greater than or equal to the maximum tolerated dose (MTD) of 23 mg/kg/day in the liver, adrenals, pituitary, prostate, uterus, and ovaries. In the testes (males), neoplasms were seen slightly below the MTD at dose levels greater than or equal 23.0 mg/kg/day due the antiandrogenic nature of vinclozolin.

6. *Oncogenicity*. An oncogenicity study in mice fed dosages of 0, 2.1, 20.6, 432, and 1,225 (HDT) mg/kg/day (males) and 0, 2.8, 28.5, 557, and 1,411 (HDT) mg/kg/day (females) with a NOAEL of 2.1 mg/kg/day (males) and 2.8 mg/kg/day (females) based on the following effects:

i. Increased mortality in the highest dose tested (HTD) as compared to controls.

ii. Decreased body weights and significant signs of clinical toxicity were observed in both males and female mice at the upper two dose levels with a progression of severity, and an equivocal body weight gain decrease at the next lower dose.

iii. Hematological and clinical chemistry value changes were observed at the highest dose tested.

iv. Increased absolute and/or relative weights for adrenals and liver were observed at the upper two dose levels, atrophic seminal vesicles and coagulation glands with reduced size of the prostate and atrophic uteri were observed at the upper two dose levels.

v. Microscopic findings were observed in the liver, adrenal, testes, ovaries and uterus, and related sexual organs were seen in the upper two dose levels.

vi. An increased incidence of neoplasms occurred at dose levels greater than the maximum tolerated dose (28.5 mg/kg/day) in the liver of female mice.

7. *Animal metabolism*—i. *Oral studies*. BASF has submitted results from a number of metabolism studies using Wistar rats. The results of these studies can be summarized as follows: vinclozolin is well absorbed (ca. 85%) and intensively metabolized, the liver playing an important role (ca. 65%) of the radioactivity administered was found in the bile and no unchanged active ingredient was excreted in the urine). Excretion is rapid by both urinary and biliary routes.

ii. *Dermal study*. In an *in vivo* dermal absorption study, male Wistar rats were dosed with ^{14}C vinclozolin. Dose levels of 0.002, 0.02, 0.2, and 2.0 mg/cm were administered to 24 rats per dose level, applied to a shaved area of approximately 13 cm_2 on the back of the rat. Groups of 4 rats were sacrificed at 0.5, 1, 2, 4, 10, or 72 hours following application of the dose. Urine and feces were collected during this period. At the end of the exposure period (10 hours in the case of the 72 hour treatment group), the skin site was washed with cotton swabs moistened with water. A blood sample was taken prior to sacrifice. The treated skin along with the gastrointestinal tract, liver, kidneys, adrenals, testes, eyes, brain and carcass were subjected to radioactive mass

balance analysis. Urine from the bladder was added to the voided samples. Results of this analysis showed recoveries of between 81.6% to 104%. The lowest dose of 0.002 mg/cm_2 from the 10–hour exposure period is considered to be the most appropriate dose for use in the occupational risk assessment, as this dose most closely approximates the dermal deposition results obtained in the worker exposure studies. After the 10–hour exposure, the total percent absorbed at this dose level was 29.1%.

Percutaneous absorption of ^{14}C–vinclozolin was also assessed *in vitro* using rat and human epidermis in flow-through diffusion cells. The test substance was applied at two dose levels, 200 µg/cm_{22} (high) and 2 µg/cm_2 (low), and assessed over 24 hours. A total of 32 samples (16 rat and 16 human) were used at the high dose level, and 34 (17 rat and 17 human) at the low dose level. Samples of human skin were obtained at postmortem. Human epidermis was prepared from full thickness skin by immersion in water at 60 °C for 1 minute. Rat epidermis was prepared by soaking the skin in 2M sodium bromide for approximately 24 hours. With respect to the worker exposure relevant time of 8 hours, penetration through human skin was 16.7 times less at the high dose tested and 4.2 times less at the low dose tested than through rat skin.

8. *Endocrine disruption.* A series of mechanistic studies were performed to elucidate and define the anti-androgenic properties of vinclozolin. The following conclusions can be drawn from the *in vivo* data: The anti-androgenic effects observed are not related to an inhibition of androgen-steroid hormone synthesis. The anti-androgenic effects are not related to an inhibition of 5 alpha-reductase activity. The anti-androgenic effects are a result of a competitive binding to the androgen receptor resulting in an inactivation of this receptor. The anti-androgenic effects are mediated by the hydrolysis metabolites M1 and/or M2 and probably not by vinclozolin or the main metabolite, R8. M2 is a slightly more potent anti-androgen than M1; however, M2 concentrations are very low and the compound may not contribute much to the *in vivo* effects.

Vinclozolin is known to be an anti-androgenic agent; thus, the consequence of hormonal imbalance are two-fold; the primary anti-androgenic effect is a suppression in androgen target organs such as epidymides, prostate or seminal vesicle, whereas stimulation is seen in organs involved in steroid hormone synthesis (testes, adrenals, ovaries). Target organs for hormones must be able to respond to changes in physiological levels of hormones, which can fluctuate significantly as evidenced by the hormone changes during the female estrus cycle. It was indeed demonstrated that changes induced in these organs were reversible when hormone levels return to normal concentrations. It is only when hormone imbalance continues over a long time that irreversible changes occur.

In the case of suppression the affected organ is forced into a hypofunctional state. Progressively, the organ becomes hypotrophic and hypoplastic. With stimulation on the other hand the initial changes can be described as hyperfunction, hypertrophy and hyperplasia. As mentioned before, it is only when the hormonal imbalance continues over a long time that the ultimate reversible adaptation of the affected organ (hypoplasia or hyperplasia) is still not sufficient to handle the situation and only then an irreversible transition takes place. In the case of hormonal suppression, atrophy is the ultimate consequence, in the case of stimulation, the ultimate consequence are tumors in the affected organs. It is thus plausible that at dose levels which do not result in hypertrophy/hyperplasia or hypotrophy/hypoplasia, the ultimate consequence of these adaptive changes, i.e. tumors or-atrophy, respectively, cannot occur. For risk assessment purposes this mode of action offers the possibility to determine a threshold for both tumor formation and atrophy by histopathological examination of the hyper-or hypo-functional organ. Thus, at dose levels which do not affect these organs, a mechanistic NOAEL can be defined and risk assessment can be carried out using assessment or safety factors.

The increase in neoplasia observed in the adrenals, ovaries and uterus were only seen in female rats at the highest dose levels. As determined by BASF and EPA, the 71 mg/kg/day dose level of the rat chronic/oncogenicity toxicity study exceeded the criteria for a MTD. Therefore, the physiological status of the animals may be deteriorated in such a way that low dose extrapolation of results obtained at this dose level is not possible. Similarly, the liver tumors arising in the mouse oncogenicity study were observed only at the 1,411 mg/kg/day dose level (in which severe body weight losses and significant mortality were observed) which clearly exceeded the MTD (as determined by BASF and EPA - Cancer Peer Review Document, September 1996) and therefore are not relevant for risk assessment purposes.

Additionally, vinclozolin is not a genotoxic agent and mechanistic studies have shown the increased incidence of liver tumors in male rat and female mice is a result of liver tumor promoting properties of the test substance. Vinclozolin is not an initiator of the carcinogenic event. Based on the available data, the mechanism of promotion is the induction of liver cell proliferation of the test substance. The data available also indicate that dose levels which do not induce liver toxicity also do not induce cell proliferation nor enhance the carcinogenic process. Therefore, BASF concludes that a threshold for liver carcinogenicity can be defined to be at least 143 mg/kg/day in the rat and at least 557 mg/kg/day in the mouse.

Concerning the testicular tumors (Leydig cell tumors), results of the long-term studies with vinclozolin demonstrate that hormone-related carcinogenesis was only observed in rats, and with the exception of Leydig cell tumors only at dose levels which exceeded the MTD criteria. The relevance of Leydig cell tumors to men should be seen in the light that this is a very rare human tumor and that the precursor change (i.e. Leydig cell hyperplasia) has not been observed in patients treated with flutamide. In addition, the toxicology of cimitidine, an H2–receptor antagonist with anti-androgenic properties results in a size reduction and atrophy of the prostate and seminal vesicles in chronic rat studies. Moreover, an increase in benign Leydig cell tumors, and a decrease in pituitary and mammary tumor incidence were noted; hence a toxicity potential not unlike that of vinclozolin is evident. Despite the fact that over 30 million patients have been treated with cimitidine, this therapeutic agent has been demonstrated to be extremely safe, clearly indicating that the rat Leydig cell tumors have very little relevance for humans. A similar conclusion is drawn by other investigators ''Leydig cell tumors of the rat have limited significance because of the fundamental differences in testicular control mechanisms.'' It is therefore concluded that the observed neoplastic changes do not pose a relevant hazard to humans. EPA in the September 1996, Cancer Peer Review Document, came to the same basic conclusion that the Leydig cell tumors are a very uncommon tumor type in humans which implies the threshold dose for humans would be greater than for rats. EPA based this conclusion on the work performed by Dr. Charles C. Capen (Professor Charles C. Capen, Leydig Cell Tumors:

Pathology, Physiology, and Mechanistic Considerations in Rats, The Toxicology Forum, 1994 Annual Summer Meeting, p. 110).

Consistent with the data and the advice of the OPP Scientific Advisory Panel and using its Guidelines for Carcinogen Risk Assessment published September 24, 1986 (51 FR 33992), EPA has classified vinclozolin as a Group C chemical-possible human carcinogen. The Agency Cancer Peer Review Committee (CPRC) chose a non-linear approach margin (MOE) based on a NOAEL of 4.9 mg/kg/day for hormone-related effects decreased epididymal weight at 30 mg/kg/day in the 2–generation oral rat reproductive toxicity study to quantify human risk. The MOE approach was chosen because the remaining tumors (Leydig cell) were benign at dose levels which were not considered to be excessive.

C. Aggregate Exposure

1. *Dietary exposure*. The established reference dose (RfD) for vinclozolin is based on a 2–year feeding study in rats with a threshold NOAEL of 1.2 mg/kg/day. Using an uncertainty factor of 100, the RfD is calculated to be 0.012 mg/kg/day.

i. *Food*—a. *Acute risk*. EPA has expressed concern for acute dietary risk in the draft RED for the subgroup population-women of childbearing age (13 years and older) due to the hormonal effects of vinclozolin. In response to this concern, BASF requested that ENVIRON, conduct an acute dietary analysis for vinclozolin that used the current consumption data and exposure models capable of calculating a real world estimates of potential exposure to residues in food.

The acute exposure analysis, utilized the principles of Tier 1 and Tier 3 analyzes presented to the FIFRA Science Advisory Panel in September 1995, and subsequently implemented by OPP/EPA. Using appropriate methodology, available residue distribution data, and percent crop treated information it was determined the margin of exposure to the most sensitive sub-population exceeded 1,000 (the value currently being used by the Agency for this compound) at the very conservative 99.9th percentile of the population; when all crops having tolerances; plus succulent beans, and canola, and cranberries were included in the analysis. The margin of exposure at the 99.9th percentile was determined to be approximately 1,100 for women of childbearing age.

b. *Chronic*. In its review granting a temporary tolerance for vinclozolin in succulent beans in October 1997, for purposes of assessing the potential chronic dietary exposure (food only) from the use of vinclozolin, EPA used the percent of crop treated/percent imported data to refine the risk estimates for selected commodities (apricots, beans, raspberries, cherries, cucumbers, lettuce, nectarines, onions, peaches, peppers, and strawberries), while other commodities were assumed to be 100% treated/imported (caneberries (other than raspberries), cranberries, endive, garlic, wine/sherry, kiwifruit, and shallots). No chronic anticipated residue refinement has been performed. Therefore, the resulting exposure (food only) estimates should be viewed as partially refined; further refinement using anticipated residues and additional percent of crop treated/percent imported data would result in lower chronic dietary exposure estimates. The Anticipated Residue Contribution (ARC) for chronic dietary exposure estimates is equivalent to 12% of the RfD for the U.S. population (48 states). The ARC for infants and children and other subgroups ranged from 7 to 15% of the RfD. The incremental risk associated with canola will not significantly change this assessment.

In addition, BASF has performed a more refined analysis of chronic dietary risk and finds that when market share and average residues are considered, no sub-population in the United States is exposed to over 1% of the RfD.

BASF concurs with the SAP and believes vinclozolin should be regulated under the margin of safety (MOS) approach for non-threshold effects. BASF has calculated the MOS for food and water using the Agency's conservative assessments discussed above. The MOS was calculated against a NOAEL of 4.9 mg/kg/day for hormone-related effects (decreased epididymal weight at 30 mg/kg/day) in the 2–generation oral rat reproductive toxicity study to quantify human risk. The resulting MOS for food is over 900,000.

ii. *Drinking water*. Exposure to vinclozolin for the general population to residues of vinclozolin are residues in drinking water and exposure from non-occupational sources. For drinking water, based on the available environmental fate data, BASF does not anticipate routine exposure to residues of vinclozolin in drinking water. There is no established maximum concentration level (MCL) or health advisory level (HAL) for vinclozolin under the Safe Drinking Water Act (SDWA).

In its 1997 assessment, EPA calculated drinking water exposure from extremely conservative models. For chronic exposure, EPA calculated a level of 1 parts per billion (ppb). Using standard EPA assumptions consumption of water containing 1 ppb would consume less than 2% of the RfD in the most exposed subgroup (children 1 to 6). BASF believes this estimate to be very conservative and is currently analyzing the available data to determine a more realistic value for drinking water exposure.

2. *Non-dietary exposure*. Vinclozolin is included in a number of formulations used for professional treatment of golf-courses (tees, greens and collars only) and turf. The turf use is limited to non-residential uses. BASF believes that these uses do not contribute significantly to the aggregates risk.

D. Cumulative Effects

BASF has considered the potential for cumulative effects of vinclozolin and other substances that have a common mechanism of toxicity. BASF is aware of two other substance active ingredients which are structurally similar, iprodione and procymidone. However, BASF believes that consideration of a common mechanism of toxicity is not appropriate at this time. This conclusion was similarly drawn by Rhone-Poulenc the manufacturer of iprodione in a recent Notice of Filing for that compound.

The Agency has previously noted both structural and toxicological similarities between iprodione, procymidone, and vinclozolin. BASF believes that there are clear differences in both the type and magnitude of effects observed after exposure to vinclozolin when contrasted with iprodione. BASF believes that there is no reliable data to indicate cumulative effects should be considered in reference to iprodione. As to procymidone, BASF is unaware of any conclusive data that would indicate a common mode of action with procymidone. It should also be noted that procymidone's tolerances are limited to grapes grown for wine production outside the United States.

EPA has expressed concern regarding a common metabolite of these three compounds, 3,5–dichloroaniline (3,5–DCA). Under FQPA, EPA is also required to estimate the risk for consumption of food and water containing 3,5–DCA across vinclozolin, iprodione, and procymidone. There is no toxicological data base; thus no RfD or Q1* for 3,5–DCA. However, EPA has used the Q1* for p-chloroaniline (PCA) to assess the carcinogenic risk for other structurally-related chloroanilines because EPA does not have any evidence that 3,5–DCA is not

carcinogenic. In 1988, the Q1* for PCA was estimated to be 0.039 $(mg/kg/day)^{-1}$. However, a revised Q1* of 0.059 $(mg/kg/day)^{-1}$ for PCA has been used for this assessment based on more recent data on male and female tumors.

At the time of the risk assessment done for vinclozolin time-limited tolerances, EPA concluded that the risk associated with 3,5–DCA was negligible. Since that time, BASF has cancelled uses in strawberries and stone fruit which will further reduce the theoretical risk. BASF does not believe it is appropriate to assume that 3,5–DCA should be regulated as an oncogen. The Agency has relied on the simple fact that PCA and DCA are structurally similar and are likely to behave similarly in animal systems for that reason alone. While both compounds are anilines and both have chlorine moieties they differ significantly in terms of electron density distribution, which is the single most important factor in the determination of how a molecule behaves in chemical and biochemical systems. BASF has presented this and other information to the Agency and awaits their response.

E. Safety Determination

1. *U.S. population*. Using the exposure assumptions described above and the completeness and the reliability of the toxicity data, BASF has estimated that aggregate exposure to vinclozolin will utilize less than 1% of the RfD for the US population. EPA generally has no concern for exposure below 100% of the RfD. Therefore, based on the completeness and reliability of the toxicity data, and the exposure assessment discussed above, BASF concludes that there is a reasonable certainty that no harm will result from aggregate exposure to residues of vinclozolin.

2. *Infants and children*. Based on the completeness of vinclozolin's toxicological data base and the risk assessment information cited above BASF believes the RfD used to assess safety to children should be the same as that for the general population, 0.012 mg/kg/day. BASF concluded that the most sensitive child population group is that of children ages 1 to 6. BASF has calculated that the exposure (food and water) to this group to be less than 1% of the RfD for all uses including those proposed in this document. Therefore, based on the completeness and reliability of the toxicity data, and the exposure assessment discussed above, BASF concludes that there is a reasonable certainty that no harm will result to infants and children from aggregate exposure to residues of vinclozolin.

F. International Tolerances

A maximum residue level for succulent beans has not been established for vinclozolin by the Codex Alimentarius Commission.

[FR Doc. 00–9928 Filed 4–20–00; 8:45 am]
BILLING CODE 6560–50–F

ENVIRONMENTAL PROTECTION AGENCY

[FRL–6483–5]

Draft General NPDES Permit for Seafood Processors in Alaska in Waters of the United States; General NPDES Permit No. AK–G52–0000

AGENCY: Environmental Protection Agency, Region 10.

ACTION: Notice of Draft General NPDES Permit.

SUMMARY: The Director, Office of Water, EPA Region 10, is proposing to reissue general National Pollutant Discharge Elimination System (NPDES) permit no. AK–G52–0000 for seafood processors in Alaska pursuant to the provisions of the Clean Water Act (CWA) 33 U.S.C. 1251 *et seq*. The proposed general NPDES permit will authorize discharges from off-shore and near-shore vessels and shore-based facilities engaged in the processing of fresh, frozen, canned, smoked, salted and pickled seafoods. The proposed permit will also authorize discharges from off-shore vessels (operating more than one nautical mile from shore at MLLW) that are engaged in the processing of seafood paste, mince or meal, as well as fresh, frozen, canned, smoked, salted and pickled seafoods. The proposed permit will authorize discharges of processing wastes, process disinfectants, sanitary wastewater and other wastewaters, including domestic wastewater, gray water, cooling water, boiler water, fresh water pressure relief water, refrigeration condensate, water used to transfer seafood to a facility, and live tank water. The proposed permit will authorize discharges to waters of the United States in and contiguous to the State of Alaska, except for receiving waters excluded from coverage as protected, special, at-risk, degraded waters, or as waters adjacent to the City of Kodiak or the Pribilof Islands (and covered by general permits specific to each of these areas).

The proposed general NPDES permit for seafood processors in Alaska will not authorize discharges from near-shore or shore-based seafood processors of mince, paste or meal (operating one nautical mile or less from shore at MLLW). The proposed permit will not authorize discharges of petroleum hydrocarbons, toxic pollutants, or other pollutants not specified in the permit.

This is the fourth reissuance of a general permit for seafood processors in Alaska. While the general permit for seafood processors issued in 1995 contained numerous substantial changes, the proposed 2000 permit contains one major change. The major new provision in the proposed general permit is a limit on the total annual load of settleable solid seafood processing waste. The total allowable residues of offal for permittees covered under the proposed permit must not exceed eight million pounds per year (based on deposition modeling using EPA's Water Quality Analysis Simulation Program).

Other minor changes in the proposed permit clarify requirements of the Notice of Intent to be covered and give specific schedules for submitting seafloor monitoring surveys. EPA anticipates that the State of Alaska Department of Environmental Conservation will certify a 100 foot mixing zone for all discharges and zone of deposit of one acre for near-shore and shore-based dischargers.

A draft NPDES permit, fact sheet and other documents of the administrative records are available upon request.

Public Notice Issuance Date: April 28, 2000

Public Notice Expiration Date: June 12, 2000

Public Comments

Persons wishing to comment on the tentative requirements and conditions contained in the proposed general permit may do so before the expiration date of the public notice. EPA appreciates both supportive and critical comments in this public review and comment period. All persons, including applicants, who believe any condition of a draft permit is inappropriate or that the Director's tentative decision to prepare this draft permit is inappropriate, must raise all reasonably ascertainable issues and submit all reasonably available arguments supporting their position by the close of the public comment period. Any supporting materials which are submitted shall be included in full and may not be incorporated by reference, unless they are already part of the administrative record or are a generally available document or reference. All written comments must include the name, address, and telephone number of the commenter and must be submitted to EPA to the attention of Burney Hill

at the address below on or before the expiration date of the public notice.

After the expiration date of the public notice, the Director, Office of Water, EPA Region 10, will make a final determination with respect to reissuance of the general permit. The tentative requirements contained in the draft general permit will become final conditions if no substantive comments are received during the public comment period. The permit will become effective on August 5, 2000.

Within 120 days following the service of notice of EPA's final permit decision under 40 CFR 124.15, any person who filed comments on the draft permit or participated in the public hearing may appeal the permit in the Federal Court of Appeals in accordance with section 509(b)(1) of the CWA. Persons affected by a general permit may not challenge the conditions of the Permit as a right of further EPA proceedings.

In addition to the tentative requirements of the draft general permit, the State of Alaska will issue a Determination of Consistency with the Alaska Coastal Management Program and State Certification which may contain specific requirements which will be incorporated into the final permit. Persons wishing to comment on the State Certification should contact Judy Kitagawa of the Alaska Department of Conservation, Valdez, at (907) 835–4698.

The following project is proposed in coastal zone areas throughout Alaska and also is being reviewed for consistency with the Alaska Coastal Management Program. Comments, particularly on the proposed project's consistency with the affected local coastal district management programs, are requested. Persons wishing to comment on the State Determination of Consistency with the Alaska Coastal Zone Management Plans should contact Maureen McCrea at (907) 269–7473. To be considered, written comments must be submitted to the Office of Management and Budget, Division of Governmental Coordination, 550 West Seventh, Anchorage, Alaska 99501, Fax: 907–269–3981, and must be received by 5:00 p.m. on May 31, 2000. Comments regarding inconsistency with an affected coastal district's enforceable policy or a state standard set out in 6 AAC 80.040–6 AAC 80.150 must identify the enforceable policy or standard and explain how the project is inconsistent.

Public Hearing

A public hearing has tentatively been scheduled for June 1, 2000, from 3 p.m. to 5 p.m. to be held in Anchorage, Alaska, room 135, Federal Building. However, this public hearing will be canceled if there is no written request for a public hearing. A public workshop is planned for June 1, 2000, for all interested parties. Details of this public workshop will be sent to all interested parties.

Administrative Record

The complete administrative record for the draft permit is available for public review. Contact Florence Carroll at the address below to view the administrative record. Copies of the draft general NPDES permit and fact sheet are available upon request; call Florence Carroll at 1–800–424–4EPA (4372) (within Region 10 only) or (206) 553–1760 or email your request to ''epa-seattle@epa.gov''. The draft permit, the fact sheet, and the public notice will be available April 28, 2000, on Region 10's website: ''www.epa.gov/r10earth/water.htm''.

ADDRESSES: Public comments should be sent to: Environmental Protection Agency Region 10, NPDES Permit Unit (OW–130), Attn: Burney Hill, 1200 Sixth Avenue, Seattle, Washington, 98101.

FOR FURTHER INFORMATION CONTACT: Florence Carroll, of EPA Region 10, at the address listed above or telephone (206) 553–1760 or e-mail ''carroll.florence@epa.gov'' or Burney Hill, of EPA Region 10, at the address listed above or telephone (206) 553–1761 or e-mail ''hill.burney@epa.gov''.

Regulatory Flexibility Act

Under the Regulatory Flexibility Act (RFA), 5 U.S.C. 601 *et seq.*, a federal agency must prepare an initial regulatory flexibility analysis ''for any proposed rule'' for which the agency ''is required by section 553 of [the Administrative Procedure Act (APA)], or any other law, to publish general notice of proposed rulemaking.'' The RFA exempts from this requirement any rule that the issuing agency certifies ''will not, if promulgated, have a significant economic impact on a substantial number of small entities.'' EPA has concluded that NPDES general permits are permits under the APA and thus not subject to APA rulemaking requirements or the RFA. Notwithstanding that general permits are not subject to the RFA, EPA has determined that this general permit, if issued, will not have a significant economic impact on a substantial number of small entities.

Authority: Clean Water Act, 33 U.S.C. 1251 *et seq.*

Dated: April 13, 2000.

Christine Psyk,

Acting Director, Office of Water.

[FR Doc. 00–10037 Filed 4–19–00; 8:45 am]

BILLING CODE 6213–01–P

FEDERAL DEPOSIT INSURANCE CORPORATION

Sunshine Act Meeting

Pursuant to the provisions of the Government in the Sunshine Act (5 U.S.C. 552b), notice is hereby given that at 10:02 a.m. on Tuesday, April 18, 2000, the Board of Directors of the Federal Deposit Insurance Corporation met in closed session to consider matters relating to the Corporation's corporate, supervisory, and personnel activities.

In calling the meeting, the Board determined, on motion of Director Ellen S. Seidman (Director, Office of Thrift Supervision), seconded by Vice Chairman Andrew C. Hove, Jr., concurred in by Director John D. Hawke, Jr. (Comptroller of the Currency), and Chairman Donna Tanoue, that Corporation business required its consideration of the matters on less than seven days' notice to the public; that no notice earlier than April 14, 2000, of the meeting was practicable; that the public interest did not require consideration of the matters in a meeting open to public observation; and that the matters could be considered in a closed meeting by authority of subsections (c)(2), (c)(6), (c)(8), (c)(9)(A)(ii), (c)(9)(B), and (c)(10), of the Government in the Sunshine Act (5 U.S.C. 552b(c)(2), (c)(6), (c)(8), (c)(9)(A)(ii), (c)(9)(B), and (c)(10)).

The meeting was held in the Board Room of the FDIC Building located at 550 17th Street, NW., Washington, DC.

Dated: April 18, 2000.

Federal Deposit Insurance Corporation.

Valerie J. Best,

Assistant Executive Secretary.

[FR Doc. 00–10077 Filed 4–19–00; 10:20 am]

BILLING CODE 6714–01–M

FEDERAL RESERVE SYSTEM

Sunshine Act Meeting

AGENCY HOLDING THE MEETING: Board of Governors of the Federal Reserve System

TIME AND DATE: 10:00 a.m., Wednesday, April 26, 2000.

PLACE: Marriner S. Eccles Federal Reserve Board Building, 20th and C Streets, N.W., Washington, D.C. 20551.

STATUS: Closed.

MATTERS TO BE CONSIDERED:

1. Personnel actions (appointments, promotions, assignments, reassignments, and salary actions) involving individual Federal Reserve System employees.

2. Any matters carried forward from a previously announced meeting.

CONTACT PERSON FOR MORE INFORMATION: Lynn S. Fox, Assistant to the Board; 202–452–3204.

SUPPLEMENTARY INFORMATION: You may call 202–452–3206 beginning at approximately 5 p.m. two business days before the meeting for a recorded announcement of bank and bank holding company applications scheduled for the meeting; or you may contact the Board's Web site at http://www.federalreserve.gov for an electronic announcement that not only lists applications, but also indicates procedural and other information about the meeting.

Dated: April 19, 2000.

Robert deV. Frierson,

Associate Secretary of the Board.

[FR Doc. 00–10078 Filed 4–19–00; 10:32 am]

BILLING CODE 6210–01–P

FEDERAL TRADE COMMISSION

[File No. 991 0192]

BP Amoco p.l.c., et al.; Analysis to Aid Public Comment

AGENCY: Federal Trade Commission.

ACTION: Proposed Consent Agreement.

SUMMARY: The consent agreement in this matter settles alleged violations of federal law prohibiting unfair or deceptive acts or practices or unfair methods of competition. The attached Analysis to Aid Public Comment describes both the allegations in the draft complaint that accompanies the consent agreement and the terms of the consent order—embodied in the consent agreement—that would settle these allegations.

DATES: Comments must be received on or before May 15, 2000.

ADDRESSES: Comments should be directed to: FTC/Office of the Secretary, Room 159, 600 Pennsylvania Ave., NW, Washington, DC 20580.

FOR FURTHER INFORMATION CONTACT: Richard Parker or Phillip Broyles, FTC/H–374, 600 Pennsylvania Ave., NW, Washington, DC 20580. (202) 326–2574 or 326–2805.

SUPPLEMENTARY INFORMATION: Pursuant to Section 6(f) of the Federal Trade Commission Act, 38 Stat. 721, 15 U.S.C. 46 and Section 2.34 of the Commission's Rules of Practice (16 CFR 2.34), notice is hereby given that the above-captioned consent agreement containing a consent order to cease and desist, having been filed with and accepted, subject to final approval, by the Commission, has been placed on the public record for a period of thirty (30) days. The following Analysis to Aid Public Comment describes the terms of the consent agreement, and the allegations in the complaint. An electronic copy of the full text of the consent agreement package can be obtained from the FTC Home Page (for April 13, 2000), on the World Wide Web, at ''http://www.ftc.gov.ftc.formal.htm.'' A paper copy can be obtained from the FTC Public Reference Room, Room H–130, 600 Pennsylvania Avenue, NW, Washington, DC 20580, either in person or by calling (202) 326–3627.

Public comment is invited. Comments should be directed to: FTC/Office of the Secretary, Room 159, 600 Pennsylvania Ave., NW, Washington, DC 20580. Two paper copies of each comment should be filed, and should be accompanied, if possible, by a 3½ inch diskette containing an electronic copy of the comment. Such comments or views will be considered by the Commission and will be available for inspection and copying at its principal office in accordance with Section 4.9(b)(6)(ii) of the Commission's Rules of Practice (16 CFR 4.9(b)(6)(ii)).

Analysis of the Proposed Consent Order and Draft Complaint to Aid Public Comment

I. Introduction

The Federal Trade Commission (''Commission'') has accepted for public comment from BP Amoco p.l.c. (''BP Amoco'') and Atlantic Richfield Company (''ARCO'') (collectively, ''Proposed Respondents'') an *Agreement Containing Consent Orders* (''Proposed Consent Order''). The Proposed Respondents have also reviewed a draft complaint that the Commission contemplates issuing. The Commission and BP Amoco and ARCO have also agreed to an Order to Hold Separate and Maintain Assets (''Hold Separate Order'') that requires the Proposed Respondents to hold separate and maintain certain divested assets. The Proposed Consent Order is designed to remedy the likely anticompetitive effects arising from BP Amoco's proposed acquisition of ARCO.

II. The Parties and the Transaction

BP Amoco is a United Kingdom corporation with headquarters in London, England. It is the world's third largest oil company, with total worldwide revenues of more than $91 billion in 1999. BP Amoco is engaged in exploration, development, and production of crude oil on the Alaskan North Slope (''ANS crude oil''), which it sells to refineries on the West Coast of the United States, Hawaii, and Alaska, and in markets abroad. It also owns capacity on the Trans-Alaska Pipeline System (''TAPS'') and leasehold interests in Jones Act tankers. These specialized tankers are used by BP Amoco to transport ANS crude oil from the North Slope production fields to its refinery customers.

ARCO is a Delaware corporation with headquarters in Los Angeles, California. In 1999, ARCO had total revenues of more than $12 billion. ARCO is also engaged in the exploration, development, and production of ANS crude. ARCO also owns capacity on TAPS, and it owns its own Jones Act tankers, which it uses to transport ANS crude oil to the West Coast. ARCO also owns and operates two refineries on the West Coast that refine ANS crude oil.

BP Amoco and ARCO were the pioneers in developing the Alaska North Slope, and today are the two most important oil companies doing business there. They account for more than half of all ANS crude oil discovered over the last decade, and currently produce about 74% of all ANS crude oil. BP Amoco and ARCO are the only two operators of ANS crude oil fields, they each own more proven ANS crude oil reserves than any other oil company, they have the largest leaseholds of exploration and production acres, and they have drilled the largest number of exploration wells on the North Slope. Individually, each has won more exploration tracts than any other company in the last decade.

The Alaska North Slope is a major oil-producing region of the United States. ANS crude oil is used to supply refineries in Alaska, Hawaii, the West Coast of the United States, and Asia. Approximately 90% of all ANS crude oil is refined on the United States West Coast, and approximately 45% of all crude oil refined on the United States West Coast is ANS crude oil.

BP Amoco and ARCO entered into an agreement on March 31, 1999, to merge their companies. The size of the transaction, based upon the value of the deal when it was announced, was about $26 billion.

III. The Proposed Complaint and Consent Order

The proposed complaint alleges that merger of BP Amoco and ARCO would

violate Section 7 of the Clayton Act, as amended, 15 U.S.C. 18, and Section 5 of the Federal Trade Commission Act, as amended, 15 U.S.C. 45. The proposed complaint alleges that the merger will lessen competition in each of the following markets: (1) The production, sale, and delivery of ANS crude oil; (2) the production, sale, and delivery of crude oil used by targeted West Coast refiners; (3) the production, sale, and delivery of all crude oil used on the West Coast; (4) the purchase of exploration rights on the Alaskan North Slope; (5) the sale of crude oil transportation on TAPS; (6) the development for commercial sale of natural gas on the Alaskan North Slope; and (7) the supply of crude oil pipeline transportation to, and crude oil storage in, Cushing, Oklahoma. The competitive concerns underlying the allegations in the draft complaint are discussed in Part V of this analysis.

IV. The Proposed Consent Order

To remedy the alleged anticompetitive effects of the merger, the Proposed Consent Order requires Proposed Respondents to divest: (1) All of ARCO's assets and interests related to and primarily used with or in connection with ARCO's Alaska businesses; and (2) all of ARCO's assets related to its Cushing, Oklahoma crude oil business. Proposed Respondents will divest all of ARCO's Alaska assets to Phillips Petroleum Company (''Phillips''), an approved up-front buyer. The vast majority of these assets must be divested to Phillips within 30 days of the signing of the Proposed Consent Order. Some of the ARCO Alaska assets require third-party or governmental approvals and Proposed Respondents have up to six (6) months to divest those particular assets. Proposed Respondents will divest the Cushing assets to an acquirer or acquirers that receive the prior approval of the Commission and in a manner approved by the Commission. They must divest the Cushing assets within four (4) months of signing the Proposed Consent order.

For a period of ten (10) years from the date the Proposed Consent Order becomes final, the Proposed Consent Order prohibits the Proposed Respondents from acquiring, directly or indirectly, any ownership, leasehold or other interests in any of the assets they are required to divest without giving prior notice to the Commission.

The Proposed Consent Order also requires the Proposed Respondents to provide the Commission with a report of compliance with the terms of the Proposed Consent Order within thirty (30) days after the Order becomes final, and every sixty (60) days thereafter, until the Proposed Respondents have fully complied with the divestiture requirements under the Proposed Consent Order. The Proposed Respondents must also file annual compliance reports detailing their compliance with the notice provisions under the Proposed Consent Order.

Proposed Respondents have also agreed to a Hold Separate Order. The purpose of the Hold Separate Order is (a) to preserve the competitive viability of the assets required to be divested under the Proposed Consent Order, pending their actual divestiture, (b) to assure that no material confidential information is exchanged between BP Amoco and the held-separate businesses, and (c) to prevent interim harm to competition pending the divestitures. The Commission may immediately appoint an asset maintenance trustee to monitor both the ARCO Alaska businesses and the ARCO Cushing Assets which are to be divested, and, in the case of the Alaska assets, to monitor whether the necessary waivers and regulatory approvals are being expeditiously pursued.

Under the terms of the Hold Separate Order, if the Proposed Respondents have not completed the divestiture of the ARCO Alaska assets that do not require third party or regulatory approvals within thirty (30) days of consummating the merger of BP Amoco and ARCO, they must maintain the relevant ARCO Alaska businesses as separate, competitively viable businesses, and not combine them with BP Amoco's operations. A trustee may be appointed to oversee the held separate businesses.

Under the terms of Hold Separate Order, until the divestiture of the ARCO Cushing Assets has been completed, Proposed Respondents must maintain the ARCO Pipeline Company as a separate, competitively viable business, and not combine it with BP Amoco's operations. The Proposed Consent Order also requires the Proposed Respondents to maintain the assets to be divested in a manner that will preserve their viability, competitiveness and marketability, to avoid causing their wasting or deterioration. Pending divestiture, Proposed Respondents are prohibited from selling, transferring, or otherwise impairing the marketability or viability of the assets to be divested.

Under the terms of the Proposed Consent Order, in the event that BP Amoco and ARCO do not divest the assets required to be divested under the terms and time constraints of the Proposed Consent Order, the Commission may appoint a trustee to divest those assets, expeditiously, and at no minimum price. Also, in the event the assets requiring third-party or governmental regulatory approvals are not divested within the allowed time, a trustee may be appointed to oversee the divestiture of those assets to Phillips.

V. The Competitive Concerns

The merger of BP Amoco and ARCO gives rise to competitive concerns in seven relevant markets, each of which is discussed below.

A. Production and Sale of ANS Crude Oil

BP Amoco currently has about a 44% share of all ANS crude oil production and ARCO has about 30% share. BP Amoco owns no refineries that it supplies with ANS crude oil. As a consequence, all of its ANS crude oil sales are to third party customers. ARCO, on the other hand, owns two refiners that use ANS crude oil. One is located in the Los Angeles area (at Carson) and the second is in the Seattle area (at Cherry Point). Because ARCO supplies its West Coast refineries with ANS crude oil, ARCO now sells only relatively small amount of ANS crude oil to third parties.

According to the complaint the Commission intends to issue, BP Amoco already exercises market power in the sale of ANS crude oil to refineries on the West Coast. The evidence of this market power is the fact that BP Amoco engages in price discrimination on two fronts: First, BP Amoco sells ANS crude to West Coast refinery customers at different prices, net of transportation (''netbacks''). Second, BP sells ANS crude to the West Coast refineries at higher netbacks than to refineries in the Far East. The Commission's draft complaint alleges the existence of three relevant markets implicated by BP Amoco's ANS crude oil pricing: (1) The production, sale, and delivery of ANS crude oil; (2) the production, sale, and delivery of crude oil used by targeted West Coast refiners; and (3) the production, sale, and delivery of all crude oil used by refiners on the West Coast.

According to the Commission's draft complaint, for several reasons, ARCO is the firm most likely to be able to constrain BP Amoco's future exercise of market power. First, with the opening of the Alpine oil field, ARCO has new production that is about to commence. Second, with a new and increased ability to substitute away from ANS crude oil to other types of crude oil at its Los Angeles refinery, ARCO will have incentives to substitute cheaper

imports for ANS crude oil if the price of ANS crude oil becomes non-competitive. Third, ARCO is the firm best positioned and most likely to find new sources of ANS crude oil, and bring that oil to market.

Entry into the crude oil markets implicated by this merger is unlikely to occur in a timely or sufficient manner to prevent the merger from reducing competition in the relevant markets. Entry has not constrained BP Amoco's exercise of market power to date. Nor is it likely that producers of other types of crude oils will supply West Coast refineries in a manner that would constrain BP Amoco's ability to exercise market power. The most compelling evidence is that they have not already done so, even as BP Amoco has been exercising market power directed at West Coast refineries for many years.

B. Bidding for ANS Crude Oil Exploration Rights

BP Amoco and ARCO are the two most important competitors in bidding for exploration leases for oil and gas on the Alaska North Slope. They own or control all exploration, development, and production assets and won over 60% of all State of Alaska lease auctions over the last decade. During that same period the top four firms won 75%. In the most recent North Slope lease sale, BP Amoco and ARCO collectively won more than 70% of the tracts bid.

After the merger, no single firm, or combination of firms, will be both large enough and sufficiently well informed with respect to the value of individual tracts, to replace the loss of revenues to the State of Alaska and the Federal Government, from bidding revenues. Moreover, the reduced competition in the bidding for oil and gas leaseholds will eventually result in less exploration and development, and less production of ANS crude oil.

New entry will not be timely, likely or sufficient to undermine the anticompetitive effects of the merger. Firms that lack the information, infrastructure, and interest in North Slope bidding will simply be unable to fill the void created by the loss of ARCO as an independent bidder for exploration and development acreage.

C. TAPS Pipeline Competition

Seven companies jointly own the TAPS pipeline, with BP Amoco and ARCO the two largest owners. BP has about a 50% interest and ARCO has about a 22% interest. Each owner of TAPS has an exclusive right to sell space on its ownership-share of TAPS capacity and to set its own tariff, and to discount those tariffs, for carriage on that capacity. After the merger, BP Amoco would control a 72% interest in TAPS. Alyeska Pipeline Service Company operates TAPS.

The owners of TAPS are entitled to capacity on the pipeline in proportion to their ownership interests. Because not all oil producers have an interest in TAPS, or an interest in TAPS in proportion to their oil production, TAPS owners can and do discount their tariffs in an effort to attract additional shippers. According to the Commission's draft complaint, the increase in concentration in TAPS ownership may cause the TAPS tariffs to increase.

D. Natural Gas Commercialization

BP Amoco and ARCO are the two largest holders of natural gas reserves on the Alaska North Slope. ExxonMobil is the only other company that holds sufficiently large volumes of natural gas reserves to have the potential to develop those reserves for significant commercial use. The merger of BP Amoco and ARCO would reduce the potential for future competition in the sale of North Slope natural gas from three firms to two firms.

Although it is unclear at this time when the North Slope gas fields will be commercialized, it is likely that this will eventually occur. To date, over $1 billion has been spent by various firms in an effort to commercialize the North Slope's natural gas reserves. When gas commercialization does become a reality, the benefit of three firms competing for this business, rather than a market characterized by a duopoly, will result in increased competition and lower prices.

E. Crude Transportation and Storage Services in Cushing, Oklahoma

Efficient functioning of the pipeline and oil storage facilities leading into, and in, Cushing, Oklahoma, is critical to the fluid operation of both the trading activities in Cushing and the trading of crude oil futures contracts on the NYMEX. The restriction of pipeline or storage capacity can affect the deliverable supply of crude oil in Cushing, and consequently affect both WTI crude oil cash prices and NYMEX futures prices.

The proposed merger would concentrate control of over 43% of Cushing storage capacity, 49% of Cushing pipeline delivery capacity, and 95% of the trading services provided at Cushing. A firm that controls substantial crude oil storage capacity in Cushing, and crude oil pipeline capacity leading into Cushing, would be able to manipulate NYMEX futures trading markets. This threat of manipulation will cause prices to rise and, because WTI crude oil is a benchmark crude oil, have ripple effects throughout the oil industry.

VI. Resolution of the Competitive Concerns

The Proposed Consent Order alleviates the competitive concerns arising from the merger as discussed below.

A. The Proposed Order Resolves Competitive Concerns in Alaska by Requiring That All of ARCO's Alaska Assets Be Divested to Phillips

The Proposed Consent Order, if finally issued by the Commission, would settle all of the charges alleged in the Commission's complaint. Under the terms of the Proposed Consent Order, BP Amoco has agreed to divest to Phillips all of the assets, properties, businesses, and goodwill, tangible and intangible, that as of March 15, 2000, were related to and primarily used with or in connection with ARCO's Alaska businesses.

The ARCO assets and properties that BP Amoco and ARCO are required to divest to Phillips include the following: (a) ARCO Alaska, Inc.; (b) ARCO Transportation Alaska, Inc., (including any interest in Alyeska Pipeline Service Company and Prince William Sound Oil Spill Response Company; (c) ARCO Marine, Inc.; (d) ARCO Marine Spill Response Company; (e) Union Texas Alaska assets of Union Texas Petroleum Holdings, Inc.; (f) Union Texas Alaska, LLC; (g) Kuparuk Pipeline Company, (including any interests in Kuparuk Transportation Company and Kuparuk Transportation Capital Corporation); (h) Oliktok Pipeline Company; (i) Alpine Pipeline Company; (j) Cook Inlet Pipeline Company; (k) All Alaska oil and gas leases; (l) AMI Leasing Inc.; (m) ARCO Beluga, Inc. (a wholly-owned subsidiary of CH-Twenty, Inc.); (n) ARCO's office complex in Anchorage; (o) intellectual property; (p) Patents; (q) seismic data; (r) ship construction contracts; (s) customer and vendor lists; (t) ARCO records; and (u) long-term supply agreements entered between BP Amoco and several West Coast refiners.

To ensure that key ARCO employees remain with the company, and become available to work for Phillips, the Proposed Consent order also provides that (a) BP Amoco not solicit for employment any ARCO employee unless that employee was terminated by Phillips; (b) vest all current and future pension benefits; and (c) pay a bonus of not less than 35% of the base salary for certain key ARCO employees.

Phillips is headquartered in Bartlesville, Oklahoma and is the sixth largest United States oil company. In 1999 it had total revenues of about $14 billion. Phillips currently has about a one percent interest in ANS crude oil production and about a 1.4% interest in TAPS. Phillips also owns oil and gas leases in the National Petroleum Reserve area of the North Slope.

The divestiture of ARCO's Alaska Businesses is intended to preserve the level of competition that existed before the merger in the production, sale and delivery of crude oil to the West Coast, bidding for exploration rights on the Alaskan North Slope, and in pipeline transportation services for ANS crude oil.

1. The Proposed Respondents Have Thirty (30) Days To Divest Most of the ARCO Alaska Assets to Phillips

Except for those ARCO Alaska assets that require consents, waivers, or approvals by regulatory authorities or other third parties before they may be transferred to Phillips (e.g., pipelines, oil and gas leases, rights of way), the Proposed Respondents must complete the required divestitures of the Alaska assets within thirty (30) days of the acquisition. The Proposed Respondents must cooperate with Phillips and use reasonable best efforts to assist Phillips in securing the consent and waivers that may be required from private entities. The Proposed Respondents must complete all other divestitures within six (6) months of consummating their merger.

2. Transition Services

The Proposed Consent Order requires that the Proposed Respondents enter into a transition services agreement with Phillips. Under this agreement, the Proposed Respondents must provide Phillips with the transition services it may need in order to conduct the ARCO businesses as they are currently being conducted.

3. Licensing Agreements

The Proposed Consent Order requires that the Proposed Respondents enter into various licensing agreements with Phillips for intellectual property necessary or related to the ARCO Alaska Assets. These agreements are in addition to the absolute transfer of other intellectual property.

B. The Proposed Order Resolves Competitive Concerns in Cushing by Requiring That All of ARCO's Cushing Assets Be Sold Within 120 Days to an Acquirer Approved by the Commission

Under the terms of the Proposed Consent Order, BP Amoco agreed to divest ARCO's assets related to its Cushing, Oklahoma crude oil business to an acquirer to be approved by the Commission and in a manner approved by the Commission. Those assets include all of ARCO's assets, properties, businesses and goodwill, tangible and intangible, in the Seaway Crude Oil Pipeline and the Mid-Continent Crude Oil Logistics Services Businesses.

The ARCO assets and properties that BP Amoco and ARCO are required to divest include the following: (a) ARCO's crude oil interest in Seaway Pipeline Company, a partnership with subsidiaries of Phillips; (b) ARCO's crude oil terminal facilities in Cushing, Oklahoma and Midland, Texas, including the line transfer and pumpover business at each location; (c) ARCO's undivided ownership interest in the Rancho Pipeline, a 400-mile, 24-inch diameter crude oil pipeline from West Texas to Houston; (d) ARCO's undivided ownership interest in the Basin Pipeline, a 416-mile crude oil pipeline running from Jal, NM, to Wichita Falls, Texas and then on to Cushing, Oklahoma; and (e) the ARCO West Texas Trunk System of receipt and delivery pipelines, which is centered around Midland.

BP Amoco and ARCO must complete the required divestitures of the Cushing assets, within 120 days of their singing the Proposed Consent Order, to an acquirer or acquirers that receive the prior approval of the Commission.

VII. Opportunity for Public Comment

The Proposed Consent Order has been placed on the public record for thirty (30) days fro receipt of comments by interested persons. Comments received during this period will become part of the public record. After thirty (30) days, the Commission will again review the Proposed Consent Order and the comments received and will decide whether it should withdraw from the Proposed Consent Order or make it final.

By accepting the Proposed Consent Order subject to final approval, the Commission anticipates that the competitive problems alleged in the complaint will be resolved. The purpose of this analysis is to invite public comment on the Proposed Consent Order, including the proposed divestitures, to aid the Commission in its determination of whether it should make final the Proposed Consent Order. This analysis is not intended to constitute an official interpretation of the Proposed Consent Order, nor is it intended to modify the terms of the Proposed Consent Order in any way.

By direction of the Commission.

Donald S. Clark,

Secretary.

Statement of Chairman Robert Pitofsky and Commissioner Mozelle W. Thompson, Concurring in Part and Dissenting in Part

The Commission accepts for public comment today a consent order that requires BP Amoco plc (''BP''), as a condition of its acquisition of Atlantic Richfield Company (''ARCO''), to divest all of ARCO's crude oil exploration and production assets in Alaska and related pipeline rights, maritime assets, seismic data and technical information. In effect, BP agrees to divest ''all of ARCO'' in Alaska. In addition, the consent order requires BP to divest all ARCO pipeline and storage facilities in and around the crude oil marketing and trading hub at Cushing, Oklahoma to a buyer to be approved by the Commission within 120 days of the date on which BP and ARCO sign the consent order.

The consent order provides that the divested Alaska assets will be acquired by Phillips Petroleum Co. (''Phillips''). Phillips is an integrated petroleum company with oil and gas exploration and production interests in several countries and (as of 1999) assets of about $15 billion and annual revenues of about $13.9 billion. Phillips currently has some Alaska oil and gas exploration and production interests of its own, but these are tiny relative to those of BP and ARCO. Phillips is engaged in refining and gasoline marketing in several of the United States, but not on the West Coast. BP selected Phillips as the buyer of ARCO's Alaska assets, and Commission today unanimously approves Phillips as the buyer, subject to public comment.

In most respects, this consent order achieves all the Commission sought, and all the relief that would likely have been achieved if the Commission prevailed in litigation. We write separately, however, to express our concern with the majority's decision not to include in the consent order a provision prohibiting BP and Phillips from exporting ANS crude oil at a loss for the purpose of maintaining oil prices on the West Coast of the United States.[1]

[1] The provision that we would favor is explained, and its terms defined, further below.

BP currently has the largest share—about 40%—of all crude oil produced on the Alaska North Slope (''ANS''); has the largest interest—about 50%—in the Trans-Alaska Pipeline System (''TAPS'') that is used to transport crude oil to port at Valdez, Alaska; and has the largest fleet that is available for transporting ANS crude oil from Alaska to refineries in the rest of the United States. ARCO is its largest rival in each of these respects, with a share of over 30% of ANS crude production; a 22% stake in TAPS; and the second largest available fleet. BP and ARCO's dominance of the market is even greater when measured in terms of exploration assets and operatorships in Alaska. BP, which does not own any West Coast refineries, currently sells all of its ANS crude in the merchant market. ARCO, which owns two of the largest refineries on the West Coast, consumers the bulk of its ANS production internally. However, ARCO also sells on the merchant market, thereby according to the Commission's complaint, serving as ''the firm most likely to constrain BP's exercise of monopoly power,'' a constraint that ''likely would increase'' over time but for the merger.[2]

Because Phillips will acquire all of ARCO's assets in Alaska, the consent order is likely to restore competition on the Alaska North Slope. In the market for the supply of ANS crude oil to targeted refineries on the West Coast, Phillips will be in a different position from ARCO because, unlike ARCO, Phillips is neither a refiner nor a gasoline marketer on the West Coast. This difference should leave Phillips with more crude oil to sell on the open market than ARCO currently has after supplying its own refineries, and, if not undermined by private conduct, may actually improve upon the level of competition in that market. In Cushing, a clean sweep of ARCO's pipeline and storage assets to a buyer to be approved by the Commission should also suffice to restore competition.

Negotiations leading to this settlement have been extensive and complicated. Nevertheless, once the outline of a settlement was agreed upon—that is, divestiture of ''all of ARCO'' in Alaska and in and around Cushing—BP, ARCO and Commission staff worked out the details with dispatch.

In one respect, however, the Commission's action in this matter is disappointing. In its original complaint and in its memorandum supporting the complaint, the Commission alleged that BP systematically and over an extended period of time exported ANS crude at a loss in Asia and to other regions in the United States in order to curtail or tighten supply to refiners on the U.S. West Coast and to maintain crude oil prices in that market.[3] The Commission was prepared to substantiate its charge with a series of documents, cited in its memorandum supporting the complaint but currently under seal in the United States District Court.[4] The Commission alleged that the pattern of exports reflected BP's market power, and that such market power would increase as a result of the proposed merger.

When litigation was suspended for settlement negotiations, the issue of exports designed to raise price was addressed. BP and Phillips reportedly stated publicly that they would not export U.S. crude resources out of PADD V (the technical term for the U.S. West Coast market, specifically, the States of Alaska, Arizona, California, Hawaii, Nevada, Oregon and Washington).[5]

We believe that the Commission should follow the logic of its own complaint and require BP and Phillips to affirm their public statements in our consent agreement in this matter. That would require the following provision in the order:

> BP and Phillips shall not knowingly and intentionally Sell for Export[6] ANS crude oil for the purpose of increasing the Spot Price[7] of ANS crude oil in PADD V, PROVIDED, however, that a Sale for Export at a price reasonably anticipated to produce a higher profit than a contemporaneous sale in PADD V shall be presumed not to violate this Order.

This provision is narrower than the parties' public statements, thereby assuring that it would in no way affect normal, competitive business conduct, such as exporting oil abroad when the price offered abroad (net of transportation and other costs) is higher than on the West Coast. Instead, it would target the systematic export of United States' crude oil to Asia or elsewhere at a loss (relative to the profit that could have been obtained on the same crude oil within PADD V) for the purpose of raising U.S. West Coast Prices—a practice that we consider an extraordinary exercise of market power. If engaged in through coordinated action—and the Commission's memorandum alleges that BP ''mop[ped] up 'excess' supplies of ANS'' crude from others[8]—such conduct would be illegal *per se. See United States* v. *Socony-Vacuum Oil Co.,* 310 U.S. 150, 190–91, 216, 218–28 (1940)(holding illegal *per se* agreements to purchase ''distress gasoline'' in order to raise prices or prevent price decreases). Regardless of its legality, exporting at a loss in order to raise West Coast prices plainly threatens competition in a market where this agency has a duty to ensure that competition is fully restored. *see, e.g., Ford Motor Co.* v. *United States,* 405 U.S. 562, 573 (1972); *United States* v. *E.I. du Point de Nemours & Co.,* 366 U.S. 316, 326 (1961).

Because the Commission was prepared to prove that intentional manipulation of supply on the West Coast occurred in the past, and could occur again in the future, the provision would be appropriate relief for the Commission to require. *See, e.g., FTC* v. *National Lead Co.,* 352 U.S. 419, 429, 430 (1957)(a remedy is proper if it bears a ''reasonable relation to the unlawful practices found to exist'' and ''decrees often suppress a lawful device when it is used to carry out an unlawful purpose'') (citations omitted); *cf. FTC* v. *Ruberoid Co.,* 343 U.S. 470, 473 (1952) (''[I]f the Commission is to obtain the objectives Congress envisioned, it cannot be required to confine its road block to the narrow lane the transgressor has traveled; it must be allowed effectively to close all roads to the prohibited goal, so that its order may not be by-passed with impunity.'')

Notwithstanding the substantial evidence of manipulation supporting the allegations in the complaint and memorandum, a majority of the Commission declines to require this

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[2] *See FTC* v. *BP Amoco plc,* Civ. No. 00–0416–SI (N.D. Cal. filed Feb. 4, 2000), Compl. ¶ 18.

[3] *See FTC* v. *BP Amoco plc,* Compl. ¶¶ 18, 23; Points and Authorities in Support of FTC Motion for a Preliminary Injunction at 7, 9–11.

[4] *See id.* at 7, n.13, 9–10 & nn. 16–18. (The public version of the FTC's Points and Authorities, with the parties' confidential information redacted, is available at /http://www.ftc.gov/os/bpamoco/index.htm. All references in this concurrence to the memorandum supporting the complaint are to that version.)

[5] *See, e.g.,* H. Josef Hebert, ''Company ties offer to halt exporting Alaska crude to merger'' (Associated Press, March 24, 2000) (citing a letter from BP to U.S. Representative Don Young of Alaska); Associated Press, ''BP Amoco Would End Alaska Exports'' (March 24, 2000); Reuters, ''BP Amoco, Phillips to halt Alaskan oil exports'' (March 24, 2000) (citing a letter from BP to U.S. Representative George Miller of California).

[6] ''Sell for Export'' and ''Sale for Export'' would be defined terms, referring to the sale, exchange, delivery or transfer of ANS crude oil for refining at a refinery located outside of PADD V, PROVIDED, however, that they would not include any sale, exchange, delivery or transfer of ANS crude oil in return for which ANS crude oil from another person is tendered or delivered to Respondents at a location in PADD V.

[7] ''Spot Price'' would be a defined term, referring to the amount paid for a single delivery of crude oil as part of an arms-length transaction as reported by Reuters, Telerate or Platts.

[8] *FTC* v. *BP Amoco plc,* Points and Authorities in Support of FTC Motion for a Preliminary Injunction at 10.

provision. In omitting any provision concerning exports, we do not understand our fellow Commissioners to condone the practices that we identified in our complaint. But we see no good reason for the omission.

First, the majority suggests that the divestitures ordered today eliminate the competitive overlap that was the central competitive concern raised by the proposed merger. While we believe that the divestiture to Phillips is effective and appropriate relief, and may even improve competition, we would also address directly the competitive concerns raised by past and potentially future exporting practices aimed at exploiting precisely the market power that the BP–ARCO merger places at issue. Today's consent permits both a realignment of operatorship interests on the Alaska North Slope and a vertical realignment, whereby BP's crude supply will now be aligned with what were ARCO's downstream assets, and ARCO's successor, Phillips, will likely replace BP as the principal supplier to the merchant (*i.e.,* non-vertically-integrated) market on the West Coast. How those realignments will affect the incentives and opportunities of BP and Phillips to continue BP's past practice of exporting to maintain West Coast prices is uncertain, as are future fluctuations in their production and reserves on the Alaska North Slope and their likely effects on those incentives and opportunities.

The majority believes that it is unnecessary to impose any restriction on exports [9] because ''BP likely will need to use most of its ANS crude oil production'' in the ARCO refineries it is acquiring on the West Coast, and because ''Phillips will have a much smaller share of ANS crude oil production than did BP.'' (We understand that Phillips' initial share of ANS crude oil production will be between 30 and 35%.) Even if true today, there is no assurance that in the future either company, in an uncertain and evolving marketplace, will not find itself in a position to engage in the same conduct BP engaged in previously. Any such risk should not be borne by the consumer.

Second, as noted above, precedent establishes that conduct relief ancillary to structural relief may be appropriate in a merger case to address related competitive concerns, even when the conduct restriction may, in doing so, restrain some lawful conduct.[10] Such relief is especially appropriate where, as in this case, the merger creates uncertainties in a market already characterized by exercises of market power that may harm consumers and where the relief imposed will increase the likelihood that competition will be fully restored. *See, e.g., Ford Motor Co.*, 405 U.S. at 578 (approving district court relief aimed at ''nurtur[ing]'' lost competition over an objection that the forces in the marketplace might suffice to restore it).[11]

Third, we believe that a narrow export-at-a-loss restriction like the one set forth above would effectively protect, and would in no way inhibit, free and vigorous competition.[12] We recognize that in 1995, Congress repealed an export ban on ANS crude oil, and we have no intention of undermining that repeal. However, as we have noted above, a consent agreement provision that narrowly prohibits exports (1) reasonably anticipated to be at a loss and (2) made ''knowingly and intentionally * * * for the purpose increasing the Spot Price of ANS crude oil in PADD V'' is far removed from a general export ban, and would leave firms entirely free to engage in normal, competitive export activities both within PADD V and elsewhere. Further, although the provision that we propose would be narrow, we believe that it would be effective. The proviso requiring that sales be reasonably anticipated to be at a loss to be suspect would give both the parties and FTC enforcement staff an objective benchmark, while the intent and purpose requirements—requirements familiar to antitrust law, *see, e.g., Aspen Skiing Co.* v. *Aspen Highlands Skiing Corp.*, 472 U.S. 585, 602 (1985)—would ensure that normal competitive conduct would be unaffected.

Under normal circumstances we favor structural rather than behavioral remedies. That approach underlies the substantial structural relief that the Commission unanimously requires in this case. However, we believe that in addition, the above-described export restriction is appropriate and warranted by the facts and circumstances of this case. Accordingly, we dissent from the majority decision not to include in the consent order a provision restraining in the future the manipulation of ANS crude supply to the West Coast that we believe occurred in the past.

Statement of Commissioners Anthony, Swindle, and Leary

Alaska's North Slope is one of the largest sources of crude oil in the world. Crude oil extracted from Alaska's North Slope (''ANS crude oil'') is transported through the Trans-Alaska Pipeline System (''TAPS'') to the warm water port of Valdez, Alaska. From Valdez, large oil tankers transport ANS crude oil to refineries, most of which are located on the West Coast of the United States. The West Coast refineries process ANS crude oil and other crude oils to produce gasoline that ultimately is sold to consumers located on the West Coast.

The three main producers of ANS crude oil are British Petroleum/Amoco Oil Co., Inc. (''BP''), Atlantic Richfield Corporation (''ARCO''), and ExxonMobil Corporation (''Exxon''). BP produces about 45% of ANS crude oil, ARCO about 30% and Exxon about 22%. Each of these producers owns interests in TAPS and the oil tanker fleet that are roughly proportionate to its share of ANS crude oil production. Because BP currently does not own any refineries on the West Coast, it sells most of its ANS crude oil to other West Coast refiners. In contract, ARCO and Exxon use most of

[9] The provision that we advocate is not, of course, an export ban. It is, rather, a narrow restriction, targeted at exports that entail an extraordinary exercise of market power.

[10] It is well established that the Commission has a broad remedial discretion that would, where appropriate, permit substantial further relief against conduct that does not independently violate the antitrust laws. *See, e.g., Ford Motor Co.*, 405 U.S. at 575; *E.I. du Pont de Nemours*, 366 U.S. at 344. Courts have approved a variety of remedies against potentially lawful conduct as ancillary to structural relief, including future lawful participation in a market previously entered by means of unlawful merger, *Ford Motor Co.*, 405 U.S. at 575–76, an injunction against further acquisitions, *United States* v. *Grinnell Corp.*, 384 U.S. 563, 580 (1966), requirements of prior Commission approval for future joint ventures, mergers or acquisitions, *Yamaha Motor Co.* v. *FTC*, 657 F.2d 971, 984–85 (8th Cir. 1981); *Luria Bros. & Co.* v. *FTC*, 389 F.2d 847, 865–66 (3d Cir. 1968), and prohibitions of sales between joint venture partners, *United States* v. *Alcan Aluminum Ltd.*, 605 F. Supp. 619 (W.D. Ky. 1985).

[11] The majority emphasizes that ''it is not the Commission's mandate to use merger enforcement as a vehicle for imposing its own notions of how competition may be 'improved.' '' We of course agree that merger enforcement is not an appropriate vehicle for ''improving'' markets in ways unrelated to the merger. But as the precedents cited in footnote 10, above, exemplify, it is equally fundamental that mergers must be viewed, and the competitive concerns that they raise addressed, in the practical and dynamic context of the markets in which they occur. *See, e.g., Brown Shoe Co.* v. *United States*, 370 U.S. 294, 321–23 (1962).

[12] The majority expresses concern that our provision would not ''apply equally to all producers'' of ANS crude oil. It is true that our provision would place restrictions on the two parties before us, who will also be the two largest producers of ANS crude oil, that would not apply to smaller competitors. But our narrow restriction would not prevent them from competing vigorously—only from engaging in a practice that the Commission's complaint identified as an exercise of market power that distorted competition. Because the mandate of this agency is to protect competition, not the individual interests of particular competitors, we are not concerned about inhibiting BP and Phillips' ability to exercise market power by manipulating West Coast prices.

their ANS crude oil in their own West Coast refineries.

BP's proposed merger with ARCO would give the merged firm about a 75% share of exploration, production, and transportation of ANS crude oil. The complaint alleges that the proposed merger is likely substantially to lessen competition in the market for the sale of ANS crude oil to West Coast refineries. The basic theory is that prior to the merger BP has been able to exercise market power in sales of ANS crude oil to West Coast refineries, *i.e.,* BP has been able to profitably maintain prices above competitive levels for a significant period of time. BP's acquisition of ARCO would increase BP's ability to exercise market power, which could cause West Coast refineries to pay more for ANS crude oil. While the case raises complex market definition and other issues, we have reason to believe that the proposed merger, absent the contemplated relief, is likely substantially to lessen competition as alleged in the complaint.

Traditionally, if a merger raises competitive concerns, the Commission requires the merging parties to divest assets to eliminate the competitive overlap before allowing the merger to be consummated. Consistent with this approach, in this case the Commission has accepted a proposed order requiring BP and ARCO to divest all of ARCO's assets in Alaska to Phillips Petroleum Company (''Phillips''). We believe that this divestiture will remedy the antitrust concerns raised by the proposed merger. In fact, as the concurring statement of Chairman Pitofsky and Commissioner Thompson points out, the consent agreement has the potential to ''actually improve upon the level of competition'' in the West Coast market. As a result of the planned divestiture, Phillips will have about a 30% share of ANS crude oil exploration, production, and transportation, and Phillips will have even more crude oil to sell on the open market than ARCO has today. Phillips appears to have the financial resources and experience to be a vigorous competitor in the exploration, production, and transportation of ANS crude oil.

In addition to this structural relief, Chairman Pitofsky and Commissioner Thompson would favor ''behavioral'' relief that would require the Commission to engage in extensive monitoring of ANS crude oil exports and prices for the next decade. Specifically, they support a provision that would prohibit BP and Phillips, for 10 years, from ''knowingly and intentionally'' exporting ANS crude oil outside the West Coast of the United States ''for the purpose of increasing the Spot Price of ANS crude oil'' on the West Coast. The proposed export restriction also would include a presumptive safe harbor if an export sale were made at a ''price reasonably anticipated to produce of higher profit than a contemporaneous sale'' on the West Coast. We believe that this over-regulatory exportation restriction would be unnecessary, unenforceable, and otherwise inappropriate.[1]

It is unnecessary to impose the proposed export restriction on BP because BP is highly unlikely to engage in exports following the merger. There is some evidence that, prior to the merger, BP occasionally exported ANS crude oil to the Far East in order to increase spot prices for ANS crude oil on the West Coast. It is important to emphasize that BP's unilateral actions were not illegal under the antitrust laws—and, indeed, the complaint makes no allegation that the exports were illegal.[2] In any event, however, BP's incentives to export will change as a result of the proposed divestitures. Before the merger, BP sold most of its ANS crude oil to other West Coast refiners because it did not own refineries on the West Coast. BP benefitted from higher spot prices because of its status as a merchant marketer, and also because Alaska's royalty scheme for ANS production was tied to ANS spot prices on the West Coast. After the merger, BP will acquire two West Coast oil refineries that were part of ARCO, and BP likely will need to use most of its ANS crude oil production to operate these two refineries. Since BP will be consuming most of its ANS production internally, BP will now benefit from lower royalty payments to the extent that the ANS spot price drops. Therefore, as a result of the new market structure created by the proposed divestitures, BP is extremely unlikely to resume exporting ANS crude oil to the Far East (or elsewhere) to increase spot prices for ANS crude oil on the West Coast.

Nor is it necessary to impose the export restriction on Phillips. Phillips is purchasing ARCO's assets in Alaska lock-stock-and-barrel, *i.e.,* Phillips is assuming ARCO's position as an explorer, producer, and transporter of ANS crude oil. There is no evidence that ARCO ever engaged in strategic ANS exports for the purpose of increasing West Coast spot prices. Granted, it might appear that Phillips will have a greater incentive than ARCO did to increase spot prices for ANS crude oil, because Phillips, like the pre-merger BP, will sell its ANS crude oil to West Coast refineries on the merchant market (whereas ARCO consumed most of its production in its own West Coast refineries). However, Phillips will have a much smaller share of ANS crude oil production than did BP—approximately 30% for Phillips versus 45% for BP—which makes it quite unlikely that Phillips could successfully engage in exports to increase spot prices for ANS crude oil on the West Coast.

Not only is the export restriction unnecessary, it also would be extremely difficult to enforce because it would require proof of BP's or Phillips's knowledge and intent. We cannot rely on the companies to create an unambiguously inculpating ''paper trail,'' and in the face of ambiguous evidence, the Commission's burden of proof would be very high indeed. We do not think that the public interest would be well served by including an order provision that is so obviously difficult to enforce that it would have little or no practical effect. Moreover, the proposed safe harbor would complicate enforcement proceedings even further by introducing additional factual issues that would be difficult to resolve.

We do not believe the export restriction is an appropriate measure for the Commission to impose in the context of a merger settlement, especially when the proposed structural relief fully restores, and may even improve upon, the *status quo ante.* The export restriction would address a pre-existing market condition, under which BP allegedly, unilaterally, and sporadically exported ANS crude oil with some slight effect on West Coast prices.[3] We acknowledge the public

[1] It bears noting that in 1995, Congress explicitly repealed the then-existing ban on ANS exports. If Congress were to determine that the ban should be reinstated, it could so act. In addition, the 1995 legislation lifting the export ban granted the President, in consultation with the Secretary of Energy, the power to reimpose the export ban upon a determination by the Secretary of Commerce that ''exporting oil * * * has caused sustained oil prices significantly above world market levels * * *.'' (30 U.S.C. 185(s)(5)). Such a ban would apply equally to all producers, and would not leave some producers under the restrictions of the Commission's order while permitting other producers to export without inhibition.

[2] Rather, the exports are cited as evidence that pre-merger BP had existing market power with respect to ANS sales on the West Coast. (Complaint ¶¶ 24–26) Therefore, the Commission alleges, it would be unlawful for BP to acquire its closest competitor in this market, and thereby enhance its market power.

Of course, if two or more producers appeared to engage in such exports through coordinated or other illegal action, the Commission could initiate an investigation of such unlawful conduct and take appropriate enforcement measures.

[3] We have reason to believe that the upward price effects of these sporadic sales amounted to no more than one-half cent per gallon at the pump.

concern over the relatively high price of gasoline on the West Coast, but people will be cruelly disappointed if they are led to believe that the export restriction would have a detectable effect on the situation. Moreover, it is not the Commission's mandate to use merger enforcement as a vehicle for imposing its own notions of how competition may be ''improved.'' Instead, Congress has directed the Commission only to prevent any harm to competition that is likely to flow from a merger. We believe that the planned divestitures already accomplish that goal.

We acknowledge that the parties are willing to sign an order with an export restriction. We need not speculate about whether they were induced to do so because of a compelling need to strike a deal promptly, or because they believe the restriction in unnecessary or unenforceable. Whatever the reason, in light of the structural relief the proposed order achieves, we see no need to bind the parties to an unnecessary behavioral provision.

For the reasons set forth above, we do not believe that the export restriction should be included in the proposed order.

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FEDERAL TRADE COMMISSION

[File No. 981 0124]

Texas Surgeons, P.A., et al.; Analysis to Aid Public Comment

AGENCY: Federal Trade Commission.

ACTION: Proposed consent agreement.

SUMMARY: The consent agreement in this matter settles alleged violations of federal law prohibiting unfair or deceptive acts or practices or unfair methods of competition. The attached Analysis to Aid Public Comment describes both the allegations in the draft complaint that accompanies the consent agreement and the terms of the consent order—embodied in the consent agreement—that would settle these allegations.

DATES: Comments must be received on or before May 15, 2000.

ADDRESSES: Comments should be directed to: FTC/Office of the Secretary, Room 159, 600 Pennsylvania Ave., NW., Washington, DC 20580.

FOR FURTHER INFORMATION CONTACT: Richard Feinstein or Alan Friedman, FTC/S–3115, 600 Pennsylvania Ave., NW., Washington, DC 20580. (202) 326–3688 or 326–2742.

SUPPLEMENTARY INFORMATION: Pursuant to section 6(f) of the Federal Trade Commission Act, 38 Stat. 721, 15 U.S.C. 46 and section 2.34 of the Commission's Rules of Practice (16 CFR 2.34), notice is hereby given that the above-captioned consent agreement containing a consent order to cease and desist, having been filed with and accepted, subject to final approval, by the Commission, has been placed on the public record for a period of thirty (30) days. The following Analysis to Aid Public Comment describes the terms of the consent agreement, and the allegations in the complaint. An electronic copy of the full text of the consent agreement package can be obtained from the FTC Home Page (for April 13, 2000), on the World Wide Web, at ''http://www.ftc.gov/ftc/formal.htm.'' A paper copy can be obtained from the FTC Public Reference Room, Room H–130, 600 Pennsylvania Avenue, NW., Washington, DC 20580, either in person or by calling (202) 326–3627.

Public comment is invited. Comments should be directed to: FTC/Office of the Secretary, Room 159, 600 Pennsylvania Ave., NW., Washington, DC 20580. Two paper copies of each comment should be filed, and should be accompanied, if possible, by a 3½ inch diskette containing an electronic copy of the comment. Such comment or views will be considered by the Commission and will be available for inspection and copying at its principal office in accordance with section 4.9(b)(6)(ii) of the Commission's Rules of Practice (16 CFR 4.9(b)(6)(ii)).

Analysis of Agreement Containing Consent Order to Aid Public Comment

The Federal Trade Commission has accepted, subject to final approval, an agreement to a proposed consent order by the Texas Surgeons, P.A. (''Texas Surgeons IPA'') and six medical practice groups comprised of Texas Surgeons IPA members—Austin Surgeons, P.L.L.C.; Austin Surgical Clinic Association, P.A.; Bruce McDonald & Associates, P.L.L.C.; Capital Surgeons Group, P.L.L.C.; Central Texas Surgical Associates, P.A.; and Surgical Associates of Austin, P.A. The agreement settles charges by the Federal Trade Commission that the Texas Surgeons IPA and the six medical practice groups (the ''respondents'') violated section 5 of the Federal Trade Commission Act, 15 U.S.C. 45, by fixing prices and other terms of dealing with third-party payers; collectively refusing to deal with third-party payers or threatening to do so; and agreeing to deal with third-party payers only on collectively determined terms. The proposed consent order has been placed on the public record for thirty (30) days for reception of comments by interested persons. Comments received during this period will become part of the public record. After thirty (30) days, the Commission will review the agreement and the comments received, and will decide whether it should withdraw from the agreement or make it and the proposed order final.

The purpose of this analysis is to facilitate public comment on the proposed order. The analysis is not intended to constitute an official interpretation of the agreement and proposed order, or to modify in any way their terms. Further, the proposed consent order has been entered into for settlement purposes only and does not constitute an admission by any respondent that the law has been violated as alleged in the complaint.

The Complaint

Under the terms of the agreement, a complaint will be issued by the Commission along with the proposed consent order. The allegations in the Commission's proposed complaint are summarized below.

Respondent Texas Surgeons IPA is an association of general surgeons who practice in the Austin, Texas area. Members of the Texas Surgeons IPA are, and at all times relevant to the complaint have been, the majority of general surgeon private practitioners serving the adult population in the Austin area.

Nearly all of the members of the Texas Surgeons IPA belong to one of six general surgery practice groups, which are also respondents in this matter. At all times relevant to the complaint, the Texas Surgeons IPA has been governed by a board of directors composed of representatives from each of the respondent medical practice groups.

The Texas Surgeons IPA has served as a vehicle for the six respondent medical practice groups (and the few solo practitioner members) to engage in actual or threatened concerted refusals to deal, and to negotiate collectively, in order to obtain higher prices from Blue Cross Blue Shield of Texas (''Blue Cross'') and United HealthCare of Texas (''United''). The six respondent medical practice groups actively furthered the unlawful conduct through their collective control of the Texas Surgeons IPA board of directors, and through their direct participation in collective fee negotiations between United and the Texas Surgeons IPA.

In April 1997, Blue Cross changed its reimbursement system from one based on historical charges to one based on a

Resource Based Relative Value Scale, similar to the system used by the federal government in its Medicare program. The effect of this change was to increase rates paid to primary care physicians, and to reduce rates to all physician specialists, including general surgeons. Soon thereafter, respondents, through the Texas Surgeons IPA, began collectively negotiating higher rates.

Despite multiple attempts by Blue Cross to negotiate individually with the six respondent medical practice groups, those groups insisted on negotiating only through the Texas Surgeons IPA. In September 1997, the Texas Surgeons IPA sent Blue Cross a package of identically worded contract termination notices for each general surgeon member of the Texas Surgeons IPA, with a cover letter stating that the termination notices were due to Blue Cross's ''unacceptable'' rate reductions. In November 1997, the Texas Surgeons IPA asked Blue Cross to waive its right to bring a private antitrust action regarding the Texas Surgeons IPA's rate negotiations with Blue Cross, but Blue Cross refused to sign the waiver. In December 1997, 26 members of the Texas Surgeons IPA, dissatisfied with Blue Cross's payment offers, collectively effected their resignations from Blue Cross, and jointly announced that action in a prominent advertisement in Austin's major daily newspaper.

In early 1998, Blue Cross experienced difficulty in securing the services of a general surgeon for an emergency room patient. At about the same time, two more general surgeons resigned from Blue Cross. These two general surgeons had been advised by one of the respondent medical practice groups that their inclusion in an arrangement with that practice group regarding back-up surgical coverage would end if they continued to deal with Blue Cross.

After these events, Blue Cross concluded that it needed to reach a rate agreement with the respondents as soon as possible to avoid inadequate general surgery coverage for Blue Cross subscribers in the Austin area. The collective rate agreement between the six respondent medical practice groups and Blue Cross that resulted in early 1998 increased Blue Cross general surgery rates nearly 30% above the April 1997 levels.

Respondents began collective price negotiations with United soon after it announced fee reductions for general surgeons and other physicians in October 1997. The new fees went into effect on January 1, 1998 for surgical procedures not usually performed by general surgeons, but comparable proposed fee reductions for general surgeons never went into effect. Instead, respondents caused general surgery fees for United's various plans to increase at least 12% to 40% above the fees that United announced in October 1997.

In early November 1997, United received a written notice from the Texas Surgeons IPA that all of its members would be terminating their contracts with United effective January 1, 1998 due to the proposed fee reductions for 1998. The Texas Surgeons IPA indicated its desire to collectively negotiate higher fees and rejected United's request to negotiate with the six respondent medical practice groups on an individual basis. United explored the possibility of creating a panel of general surgeons that did not include general surgeons from the six respondent medical practice groups, but it concluded that such a panel would not provide adequate general surgery coverage and that it had no realistic alternative to beginning collective fee negotiations with the Texas Surgeons IPA.

Prior to the start of a collective fee negotiation session in November 1997, the Texas Surgeons IPA required United to sign a waiver of its right to bring a private antitrust action against the Texas Surgeons IPA or its members stemming from those fee negotiations. At that collective fee negotiation session, respondents demanded and received an agreement from United to pay higher fees in 1998 and 1999, as described above. Representatives from the six respondent medical practice groups assembled together and collectively participated in this collective fee negotiation session through frequent telephone and fax contact with the Texas Surgeons IPA's lead negotiator.

The Texas Surgeons IPA did not engage in any activity that might justify collective agreements on the prices they would accept for their services. Respondents' actions have restrained competition among general surgeons in the Austin area and thereby have harmed, or tended to harm, consumers (including third-party payers, subscribers, and their employers) by:

- Depriving consumers of the benefits of competition;
- Increasing by over one million dollars the amount that Blue Cross, United, their individual subscribers, and employers (including the State of Texas Employees Retirement System and other self-insured employers that utilize Blue Cross or United physician network) paid for the services of surgeons during the period from January 1, 1998 to December 31, 1999;
- Fixing the payments or co-payments that individual patients, their employers, and third-party payers make for the services of surgeons;
- Fixing the terms and conditions upon which general surgeons would deal with third-party payers; and
- Raising the prices that individuals and employers pay for health plan coverage offered by third-party payers.

The Proposed Consent Order

The proposed order is designed to prevent recurrence of the illegal concerted actions alleged in the complaint, while allowing respondents to engage in legitimate joint conduct. The Commission notes that in 1999, some time after the investigation of this matter began, the State of Texas enacted legislation that permits the State Attorney General to approve, under certain conditions, joint negotiations between health plans and groups of competing physicians. Texas Senate Bill 1468, 76th Leg., R.S. ch., 1586 (1999). That conduct that gave rise to the investigation and consent agreement predated enactment of the law, and thus was not approved under its terms. Moreover, the conduct described in the complaint would not necessarily have met the conditions for approval set forth in the Act.

Enactment of the statute does not eliminate the need for an order in this matter. The statute permits only collective negotiations that are approved by the Attorney General, imposes conditions under which that approval may be granted, and by its terms expires on September 1, 2003. As is discussed below, the Commission's order does not prohibit future conduct that is approved and supervised by the State of Texas pursuant to its statute and protected from federal antitrust liability under the state action doctrine. It is necessary and appropriate, however, to provide a remedy against future conduct by the respondents that is not approved and supervised by the State of Texas.

The core operative provisions of the proposed order are contained in Section II. Section II.A prohibits respondents from entering into or facilitating any agreement: (1) To negotiate physician services on behalf of any physicians with any payer or provider; (2) to deal, refuse to deal, or threaten to refuse to deal with any payer or provider; (3) regarding any term on which any physicians deal, or are willing to deal, with any payer or provider; (4) to restrict the ability, or facilitate the refusal, of any physician to deal with any payer or provider on an individual basis or through any other arrangement; or (5) to convey to any payer or provider, through any Austin area physician, any information concerning

actual or potential dealings by any physician with any payer or provider.

The fifth provision listed above (section II.A.5 of the proposed order) ensures that communications between any respondent and any payer within a ''messenger model'' arrangement be conveyed by a neutral third party (someone other than a physician with an active practice in the Austin area). In a messenger model arrangement, physicians individually convey and receive, through a third party, information, offers, and responses from and to payers or providers. See Statements of Antitrust Enforcement Policy in Health Care. Issued jointly by the Federal Trade Commission and the U.S. Department of Justice (August 28, 1996) at 43–52, 89–92, 125–27, 138–40, 4 Trade Reg. Rep. (CCH) ¶ 13,153. In addition, section V.A.2 of the order ensures that any respondent intending to use a messenger model arrangement provide prior notification to the Commission.

Section II.B prohibits respondents from exchanging, transferring, or facilitating the exchange or transfer of information among Austin area physicians concerning: (1) Negotiation with any payer or provider regarding reimbursement terms; or (2) actual or contemplated intentions or decisions with respect to any terms, dealings or refusals to deal with any payer or provider. Section II.C prohibits respondents from encouraging, advising, or pressuring any person, other than the government, to engage in any action that would be prohibited if the person were subject to the order.

Section II contains three provisos. The first permits each respondent medical practice group to participate in arrangements for the provision of physician services that are limited to physicians from the same medical practice group. The second proviso, as noted above, permits respondents to engage in conduct that is approved and supervised by the State of Texas, so long as that conduct is protected from liability under the federal antitrust laws pursuant to the state action doctrine. The state action doctrine protects from federal antitrust liability any private conduct that is both: (1) in accordance with a clearly articulated and affirmatively expressed state policy to supplant competition; and (2) actively supervised by the state itself. *See, e.g., FTC* v. *Ticor Title Insurance Co.*, 504 U.S. 621 (1992); *California Retail Liquor Dealers Ass'n* v. *Midcal Aluminum, Inc.*, 445 U.S. 97, 105 (1980).

The third proviso allows respondents to engage in conduct (including collectively determining reimbursement and other terms of contracts with payers) that is reasonably necessary to operate any ''qualified risk-sharing joint arrangement'' or ''qualified clinically-integrated joint arrangement,'' provided respondents comply with the prior notification requirements set forth in section V of the order. The prior notification mechanism will allow the Commission to evaluate a specific proposed arrangement and assess its likely competitive impact. This requirement will help guard against any recurrence of acts and practices that have restrained competition and injured consumers.

As defined in the order, a ''qualified risk-sharing joint arrangement'' must satisfy three conditions. First, all physicians participating in the arrangement must share substantial financial risk from their participation in the arrangement. The definition illustrates ways in which physicians might share financial risk, tracking the types of financial risk-sharing set forth in the 1996 FTC/DOJ Statements of Antitrust Enforcement Policy in Health Care. Second, any agreement on prices or terms of reimbursement entered into by the arrangement must be reasonably necessary to obtain significant efficiencies through the joint arrangement. Third, the arrangement must be non-exclusive—*i.e.,* it must not restrict the ability, or facilitate the refusal, of physicians participating in the arrangement to deal with payers individually or through any other arrangement.

A ''qualified clinically-integrated joint arrangement'' pertains to arrangements in which the physicians undertake cooperative activities to achieve efficiencies in the delivery of clinical services, without necessarily sharing substantial financial risk. As with risk-sharing arrangements, the definition of clinically integrated joint arrangements reflects the analysis contained in the 1996 FTC/DOJ Statements of Antitrust Enforcement Policy in Health Care. According to the order's definition, the participating physicians must have a high degree of interdependence and cooperation through their use of programs to evaluate and modify their clinical practice patterns, in order to control costs and assure the quality of physician services provided through the arrangement. In addition, as with risk-sharing arrangements, the arrangement must be non-exclusive and any agreement on prices or terms of reimbursement entered into by the arrangement must be reasonably necessary to obtain significant efficiencies through the joint arrangement.

Sections III.A and III.B require respondents to distribute the order and complaint to its members and other specified persons, including payers. Sections III.C and III.D require that each respondent, for the next five years: (2) Distribute copies of the order and complaint to new members and other specified persons; (2) publish annually to members and owners a copy of the order and complaint; and (3) brief members and owners annually on the meaning and requirements of the order and the antitrust laws.

Sections IV and VI consist of standard Commission reporting and compliance procedures. Section IV specifies that Texas Surgeons IPA must include in its annual reports information identifying each payer or provider that has communicated with Texas Surgeons IPA concerning a possible contract for physician services, the proposed terms of any such contract, and Texas Surgeons IPA's response to the payer or provider.

Finally, section VII of the proposed order contains a twenty year ''sunset'' provision under which the order terminates twenty years after the date the order was issued.

By direction of the Commission.

Donald S. Clark,

Secretary.

[FR Doc. 00–10009 Filed 4–20–00; 8:45 am]

BILLING CODE 6750–01–M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[Program Announcement 00037]

Cancer Prevention and Control Activities; Notice of Availability of Funds

A. Purpose

The Centers for Disease Control and Prevention (CDC) announces the availability of fiscal year (FY) 2000 funds for a sole source cooperative agreement program for Cancer Prevention and Control Activities. This program addresses the ''Healthy People 2010'' priority area(s) related to Cancer.

The purpose of the program is to assist with the following:

1. Developing and disseminating current national, state, and community-based comprehensive information on cancer prevention and early detection.

2. Developing and disseminating professional education programs.

3. Promoting the analysis and development of surveillance and

research data, and its translation into public health messages, practice and programs.

4. Facilitating the exchange of expertise and coordination of programmatic efforts related to cancer prevention and control among a variety of public, private, and not-for-profit agencies at the national, state, tribal, and community level.

B. Eligible Applicants

Single Source

Assistance will be provided only to the American Cancer Society (ACS). No other applications are solicited. ACS is uniquely qualified to conduct information and education development and dissemination activities under this cooperative agreement because it has—

1. An extraordinary position as the nation's only voluntary, community-based cancer prevention and control organization dedicated to eliminating cancer as a major health problem through research, education, prevention, early detection and treatment of all cancers.

2. Access to cancer research, prevention, education and treatment programs and to the populations they serve through an extensive network that includes 2 million members, a National Society, 17 Divisions covering all states, 5 metropolitan areas, the District of Columbia and Puerto Rico, and more than 3,400 community-based unit offices.

3. Collaborative relationships with a broad range of national, state, and community-based public, private and not-for-profit organizations to disseminate information related to all aspects of cancer prevention and control; coordinate access to information and services for cancer patients, their families and others; and provide guidance and consultation at the national, state, and community level for a coordinated and comprehensive system of cancer activities. Therefore, the American Cancer Society is the only organization that can perform these activities.

C. Availability of Funds

Approximately $755,000 is available in FY 2000 to fund the projects listed below. It is expected that the awards will begin June 1, 2000, and will be made for a 12-month budget period within a project period of up to 3 years. Funding estimates may change. Continuation awards within an approved project period will be made on the basis of satisfactory progress as evidenced by required reports and the availability of funds.

Project 1. Coordinated School Health Programs

Approximately $300,000 is available to support coordinated school health programs for cancer prevention and control for school-aged populations, parents, and relevant health and education personnel.

Project 2. Comprehensive Cancer Control Activities

Approximately $400,000 will be available to plan, implement, and evaluate cancer control activities for the public (including minority, older, and underserved populations), providers (including physicians, nurses, physician assistants, health educators, state health department personnel, and others), and decision makers (policy makers, state health department administrators, and others.)

Project 3. International Network of Women Against Tobacco (INWAT)

Approximately $35,000 is available to support activities which address the complex issues of tobacco use among women and girls internationally.

Project 4. Dissemination of Information on Oral Cancer

Approximately $20,000 is available to support the review and revision of currently available information and educational materials on oral cancer and incorporate oral cancer issues into educational outreach services and/or activities for dental and other health care providers.

Use of Funds

Cooperative agreement funds may not be expended to provide inpatient hospital or treatment services. Treatment is defined as any service recommended by a clinician, including medical and surgical intervention provided in the management of a diagnosed condition.

D. Program Requirements

Projects should emphasize activities in one or more of the following areas:

1. Development and dissemination of materials, conferences, workshops, and activities for public education on the prevention and early detection of cancer through behavior modification, including utilization of proven screening modalities for early detection (*e.g.,* fecal occult blood tests, sigmoidoscopy, mammography, Pap smears), avoidance of ultraviolet radiation exposure, prevention and cessation of tobacco use, improving nutrition and dietary practices, and increasing physical activity levels. Materials should be culturally competent, linguistically appropriate and developed for a broad audience of race/ethnic groups.

2. Coalition building, and coordination of resources and activities for adult and adolescent cancer education, promotion of prevention and early detection services, and referral to treatment and follow-up services.

3. Epidemiologic and behavioral research development and analysis of data on factors related to cancer outcomes and other diseases which may be influenced by tobacco, early detection (*e.g.,* fecal occult blood tests, sigmoidoscopy, mammography, Pap smears), avoidance of ultraviolet radiation exposure, nutrition and dietary practices, and increasing physical activity levels.

4. Development and dissemination of materials, conferences, workshops and activities for professional education in cancer prevention and early detection, and support of training opportunities in cancer epidemiology, prevention, early detection and program evaluation.

5. Development and evaluation of materials and activities to improve outreach to underserved populations for cancer prevention, early detection and follow-up services.

6. The grantee will participate in a six-month progress review meeting with appropriate representatives from CDC within 30 days of the sixth month of each budget period.

In conducting activities to achieve the purpose of this program, the recipient shall be responsible for activities under 1. (Recipient Activities), and CDC shall be responsible for conducting activities under 2. (CDC Activities.)

1. Recipient Activities

Project 1. Coordinated School Health Programs

A. Collaborate with state and local education agencies with data collection around youth risk behavior, and school policies and programs.

B. Support Coordinated School Health Programs as a priority among American Cancer Society's constituents and the public, with a special emphasis on four risk factors: Tobacco use, excessive consumption of fat and calories, inadequate physical activity, and obesity.

C. Support local, state, and national coalitions to improve Coordinated School Health Programs.

D. Collaborate with CDC funded and other national, non-governmental organizations in support of school health programs.

E. Participate with other appropriate agencies in planning the annual

National School Health Leadership Conference.

Project 2. Comprehensive Cancer Control Activities

A. Collaborate with state health departments on comprehensive cancer control training, planning, implementation, and evaluation activities. Develop leadership models for state health departments to utilize. Assess comprehensive cancer control collaboration models.

B. Coordinate and support activities related to colorectal and prostate cancer education and awareness. Collaborate with state health departments in the replication and evaluation of prostate and colorectal cancer training for providers and health care systems that promotes informed decisions; provides current, balanced information on the benefits and limitations of screening and treatment for these cancers; and provides information that will enable participants to overcome system barriers to implementing screening. Collaborate with appropriate agencies in reaching primary care providers with written information regarding screening for colorectal cancer and messages for their patients to raise awareness of the need for colorectal cancer screening.

C. Identify the critical components of effective breast and cervical cancer screening outreach/education partnerships between state health departments and other organizations, including ACS.

D. Develop evaluation measures to determine the impact of project activities and identify effective cancer prevention and control projects for future continuation, replication and/or dissemination.

E. Develop clear cancer education materials and/or other items that accurately and effectively convey appropriate health messages and behaviors to the targeted populations regarding lung, breast, cervical, colorectal, prostate, and skin cancers.

F. Identify opportunities for cancer issues management forums; coordinate and support cancer issues management forums among a variety of public, private, and not-for-profit agencies at the national, state, tribal, and community level.

G. Develop and implement studies that explore the effects and interactions between various lifestyle factors and health services on the risk of cancer and cancer mortality.

Project 3. International Network of Women Against Tobacco (INWAT)

A. Provide contacts primarily to women, individuals, and organizations working in tobacco control; collect and distribute information regarding global women and tobacco issues; and develop strategies to counter tobacco advertising and promotion. Strategies might include maintaining a website, a member directory and newsletter.

B. Provide assistance with the organization and planning of conferences on tobacco control such as the World Tobacco Conference.

C. Collaborate with state health departments to address tobacco use and prevention among women and girls.

D. Provide presentations on women and tobacco, with a strong emphasis on tobacco company marketing tactics at state and national meetings in the United States.

E. Promote female leadership in initiating the development of tobacco control organizations internationally.

Project 4. Dissemination of Information on Oral Cancer

A. Inventory and assess existing educational materials and other forms of information on oral cancer available to the public and health care providers.

B. Based on the assessment, revise educational materials and other forms of information on oral cancer to reflect up-to-date, science-based knowledge.

C. Conduct and evaluate outreach activities to increase knowledge and awareness among dental and other health care providers of information resources that address oral cancer issues.

D. Coordinate these activities with major organizations in dental health, such as the American Dental Association and its component state associations, the National Institute of Dental and Cranial Facial Research, and the Association of State and Territorial Dental Directors.

2. CDC Activities

A. Collaborate on and provide technical assistance for program activities.

B. Assist in the conduct of epidemiologic studies, research, and analysis using existing or newly created databases.

C. Participate in the development of plans for the sharing and dissemination of research, data analysis, evaluation efforts, demonstration projects and interventions, and other cancer information. Sponsor information exchanges through workshops, conferences, and other group mechanisms as appropriate .

D. Assist in defining the scope, development, and dissemination of plans and education materials, guidelines, and standards for cancer prevention and control activities.

E. Assist in developing and evaluating professional training opportunities for cancer prevention and control, particularly in the areas of prevention, early detection, surveillance, data analysis and cost-effectiveness.

F. Give guidance on cancer issues management topics to be considered and timing of consideration.

E. Application Content

Use the information in the ''Program Requirements,'' ''Other Requirements,'' and ''Evaluation Criteria'' sections to develop the application content. Your application will be evaluated on the criteria listed, so it is important to follow them in laying out your program plan. The narrative should be no more than 20 (twenty) double-spaced pages, printed on one side, with one-inch margins, and unreduced font.

A separate narrative is required for each Project which contains—

1. Statement of Need.—Identify opportunities for enhancement/improvement and existing gaps in the support of comprehensive cancer control and prevention activities. Describe the extent to which the proposed programs will fill existing gaps and provide a brief description of each programmatic plan or research activity.

2. Objectives. Establish and submit short- and long-term objectives for each project proposed in Section 1 (statement of need) above. Objectives must be specific, measurable, attainable, time phased, and realistic.

3. Operational Plan.—Submit an operational plan that addresses means for achieving each of the objectives established in Section 2 (objectives) above. Provide a concise description of each component or major activity and how it will be implemented. The plan must identify and establish a time line for the completion of each component or major activity.

4. Evaluation Plan.—Submit a quantitative plan for monitoring progress toward achieving each of the objectives stated in Section 2 (objectives) above.

5. Program Management.—Describe the need, functions, and qualification for each program or research personnel requested.

6. Budget.—Submit a detailed budget and narrative justification for each of the projects that is consistent with the purpose of the program and the proposed activities.

F. Submission and Deadline

Submit the original and two copies of PHS 5161–1 (OMB Number 0937–0189).

By May 1, 2000, submit the application to the Grants Management Specialist identified in the ''Where to Obtain Additional Information'' section of this announcement.

1. Deadline: Applications will be considered as meeting the deadline if they are either:

a. Received on or before the stated deadline date; or

b. Sent on or before the deadline date. (Applicants must request a legibly dated U.S. Postal Service postmark or obtain a legibly dated receipt from a commercial carrier or the U.S. Postal Service.

Private metered postmarks shall not be acceptable proof of timely mailing.)

2. Late Applications: Applications which do not meet the criteria in 1(a) or 1(b) above are considered late applications and will be returned to the applicant.

G. Evaluation Criteria

The application will be evaluated according to the following criteria by an independent review group appointed by CDC.

1. Need statement. The extent to which the applicant identifies specific opportunities and existing gaps related to the purpose of the program. (10 points)

2. Objectives. The degree to which short- and long-term objectives are specific, measurable, attainable, time phased, and realistic. (20 points)

3. Operational Plans. The adequacy of the applicant's plan to carry out the proposed activities, including the extent to which the applicant plans to work collaboratively with other organizations and individuals who may have an impact on cancer prevention and control objectives. (25 points)

4. Evaluation Plan. The extent to which the evaluation plan appears capable of monitoring progress toward meeting project objectives. (25 points)

5. Program Management. The extent to which proposed staff appear to be qualified and possess capacity to perform the project. (20 points)

6. Budget. The extent to which each line-item budget and narrative justification for Projects 1, 2, 3 and 4 are reasonable and consistent with the purpose and objectives of the program. (Not weighted)

7. Human Subjects. Does the application adequately address the requirements of Title 45 CFR Part 46 for the protection of human subjects? (Not Weighted)

8. The degree to which the applicant has met the CDC Policy requirements regarding the inclusion of women, ethnic, and racial groups in the proposed research. This includes:

1. The proposed plan for the inclusion of both sexes and racial and ethnic minority populations for appropriate representation.

2. The proposed justification when representation is limited or absent.

3. A statement as to whether the design of the study is adequate to measure differences when warranted.

4. A statement as to whether the plans for recruitment and research for study participants include the process of establishing partnerships with community(ies) and recognition of mutual benefits.

H. Other Requirements

Technical Reporting Requirements

Provide CDC with the original plus two copies of the following:

1. Annual written progress report must be submitted 30 days after the end of each budget period.

2. Financial status report (FSR) must be submitted 90 days after the end of each budget period.

3. Final financial and performance reports, must be submitted 90 days after the end of the project period.

Send all reports to the Grants Management Specialist identified in the ''Where to Obtain Additional Information'' section of this announcement.

The following additional requirements are applicable to this program. For a complete description of each, see Attachment I in the application package.

AR–1 Human Subjects Requirement
AR–2 Requirements for Inclusion of Women and Racial and Ethnic Minorities in Research
AR–9 Paperwork Reduction Act Requirements
AR–10 Smoke-Free Workplace Requirements
AR–11 Healthy People 2010
AR–12 Lobbying Restrictions
AR–20 Conference Support

I. Authority and Catalog of Federal Domestic Assistance Number

This program is authorized under sections 301(a), 317(k)(2) of the Public Health Service Act [42 U.S.C. 241(a) and 247b(k)(2)], as amended. The Catalog of Federal Domestic Assistance Number for this program is 93.283.

J. Where To Obtain Additional Information

To obtain additional information contact: Nealean K. Austin, Grants Management Specialist Grants Management Branch, Procurement and Grants Office Announcement 00037 Centers for Disease Control and Prevention (CDC) Room 3000, 2920 Brandywine Road, Atlanta, GA 30341, telephone (770)–488–2754, E-mail address nea1@cdc.gov

See also the CDC home page on the Internet: http://www.cdc.gov

For program technical assistance, contact: Corinne Graffunder, Chief, Section A, Program Services Branch, Division of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention (CDC), 4770 Buford Highway, NE., Mailstop K–57, Atlanta, GA 30341–3724, telephone (770) 488–4880, fax (770) 488–3230.

Dated: April 17, 2000.

John L. Williams,

Director, Procurement and Grants Office, Centers for Disease Control and Prevention (CDC).

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DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. 93D–0139]

International Conference on Harmonisation; Draft Revised Guidance on Q1A(R) Stability Testing of New Drug Substances and Products

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is publishing a draft revised guidance entitled ''Q1A(R) Stability Testing of New Drug Substances and Products.'' The draft revised guidance, which updates a guidance on the same topic published in the **Federal Register** of September 22, 1994 (the 1994 guidance), was prepared under the auspices of the International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH). The draft revised guidance clarifies the 1994 guidance, adds information, and provides consistency with more recently published ICH guidances. The draft revised guidance is intended to reflect formal scientific principles for stability testing of drugs and should be useful to applicants submitting new drug applications for new molecular entities and associated drug products.

DATES: Submit written comments by June 5, 2000.

ADDRESSES: Submit written comments on the draft revised guidance to the Dockets Management Branch (HFA–305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852. Copies of the draft revised guidance are available from the Drug Information Branch (HFD–210), Center for Drug Evaluation and Research, Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301–827–4573. Single copies of the draft revised guidance may be obtained by mail from the Office of Communication, Training, and Manufacturers Assistance (HFM–40), Center for Biologics Evaluation and Research (CBER), or by calling the CBER Voice Information System at 1–800–835–4709 or 301–827–1800. Copies may be obtained from CBER's FAX Information System at 1–888–CBER–FAX or 301–827–3844.

FOR FURTHER INFORMATION CONTACT:

Regarding the guidance: Chi Wan Chen, Center for Drug Evaluation and Research (HFD–830), Food and Drug Administration, 9201 Corporate Blvd., Rockville, MD 20850, 301–827–2001.

Regarding the ICH: Janet J. Showalter, Office of Health Affairs (HFY–20), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301–827–0864.

SUPPLEMENTARY INFORMATION: In recent years, many important initiatives have been undertaken by regulatory authorities and industry associations to promote international harmonization of regulatory requirements. FDA has participated in many meetings designed to enhance harmonization and is committed to seeking scientifically based harmonized technical procedures for pharmaceutical development. One of the goals of harmonization is to identify and then reduce differences in technical requirements for drug development among regulatory agencies.

ICH was organized to provide an opportunity for tripartite harmonization initiatives to be developed with input from both regulatory and industry representatives. FDA also seeks input from consumer representatives and others. ICH is concerned with harmonization of technical requirements for the registration of pharmaceutical products among three regions: The European Union, Japan, and the United States. The six ICH sponsors are the European Commission, the European Federation of Pharmaceutical Industries Associations, the Japanese Ministry of Health and Welfare, the Japanese Pharmaceutical Manufacturers Association, the Centers for Drug Evaluation and Research and Biologics Evaluation and Research, FDA, and the Pharmaceutical Research and Manufacturers of America. The ICH Secretariat, which coordinates the preparation of documentation, is provided by the International Federation of Pharmaceutical Manufacturers Associations (IFPMA).

The ICH Steering Committee includes representatives from each of the ICH sponsors and the IFPMA, as well as observers from the World Health Organization, the Canadian Health Protection Branch, and the European Free Trade Area.

In October 1999, the ICH Steering Committee agreed that a draft revised guidance entitled ''Q1A(R) Stability Testing of New Drug Substances and Products'' should be made available for public comment. The draft revised guidance is a revision of an ICH guidance on the same topic published in the **Federal Register** of September 22, 1994 (59 FR 48754). The draft revised guidance is the product of the Quality Expert Working Group of the ICH. Comments about this draft will be considered by FDA and the Quality Expert Working Group.

In accordance with FDA's good guidance practices (62 FR 8961, February 27, 1997), this document is now being called a guidance, rather than a guideline.

The draft revised guidance provides guidance on the information to be submitted in the stability data package for a new drug substance or drug product. The revisions add information on stability storage conditions: (1) For drug substances and products intended to be stored in a refrigerator or freezer and (2) for drug products packaged in semipermeable containers. The revisions clarify the guidance on: (1) Testing frequencies for stability studies at accelerated and intermediate conditions and (2) stability commitments.

The draft revised guidance recognizes certain regional regulatory constraints. The Preamble and Objective sections of the 1994 guidance were revised to recognize that, in some regions, guidance does not constitute a regulatory requirement. The Storage Conditions sections of the 1994 guidance were revised to recognize that, in some regions, stability amendments to pending applications are not permissable.

The draft revised guidance includes references to three recently published ICH guidances: (1) ''Q1B Photostability Testing of New Drug Substances and Products,'' (2) ''Q6A Specifications: Test Procedures and Acceptance Criteria for New Drug Substances and New Drug Products: Chemical Substances,'' and (3) ''Q6B Specifications: Test Procedures and Acceptance Criteria for Biotechnological/Biological Products.''

This draft guidance applies in general to new dosage forms and biotechnological/biological products as does the original Q1A guidance. Additional guidance specific to the stability testing of new dosage forms and biotechnological/biological products can be found in two previously published ICH guidances entitled ''Q1C: Stability Testing of New Dosage Forms'' and ''Q5C: Quality of Biotechnological Products: Stability Testing of Biotechnological/Biological Products,'' respectively.

This draft revised guidance represents the agency's current thinking on stability testing of new drug substances and products. It does not create or confer any rights for or on any person and does not operate to bind FDA or the public. An alternative approach may be used if such approach satisfies the requirements of the applicable statute, regulations, or both.

Interested persons may submit to the Dockets Management Branch (address above) written comments on the draft revised guidance on or before June 5, 2000. Two copies of any comments are to be submitted, except that individuals may submit one copy. Comments are to be identified with the docket number found in brackets in the heading of this document. The draft revised guidance and received comments may be seen in the office above between 9 a.m. and 4 p.m., Monday through Friday. An electronic version of this guidance is available on the Internet at http://www.fda.gov/cder/guidance/index.htm or http://www.fda.gov/cber/publications.htm.

The text of the draft revised guidance follows:

Q1A(R): Stability Testing of New Drug Substances and Products [1]

Preamble

The following guidance defines the stability data package for a new drug substance or drug product that is sufficient for a registration application within the three regions of the EC, Japan, and the United States. It does not seek necessarily to cover

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the testing for registration in or export to other areas of the world.

The principle that stability information generated in any one of the three regions of the EC, Japan, and the United States would be mutually acceptable in both of the other two regions has been established, provided the information is consistent with this guidance and the labeling is in accord with national/regional requirements.

The guidance seeks to exemplify the core stability data package for new drug substances and products, but leaves sufficient flexibility to encompass the variety of different practical situations that may be encountered due to specific scientific considerations and characteristics of the materials being evaluated. Alternative approaches may be used when there are scientifically justifiable reasons.

Specific details of the sampling and testing for particular dosage forms/packaging, etc., are not covered in this guidance.

Objective

The purpose of stability testing is to provide evidence on how the quality of a drug substance or drug product varies with time under the influence of a variety of environmental factors, such as temperature, humidity, and light, and enables recommended storage conditions, retest periods, and shelf lives to be established.

Scope

The guidance addresses the information to be submitted in registration applications for new molecular entities and associated drug products. This guidance does not currently seek to cover the information to be submitted for abbreviated or abridged applications, variations, clinical trial applications, etc.

The choice of test conditions defined in this guidance is based on an analysis of the effects of climatic conditions in the three areas of the EC, Japan, and the United States. The mean kinetic temperature in any region of the world can be derived from climatic data (Grimm, W., *Drugs Made in Germany*, 28:196–202, 1985 and 29:39–47, 1986).

Drug Substance

General

Information on the stability of the drug substance is an integral part of the systematic approach to stability evaluation.

Stress Testing

Stress testing helps determine the intrinsic stability of the molecule by establishing degradation pathways in order to identify the likely degradation products and to validate the stability indicating power of the analytical procedures used. Stress testing is conducted to provide data on forced decomposition products and decomposition mechanisms. The severe conditions that may be encountered during distribution can be covered by stress testing. These studies should establish the inherent stability characteristics of the molecule, such as the degradation pathways, and lead to identification of degradation products and hence support the suitability of the proposed analytical procedures. The detailed nature of the studies will depend on the individual drug substance and type of drug product.

This testing is likely to be carried out on a single batch of material and to include the effect of temperatures in 10 degrees Celsius (°C) increments (e.g., 50 °C, 60 °C) above the accelerated temperature test condition and humidity (e.g., 75 percent RH or greater) where appropriate and oxidation and photolysis on the drug substance plus its susceptibility to hydrolysis across a wide range of pH values when in solution or suspension.

Photostability testing should be an integral part of stress testing. (The standard conditions for photostability testing are defined in ICH Q1B.)

It is recognized that some degradation pathways can be complex and that, under forcing conditions, decomposition products may be observed that are unlikely to be formed under accelerated or long-term testing. This information may be useful in developing and validating suitable analytical methods, but it may not always be necessary to examine specifically for all degradation products if it has been demonstrated that in practice these are not formed.

Results from these studies will form an integral part of the information provided to regulatory authorities.

Selection of Batches

Data from formal stability studies should be provided on at least three batches of the drug substance. The batches manufactured to a minimum of pilot scale should be by the same synthetic route and use a method of manufacture and procedure that simulates the final process to be used on a manufacturing scale.

The overall quality of the batches of drug substance placed on formal stability studies should be representative of the quality of the material used in clinical studies and of the quality of material to be made on a manufacturing scale.

Supporting stability data may be provided using stability data generated from batches of drug substance made on a laboratory scale.

Packaging/Containers

The stability studies should be conducted on material stored in a container closure system that is the same as or simulates the packaging proposed for storage and distribution.

Test Attributes, Test Procedures, and Test Acceptance Criteria

Test attributes, test procedures, and acceptance criteria are defined in ICH Q6A and Q6B.

The testing should cover attributes of the drug substance susceptible to change during storage and likely to influence quality, safety, and/or efficacy. Stability information should cover, as appropriate, the physical, chemical, biological, and microbiological attributes of the drug substance. Validated stability-indicating test procedures should be applied. The need for and extent of replication will depend on the results from validation studies.

Acceptance criteria are numerical limits, ranges, and other criteria for the specific tests described and should include individual and total upper limits for impurities and degradation products. The acceptance criteria should be derived from batches of the material used in the preclinical and clinical studies.

Testing Frequency

Frequency of testing should be sufficient to establish the stability attributes of the drug substance. For drug substances with a proposed retest period of at least 12 months, the frequency of testing at the long-term storage condition will normally be every 3 months over the first year, every 6 months over the second year, and then annually.

For the accelerated storage conditions, a minimum of three test points, including the initial and end points (e.g., 0, 3, and 6 months) is recommended. Where an expectation (based on development experience) exists that results from accelerated storage are likely to approach significant change criteria, increased testing should be conducted either by testing additional samples at the final time point or by inclusion of a fourth time point in the protocol.

When testing at the intermediate storage condition is necessary as a result of failure at the accelerated storage condition, a minimum of four test points, including the initial and end points, is recommended (e.g., 0, 6, 9, and 12 months).

Storage Conditions

In general, a drug substance should be evaluated for stability as appropriate under storage conditions that test both thermal stability and stability at conditions of elevated humidity. The storage conditions and length of studies chosen should be sufficient to cover storage, shipment, and subsequent use.

The storage condition at which long-term testing is conducted will be reflected in the labeling and retest date. The long-term testing should cover a minimum of 12 months' duration at the time of submission and should be continued for a sufficient period to cover the proposed retest period. Additional data accumulated during the assessment period of the registration application should be submitted to the authorities if requested. Data from the accelerated storage condition or from the intermediate storage condition, as appropriate, may be used to evaluate the impact of short-term excursions outside the label storage conditions (such as might occur during shipping).

Significant change is defined as failure to meet the specification.

Long-term, accelerated, and, where appropriate, intermediate storage conditions for drug substances are detailed in the sections below. Alternative storage conditions are allowable if justified. If not covered by a subsequent section, a drug substance should be considered as belonging to the general case.

General Case for Drug Substances

Study	Storage Condition	Minimum Time Period at Submission
Long-term	25 °C ± 2 °C/60% RH ± 5% RH	12 months
Intermediate	30 °C ±2 °C/60% RH ± 5% RH	6 months
Accelerated	40 °C ± 2 °C/75% RH ± 5% RH	6 months

When ''significant change'' occurs at any time during 6 months' storage at the accelerated storage condition, additional testing at the intermediate storage condition should be conducted and evaluated against significant change criteria. The initial application should include a minimum of 6 months' data from a 12-month study at the intermediate storage condition.

Drug Substances Intended for Storage in a Refrigerator

Study	Storage Condition	Minimum Time Period at Submission
Long-term	5 °C ± 3 °C	12 months
Accelerated	25 °C ± 2 °C/60% RH ± 5% RH	6 months

Data from refrigerated storage should be assessed according to the evaluation section of this guidance, except where explicitly noted below.

If significant change occurs between 3 and 6 months' testing at the accelerated storage condition, the proposed retest period should be based on the real-time data available at the long-term storage condition.

If significant change occurs within the first 3 months' testing at the accelerated storage condition, data should be supplied to cover use of the drug substance outside of the label storage condition. It is not necessary to continue to test a product to 6 months when an obvious significant change has occurred within the first 3 months.

Drug Substances Intended for Storage in a Freezer

Study	Storage Condition	Minimum Time Period at Submission
Long-term	−20 °C ± 5 °C	12 months

For drug substances intended for storage in a freezer, the retest period should be based on the real-time data presented at the long-term storage condition. In the absence of an accelerated storage condition for drug substances intended to be stored in a freezer, testing at an elevated temperature (e.g., 5 °C ± 3 °C or 25 °C ± 2 °C) on a single batch should be conducted to support use of the drug substance outside of the proposed label storage condition.

Drug Substances Intended for Storage Below −20 °C

Drug substances intended for storage below −20 °C should be treated on a case-by-case basis.

Stability Commitment

When available long-term stability data on primary batches do not cover the proposed retest period granted at the time of approval, the studies should be continued postapproval in order to firmly establish the retest period.

Where the submission includes long-term storage data from three production batches covering the proposed retest period, no postapproval commitment is necessary. Otherwise, the appropriate alternative from those shown below should be followed:

1. If the submission includes stability data on at least three production batches, a commitment should be made to continue these studies through the proposed retest period.

2. If the submission includes stability data on fewer than three production batches, a commitment should be made to continue these studies through the proposed retest period and to place additional production batches, to a total of at least three, on long-term stability studies through the proposed retest period.

3. If the submission does not include stability data on production batches, a commitment should be made to place the first three production batches on long-term stability studies through the proposed retest period.

The stability protocol used for long-term studies for the stability commitment should be the same as that for the primary batches unless otherwise scientifically justified.

Evaluation

The design of the stability study is to establish, based on testing a minimum of three batches of the drug substance and evaluating the stability information (covering as appropriate the physical, chemical, biological, and microbiological attributes), a retest period applicable to all future batches of the drug substance manufactured under similar circumstances. The degree of variability of individual batches affects the confidence that a future production batch will remain within specification throughout the assigned retest period.

The data may show so little degradation and so little variability that it is apparent from looking at the data that the requested retest period will be granted. Under these circumstances, it is normally unnecessary to go through the formal statistical analysis; providing a full justification for the omission would be sufficient.

An acceptable approach for quantitative characteristics that are expected to change with time is to determine the time at which the 95 percent one-sided confidence limit for the mean degradation curve intersects the acceptable specification limit. If analysis shows that the batch-to-batch variability is small, it is advantageous to combine the data into one overall estimate, and this can be done by first applying appropriate statistical tests (e.g., p values for level of significance of rejection of more than 0.25) to the slopes of the regression lines and zero time intercepts for the individual batches. If it is inappropriate to combine data from several batches, the overall retest period may depend on the minimum time a batch may be expected to remain within acceptable and justified limits.

The nature of any degradation relationship will determine the need for transformation of the data for linear regression analysis. Usually the relationship can be represented by a linear, quadratic, or cubic function on an arithmetic or logarithmic scale. Statistical methods should be employed to test the goodness of fit of the data on all batches and combined batches (where appropriate) to the assumed degradation line or curve.

Limited extrapolation of the real-time data from the long-term testing storage condition beyond the observed range to extend the retest period at approval time may be undertaken, particularly where the accelerated data support this. However, this assumes that the same degradation relationship will continue to apply beyond the observed data. Hence the use of

extrapolation should be justified in each application in terms of what is known about the mechanism of degradation, the goodness of fit of any mathematical model, batch size, existence of supportive data, etc.

Any evaluation should cover not only the assay, but also the levels of degradation products and other appropriate attributes.

Statements/Labeling

A storage temperature range may be used in accordance with relevant national/regional requirements. The range should be based on the stability evaluation of the drug substance. Where applicable, specific instructions should be provided, particularly for drug substances that cannot tolerate freezing. The use of terms such as ''ambient conditions'' or ''room temperature'' is unacceptable.

A retest period should be derived from the stability information.

Drug Product

General

The design of the formal stability studies for the drug product should be based on knowledge of the behavior and properties of the drug substance and on experience gained from clinical formulation studies and from stability studies on the drug substance. The likely changes on storage and the rationale for the selection of attributes to test in the formal stability studies should be stated.

Photostability Testing

Photostability testing should be conducted on at least one primary batch of the drug product if appropriate. (The standard conditions for photostability testing are defined in ICH Q1B.)

Selection of Batches

Data from formal stability studies are to be provided on at least three batches of the drug product. Two of the three batches should be at least pilot scale. The third batch may be smaller (e.g., 25,000 to 50,000 tablets or capsules for solid oral dosage forms). The manufacturing process used for primary batches should simulate that to be applied to production batches and should provide product of the same quality and meet the same quality specification as that intended for marketing. Where possible, batches of the drug product should be manufactured using different batches of drug substance.

Laboratory scale batches are not acceptable for formal stability studies. Data on associated formulations or packaging may be submitted as supporting stability data.

Packaging/Containers

The stability testing should be conducted on the dosage form stored in the packaging proposed for marketing. Additional testing of unprotected drug product can form a useful part of stress testing and packaging evaluation, as can studies carried out on other related packaging materials in supporting the definitive package(s).

Test Attributes, Test Procedures, and Acceptance Criteria

Test attributes, test procedures, and acceptance criteria, including the concept of release and shelf life specifications, are defined in ICH Q6A and Q6B.

The testing should cover those attributes susceptible to change during storage and likely to influence quality, safety, and/or efficacy. Analytical test procedures should be fully validated, and the assays should be stability-indicating. The need for and extent of replication will depend on the results of validation studies.

The range of testing should cover, as appropriate, chemical and/or biological stability, loss of preservative, physical properties, characteristics, functionality, and microbiological attributes.

Acceptance criteria should relate to the release limits (where applicable) to be derived from consideration of all the available stability information. The shelf life specification could allow acceptable and justifiable differences from the release specification based on the stability evaluation and the changes observed on storage. It should include specific upper limits for degradation products, the justification for which should be influenced by the levels observed in material used in preclinical studies and clinical trials. The justification for the limits proposed for certain other tests, such as particle size and/or dissolution rate, should reference the results observed for batch(es) used in bioavailability and/or clinical studies. Any differences between the release and shelf life specifications for antimicrobial preservatives should be supported by preservative efficacy testing.

Testing Frequency

Frequency of testing should be sufficient to establish the stability attributes of the drug product. For products with a proposed shelf life of at least 12 months, the frequency of testing at the long-term storage condition will normally be every 3 months over the first year, every 6 months over the second year, and then annually.

For the accelerated storage conditions, a minimum of three test points, including the initial and end points (e.g., 0, 3, and 6 months), is recommended. Where an expectation (based on development experience) exists that results from accelerated storage are likely to approach significant change criteria, increased testing should be conducted either by testing additional samples at the final time point or by inclusion of a fourth time point in the protocol.

When testing at the intermediate storage condition is necessary as a result of failure at the accelerated storage condition, a minimum of four test points, including the initial and end points is recommended (e.g., 0, 6, 9, and 12 months).

Matrixing or bracketing can be applied, if justified. (See Glossary.)

Storage Conditions

In general, a drug product should be evaluated under storage conditions that test the thermal stability and, if appropriate, its sensitivity to moisture or, for liquid products in semipermeable containers, potential for solvent loss. The storage conditions and length of studies chosen should be sufficient to cover storage, shipment, and subsequent use.

Stability of the drug product after reconstituting or diluting according to labeling should be addressed to provide appropriate and supportive information.

The storage condition at which long-term testing is conducted will be reflected in the labeling and expiration date. The long-term testing should cover a minimum of 12 months' duration at the time of submission and should be continued for a sufficient period to cover the proposed shelf life. Additional data accumulated during the assessment period of the registration application should be submitted to the authorities if requested. Data from the accelerated storage condition or from the intermediate storage condition as appropriate may be used to evaluate the impact of short-term excursions outside the label storage conditions (such as might occur during shipping).

In general, significant change is defined as:

1. A 5 percent potency change from the initial assay value;
2. Any specified degradant exceeding its acceptance criteria;
3. Failure to meet acceptance criteria for appearance and physical properties (e.g., color, phase separation, resuspendibility, delivery per actuation, caking, hardness); and as appropriate to the product type;
4. The pH exceeding its acceptance criteria; and
5. Dissolution exceeding the acceptance criteria for 12 dosage units.

Long-term, accelerated, and, where appropriate, intermediate storage conditions for drug products are detailed in the sections below; alternative storage conditions are allowable if justified. If not covered by a subsequent section, a drug product should be considered as belonging to the general case.

General Case

Study	Storage Condition	Minimum Time Period at Submission
Long-term	25 °C ± 2 °C/60% RH ± 5% RH	12 months
Intermediate	30 °C ± 2 °C/60% RH ± 5% RH	6 months
Accelerated	40 °C ± 2 °C/75% RH ± 5% RH	6 months

When ''significant change'' occurs at any time during 6 months' storage at the accelerated storage condition, additional testing at the intermediate storage condition should be conducted and evaluated against significant change criteria. The initial application should include a minimum of 6 months' data from a 12-month study at the intermediate storage condition.

Drug Products Stored in Impermeable Containers

The sensitivity to moisture or the potential for solvent loss is not a concern for drug products packaged in impermeable containers that provide a permanent barrier to passage of moisture or solvent, e.g., semisolids in sealed aluminum tubes, solutions in sealed glass ampules. Thus, stability studies for products stored in impermeable containers may be conducted under any relative humidity.

Drug Products Packaged in Semipermeable Containers

Aqueous-based products packaged in semipermeable containers should be evaluated for potential water loss in addition to physical, chemical, biological, and microbiological stability. This evaluation can be carried out under conditions of low relative humidity as discussed below. Other comparable approaches may be developed and reported for nonaqueous, solvent-based products.

Ultimately, the shelf life for aqueous-based drug products stored in semipermeable containers should justify storage in low relative humidity environments. To accommodate this, it should be demonstrated that the drug product will remain within its approved acceptance criteria throughout the proposed shelf life if stored at a temperature of 25 °C and at the reference relative humidity of 40 percent RH.

Study	Storage Condition	Minimum Time Period at Submission
Long-term	25 °C ± 2 °C/40% RH ± 5% RH	12 months
Intermediate	30 °C ± 2 °C/60% RH ± 5% RH	6 months
Accelerated	40 °C ± 2 °C/not more than (NMT) 25% RH	6 months (water loss after 3 months)

An acceptable alternative approach to storage at the reference reduced humidity (for both long-term and accelerated storage) is to perform the stability studies under higher relative humidity and to derive the water loss at reduced relative humidity through calculation. This may be done by experimentally determining the permeation coefficient for the container and closure system or the ratio of water loss between the two humidity conditions at the same temperature as shown in the example below. The permeation coefficient for any packaging system may be experimentally determined to cover a worst case alternative relative to the proposed drug product.

A significant change in water loss for a product packaged in a semipermeable container has occurred when there has been a water loss of greater than 5 percent after 3 months' storage equivalent to 40 °C/NMT 25 percent RH. However, for small single-dose products, a water loss of greater than 5 percent after 3 months' storage equivalent to 40 °C/NMT 25 percent RH may be acceptable if justified.

A significant change in water loss alone will not necessitate testing at the intermediate storage condition.

Example Approach for Determining Percentage Water Loss

An appropriate approach for calculating an equivalent percentage water loss for a product stored at a reference relative humidity from data generated from an alternative relative humidity at the same temperature is described below. A linear rate of moisture loss over the storage period should be demonstrated.

A mean percentage weight loss at the reference relative humidity should be calculated from that measured at the alternative relative humidity at a given temperature after a specified storage period.

For example, the equivalent weight loss after 3 months' storage at NMT 25 percent RH (at 40 °C) is the product of the percentage weight loss at 75 percent RH (at 40 °C) after 3 months, multiplied by 3.0 from the table below.

Other valid calculated relative humidity ratios than those in the table below may also be used.

Alternative Humidity	Nominated Humidity	Ratio
60% RH	25% RH	2.4
60% RH	40% RH	1.5
75% RH	25% RH	3.0

Drug Products Intended for Storage in a Refrigerator

Study	Storage Condition	Minimum Time Period at Submission
Long-term	5 °C ± 3 °C	12 months
Accelerated	25 °C ± 2 °C/60% RH ± 5% RH	6 months

Data from refrigerated storage should be assessed according to the evaluation section of this guidance except where explicitly noted below.

If significant change occurs between 3 and 6 months' testing at the accelerated storage condition, the proposed shelf life should be based on the real-time data available from the long-term storage condition.

If significant change occurs within the first 3 months' testing at the accelerated storage condition, data should be supplied to cover use of the drug product outside of the label storage condition. It is not necessary to continue to test a product to 6 months when an obvious significant change has occurred within the first 3 months.

Drug Products Intended for Storage in a Freezer

Study	Storage Condition	Minimum Time Period at Submission
Long-term	−20 °C ± 5 °C	12 months

For drug products intended for storage in a freezer, the shelf life should be based on the real-time data presented at the long-term storage condition. In the absence of an accelerated storage condition for drug products intended to be stored in a freezer, data from elevated temperature (e.g., 5 °C ± 3 °C or 25 °C ± 2 °C) on a single batch should be obtained to support use of the drug product outside of the proposed label storage condition.

Drug Products Intended for Storage Below −20 °C

Drug products intended for storage below −20 °C should be treated on a case-by-case basis.

Stability Commitment

When available long-term stability data on primary batches do not cover the proposed shelf life granted at the time of approval, the studies should be continued postapproval in order to firmly establish the shelf life.

Where the submission includes long-term storage data from three production batches covering the proposed shelf life, no postapproval commitment is necessary. Otherwise, the appropriate alternative from those shown below should be followed.

1. If the submission includes stability data on at least three production batches, a commitment should be made to continue these studies through the proposed shelf life.

2. If the submission includes stability data on fewer than three production batches, a commitment should be made to continue these studies through the proposed shelf life and to place additional production batches, to a total of at least three, on long-term and accelerated stability studies through the proposed shelf life.

3. If the submission does not include stability data on production batches, a commitment should be made to place the first three production batches on long-term and accelerated stability studies through the proposed shelf life.

The stability protocol used for studies on commitment batches should be the same as that for the primary batches unless otherwise scientifically justified.

Where a significant change has occurred at the accelerated storage condition for the primary batches, testing on the commitment batches should be conducted at the intermediate storage condition instead of the accelerated storage condition. As an alternative, testing may be conducted at the accelerated storage condition for the commitment batches. However, if significant change occurs at the accelerated storage condition on the commitment batches, testing at the intermediate storage condition should also be conducted.

Evaluation

A systematic approach should be adopted in the presentation and evaluation of the stability information, which should cover, as appropriate, physical, chemical, biological, and microbiological quality attributes, including particular properties of the dosage form (for example, dissolution rate for solid oral dosage forms).

Where the data show so little degradation and so little variability that it is apparent from looking at the data that the requested shelf life will be granted, it is normally unnecessary to go through the formal statistical analysis; providing a justification for the omission should be sufficient.

The design of the stability study is to establish, based on testing a minimum of three batches of the drug product, a shelf life and label storage instructions applicable to all future batches of the drug product manufactured and packed under similar circumstances. The degree of variability of individual batches affects the confidence that a future production batch will remain within specification throughout its shelf life.

An acceptable approach for quantitative characteristics that are expected to change with time is to determine the time at which the 95 percent one-sided confidence limit for the mean degradation curve intersects the acceptance criterion. If analysis shows that the batch-to-batch variability is small, it is advantageous to combine the data into one overall estimate, and this can be done by first applying appropriate statistical tests (e.g., p values for level of significance of rejection of more than 0.25) to the slopes of the regression lines and zero time intercepts for the individual batches. If it is inappropriate to combine data from several batches, the overall shelf life may depend on the minimum time a batch may be expected to remain within acceptable and justified limits.

The nature of the degradation relationship will determine the need for transformation of the data for linear regression analysis. Usually the relationship can be represented by a linear, quadratic, or cubic function on an arithmetic or logarithmic scale. Statistical methods should be employed to test the goodness of fit on all batches and combined batches (where appropriate) to the assumed degradation line or curve.

Limited extrapolation of the real-time data presented from the long-term storage condition beyond the observed range to extend the shelf life at approval time, particularly where the accelerated data support this, may be undertaken. However, this assumes that the same degradation relationship will continue to apply beyond the observed data, and hence the use of extrapolation should be justified in each application in terms of what is known about the mechanisms of degradation, the goodness of fit of any mathematical model, batch size, existence of supportive data, etc.

Any evaluation should consider not only the assay, but the levels of degradation products and appropriate attributes. Where appropriate, attention should be paid to reviewing the adequacy of the mass balance and different stability and degradation performance.

The stability of the drug product after reconstituting or diluting according to labeling should be addressed to provide appropriate and supportive information.

Statements/Labeling

A storage temperature range may be used in accordance with relevant national/regional requirements. The range should be based on the stability evaluation of the drug product. Where applicable, specific instruction should be provided, particularly for drug products that cannot tolerate freezing.

The use of terms such as ''ambient conditions'' or ''room temperature'' is unacceptable.

There should be a direct linkage between the label statement and the demonstrated stability characteristics of the drug product.

Annex 1

Glossary and Information

The following terms have been in general use, and the following definitions are provided to facilitate interpretation of the guidance.

Accelerated testing: Studies designed to increase the rate of chemical degradation or physical change of a drug substance or drug product by using exaggerated storage conditions as part of the formal stability studies. These data, in addition to long-term stability studies, may also be used to assess longer-term chemical effects at nonaccelerated conditions and to evaluate the impact of short-term excursions outside the label storage conditions such as might occur during shipping. Results from accelerated testing studies are not always predictive of physical changes.

Bracketing: The design of a stability schedule so that at any time point only the samples on the extremes, for example, of container size and/or dosage strengths, are tested. The design assumes that the stability of the intermediate condition samples are represented by those at the extremes.

Where a range of dosage strengths is to be tested, bracketing designs may be particularly applicable if the strengths are very closely related in composition (e.g., for a tablet range made with different compression weights of a similar basic granulation, or a capsule range made by filling different plug fill weights of the same basic composition into different size capsule shells). Where a range of sizes of immediate containers is to be evaluated,

bracketing designs may be applicable if the composition of the container and the type of closure are the same throughout the range.

Climatic zones: The concept of dividing the world into four zones based on defining the prevalent annual climatic conditions.

Commitment batches: Production batches of a drug substance or drug product for which the stability studies will be initiated or completed postapproval through a commitment made in the registration application.

Dosage form: A pharmaceutical product type (for example, tablet, capsule, solution, cream) that contains a drug substance generally, but not necessarily, in association with excipients.

Drug product: The dosage form in the final immediate packaging intended for marketing.

Drug substance: The unformulated drug substance that may subsequently be formulated with excipients to produce the drug product.

Excipient: Anything other than the drug substance in the dosage form.

Expiration date: The date placed on the container/labels of a drug product designating the time during which a batch of the product is expected to remain within the approved shelf life specification if stored under defined conditions, and after which it must not be used.

Formal stability studies: Long-term and accelerated (and intermediate) studies undertaken on primary and/or commitment batches according to a prescribed stability protocol to establish or confirm the retest period of a drug substance or the shelf life of a drug product.

Impermeable containers: Containers that provide a permanent barrier to the passage of gases or solvents.

Long-term testing: Stability studies under the recommended storage condition, for the retest period or shelf life proposed (or approved) for labeling.

Mass balance: The process of adding together the assay value and levels of degradation products to see how closely these add up to 100 percent of the initial value, with due consideration of the margin of analytical error.

Matrixing: The statistical design of a stability schedule so that only a fraction of the total number of samples is tested at any specified sampling point. At a subsequent sampling point, different sets of samples of the total number would be tested. The design assumes that the stability of the samples tested represents the stability of all samples. The differences in the samples for the same drug product should be identified as, for example, covering different batches, different strengths, different sizes of the same container and closure, and, possibly, in some cases, different container/closure systems.

Matrixing can cover reduced testing when more than one variable is being evaluated. Thus the design of the matrix will be dictated by the factors being covered and evaluated. This potential complexity precludes inclusion of specific details and examples, and it may be desirable to discuss design in advance with the regulatory authority, where this is possible. In every case, it is essential that all batches are tested initially and at the end of the long-term testing.

Mean kinetic temperature: A single derived temperature that, if maintained over a defined period, affords the same thermal challenge to a drug substance or drug product as would have been experienced over a range of both higher and lower temperatures for an equivalent defined period. The mean kinetic temperature is higher than the arithmetic mean temperature and takes into account the Arrhenius equation.

When establishing the mean kinetic temperature for a defined period, the formula of J. D. Haynes (*J. Pharm. Sci.* 60:927–929, 1971) can be used.

New molecular entity: A substance that has not previously been registered as a new drug substance with the national or regional authority concerned.

Pilot scale: The manufacture of either drug substance or drug product by a procedure fully representative of and simulating that to be applied on a full manufacturing scale.

For solid oral dosage forms, this is generally taken to be at a minimum scale of one-tenth that of full production or 100,000 tablets or capsules, whichever is the larger.

Primary batch: A batch of drug substance or drug product used in a formal stability study from which stability data are submitted in a registration application for the purpose of establishing a retest period or shelf life, respectively. A primary batch should be at least a pilot scale batch (except in the case of drug product where one of the three batches can be smaller); but it may also be a production batch.

Production batch: A batch of a drug substance or drug product manufactured at production scale by using production equipment in a production facility as specified in the application.

Retest date: The date after which samples of the drug substance should be examined to ensure that the material is still suitable for use.

Retest period: The period of time during which the drug substance can be considered to remain within the specification and therefore acceptable for use in the manufacture of a given drug product, provided that it has been stored under the defined conditions. After this period, a batch destined for use in the manufacture of a drug product should be retested for compliance with specifications and then used immediately.

Semipermeable containers: Containers that allow the passage of solvent, usually water, while preventing solute loss. The mechanism for solvent transport occurs by absorption into one container surface, diffusion through the bulk of the container material, and desorption from the other surface. Transport is driven by a partial-pressure gradient. Examples of semipermeable containers include plastic bags and semirigid, low-density polyethylene (LDPE) pouches for large volume parenterals, and LDPE ampules, bottles, and vials.

Shelf life: The time interval that a drug product is expected to remain within the approved shelf life specification provided that it is stored under the conditions defined on the label in the proposed containers and closure.

Specification: See ICH Q6A and Q6B.

Specification—release: The combination of physical, chemical, biological, and microbiological tests and acceptance criteria that determine the suitability of a drug product at the time of its release.

Specification—shelf life: The combination of physical, chemical, biological, and microbiological tests and acceptance criteria that determine the suitability of a drug substance throughout its retest period or that a drug product should meet throughout its shelf life.

Storage conditions tolerances: The acceptable variation in temperature and relative humidity of storage facilities.

The equipment should be capable of controlling the storage condition within the ranges defined within the body of this document. The actual temperature and humidity should be monitored during stability storage. Short-term spikes due to opening of doors of the storage facility are accepted as unavoidable. The effect of excursions due to equipment failure should be addressed by the applicant and reported if judged to impact stability results. Excursions that exceed the defined tolerances for more than 24 hours should be described in the study report and their impact assessed.

Stress testing (Drug substance): Studies undertaken to elucidate intrinsic stability attributes. Such testing is part of the development strategy and is normally carried out under more severe conditions than those used for accelerated tests.

Stress testing (Drug product): Photostability testing should be an integral part of stress testing (see ICH Q1B).

Special test conditions for specific products (e.g., metered-dose inhalations, creams, emulsions) may need additional stress studies.

Supporting stability data: Data other than from formal stability studies, such as stability data on early synthetic route batches of drug substance, small scale batches of materials, investigational formulations not proposed for marketing, related formulations, product presented in containers and/or closures other than those proposed for marketing, information regarding test results on containers, and other scientific rationale that support the analytical procedures, the proposed retest period or shelf life and storage conditions.

Footnote

This guidance has been developed within the Quality Expert Working Group of the ICH Process. Additional topics continue to be discussed within the Expert Working Group and will be the subject of future guidance documents.

Dated: April 14, 2000.

Margaret M. Dotzel,

Acting Associate Commissioner for Policy.

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DEPARTMENT OF HEALTH AND HUMAN SERVICES

Administration for Children and Families

[Program Announcement No. CFDA 93.576]

Technical Assistance to Special Programs

AGENCY: Office of Refugee Resettlement (ORR), ACF, DHHS.

ACTION: Notice of availability of FY 2000 discretionary funds for technical assistance in six categories of programs that assist refugees.

SUMMARY: ORR invites eligible entities to submit competitive applications for cooperative agreements to provide technical assistance to agencies that serve in the following program areas:

Program Area 1—Technical assistance for special programs in designated initiatives;

Program Area 2—Technical assistance for employment services;

Program Area 3—Technical assistance to English language training providers;

Program Area 4—Technical assistance to agencies with Individual Development Account (IDA) projects for refugees;

Program Area 5—Technical assistance for refugee child welfare services; and

Program Area 6—Technical assistance for refugee housing services.

Applications will be screened and evaluated as indicated in this program announcement. Awards will be contingent on the outcome of the competition and the availability of funds.

Applications will be accepted pursuant to the Director's discretionary authority under section 412(c) of the Immigration and Nationality Act (INA) (8 U.S.C. 1522), as amended.

DATES: The closing date for submission of applications is June 20, 2000. See Part IV of this announcement for more information on submitting applications.

FOR FURTHER INFORMATION CONTACT: Program Areas 1 and 5—Marta Brenden at (202) 205–3589, *MBrenden@ACF.DHHS.GOV;* Program Areas 2, 4 and 6—Henley Portner at (202) 401–5363, *HPortner@ACF.DHHS.GOV;* Program Area 3—Nguyen Kimchi at (202) 401–4556, *NKimchi@ACF.DHHS.GOV.* Application materials are also available from Marta Brenden at the Office of Refugee Resettlement, 370 L'Enfant Promenade SW, Washington DC 20447 and on the ORR website at *www.acf.dhhs.gov/program/orr.*

SUPPLEMENTARY INFORMATION: This program announcement consists of four parts:

Part I: Background, legislative authority, funding availability, CFDA Number, applicant eligibility, project and budget periods, length of application, and for each of the six program areas: purpose and scope, allowable activities, and review criteria.

Part II: General instructions for preparing a full project description.

Part III: The Review Process—Intergovernmental review, initial ACF screening, competitive review, and funding reconsideration.

Part IV: The Application—Application materials, application development, application submission information and certifications, and regulations and reporting.

Paperwork Reduction Act of 1995 (Pub. L. 104–13)

Public reporting burden for each collection of information is estimated to average 8 hours, including the time for reviewing instructions, gathering and maintaining the data needed, and reviewing the collection of information. The following information collections are included in the program announcement: OMB Approval No. 0970–0139, ACF UNIFORM PROJECT DESCRIPTION (UPD) which expires 10/31/2000. 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.

Part I: Background

In recent years, ORR has supported the work of its grantees in various program areas through several ''technical assistance'' grants with organizations uniquely qualified to advance the field, improve program achievement and develop organizational capacity to improved performance. ORR has supported technical assistance for employment, English language training, microenterprise, services to the elderly, and the impact of welfare reform on refugees. Under this announcement, ORR continues its practice of providing technical assistance to the field of grantees in several new or expanded categories. ORR's intent through this support is to equip grantees with the best technical help for continuous improvement in programs, in their capacity to serve refugees, and in their impact on refugee lives and economic independence.

Legislative Authority: This program is authorized by Section 412(c)(1)(A) of the Immigration and Nationality Act (INA)(8 U.S.C. 1522 (c)(1)(A)), as amended, which authorizes the Director ''to make grants to, and enter into contracts with, public or private nonprofit agencies for projects specifically designed—(i) to assist refugees in obtaining the skills which are necessary for economic self sufficiency, including projects for job training, employment services, day care, professional refresher training, and other recertification services; (ii) to provide training in English where necessary (regardless of whether the refugees are employed or receiving cash or other assistance); and (iii) to provide where specific needs have been shown and recognized by the Director, health (including mental health) services, social services, education and other services.'' The FY 2000 Appropriation Act for the Department of Health and Human Services (Pub. L. 106–113) appropriates funds for refugee and entrant assistance activities authorized by these provisions of the INA.

Funding Availability: ORR expects to make available approximately $2 million for up to 6 cooperative agreements one for each program area.

The Director reserves the right to award less, or more, than the funds described, in the absence of worthy applications, or under such other circumstances as may be deemed to be in the best interest of the government.

CFDA Number: 93.576.

Applicant Eligibility: Eligible applicants are public and private non-profit organizations and agencies of State governments that are responsible for the refugee program under 45 CFR 400.5.

Project and Budget Periods: This announcement invites applications for project periods up to 3 years. Awards, on a competitive basis, will be for a one-year budget period, although project periods may be for 3 years. Applications for continuation grants funded under these awards beyond the one-year budget period but within the 3 year project period will be entertained in subsequent years on a noncompetitive basis, subject to availability of funds, satisfactory progress of the grantee and a determination that continued funding would be in the best interest of the Government.

Length of Application: Applicants are encouraged to limit program narratives to 25 pages (double-spaced on standard, letter-size paper, in 12-point font) plus no more than 25 pages of appended material. This limitation of 25 pages per program area should be considered as a maximum, and not necessarily a goal.

Program Area 1

Technical Assistance for Special Programs in Designated Initiatives

Program Purpose and Scope

The Office of Refugee Resettlement (ORR) proposes to award one cooperative agreement for the purpose of providing technical assistance to designated programs of special interest to the Director. For fiscal year 2000 funds, three special programs have been designated: microenterprise development; model projects for comprehensive cash assistance and employment services; and projects for refugees who have experienced long-term difficulties in assimilation. Through this award, ORR intends to provide technical planning and assistance to grantees for multiple purposes: to strengthen organizational capacity; to share policies, procedures, and materials through a grantee network; to collaborate on performance measures; to report program performance; and to assist grantees in their efforts at continuous performance improvement and its impact on refugee economic self-sufficiency.

Approximately $500,000 has been allocated for this program area. One cooperative agreement may be awarded for one national project. Successful applicants will have demonstrated expertise in both organizational and community development as well as more specialized experience in the field of micro-finance and the development of microenterprise projects.

Through this cooperative agreement, ORR intends to review and approve (1) A technical assistance plan, including proposed site visits and technical assistance activities and schedules; (2) all written materials developed and proposed for dissemination to the field; and (3) locations of proposed workshops, proposed topics and formats, and agendas.

Allowable Activities

Applicants may propose all or some combination of the following, as well as other innovative strategies for technical assistance:

- Assessing technical assistance and training needs in agencies and communities;
- Disseminating information, materials and technical advice related to employment, subsidized employment, self-employment, effective case management, financial management systems, and micro-finance;
- Collecting and summarizing data and information on program performance;
- Facilitating the electronic exchange of information through a network website, listserve, and through the collection and reporting of program performance, performance measurement, and impact information;
- Providing on-site or group training or technical assistance meetings and workshops;
- Developing training curricula and materials;
- Conducting on-site program reviews;
- Maintenance of a database of characteristics and achievements of the programs and preparation and dissemination of reports on the program characteristics and achievements.

Program Area 1

Application Review Criteria

1. *Approach.* The technical assistance plan is clearly described and appropriate, and the proposed activities and timeframes are reasonable. The technical assistance plan describes clearly and in detail the manner in which the applicant will assess the need for technical assistance, the proposed activities, and how the proposed activities are expected to address known technical assistance needs of agencies and communities. (20 points)

2. *Results or Benefits Expected.* The results or benefits expected are clearly explained and are appropriate to the technical assistance activities proposed. (15 points)

3. *Organizational Profiles.* The capacity of the applicant to achieve the project's objectives is clearly demonstrated. Organizational expertise and experience in the provision of technical assistance and information sharing are appropriate for the proposed project. (30 points)

4. *Staff and Position Data.* Staff qualifications are clearly presented and are appropriate to achieving the project's objectives. The description of staff qualifications demonstrates experience in providing technical assistance to refugee programs and communities. (20 points)

5. *Budget and Budget Justification.* The budget is clearly presented and is detailed, reasonable, and cost effective. (15 points)

Program Area 2

Technical Assistance for Employment Services

Purpose and Scope

The primary goal of refugee resettlement is to assist refugees in becoming self-sufficient. Two factors critical to achieving this goal are attachment to the labor force and the opportunity to earn a living wage. ORR proposes to award one cooperative agreement to an agency that will provide technical assistance to ORR employment service providers.

This announcement continues ORR's longstanding support for technical assistance to refugee employment service providers for multiple purposes: to identify model and best practices and to disseminate this information broadly; to assist local programs in implementing performance measures under the Government Performance and Results Act (GPRA); to develop and conduct training and on-site peer reviews; and to perform on-site analysis of employment services in such areas as staff training, multi-agency collaboration, and employer and/or refugee involvement in the design of services.

Approximately $275,000 has been allocated for this program area. One cooperative agreement may be awarded for one national project. Through this cooperative agreement, ORR intends to review and approve (1) the technical assistance plan, including proposed site visits and technical assistance activities and schedules; (2) all written materials developed prior to the release of such documents; and (3) locations of proposed workshops, proposed topics and formats, and agendas.

Allowable Activities

Applicants may propose all or a combination of the activities described below. Applicants may also propose new or innovative approaches to providing technical assistance for employment services.

- On-site visits to assess technical assistance needs, to provide technical assistance and training directly to agencies, and to ascertain best practices in providing employment services;
- Preparation of a variety of reports to be distributed to agencies to assist them in providing employment services, including site visit reports and best practices reports;
- Organization and operation of workshops for agencies in the area of employment services, to include facilitated discussions, training, and presentations; and
- Provision of technical assistance, both in writing and by telephone, to agencies.
- Maintenance of a database of characteristics and achievements of the programs and preparation and dissemination of reports on the program characteristics and achievements.

Program Area 2

Application Review Criteria

1. *Approach.* The technical assistance plan is clearly described and appropriate; and the proposed activities and timeframes are reasonable. The technical assistance plan describes clearly and in detail the manner in which the applicant will assess the need for technical assistance, the proposed activities, and how the proposed activities are expected to address known technical assistance needs of agencies that provide employment services. (30 points)

2. *Results or Benefits Expected.* The results or benefits expected are clearly explained and are appropriate to the technical assistance activities proposed. (15 points)

3. *Organizational Profiles.* The capacity of the applicant to achieve the project's objectives is clearly demonstrated. Organizational expertise and experience in the provision of employment services and in the provision of technical assistance are described and are appropriate and adequate for the proposed project. (20 points)

4. *Staff and Position Data.* Staff qualifications are clearly presented and are appropriate to achieving the project's objectives. The description of staff qualifications demonstrates experience in providing employment services and in providing technical assistance. (20 points)

5. *Budget and Budget Justification.* The budget is clearly presented and is detailed, reasonable, and cost effective. (15 points)

Program Area 3

Technical Assistance to English Language Training Providers

Purpose and Scope

The Office of Refugee Resettlement (ORR) proposes to award one cooperative agreement in the amount of $275,000 for a project to provide technical assistance and training to providers of English language training (ELT). Technical assistance may be proposed for the following purposes:

- Design and improvement of employment-related ELT. Technical assistance and training may be provided both to teachers and to programs; the technical assistance and training may be focused on curricula, teaching strategies, and/or program development such as integrating ELT with employment-focused services, work-site ELT, and family literacy.
- Training in the areas of cultural adjustment, learning disabilities, and mental health and in the use of new or innovative classroom technologies. Training may include topics such as identifying cultural adjustment/learning disabilities/mental health issues, accommodating such issues in the classroom and/or seeking professional consultation, and developing appropriate curricula. Training may also include introducing teachers to new and/or innovative ELT technologies, such as using software programs in classroom instruction.
- Organization and facilitation of consultative and information-sharing sessions. Such sessions may include staff from similar types of agencies or from agencies serving similar groups of refugees. The purpose of the sessions would be to provide an opportunity for ELT staff to share experiences. These sessions may also provide opportunities for different types of staff—ELT teachers, case managers, employment specialists, public health professionals—to meet to develop strategies for effective working relationships.

Applicants should propose technical assistance projects that are to be implemented nationally. Under the cooperative agreement for these projects, ORR intends to review and approve: (1) The technical assistance plan, including proposed sites and participants; (2) assessment tools to be used to evaluate technical assistance needs; (3) subject areas for which technical assistance curricula will be used; and (4) materials prepared for use in the delivery of the technical assistance.

Allowable Activities

Applicants may propose all or a combination of the activities described below. Applicants may also propose additional or innovative approaches for technical assistance for ELT providers.

- Assessment of ELT technical assistance needs in agencies and communities;
- Organization and operation of training and facilitated sessions on identified ELT technical assistance needs. These sessions may include both single agency and multi-site or multi-project training and facilitated discussion;
- Provision of technical assistance, both in writing and by telephone, to ELT providers;
- Review of existing materials and recommendations on usefulness/appropriateness for use in refugee-oriented ELT; and preparation and distribution of materials relevant to identified ELT needs;
- Development of, or participation in the development of, employment-based ELT curricula;
- Facilitation of a network of providers to share information and to resolve problems.

Program Area 3

Review Criteria for Technical Assistance to Organizations Providing English Language Training

1. *Approach.* The technical assistance plan is clearly described and appropriate; and the proposed activities and timeframes are reasonable. The technical assistance plan describes clearly and in detail the manner in which the applicant will assess the need for technical assistance, the proposed activities, and how the proposed activities are expected to address known ELT technical assistance needs. (30 points)

2. *Results or Benefits Expected.* The results or benefits expected are clearly explained and are appropriate to the technical assistance activities proposed. (15 points)

3. *Organization Profiles.* The capacity of the applicant to achieve the project's objectives is clearly demonstrated. Organizational expertise and experience in the provision of ELT and/or in ELT technical assistance to ELT staff and to agencies are described and are appropriate and adequate for the proposed project. (20 points)

4. *Staff and Position Data.* Staff qualifications are clearly presented and are appropriate to achieving the project's objectives. The description of staff qualifications demonstrates experience in providing ELT services and in providing ELT and cross-cultural communication technical assistance. (20 points)

5. *Budget and Budget Justification.* The budget is clearly presented, detailed, reasonable, and cost effective. (15 points)

Program Area 4

Technical Assistance to Agencies With Individual Development Account (IDA) Refugee Projects

Purpose and Scope

ORR invites eligible entities to submit competing applications for a cooperative agreement to provide technical assistance and information sharing activities to providers of Individual Development Account (IDA) Programs for Refugees. Under the cooperative agreement, the grantee would implement various activities intended to assist ORR-funded IDA grantees in the administration of their projects.

Allowable Activities

Allowable activities could include:

- On-site visits to assess technical assistance needs, provide technical assistance and training directly to grantees, and to ascertain best practices in both administering IDA programs and addressing the specific needs of refugees participating in these programs;
- Preparation of a variety of reports to be distributed to IDA grantees to assist them in administering their IDA programs, including site visit reports and best practices reports;
- Organization and operation of workshops for IDA grantees, to include facilitated discussions, training, and presentations;
- Provision of technical assistance, both in writing and by telephone, to IDA grantees;
- Facilitation of a network of IDA grantees to share information and to resolve problems, through, for example, the maintenance of a listserve, conference calls, etc.; and
- Maintenance of a database of characteristics and achievements of IDA programs and preparation and dissemination of reports on IDA program characteristics and achievements.

Applicants may propose additional techniques for providing technical assistance and information sharing activities to IDA grantees.

Approximately $250,000 has been allocated for this program area. Under the cooperative agreement(s), ORR intends to review and approve: (1) Proposed site visits and technical assistance activities; (2) all written materials developed prior to the release of such documents; (3) locations of proposed workshops, proposed topics and formats, and agendas; and (4) database program and structure. ORR expects that applicants for the cooperative agreement(s) for technical assistance will demonstrate in their applications expertise in the areas of administering financial programs such as IDA programs, providing financial training to low-income populations, and in providing technical assistance and information-sharing activities.

Program Area 4

IDA Review Criteria

Proposed projects to provide Technical Assistance and Information-Sharing Activities to Individual Development Account Programs will be evaluated according to the following criteria:

1. *Approach.* The technical assistance plan is clearly described and appropriate; the proposed activities and timeframes are reasonable and feasible. The plan describes in detail how the proposed activities will be accomplished. (30 points)

2. *Results or Benefits Expected.* The results or benefits expected are clearly explained and are appropriate to the technical assistance activities proposed. (15 points)

3. *Staff and Position Data.* Staff qualifications are clearly presented and are appropriate to achieving the project's goals. Staff qualifications show experience in providing technical assistance and information-sharing activities in the areas of administering financial programs and providing financial training to low-income populations. (20 points)

4. *Organization Profiles.* The applicant demonstrates the capacity of the organization to achieve the project's objectives. Organizational expertise and experience in the provision of technical assistance and information-sharing activities is described. (20 points)

5. *Budget and Budget Justification.* The budget is reasonable, clearly presented, and cost-effective. (15 points)

Program Area 5

Technical Assistance for Refugee Child Welfare Services

Program Purpose and Scope

Well-being of refugee families is an important contributing factor to family self-sufficiency. ORR proposes to award one cooperative agreement to an agency that will provide technical assistance to public and private agencies in promoting collaboration among refugee communities, the network of refugee resettlement services, and the child and youth services including child protective services to promote the well-being of refugee families.

Refugee families residing in U.S. communities may encounter significant differences in child rearing practices compared to the ethnic or national customs of their country of origin. First, traditional cultures with a strong authoritarian parental role may frequently conflict with the more egalitarian American family, resulting, for example, in differences in refugee youth's desire for early independence. Second, refugee families may experience trauma as a result of the persecution or flight, the effects of which may be destabilizing to family life. Third, refugee families may need income from both parents, unlike the practice of their home country, to adequately provide for their needs. Fourth, single parent families face similar stresses that U.S. single parent families face in addition to the trauma from their refugee experiences. Finally, they may live in low income neighborhoods with high crime rates and without the benefit of an ethnic community to provide information, guidance, protection and support.

As a result of these factors, a small number of refugee families encounter and may require the assistance of child protective services and other services of the judicial system. These experiences may not be easily understood by the refugee family and the larger refugee community and serve to make the whole refugee community insecure with the U.S. child welfare and child protective systems. This may result in difficulties for refugee families to establish homes that promote the well-being of its members, where parents are secure in their role of providing a nurturing and educational environment for their children and youth. Children may also confront conflicts in meeting the expectations of their parents, fitting in with their peers or finding a sense of belonging in the schools and social groups.

Many U.S. community public services do not have the cultural expertise or language capability to work effectively with refugee families. While the Civil Rights Act of 1964 mandates equal access to public services, frequently public resources are limited, and cultural and linguistic capacity is seldom available for refugee families.

In recent years, ORR has funded initiatives for recreation for refugee youth, crime prevention among refugee youth, parenting classes, and intergenerational activities. Currently, ORR has approximately 30 grantees in these program areas, but is likely to award funds to additional grantees during this fiscal year. It has become clear over time that a productive relationship with child welfare services, child protective services, youth shelters and other youth transitional services is also needed to promote the refugee families' capacity to care for their children and youth in their new communities.

ORR is interested in supporting a national technical assistance effort to promote collaboration among refugee families, refugee service providers and the children and youth service agencies that promote the welfare of refugee families, refugee youth and children. The cooperative agreement is also intended to promote cultural and linguistic services or access to services for refugee families. ORR is interested in the grantee selecting approximately six specific communities in which to concentrate assessment and training activities with child welfare services

and refugee families. Approximately $400,000 has been allocated for this program area.

Through this cooperative agreement, ORR intends to review and approve: (1) A technical assistance plan (such as the site selection of specific communities for concentrated activities), including proposed additional site visits and technical assistance activities and schedules; (2) all written materials developed and proposed for dissemination to the field; (3) locations of proposed workshops, proposed topics, formats and agendas; and 4) other innovative activities that may be proposed by the grantee.

Allowable Activities

Applicants may propose all or some combination of the following, as well as other innovative strategies for technical assistance:

- Provision of technical assistance to refugee communities, refugee service providers, school systems, school counselors, and child welfare and youth services agencies both in writing and through telephone consultation;
- Facilitating the electronic exchange of refugee child welfare information through a network website and listserv;
- Providing on-site group training or technical assistance meetings and workshops;
- Promoting refugee families as foster parents;
- Locating or developing training curricula and materials;
- Conducting on-site reviews of refugee child welfare services.

Program Area 5

Refugee Child Welfare Services Application Review Criteria

1. *Approach.* The technical assistance plan is clearly described and appropriate, and the proposed activities and timeframes are reasonable. The technical assistance plan describes clearly and in detail the manner in which the applicant will assess the need for technical assistance, the proposed activities, and how the propose activities are expected to address known technical assistance needs of agencies and communities. (25 points)

2. *Results and Benefits Expected.* The results or benefits expected are clearly explained and are appropriate to the technical assistance activities proposed. (20 points)

3. *Organizational Capacity.* The capacity of the applicant to achieve the project's objectives is clearly demonstrated. Organizational expertise and experience in the provision of technical assistance and information sharing are appropriate for the proposed project. (25 points)

4. *Staff.* Staff qualifications are clearly presented and are appropriate to achieving the project's objectives. The description of staff qualifications demonstrates experience providing technical assistance to refugee programs and communities. (15 points)

5. *Budget.* The budget is clearly presented and is detailed, reasonable and cost effective. (15 points)

Program Area 6

Technical Assistance for Refugee Housing Services

Purpose and Scope

The primary goal of refugee resettlement is to assist refugees in becoming self-sufficient. One factor that is critical to achieving this goal is access to affordable and decent housing. ORR proposes to award one cooperative agreement to an agency that will provide technical assistance to ORR service providers in the provision of this essential service.

This program area is intended to assist both service providers and refugees in gaining access to affordable and decent housing for refugee singles and families. In locations throughout the U.S. where the majority of refugees are resettled, rent levels are being pushed to record highs; and there is a dwindling supply of affordable and decent housing. In many areas, rents are increasing faster than wages; and recent energy price hikes have exacerbated an already critical situation. There is a need to assist resettlement and service agencies in developing innovative approaches to the housing crisis so that refugees can live as well-informed consumers in safe and decent homes and communities.

A grantee in this category will provide technical planning and assistance to promote access to housing that meets acceptable standards for health, safety, affordability, good repair and maintenance.

Approximately $250,000 has been allocated for this program area. One cooperative agreement may be awarded for one national project.

Through this cooperative agreement, ORR intends to review and approve (1) The technical assistance plan, including proposed site visits and technical assistance activities and schedules; (2) all written materials developed prior to the release of such documents; and (3) locations of proposed workshops, proposed topics and formats, and agendas.

Allowable Activities

Applicants may propose all or a combination of the activities described below. Applicants may also propose new or innovative approaches to providing technical assistance in the area of housing assistance and services.

- On-site visits to assess technical assistance needs, to provide technical assistance and training directly to agencies, and to ascertain best practices in providing services for counseling refugees about housing;
- Provision of information to agencies on relevant available services and programs in the area of housing assistance, including programs designed for low-income first time home buyers;
- Preparation of a variety of reports to be distributed to agencies to assist them in providing housing services, including site visit reports and best practices reports;
- Organization and operation of workshops for agencies in the area of housing services, to include such subjects as effective use of Section 8 vouchers, energy assistance, and other local assistance programs as available;
- Assistance in developing collaborative agreements with employers, housing non-profit agencies, landlords, and other Federal and State agency programs;
- Training of case workers in orienting refugees to be responsible tenants including timely payment of rent, maintenance of apartments, building good credit and negotiating with landlords;
- Provision of technical assistance, both in writing and by telephone, to agencies.

Program Area 6

Refugee Housing Services Application Review Criteria

1. *Approach.* The technical assistance plan is clearly described and appropriate; and the proposed activities and timeframes are reasonable. The technical assistance plan describes clearly and in detail the manner in which the applicant will assess the need for technical assistance, the proposed activities, and how the proposed activities are expected to address known technical assistance needs of agencies that provide housing assistance and services. (30 points)

2. *Results and Benefits Expected.* The results or benefits expected are clearly explained and are appropriate to the technical assistance activities proposed. (20 points)

3. *Organizational Capacity.* The capacity of the applicant to achieve the project's objectives is clearly

demonstrated. Organizational expertise and experience in the provision of housing assistance and in the provision of technical assistance are described and are appropriate and adequate for the proposed project. (25 points)

4. *Staff.* Staff qualifications are clearly presented and are appropriate to achieving the project's objectives. The description of staff qualifications demonstrates experience in providing housing assistance services and in providing technical assistance. (10 points)

5. *Budget.* The budget is clearly presented and is detailed, reasonable, and cost effective. (15 points)

Part II: General Instructions for Preparing a Full Project Description

Purpose

The project description provides a major means by which an application is evaluated and ranked to compete with other applications for available assistance. The project description should be concise and complete and should address the activity for which Federal funds are being requested. Supporting documents should be included where they can present information clearly and succinctly. Applicants are encouraged to provide information on their organizational structure, staff, related experience, and other information considered to be relevant. Awarding offices use this and other information to determine whether the applicant has the capability and resources necessary to carry out the proposed project. It is important, therefore, that this information be included in the application. However, in the narrative the applicant must distinguish between resources directly related to the proposed project from those that will not be used in support of the specific project for which funds are requested.

General Instructions

Cross-referencing should be used rather than repetition. ACF is particularly interested in specific factual information and statements of measurable goals in quantitative terms. Project descriptions are evaluated on the basis of substance, not length. Extensive exhibits are not required. (Supporting information concerning activities that will not be directly funded by the grant or information that does not directly pertain to an integral part of the grant funded activity should be placed in an appendix.) Pages should be numbered and a table of contents should be included for easy reference.

Project Summary/Abstract

Provide a summary of the project description (a page or less) with reference to the funding request.

Objectives and Need for Assistance

Clearly identify the physical, economic, social, financial, institutional, and/or other problem(s) requiring a solution. The need for assistance must be demonstrated and the principal and subordinate objectives of the project must be clearly stated; supporting documentation, such as letters of support and testimonials from concerned interests other than the applicant, may be included. Any relevant data based on planning studies should be included or referred to in the endnotes/footnotes. Incorporate demographic data and participant/beneficiary information, as needed. In developing the project description, the applicant may volunteer or be requested to provide information on the total range of projects currently being conducted and supported (or to be initiated), some of which may be outside the scope of the program announcement.

Results or Benefits Expected

Identify the results and benefits to be derived. For example, when applying for a grant to establish a neighborhood child care center, describe who will occupy the facility, who will use the facility, how the facility will be used, and how the facility will benefit the community which it will serve. For example, when applying for microenterprise development assistance, describe the prospective clients in terms of numbers, national origin, interest in microenterprise and what business opportunities are available to refugees in the community.

Approach

Outline a plan of action which describes the scope and detail of how the proposed work will be accomplished. Account for all functions or activities identified in the application. Cite factors which might accelerate or decelerate the work and state your reason for taking the proposed approach rather than others. Describe any unusual features of the project such as design or technological innovations, reductions in cost or time, or extraordinary social and community involvement.

Provide quantitative monthly or quarterly projections of the accomplishments to be achieved for each function or activity in such terms as the number of people to be served and the number of microloans made. When accomplishments cannot be quantified by activity or function, list them in chronological order to show the schedule of accomplishments and their target dates.

Identify the kinds of data to be collected, maintained, and/or disseminated. Note that clearance from the U.S. Office of Management and Budget might be needed prior to a ''collection of information'' that is ''conducted or sponsored'' by ACF. List organizations, cooperating entities, consultants, or other key individuals who will work on the project along with a short description of the nature of their effort or contribution.

Geographic Location

Describe the precise location of the project and boundaries of the area to be served by the proposed project. Maps or other graphic aids may be attached.

Staff and Position Data

Provide a biographical sketch for each key person appointed and a job description for each vacant key position. A biographical sketch will also be required for new key staff as appointed.

Organization Profiles

Provide information on the applicant organization(s) and cooperating partners such as organizational charts, financial statements, audit reports or statements from CPAs/Licensed Public Accountants, Employer Identification Numbers, names of bond carriers, contact persons and telephone numbers, child care licenses and other documentation of professional accreditation, information on compliance with Federal/State/local government standards, documentation of experience in the program area, and other pertinent information. Any non-profit organization submitting an application must submit proof of its non-profit status in its application at the time of submission.

The non-profit agency can accomplish this by providing a copy of the applicant's listing in the Internal Revenue Service's (IRS) most recent list of tax-exempt organizations described in Section 501(c)(3) of the IRS code, or by providing a copy of the currently valid IRS tax exemption certificate, or by providing a copy of the articles of incorporation bearing the seal of the State in which the corporation or association is domiciled.

Third-Party Agreements

Include written agreements between grantees and subgrantees or subcontractors or other cooperating entities. These agreements must detail

scope of work to be performed, work schedules, remuneration, and other terms and conditions that structure or define the relationship.

Letters of Support

Provide statements from community, public and commercial leaders that support the project proposed for funding.

Budget and Budget Justification

Provide line item detail and detailed calculations for each budget object class identified on the Budget Information form. Detailed calculations must include estimation methods, quantities, unit costs, and other similar quantitative detail sufficient for the calculation to be duplicated. The detailed budget must also include a breakout by the funding sources identified in Block 15 of the SF–424.

Provide a narrative budget justification that describes how the categorical costs are derived. Discuss the necessity, reasonableness, and allocability of the proposed costs.

General

The following guidelines are for preparing the budget and budget justification. Both Federal and non-Federal resources shall be detailed and justified in the budget and narrative justification. For purposes of preparing the budget and budget justification, ''Federal resources'' refers only to the ACF grant for which you are applying. Non-Federal resources are all other Federal and non-Federal resources. It is suggested that budget amounts and computations be presented in a columnar format: first column, object class categories; second column, Federal budget; next column(s), non-Federal budget(s), and last column, total budget. The budget justification should be a narrative.

Personnel

Description: Costs of employee salaries and wages.

Justification: Identify the project director or principal investigator, if known. For each staff person, provide the title, time commitment to the project (in months), time commitment to the project (as a percentage or full-time equivalent), annual salary, grant salary, wage rates, etc. Do not include the costs of consultants or personnel costs of delegate agencies or of specific project(s) or businesses to be financed by the applicant.

Fringe Benefits

Description: Costs of employee fringe benefits unless treated as part of an approved indirect cost rate.

Justification: Provide a breakdown of the amounts and percentages that comprise fringe benefit costs such as health insurance, FICA, retirement insurance, taxes, etc.

Travel

Description: Costs of project-related travel by employees of the applicant organization (does not include costs of consultant travel).

Justification: For each trip, show the total number of traveler(s), travel destination, duration of trip, per diem, mileage allowances, if privately owned vehicles will be used, and other transportation costs and subsistence allowances. Travel costs for key staff to attend ACF-sponsored workshops should be detailed in the budget.

Equipment

Description: Costs of tangible, non-expendable, personal property, having a useful life of more than one year and an acquisition cost of $5,000 or more per unit. However, an applicant may use its own definition of equipment provided that such equipment would at least include all equipment defined above.

Justification: For each type of equipment requested, provide a description of the equipment, the cost per unit, the number of units, the total cost, and a plan for use on the project, as well as use or disposal of the equipment after the project ends. An applicant organization that uses its own definition for equipment should provide a copy of its policy or section of its policy which includes the equipment definition.

Supplies

Description: Costs of all tangible personal property other than that included under the Equipment category.

Justification: Specify general categories of supplies and their costs. Show computations and provide other information which supports the amount requested.

Other

Enter the total of all other costs. Such costs, where applicable and appropriate, may include but are not limited to insurance, food, medical and dental costs (noncontractual), professional services costs, space and equipment rentals, printing and publication, computer use, training costs, such as tuition and stipends, staff development costs, and administrative costs.

Justification: Provide computations, a narrative description and a justification for each cost under this category.

Indirect Charges

Description: Total amount of indirect costs. This category should be used only when the applicant currently has an indirect cost rate approved by the Department of Health and Human Services (HHS) or another cognizant Federal agency.

Justification: An applicant that will charge indirect costs to the grant must enclose a copy of the current rate agreement. If the applicant organization is in the process of initially developing or renegotiating a rate, it should immediately upon notification that an award will be made, develop a tentative indirect cost rate proposal based on its most recently completed fiscal year in accordance with the principles set forth in the cognizant agency's guidelines for establishing indirect cost rates, and submit it to the cognizant agency. Applicants awaiting approval of their indirect cost proposals may also request indirect costs. It should be noted that when an indirect cost rate is requested, those costs included in the indirect cost pool should not also be charged as direct costs to the grant. Also, if the applicant is requesting a rate which is less than what is allowed under the program, the authorized representative of the applicant organization must submit a signed acknowledgment that the applicant is accepting a lower rate than allowed.

Program Income

Description: The estimated amount of income, if any, expected to be generated from this project.

Justification: Describe the nature, source and anticipated use of program income in the budget or refer to the pages in the application which contain this information.

Non-Federal Resources

Description: Amounts of non-Federal resources that will be used to support the project as identified in Block 15 of the SF–424.

Justification: The firm commitment of these resources must be documented and submitted with the application in order to be given credit in the review process. A detailed budget must be prepared for each funding source.

Total Direct Charges, Total Indirect Charges, Total Project Costs

Self explanatory.

Part III: The Review Process

Intergovernmental Review: State Single Point of Contact (SPOC)

This program is covered under Executive Order 12372, ''Intergovernmental Review of Federal Programs,'' and 45 CFR Part 100, ''Intergovernmental Review of Department of Health and Human Services Programs and Activities.'' Under the Order, States may design their own processes for reviewing and commenting on proposed Federal assistance under covered programs.

Note: State/territory participation in the intergovernmental review process does not signify applicant eligibility for financial assistance under a program. A potential applicant must meet the eligibility requirements of the program for which it is applying prior to submitting an application to its SPOC, if applicable, or to ACF.

In accordance with Executive Order #12372, ''Intergovernmental Review of Federal Programs,'' this listing represents the designated State Single Points of Contact. The jurisdictions not listed no longer participate in the process but grant applicants are still eligible to apply for the grant even if your state, territory, commonwealth, etc. does not have a ''state single point of contact.'' Jurisdictions without ''state single points of contacts'' include: Alabama; Alaska; American Samoa; Colorado; Connecticut; Kansas; Hawaii; Idaho; Louisiana; Massachusetts; Minnesota; Montana; Nebraska; New Jersey; Ohio; Oklahoma; Oregon; Palau; Pennsylvania; South Dakota; Tennessee; Vermont; Virginia; and Washington.

This list is based on the most current information provided by the States. Information on any changes or apparent errors should be provided to the Office of Management and Budget and the State in question. Changes to the list will only be made upon formal notification by the State. Also, this listing is published biannually in the Catalogue of Federal Domestic Assistance.

Jurisdictions that participate in the Executive Order process have established SPOCs. Applicants from participating jurisdictions should contact their SPOCs as soon as possible to alert them of the prospective applications and receive instructions. Applicants must submit any required material to the SPOCs as soon as possible so that the program office can obtain and review SPOC comments as part of the award process. The applicant must submit all required materials, if any, to the SPOC and indicate the date of this submittal (or the date of contact if no submittal is required) on the Standard Form 424, item 16a. Under 45 CFR 100.8(a)(2), a SPOC has 60 days from the application deadline to comment on proposed new or competing continuation awards. SPOCs are encouraged to eliminate the submission of routine endorsements as official recommendations. Additionally, SPOCs are requested to clearly differentiate between mere advisory comments and those official State process recommendations which may trigger the ''accommodate or explain'' rule. When comments are submitted directly to ACF, they should be addressed to: Department of Health and Human Services, Administration for Children and Families, Office of Refugee Resettlement, 370 L'Enfant Promenade SW, 6th Floor, Washington DC, 20447 Attn: Ms. Daphne Weeden.

A list of the Single Points of Contact for each State and Territory follows:

OMB State Single Point of Contact Listing

Arizona

Joni Saad, Arizona State Clearinghouse, 3800 N. Central Avenue, Fourteenth Floor, Phoenix, Arizona 85012, Telephone: (602) 280–1315, FAX: (602) 280–8144, e-mail: jonis@ep.state.az.us

Arkansas

Mr. Tracy L. Copeland, Manager, State Clearinghouse, Office of Intergovernmental Services, Department of Finance and Administration, 1515 W. 7th St., Room 412, Little Rock, Arkansas 72203, Telephone: (501) 682–1074, FAX: (501) 682–5206

California

Grants Coordinator, Office of Planning and Research/State Clearinghouse, 1400 Tenth Street, Room 121, Sacramento, California 95814, Telephone: (916) 323–7480, FAX: (916) 323–3018

Delaware

Francine Booth, State Single Point of Contact, Executive Department, Office of the Budget, 540 S. du Pont Highway, Suite 5, Dover, Delaware 19901, Telephone: (302) 739–3326, FAX: (302) 739–5661

District of Columbia

Charles Nichols, State Single Point of Contact, Office of Grants Management and Development, 717 14th Street, NW—Suite 1200, Washington, D.C. 20005, Telephone: (202) 727–6537, FAX: (202) 727–1617, e-mail: charlesnic@yahoo.com or cnichols-ogmd@dcgov.org

Florida

Cherie L. Trainor, Coordinator, Florida State Clearinghouse, Department of Community Affairs, 2555 Shumard Oak Boulevard, Tallahassee, Florida 32399–2100, Telephone: (850) 922–5438 or (850) 414–5495, FAX: (850) 414–0479, e-mail: cherie.trainor@dca.state.fl.us

Georgia

Debra S. Stephens, Coordinator, Georgia State Clearinghouse, 270 Washington Street, SW.—8th Floor, Atlanta, Georgia 30334, Telephone: (404) 656–3855, FAX: (404) 656–7901, e-mail: ssda@mail.opb.state.ga.us

Illinois

Virginia Bova, State Single Point of Contact, Illinois Department of Commerce and Community Affairs, James R. Thompson Center, 100 West Randolph, Suite 3–400, Chicago, Illinois 60601, Telephone: (312) 814–6028, FAX: (312) 814–1800

Indiana

Frances Williams, State Budget Agency, 212 State House, Indianapolis, Indiana 46204–2796, Telephone: (317) 232–5619, FAX: (317) 233–3323

Iowa

Steven R. McCann, Division for Community Assistance, Iowa Department of Economic Development, 200 East Grand Avenue, Des Moines, Iowa 50309, Telephone: (515) 242–4719, FAX: (515) 242–4809

Kentucky

Kevin J. Goldsmith, Director, John-Mark Hack, Deputy Director, Sandra Brewer, Executive Secretary, Intergovernmental Affairs, Office of the Governor 700 Capitol Avenue, Frankfort, Kentucky 40601, Telephone: (502) 564–2611, FAX: (502) 564–2849

Maine

Joyce Benson, State Planning Office, 184 State Street, 38 State House Station, Augusta, Maine 04333, Telephone: (207) 287–3261, FAX: (207) 287–6489

Maryland

Linda C. Janey, JD, Manager, Clearinghouse and Plan Review Unit, Maryland Office of Planning, 301 W. Preston Street—Room 1104, Baltimore, Maryland 21201–2305, Telephone: (410) 767–4491, FAX: (410) 767–4480 e-mail: Linda@mail.op.state.md.us

Michigan

Richard Pfaff, Southeast Michigan Council of Governments, 660 Plaza Drive—Suite 1900, Detroit, Michigan 48226, Telephone: (313) 961–4266, FAX: (313) 961–4869

Mississippi

Cathy Mallette, Clearinghouse Officer, Department of Finance and Administration, 455 North Lamar Street, Jackson, Mississippi 39202–3087, Telephone: (601) 359–6762, FAX: (601) 359–6764

Missouri

Lois Pohl/Carol Meyer, Federal Assistance Clearinghouse, Office Of Administration, P.O. Box 809, Room 915, Jefferson Building, Jefferson City, Missouri 65102, Telephone: (573) 751–4834, FAX: (573) 522–4395

Nevada

Heather Elliott, Department of Administration, State Clearinghouse, Capitol Complex, Carson City, Nevada 89710, Telephone: (702) 687–6367, FAX: (702) 687–3983

New Hampshire

Jeffrey H. Taylor, Director, New Hampshire Office of State Planning, Attn: Intergovernmental Review Process, Mike Blake, Office of State Planning, 2½ Beacon Street, Concord, New Hampshire 03301, Telephone: (603) 271–2155, FAX: (603) 271–1728

New Mexico

Nick Mandell, Local Government Division, Room 201, Bataan Memorial Building, Santa Fe, New Mexico 87503, Telephone: (505) 827–4991, FAX: (505) 827–4948

New York

Marsha Roth, New York State Clearinghouse, Division of the Budget, State Capitol, Albany, New York 12224, Telephone: (518) 474–1605, FAX: (518) 486–5617

North Carolina

Chrys Baggett, Director, North Carolina State Clearinghouse, Office of the Secretary of Administration 116 West Jones Street—Suite 5106, Raleigh, North Carolina 27603–8003, Telephone: (919) 733–7232, FAX: (919) 733–9571

North Dakota

Jim Boyd, North Dakota Single Point of Contact, Office of Intergovernmental Assistance, 600 East Boulevard Avenue, Department 105, Bismarck, North Dakota 58505–0170, Telephone: (701) 328–2094, FAX: (701) 328–2308

Rhode Island

Kevin Nelson, Review Coordinator, Department of Administration, Division of Planning, One Capitol Hill, 4th Floor, Providence, Rhode Island 02908–5870, Telephone: (401) 222–2656, FAX: (401) 222–2083

South Carolina

Omegia Burgess, State Single Point of Contact, Budget and Control Board, Office of State Budget, 1122 Ladies Street—12th Floor, Columbia, South Carolina 29201, Telephone: (803) 734–0494, FAX: (803) 734–0645

Texas

Tom Adams, Single Point of Contact, State of Texas, Governor's Office of Budget and Planning, Director, Intergovernmental Coordination, P.O. Box 12428, Austin, Texas 78711–2428, Telephone: (512) 463–1771, FAX: (512) 936–2681, e-mail: tadams@governor.state.tx.us

Utah

Carolyn Wright, Utah State Clearinghouse, Office of Planning and Budget, Room 116 State Capitol, Salt Lake City, Utah 84114, Telephone: (801) 538–1535, FAX: (801) 538–1547

West Virginia

Judith Dryer, Chief Program Manager, West Virginia Development Office, Building #6, Room 645, State Capitol, Charleston, West Virginia 25305, Telephone: (304) 558–0350, FAX: (304) 558–0362

Wisconsin

Jeff Smith, Section Chief, State/Federal Relations, Wisconsin Department of Administration, 101 East Wilson Street—6th Floor, P.O. Box 7868, Madison, Wisconsin 53707, Telephone: (608) 266–0267, FAX: (608) 267–6931

Wyoming

Matthew Jones, State Single Point of Contact, Office of the Governor, 200 West 24th Street, State Capital, Room 124, Cheyenne, Wyoming 82002, FAX: (307) 632–3909

Territories

Guam

Mr. Giovanni T. Sgambelluri, Director, Bureau of Budget and Management Research, Office of the Governor, P.O. Box 2950, Agana, Guam 96910, Telephone: 011–671–472–2285, FAX: 011–671–472–2825

Puerto Rico

Norma Burgos/Jose E. Caro, Chairwoman/Director, Puerto Rico Planning Board, Federal Proposals Review Office, Minillas Government Center, P.O. Box 41119, San Juan, Puerto Rico 00940–1119, Telephone: (809) 727–4444 or (809) 723–6190, FAX: (809) 724–3270 or (809) 724–3103

Northern Mariana Islands

Mr. Alvaro A. Santos, Executive Officer, Office of Management and Budget, Office of the Governor, Saipan, MP 96950, Telephone: (670) 664–2256, FAX: (670) 664–2272

Please direct all questions and correspondence about intergovernmental review to:

Ms. Jacoba T. Seman, Federal Programs Coordinator, Telephone: (670) 664–2289, FAX: (670) 664–2272

Virgin Islands

Nellon Bowry, Director, Office of Management and Budget, #41 Norregade Emancipation Garden Station, Second Floor, Saint Thomas, Virgin Islands 00802

Please direct all questions and correspondence about intergovernmental review to:

Daisey Millen, Telephone: (809) 774–0750, FAX: (809) 776–0069

Initial ACF Screening

Each application submitted under this program announcement will undergo a pre-review to determine that (1) the application was received by the closing date and submitted in accordance with the instructions in this announcement and (2) the applicant is eligible for funding.

Competitive Review

Applications which pass the initial ACF screening will be evaluated and rated by an independent review panel on the basis of specific evaluation criteria. The evaluation criteria are designed to assess the quality of a proposed project, and to determine the likelihood of its success. The evaluation criteria are closely related and are considered as a whole in judging the overall quality of an application. Points are awarded only to applications which are responsive to the evaluation criteria within the context of this program announcement.

Funding Reconsideration

After Federal funds are exhausted for this grant competition, applications which have been independently reviewed and ranked but have no final disposition (neither approved nor disapproved for funding) may again be considered for funding. Reconsideration

may occur at any time funds become available within twelve (12) months following ranking. However, ACF does not select from multiple ranking lists for a program. Therefore, should a new competition be scheduled and an application remain ranked without final disposition, applicants are informed of their opportunity to reapply for the new competition, to the extent practical.

Part IV: Application Submission

In order to be considered for a grant under this program announcement, an application must be submitted on the forms supplied and in the manner prescribed by ACF. Application materials including forms and instructions are available from the contact named under the **ADDRESSES** section in the preamble of this announcement.

Each application should include one signed original and two additional copies.

Each application narrative portion should not exceed 25 double-spaced pages in a 12-pitch font. Attachments and appendices should not exceed 25 pages and should be used only to provide supporting documentation such as maps, administration charts, position descriptions, resumes, and letters of intent for partnership agreements. Please do not include books or video tapes as they are not easily reproduced and are therefore, inaccessible to the reviewers. Each page should be numbered sequentially, including the attachments or appendices.

A. Application Materials

Applicants for financial assistance under this announcement must file the Standard Form (SF) 424, Application for Federal Assistance; SF 424A, Budget Information—Non-construction Programs; SF 424B, Assurances—Non-Construction Programs. The forms may be reproduced for use in submitting applications. An application with an original signature and two copies is required.

B. Application Submission Information and Certifications

The closing date for submission of applications is June 20, 2000. Mailed applications postmarked after the closing date will be classified as late.

Deadline: Mailed applications shall be considered as meeting an announced deadline if they are either received on or before the deadline date or sent on or before the deadline date and received by ACF in time for the independent review to: U.S. Department of Health and Human Services, Administration for Children and Families, Office of Refugee Resettlement, Attention: Ms. Daphne Weeden.

Applicants must ensure that a legibly dated U.S. Postal Service postmark or a legibly dated, machine produced postmark of a commercial mail service is affixed to the envelope/package containing the application(s). To be acceptable as proof of timely mailing, a postmark from a commercial mail service must include the logo/emblem of the commercial mail service company and must reflect the date the package was received by the commercial mail service company from the applicant. Private Metered postmarks shall not be acceptable as proof of timely mailing. (Applicants are cautioned that express/overnight mail services do not always deliver as agreed.)

Applications handcarried by applicants, applicant couriers, or by other representatives of the applicant shall be considered as meeting an announced deadline if they are received on or before the deadline date, between the hours of 8:00 a.m. and 4:30 p.m., EST, at the U.S. Department of Health and Human Services, Administration for Children and Families, the Office of Refugee Resettlement, 6th Floor, Aerospace Building, 901 D Street, SW, Washington, DC 20447 between Monday and Friday (excluding Federal holidays). The address must appear on the envelope/package containing the application with the note ''Attention: Ms. Daphne Weeden.'' (Applicants are cautioned that express/overnight mail services do not always deliver as agreed.)

ACF cannot accommodate transmission of applications by fax or through other electronic media. Therefore, applications transmitted to ACF electronically will not be accepted regardless of date or time of submission and time of receipt.

Late applications: Applications which do not meet the criteria above are considered late applications. ACF shall notify each late applicant that its application will not be considered in the current competition.

Extension of deadlines: ACF may extend application deadlines when circumstances such as acts of God (floods, hurricanes, etc.) occur, or when there are widespread disruptions of mails service. Determinations to extend or waive deadline requirements rest with the Chief Grants Management Officer.

For Further Information on Application Deadlines Contact: Ms. Daphne Weeden, Administration for Children and Families, Office of Refugee Resettlement, 370 L'Enfant Promenade SW, 6th Floor, Washington, DC 20447, (202) 401–4577.

Standard Language Concerning the Certifications, Assurances, and Disclosure Required for Non Construction Programs

Applicants requesting financial assistance for non construction projects must file the Standard Form 424B, ''Assurances: Non-Construction Programs.'' Applicants must sign and return the Standard Form 424B with their applications.

Applicants must disclose lobbying activities on the Standard Form LLL when applying for an award in excess of $100,000. Applicants who have used non Federal funds for lobbying activities in connection with receiving assistance under this announcement shall complete a disclosure form to report lobbying. Applicants must sign and return the disclosure form, if applicable, with their applications.

Applicants must make the appropriate certification of their compliance with the Drug Free Workplace Act of 1988. By signing and submitting the application, the applicant is providing the certification and need not mail back the certification with the applications. Applicants must make the appropriate certification that they are not presently debarred, suspended or otherwise ineligible for an award. By signing and submitting the application, the applicant is providing the certification need not mail back the certification with the applications.

Applicable Regulations

Applicable DHHS grant administration regulations can be found in 45 CFR Part 74 or 92.

Reporting Requirements

Grantees are required to file the Financial status Report (SF–269) and Program Performance Reports on a semi-annual basis. Funds issued under these awards must be accounted for and reported upon separately from all other grant activities. Although ORR does not expect the proposed projects to include evaluation activities, it does expect grantees to maintain adequate records to track and report on project outcomes. The official receipt point for all reports and correspondence is the ORR Grants Officer, Ms. Daphne Weeden, Administration for Children and Families/Office of Refugee Resettlement, 370 L'Enfant Promenade SW, 6th Floor, Washington, DC 20447, Telephone: (202) 401–4577. An original and one copy of each report shall be submitted within 30 days of the end of each reporting period directly to the Grants

Officer. The mailing address is: Ms. Daphne Weeden, Administration for Children and Families, Office of Refugee Resettlement, 370 L'Enfant Promenade SW, 6th Floor, Washington, DC 20447. A final Financial and Program Report shall be due 90 days after the budget expiration date or termination of grant support.

Dated: April 18, 2000.

Lavinia Limon,

Director, Office of Refuge Resettlement.

[FR Doc. 00–10018 Filed 4–20–00; 8:45 am]

BILLING CODE 4184–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Substance Abuse and Mental Health Services Administration

Agency Information Collection Activities: Submission for OMB review; comment request

Periodically, the Substance Abuse and Mental Health Services Administration (SAMHSA) will publish a list of information collection requests under OMB review, in compliance with the Paperwork Reduction Act (44 U.S.C. Chapter 35). To request a copy of these documents, call the SAMHSA Reports Clearance Officer on (301)443–7978.

Drug and Alcohol Services Information System (DASIS) (OMB No. 0930–0106, Revision)—The DASIS consists of three related data systems: the National Master Facility Inventory (NMFI), the Uniform Facility Data Set (UFDS), and the Treatment Episode Data Set (TEDS). The NMFI includes all known substance abuse treatment facilities. The UFDS is an annual survey of all substance abuse treatment facilities listed in the NMFI. The TEDS is a compilation of client-level admission data and discharge data submitted by States on clients treated in facilities that receive State funds. Together, they provide information on the location, scope and characteristics of all known drug and alcohol treatment facilities in the United States, and the characteristics of clients receiving services. This information is needed to assess the nature and extent of these resources, to identify gaps in services, and to provide a database for treatment referrals.

This request is for OMB approval of proposed revisions to the annual UFDS survey. Several major changes are proposed, including: (1) The UFDS survey will be conducted by mail, rather than by telephone; (2) Non-treatment (prevention) facilities will no longer be included in the annual survey; (3) Some questions will be reinstated (*e.g.,* whether facility provides DUI/DWI services, percent of clients treated for alcohol abuse, drug abuse, or both); (4) Several questions will be added (*e.g.,* whether facility treats only incarcerated or DUI/DWI clients, whether services are provided in languages other than English, availability of fully subsidized care or a sliding fee scale, receipt of public funding); (5) Some questions will be deleted (*e.g.,* whether facility is a school, social services agency, community mental health center, community health center, or private group practice; facility accreditation; percent of clients being treated for substance abuse); (6) Several questions will be revised. Changes to the TEDS and NMFI are not planned.

Estimated annual burden for the DASIS activities is shown in the table below.

Type of respondent and activity	Number of respondents	Responses/ respondent	Hours/response	Total hours
States:				
TEDS Admission Data [1]	52	4	6	1,248
TEDS Discharge Data [1]	13	4	6	312
TEDS Discharge Crosswalks [1]	5	1	10	50
NFR Update [1, 2]				
Additions	56	17	0.08	76
Revisions	56	24	0.05	67
State Subtotal [1]	56	.....	.....	1,753
Facilities				
Network Update	1,000	1	.1	100
UFDS Questionnaire	19,000	1	.6	11,400
Pre-screening of newly-identified facilities	2,000	1	.08	160
Facility Subtotal	21,000	.....	.....	11,660
Total	21,056	.....	.....	13,413

[1] The burden estimates for these activities are unchanged.

[2] States forward to SAMHSA information on newly licensed/approved facilities and on changes in facility name, address, status, etc. This is done electronically by nearly all States.

Written comments and recommendations concerning the proposed information collection should be sent within 30 days of this notice to: Clarissa Rodrigues-Coelho, Human Resources and Housing Branch, Office of Management and Budget, New Executive Office Building, Room 10235, Washington, D.C. 20503.

Dated: April 12, 2000.

Richard Kopanda,

Executive Officer, SAMHSA.

[FR Doc. 00–9957 Filed 4–20–00; 8:45 am]

BILLING CODE 4162–20–P

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR–4557–N–16]

Federal Property Suitable as Facilities To Assist the Homeless

AGENCY: Office of the Assistant Secretary for Community Planning and Development, HUD.

ACTION: Notice.

SUMMARY: This Notice identifies unutilized, underutilized, excess, and surplus Federal property reviewed by HUD for suitability for possible use to assist the homeless.

FOR FURTHER INFORMATION CONTACT: Clifford Taffet, room 7266, Department of Housing and urban Development, 451 Seventh Street SW, Washington, DC 20410; telephone (202) 708–1234; TTY number for the hearing- and speech-impaired (202) 708–2565 (these telephone numbers are not toll-free), or call the toll-free Title V information line at 1–800–927–7588.

SUPPLEMENTARY INFORMATION: In accordance with 24 CFR part 581 and section 501 of the Stewart B. McKinney Homeless Assistance Act (42 U.S.C. 11411), as amended, HUD is publishing this Notice to identify Federal buildings and other real property that HUD has reviewed for suitability for use to assist the homeless. The properties were reviewed using information provided to HUD by Federal landholding agencies regarding unutilized and underutilized buildings and real property controlled by such agencies or by GSA regarding its inventory of excess or surplus Federal property. This Notice is also published in order to comply with the December 12, 1988 Court Order in *National Coalition for the Homeless* v. *Veterans Administration*, No. 88–2503–OG (D.D.C.).

Properties reviewed are listed in this Notice according to the following categories: Suitable/available, suitable/unavailable, suitable/to be excess, and unsuitable. The properties listed in the three suitable categories have been reviewed by the landholding agencies, and each agency has transmitted to HUD: (1) Its intention to make the property available for use to assist the homeless, (2) its intention to declare the property excess to the agency's needs, or (3) a statement of the reasons that the property cannot be declared excess or made available for use as facilities to assist the homeless.

Properties listed as suitable/available will be available exclusively for homeless use for a period for 60 days from the date of this Notice. Homeless assistance providers interested in any such property should send a written expression of interest to HHS, addressed to Brian Rooney, Division of Property Management, Program Support Center, HHS, room 5B–41, 5600 Fishers Lane, Rockville, MD 20857; (301) 443–2265. (This is not a toll-free number.) HHS will mail to the interested provider an application packet, which will include instructions for completing the application. In order to maximize the opportunity to utilize a suitable property, providers should submit their written expressions of interest as soon as possible. For complete details concerning the processing of applications, the reader is encouraged to refer to the interim rule governing this program 24 CFR part 581.

For properties listed as suitable/to be excess, that property may, if subsequently accepted as excess by GSA, be made available for use by the homeless in accordance with applicable law, subject to screening for other Federal use. At the appropriate time, HUD will publish the property in a Notice showing it as either suitable/available or suitable/unavailable.

For properties listed as suitable/unavailable, the landholding agency has decided that the property cannot be declared excess or made available for use to assist the homeless, and the property will not be available.

Properties listed as unsuitable will not be made available for any other purpose for 20 days from the date of this Notice. Homeless assistance providers interested in a review by HUD of the determination of unsuitability should call the toll free information line at 1–800–927–7588 for detailed instructions or write a letter to Clifford Taffet at the address listed at the beginning of this Notice. Included in the request for review should be the property address (including zip code), the date of publication in the **Federal Register**, the landholding agency, and the property number.

For more information regarding particular properties identified in this Notice (*i.e.,* acreage, floor plan, existing sanitary facilities, exact street address), providers should contact the appropriate landholding agencies at the following addresses: COE: Ms. Shirley Middleswarth, Army Corps of Engineers, Management & Disposal Division, Pulaski Bldg., Room 4224, 20 Massachusetts Avenue, NW, Washington, DC 20314–1000; (202) 761–0515; GSA: Mr. Brian K. Polly, Assist Commissioner, General Services Administration, Office of Property Disposal, 18th and F Streets, NW, Washington, DC 20405; (202) 501–0052; INTERIOR: Mr. Al Barth, Property Management, Department of the Interior, 1849 C Street, NW, Mail Stop 5512–MIB, Washington, DC 20240; (202) 208–7283; NAVY: Mr. Charles C. Cocks, Director, Department of the Navy, Real Estate Policy Division, Naval Facilities Engineering Command, Washington Navy Yard, 1322 Patterson Ave., SE, Suite 1000, Washington, DC 20374–5065; (202) 685–9200; (These are not toll-free numbers).

Dated: April 14, 2000.

Fred Karnas, Jr.,

Deputy Assistant Secretary for Special Needs Assistance Programs.

Title V, Federal Surplus Property Program Federal Register Report for 4/21/00

Suitable/Available Properties

Building (by State)

California

Bldg. 4156
Tract 12–135
National Park Land
Yosemite Co: Mariposa CA 95389–
Landholding Agency: Interior
Property Number: 61200020001
Status: Unutilized
Comment: 499 sq. ft. seasonal housing, off-site use only

Mississippi

Quarters #193
Jeff Busby Park
Rt. 3
Ackerman Co: Choctaw MS 39725–
Landholding Agency: Interior
Property Number: 61200020015
Status: Unutilized
Comment: 1121 sq. ft., presence of asbestos, most recent use—residence, off-site use only

New York

Former RPH Property
Tract 273–01
E. Fishkill Town Co: Dutchess NY 10701–
Landholding Agency: Interior
Property Number: 61200020002
Status: Unutilized
Comment: garage, 748 sq. ft./concrete block, off-site use only

Pennsylvania

(F) Romig Property
Tract 367–10, Kuhn Road
Boiling Springs Co: Cumberland PA 17007–
Landholding Agency: Interior
Property Number: 61200020014
Status: Unutilized
Comment: 665 sq. ft., most recent use—residence, off-site use only

Tennessee

Naval Hospital
5720 Integrity Drive
Millington Co: Shelby TN 38054–
Location: Bldgs, 98, 100, 103, 105, 111, 114, 116, 117, 118
Landholding Agency: GSA
Property Number: 54200020005
Status: Excess
Comment: 9 bldgs., various sq. ft., need major rehab
GSA Number: 4–N–TN–648

West Virginia

Residence/Garage

109 Pine Street
Monongahela National Forest
Petersburg Co: Grant WV 26847–
Landholding Agency: GSA
Property Number: 54200020006
Status: Excess
Comment: 1800 sq. ft. residence, 365 sq. ft. garage, good condition
GSA Number: 4–A–WV–534

Suitable/Available Properties

Land (by State)

Pennsylvania

Portion of Tract 119
State Rt 969
Curwensville Co: Clearfield PA 16833–
Landholding Agency: COE
Property Number: 31200010005
Status: Unutilized
Comment: approx. 17 acres, hilly wooded terrain

Unsuitable Properties

Buildings (by State)

California

Bldg. 4159
Tract 12–135
National Park Land
Yosemite Co: Mariposa CA 95389–
Landholding Agency: Interior
Property Number: 61200020003
Status: Unutilized
Reason: Extensive deterioration

Bldg. 4160
Tract 12–135
National Park Land
Yosemite Co: Mariposa CA 95389–
Landholding Agency: Interior
Property Number: 61200020004
Status: Unutilized
Reason: Extensive deterioration

Bldg. 4161
Tract 12–135
National Park Land
Yosemite Co: Mariposa CA 95389–
Landholding Agency: Interior
Property Number: 61200020005
Status: Unutilized
Reason: Extensive deterioration

Bldgs. 4091, 4092
Tract 08–136
National Park Land
Yosemite Co: Mariposa CA 95389–
Landholding Agency: Interior
Property Number: 61200020006
Status: Unutilized
Reason: Extensive deterioration

Vagim House/Garage/Laundry
Tract 08–155
National Park Land
Yosemite Co: Mariposa CA 95389–
Landholding Agency: Interior
Property Number: 61200020007
Status: Unutilized
Reason: Extensive deterioration

Bldg. 4166
Tract 05–118
National Park Land
Yosemite Co: Mariposa CA 95389–
Landholding Agency: Interior
Property Number: 61200020008
Status: Unutilized
Reason: Extensive deterioration

Bldg. 4077
Tract 08–118
National Park Land
Yosemite Co: Mariposa CA 95389–
Landholding Agency: Interior
Property Number: 61200020009
Status: Unutilized
Reason: Extensive deterioration

''Putnam House''
Yosemite National Park
Wawona Co: Mariposa CA 95389–
Landholding Agency: Interior
Property Number: 61200020016
Status: Unutilized
Reasons: Extensive deterioration

Bldg. 17A
Marine Corps Logistics Base
Barstow Co: San Bernardino CA 92311–
Landholding Agency: Navy
Property Number: 77200020001
Status: Unutilized
Reasons: Secured Area, Extensive deterioration

Georgia

Range Rear Light
Blythe Island
Brunswick Co: Glynn GA 31525–
Landholding Agency: GSA
Property Number: 54200020001
Status: Excess
Reason: Extensive deterioration
GSA Number: 4–U–GA–863

Federal Bldg.
202 North Harris St.
Sandersville Co: GA 31082–
Landholding Agency: GSA
Property Number: 54200020002
Status: Excess
Reason: Within airport runway clear zone
GSA Number: 4–G–GA–862

Massachusetts

Petricca House
97 North Great Road
Lincoln Co: Middlesex MA 01773–
Landholding Agency: Interior
Property Number: 61200020010
Status: Unutilized
Reason: Extensive deterioration

Willow Pond Kitchen
751 Lexington Road
Concord Co: Middlesex MA 01742–
Landholding Agency: Interior
Property Number: 61200020017
Status: Unutilized
Reason: Extensive deterioration

Schlberg House
44 Virginia Road
Lincoln Co: Middlesex MA 00000–
Landholding Agency: Interior
Property Number: 61200020018
Status: Unutilized
Reason: Extensive deterioration

Nelson House
47 Virginia Road
Lincoln Co: Middlesex MA 00000–
Landholding Agency: Interior
Property Number: 61200020019
Status: Unutilized
Reason: Extensive deterioration

Michigan

Federal Bldg.
Benton Harbor
174/5 Territorial Road
Benton Harbor Co: Berrien MI 49022–
Landholding Agency: GSA
Property Number: 54200020003
Status: Excess
Reason: Within 2000 ft. of flammable or explosive material
GSA Number: 1–G–MI–796

Minnesota

Nike Battery Site, MS–40
Castle Rock Township
Farmington Co: Dakota MN 00000–
Landholding Agency: GSA
Property Number: 54200020004
Status: Surplus
Reason: Within 2000 ft. of flammable or explosive material
GSA Number: 1–I–MN–451–B

New York

Former Baker Property
Tract 270–19
Beekman Co: Dutchess NY 12570–
Landholding Agency: Interior
Property Number: 61200020011
Status: Unutilized
Reason: Extensive deterioration

(F) Depot Hill Property
Tract 270–07
Beekman Co: Dutchess NY 12564–
Landholding Agency: Interior
Property Number: 61200020012
Status: Unutilized
Reason: Extensive deterioration

(F) Yegella Property
Tract #268–33
Pawling Co: Dutchess NY 12564–
Landholding Agency: Interior
Property Number: 61200020013
Status: Unutilized
Reason: Extensive deterioration

North Carolina

Bldg. BA114
Marine Corps Base
Camp Lejeune Co: Onslow NC 28542–0004
Landholding Agency: Navy
Property Number: 77200020003
Status: Unutilized
Reason: Extensive deterioration

Bldg. H16
Marine Corps Base
Camp Lejeune Co: Onslow NC 28542–0004
Landholding Agency: Navy
Property Number: 77200020004
Status: Unutilized
Reason: Extensive deterioration

Bldg. TC816
Marine Corps Base
Camp Lejeune Co: Onslow NC 28542–0004
Landholding Agency: Navy
Property Number: 77200020005
Status: Unutilized
Reason: Extensive deterioration

Bldg. TC818
Marine Corps Base
Camp Lejeune Co: Onslow NC 28542–0004
Landholding Agency: Navy
Property Number: 77200020006
Status: Unutilized
Reason: Extensive deterioration

Bldg. SM145
Marine Corps Base
Camp Lejeune Co: Onslow NC 28542–0004
Landholding Agency: Navy
Property Number: 77200020007
Status: Unutilized
Reason: Extensive deterioration

Bldg. BA113
Marine Corps Base
Camp Lejeune Co: Onslow NC 28542–0004
Landholding Agency: Navy
Property Number: 77200020008
Status: Unutilized
Reason: Extensive deterioration

Pennsylvania

Tract 105–03
Beach Lake Co: Wayne PA 18405–9737
Landholding Agency: Interior
Property Number: 61200020020
Status: Excess
Reason: Extensive deterioration

Virginia

Bldg. 7
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020009
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area

Bldg. 12
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020010
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldg. 24
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020011
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area

Bldg. 34
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020012
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldg. 108
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020013
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldg. 299
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020014
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldg. 400
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020015
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldg. 436
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020016
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldgs. 442, 443
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020017
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldg. 530
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020018
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldg. 532
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020019
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldgs. 646–651
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020020
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldgs. 758, 759
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020021
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldg. 764
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020022
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldg. 784
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020023
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldg. 786
Naval Weapons Station
Yorktown
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020024
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldg. 788
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020025
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldg. 790
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020026
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldg. 814
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020027
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldgs. 1955–1957
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020028
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldgs. 1960, 1961, 1964
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020029
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldgs. 1980, 1981
Naval Weapons Station
Yorktown Co: VA 23691–
Landholding Agency: Navy
Property Number: 77200020030
Status: Unutilized
Reasons: Within 2000 ft. of flammable or explosive material, Secured Area, Extensive deterioration

Bldg. 160
Cheatham Annex
Williamsburg Co: VA 23185–5830
Landholding Agency: Navy
Property Number: 77200020031
Status: Unutilized
Reasons: Secured Area, Extensive deterioration

Bldg. 3023
Naval Amphibious Base
Norfold Co: VA 23521–3229
Landholding Agency: Navy
Property Number: 77200020032
Status: Excess
Reason: Extensive deterioration

Facility 3063
Naval Amphibious Base
Norfold Co: VA 23521–3229
Landholding Agency: Navy
Property Number: 77200020033
Status: Unutilized
Reasons: Extensive deterioration

Land (by State)

Washington

0.7 acres
Coulee Dam/Switching Station
Nespelem Co: Okanogan WA
Landholding Agency: Interior
Property Number: 61200020021
Status: Excess
Reasons: Within 2000 ft. of flammable or explosive material

[FR Doc. 00–9775 Filed 4–20–00; 8:45 am]

BILLING CODE 4210–29–M

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

Notice of Issuance of Five Permits for Incidental Take of Threatened and Endangered Species.

SUMMARY: Between October 1, 1999, and March 31, 2000, Region 2 of the Fish and Wildlife Service issued five permits for the incidental take of threatened and endangered species, pursuant to section 10(a)(1)(B) of the Endangered Species Act of 1973 (Act), as amended. Of the five permits issued, three are for the golden-cheeked warbler (GCW) and two are for the Houston toad (HT), and all are issued to Permittees in the greater Austin, Texas area. Copies of the five permits and associated decision documents are available upon request. In addition, between October 1, 1999 and March 31, 2000, one permit had a minor administrative amendment.

ADDRESSES: If you would like copies of any of the above documents, please contact the U.S. Fish and Wildlife Service, Ecological Services, P.O. Box 1306, Albuquerque, New Mexico.

FOR FURTHER INFORMATION CONTACT: Leslie Dierauf, Regional Habitat Conservation Plan Coordinator, at the above address, 505–248–6651. Further details of these permits may also be viewed on the Internet at *http://ecos.fws.gov.*

SUPPLEMENTARY INFORMATION: Section 9 of the Act and Federal Regulation prohibits the ''take'' of wildlife species listed as threatened or endangered species. Under the Act, the term ''take'' means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect listed wildlife, or to attempt to engage in any such conduct. The Service may, under limited circumstances, issue permits to authorize incidental take, *i.e.* that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Regulations governing permits for endangered species are at 50 CFR 17.22.

FIVE INCIDENTAL TAKE PERMITS ISSUED

Permittee	Permit No.	Date of Issuance
David C. Anderson (TX), GCW	TE–019709–0	02/04/00
Tamera M. Smith (TX), HT	TE–020079–0	02/22/00
Shelby D. Gregory (TX), HT	TE–020080–0	02/22/00
Brent Mayberry (TX), GCW	TE–012963–0	12/15/99
Anthony J. Franzetti (TX), GCW	TE–016491–0	01/20/00

ONE ADMINISTRATIVE AMENDMENT

Permittee	Permit No.	Date of amendment
Spicewood at Bull Creek Amendment #4	PRT–783564	03/02/00

Geoffrey L. Haskett,

Regional Director, Region 2, Albuquerque, New Mexico.

[FR Doc. 00–9958 Filed 4–20–00; 8:45 am]

BILLING CODE 4510–55–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

Notice of Availability, Restoration Plan

AGENCY: Fish and Wildlife Service, Department of the Interior.

ACTION: Notice of availability.

SUMMARY: The U.S. Fish and Wildlife Service (Service), on behalf of the Department of the Interior and the State of New Hampshire, announces the release for public review of the draft Restoration Plan (Plan) for the South Municipal Wellfield Superfund Site (Site). The Plan describes the trustees' proposal to restore natural resources injured as a result of the release of hazardous substances from the Site.

DATES: Written comments must be submitted on or before June 1, 2000.

ADDRESSES: Requests for copies of the Plan may be made to: U.S. Fish and Wildlife Service, New England Field Office, 22 Bridge Street, Unit 1, Concord, New Hampshire 03301.

Written comments or materials regarding the Plan should be sent to the same address.

FOR FURTHER INFORMATION CONTACT: Molly B. Sperduto or Kenneth C. Carr, Environmental Contaminants Program, U.S. Fish and Wildlife Service, 22 Bridge Street, Unit 1, Concord, New Hampshire 03301.

Interested parties may also call (603) 225–1411 for further information.

SUPPLEMENTARY INFORMATION: The South Municipal Wellfield Superfund Site, is located in Peterborough, New Hampshire. Contamination from an on-Site ball bearings manufacturing facility, including volatile organic compounds, polychlorinated biphenyls and polycyclic aromatic hydrocarbons, adversely affected adjacent wetlands. These wetlands were impaired due to food web contamination or the reduction and/or loss of their biological diversity and productivity. In turn, injury to wetland-dependent wildlife, primarily migratory birds, occurred.

In 1995, the United States of America settled claims for natural resource damages associated with the South Municipal Wellfield Superfund Site under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. The settlement proceeds will be used to compensate for injury, destruction, or loss of natural resources under trusteeship of the Department of the Interior and the State of New Hampshire. The Plan is being released in accordance with the Natural Resource Damage Assessment Regulations found at 15 CFR part 990. It is intended to describe the trustees' proposals to restore natural resources injured as a result of releases of contaminants from the Site.

The Plan describes a number of habitat restoration and protection alternatives and discusses the environmental consequences of each. The primary goal is to implement a restoration project that compensates for impacts to wetlands that provide habitat for migratory birds. Based on an evaluation of the various restoration alternatives, acquisition of equivalent resources is the preferred alternative. This alternative maximizes the benefit to wetland-dependent wildlife, preventing the imminent destruction and degradation of an extensive wetland system. The trustees believe that the proposed action will not have significant impacts on the quality of the physical, biological, and cultural environment.

Interested members of the public are invited to review and comment on the Plan. Copies of the Plan are available for review at the U.S. Fish and Wildlife Service's New England Field Office in Concord, New Hampshire (22 Bridge Street, Unit 1, Concord, New Hampshire). Additionally, the Plan will be available for review at the Peterborough Town Library. Written comments will be considered and addressed in the final Plan at the conclusion of the restoration planning process.

Authority: The authority for this action is the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (''CERCLA''), 42 U.S.C.

Dated: April 14, 2000.

Ronald E. Lambertson,

Regional Director, Region 5, U.S. Fish and Wildlife Service.

[FR Doc. 00–9948 Filed 4–20–00; 8:45 am]

BILLING CODE 4310–55–M

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[WY–920–1310–01; WYW 147278]

Notice of Proposed Reinstatement of Terminated Oil and Gas Lease

April 14, 2000.

Pursuant to the provisions of 30 U.S.C. 188(d) and (e), and 43 CFR 3108.2–3(a) and (b)(1), a petition for reinstatement of oil and gas lease WYW147278 for lands in Campbell County, Wyoming, was timely filed and was accompanied by all the required rentals accruing from the date of termination. The lessee has agreed to the amended lease terms for rentals and royalties at rates of $10.00 per acre, or fraction thereof, per year and 16⅔ percent, respectively.

The lessee has paid the required $500 administrative fee and $125 to reimburse the Department for the cost of this **Federal Register** notice. The lessee has met all the requirements for reinstatement of the lease as set out in Section 31 (d) and (e) of the Mineral Lands Leasing Act of 1920 (30 U.S.C. 188), and the Bureau of Land Management is proposing to reinstate lease WYW147278 effective February 1, 2000, subject to the original terms and conditions of the lease and the increased rental and royalty rates cited above.

Mary Jo Rugwell,

Acting Chief, Leasable Minerals Section.

[FR Doc. 00–9952 Filed 4–20–00; 8:45 am]

BILLING CODE 4310–22–M

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[WY–920–1310–01; WYW140574]

Notice of Proposed Reinstatement of Terminated Oil and Gas Lease

April 14, 2000.

Pursuant to the provisions of 30 U.S.C. 188(d) and (e), and 43 CFR 3108.2–3(a) and (b)(1), a petition for reinstatement of oil and gas lease WYW140574 for lands in Johnson County, Wyoming, was timely filed and was accompanied by all the required rentals accruing from the date of termination. The lessee has agreed to the amended lease terms for rentals and royalties at rates of $5.00 per acre, or fraction thereof, per year and 16⅔ percent, respectively.

The lessee has paid the required $500 administrative fee and $125 to reimburse the Department for the cost of

this **Federal Register** notice. The lessee has met all the requirements for reinstatement of the lease as set out in Section 31 (d) and (e) of the Mineral Lands Leasing Act of 1920 (30 U.S.C. 188), and the Bureau of Land Management is proposing to reinstate lease WYW140574 effective February 1, 2000, subject to the original terms and conditions of the lease and the increased rental and royalty rates cited above.

Mary Jo Rugwell,

Acting Chief, Leasable Minerals Section.

[FR Doc. 00–9953 Filed 4–20–00; 8:45 am]

BILLING CODE 4310–22–M

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[AK–040–00–1410; AA–81911]

Realty Action; Airport Lease, Near Cairn Mountain/Sparrevohn

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of Realty Action, Lease of Public Land.

SUMMARY: Mr. and Mrs. Gary Pogany (Applicants) have submitted an application for an airport lease on public land pursuant to the Act of May 24, 1928, as amended (49 U.S.C. appendix, 211–213) and regulations at 43 CFR part 2911. The leased land would be used to increase the safety of people flying into Osprey Lodge, which is owned and operated by Mr. and Mrs. Gary Pogany. The description of the land is as follows:

T. 12 N., R. 34 W., Section 16, SE¼,

Containing approximately 3.4 acres.

SUPPLEMENTARY INFORMATION: This Notice of Realty Action proposes to lease public land that borders the Applicant's private land to extend an existing air strip for safety purposes.

The applicants have provided a letter of concurrence with the proposal from the Federal Aviation Administration.

The lease will be offered to the Applicants for a term of 20 years. Payment of rent to the United States will be required at no less than fair market value.

DATES: Interested parties may submit comments on or before June 5, 2000, to the Field Manager, Anchorage Field Office, 6881 Abbott Loop Road, Anchorage, Alaska 99507–2599. In the absence of a timely objection, this proposal shall become the final decision of the Department of the Interior.

FOR FURTHER INFORMATION CONTACT: Karen Collie, Anchorage Field Office, Bureau of Land Management, 6881 Abbott Loop Road, Anchorage, Alaska 99507–2599; (907) 267–1244 or (800) 478–1263.

Clinton Hanson,

Acting Field Manager.

[FR Doc. 00–9950 Filed 4–20–00; 8:45 am]

BILLING CODE 4310–JA–P

DEPARTMENT OF THE INTERIOR

Bureau of Reclamation

Salton Sea Restoration Project, Riverside and Imperial Counties, California, INT–DES–00–03

AGENCY: Bureau of Reclamation, Interior.

ACTION: Notice of extension of public comment period for the Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR).

SUMMARY: Notice is hereby given that the public comment period for the DEIS/DEIR for the Salton Sea Restoration Project is extended an additional 21 days to May 16, 2000.

DATES: The end of the public comment period, as noted in the **Federal Register** (65 FR 4258) on January 26, 2000, was to be April 25, 2000. The public comment period is now extended to May 16, 2000.

ADDRESSES: Written comments on the DEIS/DEIR should be addressed to Mr. Tom Kirk, Director, Salton Sea Authority, 78–401 Highway 111, Suite T, La Quinta, CA 92253; or to Mr. William Steele, Program Manager, Salton Sea Project, Bureau of Reclamation, PO Box 61470, Boulder City, NV 89006–1470.

The document is available on the Internet at http://www.lc.usbr.gov. Copies of the DEIS/DEIR may be requested from Mr. Steele at the above address or by calling (702) 293–8129.

Our practice is to make comments, including names and home addresses of respondents, available for public review. Individual respondents may request that we withhold their home address from public disclosure, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold a respondent's identity from public disclosure, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public disclosure in their entirety.

FOR FURTHER INFORMATION CONTACT: Mr. Tom Kirk, SSA, at (760) 564–4888; or Mr. William Steele, Reclamation, at (702) 293–8129.

Dated: April 14, 2000.

Erica Petacchi,

Federal Register Liaison.

[FR Doc. 00–9968 Filed 4–20–00; 8:45 am]

BILLING CODE 4310–94–P

INTERNATIONAL TRADE COMMISSION

Sunshine Act Meeting

AGENCY HOLDING THE MEETING: United States International Trade Commission.

TIME AND DATE: April 27, 2000 at 11 a.m.

PLACE: Room 101, 500 E Street SW., Washington, DC 20436, Telephone: (202) 205–2000.

STATUS: Open to the public.

MATTERS TO BE CONSIDERED:

1. Agenda for future meeting: none.
2. Minutes.
3. Ratification List.
4. Inv. Nos. 731–TA–839–840 (Final)(Certain Cold-Rolled Steel Products from Turkey and Venezuela)—briefing and vote. (The Commission will transmit its determination to the Secretary of Commerce on May 4, 2000.)
5. Outstanding action jackets:

(1.) Document No. ER–00–001: Approval of FY 1999 Annual Report.

In accordance with Commission policy, subject matter listed above, not disposed of at the scheduled meeting, may be carried over to the agenda of the following meeting.

By order of the Commission.

Issued: April 17, 2000.

Donna R. Koehnke,

Secretary.

[FR Doc. 00–10063 Filed 4–18–00; 4:54 pm]

BILLING CODE 7020–02–P

DEPARTMENT OF JUSTICE

Immigration and Naturalization Service

[INS No. 2056–00]

Announcement of District Advisory Council on Immigration Matters Ninth Meeting

AGENCY: Immigration and Naturalization Service, Justice.

ACTION: Notice of meeting.

SUMMARY: The Immigration and Naturalization Service (Service), has established a District Advisory Council on Immigration Matters (DACOIM) to provide the New York District Director of the Service with recommendations on ways to improve the response and reaction to customers in the local jurisdiction and to develop new partnerships with local officials and community organizations to build and enhance a broader understanding of immigration policies and practices. The purpose of this notice is to announce the forthcoming meeting.

DATES AND TIMES: The ninth meeting of the DACOIM is scheduled for May 25, 2000, at 1 p.m.

ADDRESSES: The meeting will be held at the Jacob Javitts Federal Building, 26 Federal Plaza, Room 537, New York, New York 10278.

FOR FURTHER INFORMATION CONTACT: Christian A. Rodriguez, Designated Federal Officer, Immigration and Naturalization Service, 26 Federal Plaza, Room 14–100, New York, New York 10278, telephone: (212) 264–0736.

SUPPLEMENTARY INFORMATION: Meetings will be held tri-annually on the fourth Thursday during the months of January, May, and September.

Summary of Agenda

The purpose of the meeting will be to conduct general business, review subcommittee reports and facilitate public participation. The DACOIM will be chaired by Jack Byrnes, Section Chief, New York District, Immigration and Naturalization Service.

Public Participation

The DACOIM meeting is open to the public, but advance notice of attendance is requested to ensure adequate seating. Persons planning to attend should notify the contact person at least two (2) days prior to the meeting. Members of the public may submit written statements at any time before or after the meeting for consideration by the DACOIM. Written statements should be sent to Christian A. Rodriguez, Designated Federal Officer, Immigration and Naturalization Service, 26 Federal Plaza, Room 14–100, New York, New York 10278, telephone: (212) 264–0736. Only written statements received by 5 p.m. on May 22, 2000, will be considered for presentation at the meeting. Minutes of the meeting will be available upon request.

Dated: April 14, 2000.

Doris Meissner,

Commissioner, Immigration and Naturalization Service.

[FR Doc. 00–9989 Filed 4–20–00; 8:45 am]

BILLING CODE 4410–10–M

DEPARTMENT OF JUSTICE

Bureau of Prisons

Notice of Availability and Publication of the Final Environmental Impact Statement

The Federal Bureau of Prisons announces the publication of a Final Environmental Impact Statement (FEIS) regarding a proposed medium-security federal correctional facility in South Carolina.

Two preferred alternative locations are named in the document: the ''Salters Site'' in Williamsburg County and the ''Bennettsville Site'' in Marlboro County.

The document is being made available to provide for timely public comment and understanding of federal plans and programs with possible environmental consequences as required by the National Environmental Policy Act of 1969, as amended.

The purpose of the document is to afford the public and local officials an opportunity to learn of the Bureau's proposed planning, construction, and operation of a federal correctional institution near the communities of Salters and/or Bennettsville, South Carolina. The document is available at local libraries or a copy of the FEIS can be obtained by contacting the Bureau of Prisons.

Interested persons are encouraged to express their views and comments on the FEIS by submitting written comments to the Bureau of Prisons.

Items addressed in the FEIS include, but are not limited to: utilities, traffic, noise, cultural resources and socio-economic impacts.

Written statements will be accepted until May 22, 2000.

Written comments may be directed to: David J. Dorworth, Chief, Site Selection and Environmental Review Branch, Federal Bureau of Prisons, 320 First Street, NW, Washington, D.C. 20534, Telephone (202) 514–6470, Telefacsimile (202) 616–6024 ddorworth@bop.gov

Dated: March 29, 2000.

David J. Dorworth,

Chief, Site Selection and Environmental Review Branch.

[FR Doc. 00–8119 Filed 4–20–00; 8:45 am]

BILLING CODE 4110–05–U

DEPARTMENT OF LABOR

Employment and Training Administration

[TA–W–37,328 and TA–W–37,328A]

Thaw Corporation, Snow Creek Division, Wenatchee, Washington, and Thaw Corporation, Cutting Department, Kent, Washington; Amended Certification Regarding Eligibility To Apply for Worker Adjustment Assistance

In accordance with Section 223 of the Trade Act of 1974 (19 U.S.C. 2273) the Department of Labor issued a Certification of Eligibility to Apply for Worker Adjustment Assistance on February 18, 2000, applicable to workers of Thaw Corporation, Snow Creek Division, Wenatchee, Washington. The notice was published in the **Federal Register** on March 31, 2000 (65 FR 17312).

At the request of the company, the Department reviewed the certification for workers of the subject firm. The workers are engaged in the production of fleece outerwear and thermal underwear. New information shows that workers separations occurred at the subject firms' Cutting Department, Kent, Washington in March, 2000. Workers perform cutting operations for all Thaw Corporation's production facilities, including Snow Creek Division, Wenatchee, Washington.

Based on these new findings, the Department is amending the certification to cover workers at the Cutting Department, Kent, Washington location.

The intent of the Department's certification is to include all workers of Thaw Corporation adversely affected by increased imports.

The amended notice applicable to TA–W–37,328 is hereby issued as follows:

All workers of Thaw Corporation, Snow Creek Division, Wenatchee, Washington (TA–W–37,328) and the Cutting Department, Kent, Washington (TA–W–37,328A) who became totally or partially separated from employment on or after January 28, 1999 through February 18, 2002 are eligible to apply for adjustment assistance under Section 223 of the Trade Act of 1974.

Signed at Washington, DC, this 12th day of April, 2000.

Grant D. Beale,

Program Manager, Division of Trade Adjustment Assistance.

[FR Doc. 00–9969 Filed 4–20–00; 8:45 am]

BILLING CODE 4510–30–M

DEPARTMENT OF LABOR

Employment and Training Administration

[T–W–37,387]

Timbergon, Redmond, Oregon; Notice of Termination of Investigation

Pursuant to Section 221 of the Trade Act of 1974, an investigation was initiated on February 28, 2000 in response to a worker petition which was filed on behalf of workers at Timbergon, Redmond, Oregon.

The petitioner has requested that the petition be withdrawn. Consequently, further investigation in this case would serve no purpose, and the investigation has been terminated.

Signed in Washington, DC, this 6th day of April, 2000.

Grant D. Beale,

Program Manager, Division of Trade Adjustment Assistance.

[FR Doc. 00–9975 Filed 4–20–00; 8:45 am]

BILLING CODE 4510–30–M

DEPARTMENT OF LABOR

Employment and Training Administration

[TA–W–37,208, et al.]

Tultex Corporation, South Boston, Virginia; Amended Certification Regarding Eligibility To Apply for Worker Adjustment Assistance

In accordance with Section 223 of the Trade Act of 1974 (19 U.S.C. 2273) the Department Labor issued a Certification of Eligibility to Apply for Worker Adjustment Assistance on January 13, 2000, applicable to workers of Tultex Corporation, South Boston, Virginia. The notice was published in the **Federal Register** on February 4, 2000 (65 FR 5690).

At the request of the company, the Department reviewed the certification for workers of the subject firm. The workers are engaged in employment related to the production of fleece activewear. New findings show that California Shirt Sales, Inc., is a wholly owned subdivision of Tultex Corporation. Worker separations occurred at various locations of California Shirt Sales when Tultex Corporation closed all locations, including the South Boston, Virginia plant, in February, 2000. The workers provided distribution of finished fleece activewear manufactured by Tultex Corporation to its customers.

The intent of the Department's certification is to include all workers of Tultex Corporation who were adversely affected by increased imports.

The amended notice applicable to TA–W–37,208 is hereby issued as follows:

All workers of Tultex Corporation, South Boston, Virginia (TA–W–37,208) and California Shirt Sales, Inc., Fullerton, California (TA–W–37,208A), Honolulu, Hawaii (TA–W–37,208B), Las Vegas, Nevada (TA–W–37,208C), Oakland, California (TA–W–37,208D), Kent, Washington (TA–W–37,208F) and Tempe, Arizona (TA–W–37,208G) who became totally or partially separated from employment on or after December 16, 1998 through January 13, 2002 are eligible to apply for adjustment assistance under Section 223 of the Trade Act of 1974.

Signed at Washington, DC this 7th day of April, 2000.

Grant D. Beale,

Program Manager, Division of Trade Adjustment Assistance.

[FR Doc. 00–9976 Filed 4–20–00; 8:45 am]

BILLING CODE 4510–30–M

DEPARTMENT OF LABOR

Employment and Training Administration

[NAFTA–03839]

Ametek Aerospace, Wilmington, Massachusetts; Notice of Termination of Investigation

Pursuant to Title V of the North American Free Trade Agreement Implementation Act (Pub. L. 103–182) concerning transitional adjustment assistance, hereinafter called (NAFTA–TAA), and in accordance with Section 250(a), Subchapter D, Chapter 2, Title II, of the Trade Act of 1974, as amended (19 U.S.C. 2273), an investigation was initiated on February 18, 2000 in response to a petition filed on behalf of workers at Ametek Aerospace, Wilmington, Massachusetts.

In a letter dated April 10, 2000, the petitioner requested that the petition for NAFTA–TAA be withdrawn. Consequently, further investigation in this case would serve no purpose, and the investigation has been terminated.

Signed at Washington, DC, this 13th day of April, 2000.

Grant D. Beale,

Program Manager, Division of Trade Adjustment Assistance.

[FR Doc. 00–9974 Filed 4–20–00; 8:45 am]

BILLING CODE 4510–30–M

DEPARTMENT OF LABOR

Employment and Training Administration

[NAFTA–3578 and TA–W–37,035; Court Metal Finishing, Inc., Flint, Michigan]

Notice of Revised Determination on Reconsideration

On March 31, 2000, the Department issued an Affirmative Determination Regarding Application for Reconsideration for the workers and former workers of the subject firm denied eligibility to apply for North American Free Trade Agreement-Transitional Adjustment Assistance (NAFTA–TAA). The notice was published in the **Federal Register** on April 11, 2000 (65 FR 19390). The petitioners presented information regarding customer imports from Mexico of articles like or directly competitive with those produced at the workers' firm.

The January 6, 2000, denial of NAFTA–TAA for workers of Court Metal Finishing, Inc., Flint, Michigan, engaged in employment related to the production of valves was based on the finding that criteria (3) and (4) of the Group Eligibility Requirements of paragraph (a)(1) of section 250 of the Trade Act of 1974, as amended, were not met. The investigation revealed that there were no company or customer imports of valves from Mexico or Canada during the time period relevant to the investigation. Court Metal Finishing, Inc. did not shift production of valves from the Flint, Michigan plant to Mexico or Canada.

On reconsideration, the Department conducted an additional survey of the subject firm's major declining customers. The responses revealed that a major declining customer increased imports of valves from Mexico or Canada while reducing purchases from Court Metal Finishing, Inc.

The Department, on its own motion, reviewed the findings of the January 6, 2000 Trade Adjustment Assistance (TAA) negative determination applicable to workers of the subject firm, petition number TA–W–37,035. The investigation review shows that with the new customer information obtained on reconsideration of NAFTA–3578, all criteria of the Group Eligibility Requirements of section 222 of the Trade Act of 1974 are met.

Conclusion

After careful consideration of the new facts obtained on reconsideration, it is concluded that the workers of Court Metal Finishing, Inc., Flint, Michigan,

were adversely affected by increased imports, including those from Mexico or Canada, of articles like or directly competitive with those produced at the subject firm.

All workers of Court Metal Finishing, Inc., Flint, Michigan, who became totally or partially separated from employment on or after November 1, 1998, through two years from the date of this issuance are eligible to apply for NAFTA–TAA under Section 250 of the Trade Act of 1974.

All workers of Court Metal Finishing, Inc., Flint, Michigan, who became totally or partially separated from employment on or after October 15, 1998 through two years from the date of this issuance are eligible to apply for adjustment assistance under Section 223 of the Trade Act of 1974.

Signed at Washington, DC this 13th day of April 2000.

Grant D. Beale,

Program Manager, Division of Trade Adjustment Assistance.

[FR Doc. 00–9972 Filed 4–20–00; 8:45 am]

BILLING CODE 4510–30–M

DEPARTMENT OF LABOR

Employment and Training Administration

[TA–W–37,063 and NAFTA–3605]

Kellogg Company, South Operations Plant, Battle Creek, Michigan; Notice of Revised Determination on Reconsideration

On March 21, 2000, the Department issued an Affirmative Determination Regarding Application for Reconsideration with respect to the workers and former workers of the subject firm. The Department determined that the Bakery, Confectionery, Tobacco Workers and Grain Millers International Union, Local 3–G, assertion that the effects of a transfer of production equipment to Mexico warranted further investigation. The notice was published in the **Federal Register** on March 31, 2000 (65 FR 17311).

The February 10, 2000, negative determination regarding TAA was based upon the finding that the ''contributed importantly'' test of the Group Eligibility Requirements of the Trade Act of 1974, as amended, was not met. The investigation revealed that sales and production of cereal remained relatively constant from 1997 through September 1999 and that company imports relative to domestic production had declined slightly in recent years. Separations at the Battle Creek, Michigan plant were attributed to a domestic shift in production.

The February 10, 2000, negative determination regarding NAFTA–TAA was based upon the finding that criteria (3) and (4) of paragraph (a)(1) of Section 250 of the Trade Act were not met. The company's reliance on imported cereal from Mexico decreased throughout the relevant period through September 1999. Layoffs were attributable to the transfer of cereal production to other domestic plants.

On reconsideration, the Department requested current information from the subject firm applicable to the time period in which significant worker separations were scheduled to occur. The information provided by Kellogg's applicable to cereal produced by workers at the South Operations Plant, Battle Creek, Michigan, show declines in sales, production, employment. Additional information reveals that, although it remains apparent that a significant portion of former production of the South Operations Plant is being transferred domestically, there has been an increase in company imports of cereal from Mexico or Canada relative to domestic production since the phase down of production at the South Operations Plant began.

Conclusion

After careful consideration of the new facts obtained on reconsideration, it is concluded that the workers of Kellogg Company, South Operations Plant, Battle Creek, Michigan, were adversely affected by increased imports, including those from Mexico or Canada, of articles like or directly competitive with those produced at the subject firm.

All workers of Kellogg Company, South Operations Plant, Battle Creek, Michigan, engaged in employment related to the production of cereal, who became totally or partially separated from employment on or after October 29, 1998 through two years from the date of this issuance are eligible to apply for adjustment assistance under Section 223 of the Trade Act of 1974.

All workers of Kellogg Company, South Operations Plant, Battle Creek, Michigan, engaged in employment related to the production of cereal, who became totally or partially separated from employment on or after November 23, 1998, through two years from the date of this issuance are eligible to apply for NAFTA–TAA under Section 250 of the Trade Act of 1974.

Signed at Washington, DC, this 11th day of April 2000.

Grant D. Beale,

Program Manager, Division of Trade Adjustment Assistance.

[FR Doc. 00–9971 Filed 4–20–00; 8:45 am]

BILLING CODE 4510–30–M

DEPARTMENT OF LABOR

Employment and Training Administration

Notice of Determinations Regarding Eligibility To Apply for Worker Adjustment Assistance and NAFTA Transitional Adjustment Assistance

In accordance with Section 223 of the Trade Act of 1974, as amended, the Department of Labor herein presents summaries of determinations regarding eligibility to apply for trade adjustment assistance for workers (TA–W) issued during the period of March and April, 2000.

In order for an affirmative determination to be made and a certification of eligibility to apply for worker adjustment assistance to be issued, each of the group eligibility requirements of Section 222 of the Act must be met.

(1) That a significant number or proportion of the workers in the workers' firm, or an appropriate subdivision thereof, have become totally or partially separated,

(2) That sales or production, or both, of the firm or subdivision have decreased absolutely, and

(3) That increases of imports of articles like or directly competitive with articles produced by the firm or appropriate subdivision have contributed importantly to the separations, or threat thereof, and to the absolute decline in sales or production.

Negative Determinations for Worker Adjustment Assistance

In each of the following cases the investigation revealed that criterion (3) has not been met. A survey of customers indicated that increased imports did not contribute importantly to worker separations at the firm.

TA–W–37,332 & A; Shelby Yarn Co. Including All Locations in Shelby, NC and Cherryville, NC

TA–W–37,331; Vesuvius Premier Refractories, Washington, PA

TA–W–37,384; FNA Acquisitions, d/b/a Superba, Mooresville, NC

TA–W–37,239; DeZurik Corp., McMinnville, TN

TA–W–37,295; Hylton House Furniture, Kenbridge, VA

TA–W–37,134; Advanced Manufacturing and Developing, Inc., Willits, CA

TA–W–37,116; Falcon Foundry Co., Lowellville, OH

TA–W–37,401; Arbor Acres, Carthage, MS

TA–W–37,327; Energy Knits, Denver, PA

TA–W–37,294; Ball Foster Glass Container Co LLC, Marion, IN

TA–W–37,382; Alaska Petroleum Contractor, Alpine Project Kenai, Kenai, AK

In the following cases, the investigation revealed that the criteria for eligibility have not been met for the reasons specified.

TA–W–37,473; Far East International, Huntington Beach, CA
TA–W–37,464; Republic Supply Co., Sidney, MT
TA–W–37,456; General Electric Engine Services, Inc., Ontario, CA
TA–W–37,339 & A; Cominco LTD, Glenbrook Operations, Riddle, OR and Coos Bay, OR
TA–W–37,415; Parker Drilling Co., Tulsa, OK
TA–W–37,420; Western Gas Resources, Midkiff, TX
TA–W–37,400; Renfro Corp., South Pittsburg, TN
TA–W–37,371; Burlington Industries, Burlington Industries Transportation, Belmont, NC
TA–W–37,319; Furon Co., Laguna Niguel, CA
TA–W–37,489; Hasbro Manufacturing Services, El Paso, TX

The workers firm does not produce an article as required for certification under Section 222 of the Trade Act of 1974.

TA–W–37,462; Brandon Manufacturing, Inc., Shreveport, LA
TA–W–37,429; Bassett Furniture Industries of North Carolina, Upholstery Div., Dumas, AR
TA–W–37,379; Emerson Electric Co., Air Moving Motor Div., Rogers, AR
TA–W–37,446; Mulay Plastics, Casa Grande, AZ
TA–W–37,437; Elliott Turbomachinery, Jeannette, PA
TA–W–37,405; GCC Cutting, Inc., El Paso, TX
TA–W–37,486; Down River Forest Products, Inc., Woodland, WA
TA–W–37,284; Martin Mills Inc., Sewing Dept., St. Martinville, LA
TA–W–37,340; Alltex Laminating Corp., Mount Vernon, NY
TA–W–37,260; L.P.F. Apparel Corp., New York, NY
TA–W–37,176; Intersil Corp., Findlay, OH
TA–W–37,368; ITT Industries—Jabsco, Springfield, OH
TA–W–37,492; ISO Electronics, Inc., Indianapolis, IN

Increased imports did not contribute importantly to worker separations at the firm.

TA–W–37,337; G & M Cutting Services of El Paso, Inc., El Paso, TX

The investigation revealed the criteria (1) and criteria (2) have not been met. A significant number of proportion of the workers did not become totally or partially separated from employment as required for certification. Sales or production did not decline during the relevant period as required for certification.

TA–W–37,152; Goss Graphics Systems, Inc., Wyomissing, PA

The investigation revealed that criteria (1) and criteria (3) have not been met. A significant number or proportion of the workers did not become totally or partially separated from employment as required for certification. Increases of imports of articles like or directly competitive with articles produced by the firm or an appropriate subdivision have not contributed importantly to the separations of threat thereof, and the absolute decline in sales or production.

Affirmative Determinations for Worker Adjustment Assistance

The following certifications have been issued; the date following the company name and location of each determination references the impact date for all workers of such determination.

TA–W–37,105; Weiser Lock, A Masco Subsidiary, Tucson, AZ: November 19, 1998.
TA–W–37,417; Microtek Medical, Inc., Columbus, MS: February 16, 1999.
TA–W–37,245; Pioneer Wear, Albuquerque, NM: December 30, 1998.
TA–W–37,285; R.L.F. Neckwear, Inc., Belleville, NJ: January 11, 1999.
TA–W–37,237: International Paper Co., Natchez Mill, Natchez, MS: December 13, 1998.
TA–W–37,230; E–Town Sportswear Corp., Elizabethville, KY: December 29, 1998.
TA–W–37,236; Chicago Pneumatic Tool Co., Rock Hill, SC: December 15, 1998.
TA–W–37,298; Apparel Specialists, Inc., Green Bay, WI: January 14, 1999.
TA–W–37,338 & A, B, C, D & E; Johnstown Knitting Mill Co., Glenfield Div., Glenfield, NY, Montgomery St. Div., Johnstown, NY, Comrie Ave. Div., Johnstown, NY, Fort Plain Div., Fort Plain, NY, New York City Div., NY, NY, and The Diana Knitting Corp., Johnstown, NY: February 3, 1999.
TA–W–37,375; Mitec Wireless, Inc., Tinton Falls, NJ: January 21, 1999.
TA–W–37,273; Cumberland Apparel, Monticello, KY: January 10, 1999.
TA–W–37,379; Sterling Diagnostic Imaging, Inc., Brevard, NC: January 6, 1999.
TA–W–37,385; Kryptonite Corp., Canton, MA: February 7, 1999.
TA–W–37,064; Val Originals, Inc., Providence, RI: October 30, 1998.
TA–W–37,336; ISA Cutting Room Service, El Paso, TX: February 4, 1999.
TA–W–37,411 & A; The Monet Group, Inc., West Providence, RI; and New York, New York: May 5, 2000.
TA–W–37,410; Trico Products, Lawrenceburg, TN: February 4, 1999.
TA–W–37,396; Elliott Corp., Gillett, WI: February 10, 1999.
TA–W–37,399; Tanner Companies Limited Partnership, Manufacturing Div., Rutherfordton, NC: February 16, 1999.
TA–W–37,226; Burgett Geothermal Greenhouse, Inc., Animas, NM: December 28, 2000.
TA–W–37,440; Terry Products, Inc., Kannapolis, NC: March 2, 1999.
TA–W–37,335; Calvin Klein, New York, NY: February 1, 1999.
TA–W–37,215; Item House, Inc., Tacoma, WA: December 15, 1998.
TA–W–37,353; Danskin, Inc., York, PA: February 1, 1999.
TA–W–37,219; The Boeing Co., Melbourne, AR: December 20, 1998.
TA–W–37,280; The John Plant Co., Ramseur, NC: January 13, 1999.
TA–W–37,263; Fayette Glove Co, d/b/a Best Manufacturing, Fayette, AL: January 11, 1999.
TA–W–37,386; Southside Sportswear, Inc., Florence, SC: February 15, 1999.
TA–W–37,374; T&K Manufacturing, Inc., Brownstown, PA: February 7, 1999.
TA–W–37,323; Russell T. Bundy Associates, Inc., d/b/a/ Durashield USA, Sunbury, OH: January 28, 1999.
TA–W–37,310; Boyt Harness Co LLC, Bob Allen Sportswear Div., Arlington, SD: January 18, 1999
TA–W–37,312; Florence Eiseman, Inc., Milwaukee, WI: January 18, 1999.
TA–W–37,388; Sullivan Die Castings, Inc., Kenilworth, NJ: February 9, 1999.
TA–W–37,449; New River Apparel, Fries, VA: February 28, 1999.
TA–W–37,342; Assembly USA, Inc., Macon, MO: February 3, 1999.
TA–W–37,451 & A; Cross Creek Apparel, Inc., Mt Airy, NC and Walnut Cove, NC: February 21, 1999.
TA–W–37,349; RNV Apparel, Inc., Shade Gap, PA: February 1, 2000.
TA–W–37,317; Sewell Clothing Co., Inc., Temple, GA: January 26, 1999.
TA–W–37,434 & A; Bula, Inc., Durango CO and Montezuma Creek, UT: February 24, 1999.

TA–W–37,478; Hartwell Industries, Hartwell Sports, Hartwell, GA: February 25, 1999.

TA–W–37,309; A & B; Wharton Knitting Mills, Inc., Knitting Dept., Ridgewood, NY, Sewing Dept, Ridgewood, NY and Rita Knitting Mills, Ridgewood, NY: January 20, 1999.

TA–W–37,516; Finishing 2000 LLC, El Paso, TX: March 14, 1999.

TA–W–37,467; Hartz and Co., Inc., Oakloom Plant, Baltimore, MD: March 6, 1999.

Also, pursuant to Title V of the North American Free Trade Agreement Implementation Act (Pub. L. 103–182) concerning transitional adjustment assistance hereinafter called (NAFTA–TAA) and in accordance with Section 250(a), Subchapter D, Chapter 2, Title II, of the Trade Act as amended, the Department of Labor presents summaries of determinations regarding eligibility to apply for NAFTA–TAA issued during the month of March and April, 2000.

In order for an affirmative determination to be made and a certification of eligibility to apply for NAFTA–TAA the following group eligibility requirements of Section 250 of the Trade Act must be met:

(1) That a significant number or proportion of the workers in the workers' firm, or an appropriate subdivision thereof, (including workers in any agricultural firm or appropriate subdivision thereof) have become totally or partially separated from employment and either—

(2) That sales or production, or both, of such firm or subdivision have decreased absolutely,

(3) That imports from Mexico or Canada of articles like or directly competitive with articles produced by such firm or subdivision have increased, and that the increases in ports contributed importantly to such workers' separations or threat of separation and to the decline in sales or production of such firm or subdivision; or

(4) That there has been a shift in production by such workers' firm or subdivision to Mexico or Canada of articles like or directly competitive with articles which are produced by the firm or subdivision.

Negative Determinations NAFTA–TAA

In each of the following cases the investigation revealed that criteria (3) and (4) were not met. Imports from Canada or Mexico did not contribute importantly to workers' separations. There was no shift in production from the subject firm to Canada or Mexico during the relevant period.

NAFTA–TAA–03685; ASC Incorporated, Rancho Dominguez, CA

NAFTA–TAA–03709; Boyt Harness Co LLC, Bob Allen Sportswear Div., Arlington, SD

NAFTA–TAA–03702 & A; Shelby Yarn Co., Including all Locations in Shelby, NC and Cherryville, NC

NAFTA–TAA–03658; Martin Mills, Inc., Sewing Dept., St. Martinville, LA

NAFTA–TAA–03642; DeZurik Corporation, McMinnville, TN

NAFTA–TAA–03731; Renewable Energies, Inc., Slatyfork, WV

NAFTA–TAA–03765; Bassett Furniture Industries of North Carolina, Upholstery Div., Dumas, AR

NAFTA–TAA–03771 & A; Bula, Inc., Durango, CO and Montezuma Creek, UT

NAFTA–TAA–03774; Brandon Manufacturing, Inc., Shreveport, LA

NAFTA–TAA–03716; A&B; Wharton Knitting Mills, Inc., Knitting Dept., Ridgewood, NY, Sewing Dept., Ridgewood, NY and Rita Knitting Mills, Inc., Ridgewood, NY.

NAFTA–TAA–03797; Raytheon Systems Co., Microwave Div., El Sugundo, CA.

NAFTA–TAA–03788; ISO Electronics, Inc., Indianapolis, IN.

NAFTA–TAA–03650; Ball Foster Glass Container Co., LLC, Marion, IN.

The investigation revealed that the criteria for eligibility have not been met for the reasons specified.

NAFTA–TAA–3719; Burlington Industries, Burlington Industries Transportation, Belmont, NC.

NAFTA–TAA–03742; Target Retail Store, Mt. Carmel, IL.

The investigation revealed that workers of the subject firm did not produce an article within the meaning of Section 250(a) of the Trade Act, as amended.

NAFTA–TAA–03715; G&M Cutting Services of El Paso, Inc., El Paso, TX.

The investigation revealed that criteria (1) and criteria (2) have not been met. A significant number or proportion of the workers in such workers' firm or an appropriate subdivision (including workers in any agricultural firm or appropriate subdivision thereof) have become totally or partially separated from employment. Sales or production did not decline during the relevant period as required for certification.

Affirmative Determinations NAFTA–TAA

NAFTA–TAA–03606; Nucor Corp., Nucor Fastener Div., Conway, AR: November 12, 1998.

NAFTA–TAA–03695; The Eureka Co., Div. of White Consolidated Industries, Inc., Bloomington, IL: January 4, 1999.

NAFTA–TAA–03726; Trico Products, Lawrenceburg, TN: January 29, 1999.

NAFTA–TAA–03779; Atessa, Inc., Philadelphia, PA: March 2, 1999.

NAFTA–TAA–03739; Southside Sportswear, Inc., Florence, SC: February 15, 1999.

NAFTA–TAA–03678; The John Plant Co., Ramseur, NC: January 13, 1999.

NAFTA–TAA–03737; Elloit Corp., Gillett, WI: February 10, 1999.

NAFTA–TAA–03734; FNA Acquisitions, d/b/a Superba, Mooresville, NC: February 18, 1999.

NAFTA–TAA–03673; Apparel Specialists, Inc., Green Bay, WI: January 14, 1999.

NAFTA–TAA–03753; GCC Cutting, El Paso, TX: January 19, 1999.

NAFTA–TAA–03783; Link Door Controls, Inc., Ronkonkoma, NY: February 4, 1999.

NAFTA–TAA–03757; A,B,C,D, & E; Conoco, Inc., Oklahoma City, OK & Operating in the Following Locations: Hennessay, OK, Cashion, OK, Tuttle, OK, Carney, OK and Washington, OK: February 23, 1999.

NAFTA–TAA–03785 & A; Cross Creek Apparel, Inc., Mt. Airy, NC and Walnut Cove, NC: February 21, 1999.

NAFTA–TAA–03760; Burnsville Apparel Co., Wadesboro, NC: February 17, 1999.

NAFTA–TAA–03749; Emerson Electric Co., Air Moving Motor Div., Rogers, AR: February 3, 1999.

NAFTA–TAA–03686; General Electric Co., Industrial Systems, Tell City, IN: August 25, 1998.

NAFTA–TAA–03800; Hartwell Industries, Hartwell Sparts, Hartwell, GA: February 25, 1999.

NAFTA–TAA–03832; Finishing 2000 LLC, El Paso, TX: March 14, 1999.

NAFTA–TAA–03759; John Clark, Inc., Denver, CO: February 23, 1999.

NAFTA–TAA–03784; Eastman Kodak Co., Color Film Mfg-Commercial/ Professional Finishing Div., Graphics Workcenter, Rochester, NY: February 25, 1999.

NAFTA–TAA–03710; United States Leather, Inc., Pfister & Vogel Leather, Milwaukee, WI: February 4, 1999.

I hereby certify that the aforementioned determinations were issued during the month of March and April, 2000. Copies of these determinations are available for inspection in Room C–4318, U.S.

Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210 during normal business hours or will be mailed to persons who write to the above address.

Dated: April 13, 2000.

Grant D. Beale,

Program Manager, Division of Trade Adjustment Assistance.

[FR Doc. 00–9970 Filed 4–20–00; 8:45 am]

BILLING CODE 4510–30–M

DEPARTMENT OF LABOR

Employment and Training Administration

[NAFTA–03705 Thaw Corporation, Snow Creek Division, Wenatchee, Washington; and NAFTA–3705A Thaw Corporation, Cutting Department, Kent, Washington]

Amended Certification Regarding Eligibility To Apply for NAFTA Transitional Adjustment Assistance

In accordance with section 205(a), subchapter 2, title II, of the Trade Act of 1974, as amended (19 U.S.C. 2273), the Department of Labor issued a Certification of Eligibility to Apply for NAFTA Transitional Adjustment Assistance on February 18, 2000, applicable to workers of Thaw Corporation, Snow Creek Division, Wenatchee, Washington. The notice was published in the **Federal Register** on March 17, 2000 (65 FR 14628).

At the request of the company, the Department reviewed the certification for workers of the subject firm. The workers are engaged in the production of fleece outerwear and thermal underwear. New information shows that worker separations occurred at the subject firms' Cutting Department, Kent, Washington in March, 2000. Workers perform cutting operations for all Thaw Corporation's production facilities, including Snow Creek Division, Wenatchee, Washington.

Based on these new findings, the Department is amending the certification to cover workers at the Cutting Department, Kent, Washington location.

The intent of the Department's certification is to include all workers of Thaw Corporation who were adversely affected by a shift of production to Mexico.

The amended notice applicable to NAFTA–03705 is hereby issued as follows:

All workers of Thaw Corporation, Snow Creek Division, Wenatchee, Washington (NAFTA–03705) and the Cutting Department, Kent, Washington (NAFTA–0305A) who became totally or partially separated from employment on or after January 28, 1999 through February 18, 2002 are eligible to apply for NAFTA–TAA under Section 250 of the Trade Act of 1974.

Signed at Washington, DC, this 12th day of April, 2000.

Grant D. Beale,

Program Manager, Division of Trade Adjustment Assistance.

[FR Doc. 00–9973 Filed 4–20–00; 8:45 am]

BILLING CODE 4510–30–M

DEPARTMENT OF LABOR

Employment Standards Administration Wage and Hour Division

Minimum Wages for Federal and Federally Assisted Construction; General Wage Determination Decisions

General wage determination decisions of the Secretary of Labor are issued in accordance with applicable law and are based on the information obtained by the Department of Labor from its study of local wage conditions and data made available from other sources. They specify the basic hourly wage rates and fringe benefits which are determined to be prevailing for the described classes of laborers and mechanics employed on construction projects of a similar character and in the localities specified therein.

The determinations in these decisions of prevailing rates and fringe benefits have been made in accordance with 29 CFR Part 1, by authority of the Secretary of Labor pursuant to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Stat. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in 29 CFR Part 1, Appendix, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act. The prevailing rates and fringe benefits determined in these decisions shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

Good cause is hereby found for not utilizing notice and public comment procedure thereon prior to the issuance of these determinations as prescribed in 5 U.S.C. 553 and not providing for delay in the effective date as prescribed in that section, because the necessity to issue current construction industry wage determinations frequently and in large volume causes procedures to be impractical and contrary to the public interest.

General wage determination decisions, and modifications and supersedes decisions thereto, contain no expiration dates and are effective from their date of notice in the **Federal Register**, or on the date written notice is received by the agency, whichever is earlier. These decisions are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits, notice of which is published herein, and which are contained in the Government Printing Office (GPO) document entitled ''General Wage Determinations Issued Under The Davis-Bacon And Related Acts,'' shall be the minimum paid by contractors and subcontractors to laborers and mechanics.

Any person, organization, or governmental agency having an interest in the rates determined as prevailing is encouraged to submit wage rate and fringe benefit information for consideration by the Department. Further information and self-explanatory forms for the purpose of submitting this data may be obtained by writing to the U.S. Department of Labor, Employment Standards Administration, Wage and Hour Division, Division of Wage Determinations, 200 Constitution Avenue, N.W., Room S–3014, Washington, D.C. 20210.

Withdrawn General Wage Determination Decision

This is to advise all interest parties that the Department of Labor is withdrawing, from the date of this notice, the following General Wage Determinations:

MS000028—See MS000003
MS000030—See MS000003
MS000032—See MS000003
MS000034—See MS000003
MS000035—See MS000003
MS000050—See MS000003
IA000054—See IA000009

Contracts for which bids have been opened shall not be affected by this notice. Also, consistent with 29 CFR 1.6(c)(2)(i)(A), when the opening of bids is less than ten (10) days from the date of this notice, this action shall be effected unless the agency finds that there is insufficient time to notify bidders of the change and the finding is documented in the contract file.

New General Wage Determination Decision

The number of the decisions added to the Government Printing Office document entitled ''General Wage determinations Issued Under the Davis-Bacon and related Acts'' are listed by Volume and States''

Volume V

Iowa
IA000045 (Apr. 21, 2000)

Modifications to General Wage Determination Decisions

The number of decisions listed in the Government Printing Office document entitled ''General Wage Determinations Issued Under the Davis-Bacon and Related Acts'' being modified are listed by Volume and State. Dates of publication in the **Federal Register** are in parentheses following the decisions being modified.

Volume I

None

Volume II

Pennsylvania
PA000007 (Feb. 11, 2000)
PA000009 (Feb. 11, 2000)

Volume III

Mississippi
MS000003 (Feb. 11, 2000)
North Carolina
NC000033 (Feb. 11, 2000)

Volume IV

Illinois
IL000011 (Feb. 11, 2000)

Volume V

Iowa
IA000009 (Feb. 11, 2000)
IA000080 (Feb. 11, 2000)
Texas
TX000053 (Feb. 11, 2000)

Volume VI

None

Volume VII

None

General Wage Determination Publication

General wage determinations issued under the Davis-Bacon and related Acts, including those noted above, may be found in the Government Printing Office (GPO) document entitled ''General Wage Determinations Issued Under The Davis-Bacon and Related Acts.'' This publication is available at each of the 50 Regional Government Depository Libraries and many of the 1,400 Government Depository Libraries across the country.

The general wage determinations issued under the Davis-Bacon and related Acts are available electronically by subscription to the FedWorld Bulletin Board System of the National Technical Information Service (NTIS) of the U.S. Department of Commerce at 1–800–363–2068

Hard-copy subscriptions may be purchased from: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, (202) 512–1800.

When ordering hard-copy subscription(s), be sure to specify the State(s) of interest, since subscriptions may be ordered for any or all of the seven separate volumes, arranged by State. Subscriptions include an annual edition (issued in January or February) which includes all current general wage determinations for the States covered by each volume. Throughout the remainder of the year, regular weekly updates are distributed to subscribers.

Signed at Washington, DC, this 13th day of April 2000.

Carl J. Poleskey,

Chief, Branch of Construction Wage Determinations.

[FR Doc. 00–9753 Filed 4–20–00; 8:45 am]

BILLING CODE 4510–27–M

DEPARTMENT OF LABOR

Bureau of Labor Statistics

Proposed Collection; Comment Request

ACTION: Notice.

SUMMARY: The Department of Labor, as part of its continuing effort to reduce paperwork and respondent burden, conducts a pre-clearance consultation program to provide the general public and Federal agencies an opportunity to comment on proposed and/or continuing collections of information in accordance with the Paperwork Reduction Act of 1995 (PRA95) [44 U.S.C. 3506(c)(2)(A)]. This program helps to ensure that requested data can be provided in the desired format, reporting burden (time and financial resources) is minimized, collection instruments are clearly understood, and the impact of collection requirements on respondents can be properly assessed. The Bureau of Labor Statistics (BLS) is soliciting comments concerning the proposed revision of the ''International Price Program—U.S. Import Price Indexes.'' A copy of the proposed information collection request (ICR) can be obtained by contacting the individual listed in the **ADDRESSES** section of this notice.

DATES: Written comments must be submitted to the office listed in the **ADDRESSES** section of this notice on or before June 20, 2000.

ADDRESSES: Send comments to Sytrina D. Toon, BLS Clearance Officer, Division of Management Systems, Bureau of Labor Statistics, Room 3255, 2 Massachusetts Avenue, N.E., Washington, DC 20212, telephone number 202–691–7628 (this is not a toll free number).

FOR FURTHER INFORMATION CONTACT: Sytrina D. Toon, BLS Clearance Officer, telephone number 202–691–7628. (See **ADDRESSES** section.)

SUPPLEMENTARY INFORMATION:

I. Background

The U.S. Import Price Indexes, produced continuously by the Bureau of Labor Statistic's International Price Program (IPP) since 1971, measure price change over time for all categories of imported products, as well as many services. The Office of Management and Budget has listed the Import Price Indexes as a Principal Federal Domestic Indicator since 1982. The indexes are widely used in both the public and private sectors. The primary public sector use is the deflation of the U.S. Trade Statistics and the Gross Domestic Product; the indexes also are used in formulating U.S. trade policy and in trade negotiations with other countries. In the private sector, uses of the Import Price Indexes include market analysis, inflation forecasting, contract escalation, and replacement cost accounting.

The IPP indexes are closely followed statistics, and are viewed as a sensitive indicator of the economic environment. The U.S. Department of Commerce uses the monthly statistics to produce monthly and quarterly estimate of inflation-adjusted trade flows. Without continuation of data collection, it would be extremely difficult to construct accurate estimates of the U.S. Gross Domestic Product. In addition, Federal policymakers in the Department of Treasury, the Council of Economic Advisers, and the Federal Reserve Board utilize these statistics on a regular basis to improve these agencies' formulation and evaluation of monetary and fiscal policy and evaluation of the general business environment.

II. Desired Focus of Comments

The Bureau of Labor Statistics is particularly interested in comments which:

• Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

• Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

• Enhance the quality, utility, and clarity of the information to be collected; and

• Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submissions of responses.

III. Current Action

The IPP continues to modernize data collection and processing to permit more timely release of its indexes, and to reduce reporter burden. The IPP is testing initiation techniques to reduce burden such as less frequent sampling of more stable item areas, use of broader item areas in certain cases, and retention of items initiated in previous samples that reporters still trade. In order to reduce the time required for processing new items, direct entry of initiation data from the field was recently implemented. The IPP is testing the application of new technology to repricing and the use of fax telephone lines to permit direct collection and entry into the BLS reporters' repricing database. The IPP also is considering use of the Internet for monthly repricing.

Type of Review: Revision.

Agency: Bureau of Labor Statistics.

Title: International Price Program/U.S. Import Price Indexes.

OMB Number: 1220–0026.

Affected Public: Business or other for profit.

Total Respondents: (FY 2000) 4,935.

Frequency: Quarterly/Monthly.

Total Responses: (FY 2001) 40,240.

Average Time Per Response: 36.18 minutes.

Estimated Total Burden Hours: (FY 2001) 24,246 hours.

Form	Total respondents	Frequent	Total responses	Average time per response (hours)	Estimated total burden (hours)
Initiation Visit (includes form 3008)	1,700	annually	1,700	1.00	1,700
Form 3007D	3,235	Monthly/quarterly	38,540	.585	22,546
Totals	4,935		40,240		24,246

Total Burden Cost (capital/startup): $0.

Total Burden Cost (operating/maintenance): $0.

Comments submitted in response to this notice will be summarized and/or included in the request for Office of Management and Budge approval of the information collection request; they also will become a matter of public record.

Signed at Washington, DC, this 17th day of April 2000.

W. Stuart Rust, Jr.,

Chief, Division of Management Systems, Bureau of Labor Statistics.

[FR Doc. 00–9977 Filed 4–20–00; 8:45 am]

BILLING CODE 4510–24–M

DEPARTMENT OF LABOR

Bureau of Labor Statistics

Proposed Collection; Comment Request

ACTION: Notice.

SUMMARY: The Department of Labor, as part of its continuing effort to reduce paperwork and respondent burden, conducts a pre-clearance consultation program to provide the general public and Federal agencies an opportunity to comment on proposed and/or continuing collections of information in accordance with the Paperwork Reduction Act of 1995 (PRA95) [44 U.S.C. 3506(c)(2)(A)]. This program helps to ensure that requested data can be provided in the desired format, reporting burden (time and financial resources) is minimized, collection instruments are clearly understood, and the impact of collection requirements on respondents can be properly assessed. The Bureau of Labor Statistics (BLS) is soliciting comments concerning the proposed revision of the ''International Price Program—U.S. Export Price Indexes.'' A copy of the proposed information collection request (ICR) can be obtained by contacting the individual listed in the **ADDRESSES** section of this notice.

DATES: Written comments must be submitted to the office listed in the **ADDRESSES** section of this notice on or before June 20, 2000.

ADDRESSES: Send comments to Sytrina D. Toon, BLS Clearance Officer, Division of Management Systems, Bureau of Labor Statistics, Room 3255, 2 Massachusetts Avenue, NE., Washington, DC 20212, telephone number 202–691–7628 (this is not a toll free number).

FOR FURTHER INFORMATION CONTACT: Sytrina D. Toon, BLS Clearance Officer, telephone number 202–691–7628. (See **ADDRESSES** section.)

SUPPLEMENTARY INFORMATION:

I. Background

The U.S. Export Price Indexes, produced continuously by the Bureau of Labor Statistics' International Price Program (IPP) since 1971, measure price change over time for all categories of exported products, as well as many services. The Office of Management and Budget has listed the Export Price Indexes as a Principal Federal Economic Indicator since 1982. The indexes are widely used in both the public and private sectors. The primary public sector use is the deflation of the U.S. Trade Statistics and the Gross Domestic Product; the indexes also are used in formulating U.S. trade policy and in trade negotiations with other countries. In the private sector, uses of the Export Price Indexes include market analysis, inflation forecasting, contract escalation, and replacement cost accounting.

The IPP indexes are closely followed statistics and are viewed as a sensitive indicator of the economic environment. The U.S. Department of Commerce uses the monthly statistics to produce monthly and quarterly estimates of inflation-adjusted trade flows. Without continuation of data collection, it would be extremely difficult to construct accurate estimates of the U.S. Gross Domestic Product. In addition, Federal policymakers in the Department of Treasury, the Council of Economic Advisers, and the Federal Reserve Board utilize these statistics on a regular basis to improve these agencies' formulation and evaluation of monetary and fiscal policy and evaluation of the general business environment.

II. Desired Focus of Comments

The Bureau of Labor Statistics is particularly interested comments which:

• Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

• Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

• Enhance the quality, utility, and clarity of the information to be collected; and

• Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submissions of responses.

III. Current Action

The IPP continues to modernize data collection and processing to permit more timely release of its indexes, and to reduce reporter burden. The IPP is testing initiation techniques to reduce burden such as less frequent sampling of more stable item areas, use of broader item areas in certain cases, and retention of items initiated in previous samples that reporters still trade. In order to reduce the time required for processing new items, direct entry of initiation data from the field was recently implemented. The IPP is testing the application of new technology to repricing and the use of fax telephone lines to permit direct collection and entry into the BLS reporters' repricing database. The IPP also is considering use of the Internet for monthly repricing.

Type of Review: Revision.

Agency: Bureau of Labor Statistics.

Title: International Price Program/U.S. Export Price Indexes.

OMB Number: 1220–0025.

Affected Public: Business or other for profit.

Total Respondents: (FY 2000) 4,935.

Frequency: Quarterly/Monthly.

Total Responses: (FY 2001) 40,240.

Average Time Per Response: 34.86. minutes.

Estimated Total Burden Hours: (FY 2001) 23,379 hours.

Form	Total respondents	Frequency	Total responses	Average time per response (hours)	Estimated total burden (hours)
Initiation visit (includes form 4008)	2,700	Annually	1,700	1.00	1,700
Form 3007D	3,235	Montly, Quarterly	38,540	.5625	21,679
Totals	4,935		40,240		23,379

Total Burden Cost (capital/startup): $0.

Total Burden Cost (operating/maintenance): $0.

Comments submitted in response to this notice will be summarized and/or included in the request for Office of Management and Budget approval of the information collection request; they also will become a matter of public record.

Signed at Washington, DC, this 17th day of April 2000.

W. Stuart Rust, Jr.,

Chief, Division of Management Systems, Bureau of Labor Statistics.

[FR Doc. 00–9978 Filed 4–20–00; 8:45 am]

BILLING CODE 4510–24–M

DEPARTMENT OF LABOR

Bureau of Labor Statistics

Proposed Collection; Comment Request

ACTION: Notice.

SUMMARY: The Department of Labor, as part of its continuing effort to reduce paperwork and respondent burden, conducts a pre-clearance consultation programs to provide the general public and Federal agencies an opportunity to comment on proposed and/or continuing collections of information in accordance with the Paperwork Reduction Act of 1995 (PRA95) [44 U.S.C. 3506(c)(2)(A)]. This program helps to ensure that requested data can be provided in the desired format, reporting burden (time and financial resources) is minimized, collection instruments are clearly understood, and the impact of collection requirements on respondents can be properly assessed. The Bureau of Labor Statistics (BLS) is soliciting comments concerning the proposed revision of the Survey of Occupational Injuries and Illnesses. A copy of the proposed information collection request (ICR) can be obtained by contacting the individual listed in the Addresses section of this notice.

DATES: Written comments must be submitted to the office listed in the Addresses section of this notice on or before June 20, 2000.

ADDRESSES: Send comments to Sytrina D. Toon, BLS Clearance Officer, Division of Management Systems, Bureau of Labor Statistics, Room 3255, 2 Massachusetts Avenue, NE., Washington, DC 20212, telephone number 202–691–7628 (this is not a toll free number).

FOR FURTHER INFORMATION CONTACT: Sytrina D. Toon, BLS Clearance Officer, telephone number 202–691–7628. (See Addresses section.)

SUPPLEMENTARY INFORMATION:

I. Background

Section 24(a) of the Occupational Safety and Health Act of 1970 requires the Secretary of Labor to develop and maintain an effective program of collection, compilation, and analysis of statistics on occupational injuries and illnesses. The Commissioner of Labor Statistics has been delegated the responsibility for ''Furthering the purpose of the Occupational Safety and Health Act by developing and maintaining an effective program of collection, compilation, analysis and publication of occupational safety and health statistics.'' The Bureau of Labor Statistics (BLS) fulfills this responsibility, in part, by conducting the Survey of Occupational Injuries and Illnesses in conjunction with participating State agencies. The BLS Survey of Occupational Injuries and Illnesses provides the nations's primary indicator of the progress towards achieving the goal of safer and healthier workplaces. The survey produces the overall rate of occurrence of work injuries and illnesses by industry, which can be compared to prior years to produce measures of the rate of change. These data are used to improve safety and health programs and measure the change in work-related injuries and illnesses.

II. Desired Focus of Comments

The Bureau of Labor Statistics is particularly interested in comments which:

• Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

• Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

• Enhance the quality, utility, and clarity of the information to be collected; and

• Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submissions of responses.

III. Current Action

OMB clearance is being sought for the upcoming Survey of Occupational Injuries and Illnesses. Approximately 230,000 establishments will be surveyed annually. The clearance will include survey prenotification materials for employers who normally are exempt from the requirement to record injuries and illnesses.

Type of Review: Revision.

Agency: Bureau of Labor Statistics.

Title: Survey of Occupational Injuries and Illnesses.

OMB Number: 1220–0045.

Affected Public: Business or other for-profit; Not-for-profit institutions; Farms; State, Local or Tribal Government.

Frequency: Annually.

Form	Total respondents	Total responses	Estimated time per response (hours)	Estimated total burden (hours)
BLS 9300	230,000	230,000	.71	163,125
Prenotification Package	150,000 out of 230,000	150,000 out of 230,000	.11	16,666
Totals	230,000	230,000	.78	179,791

Total Burden Cost (capital/startup): $0.

Total Burden Cost (operating/maintenance): $0.

Comments submitted in response to this notice will be summarized and/or included in the request for Office of Management and Budget approval of the information collection request; they also will become a matter of public record.

Signed at Washington, DC, this 17th day of April 2000.

W. Stuart Rust, Jr.,

Chief, Division of Management Systems, Bureau of Labor Statistics.

[FR Doc. 00–9979 Filed 4–20–00; 8:45 am]

BILLING CODE 4510–24–M

LEGAL SERVICES CORPORATION

Notice of Availability of Calendar Year 2001 Competitive Grant Funds

AGENCY: Legal Services Corporation.

ACTION: Solicitation for Proposals for the Provision of Civil Legal Services.

SUMMARY: The Legal Services Corporation (LSC or Corporation) is the national organization charged with administering federal funds provided for civil legal services to the poor.

The Corporation hereby announces the availability of competitive grant funds and is soliciting grant proposals from interested parties who are qualified to provide effective, efficient and high quality civil legal services to eligible clients in the states and territories, by service area(s) identified below. The exact amount of congressionally appropriated funds and the date, terms and conditions of their availability for calendar year 2001 have not been determined.

DATES: See Supplementary Information section for grants competition dates.

ADDRESSES: Legal Services Corporation—Competitive Grants, 750 First Street NE, 10th Floor, Washington, DC 20002–4250.

FOR FURTHER INFORMATION CONTACT: Office of Program Performance, Competitive Grants—Service Desk at (202) 336–8900, by FAX at (202) 336–7272, by e-mail at competition@lsc.gov, or visit the LSC web site at *www.ain.lsc.gov.*

SUPPLEMENTARY INFORMATION: Request for Proposals (RFP) will be available April 24, 2000. The due dates for the Notice of Intent to Compete and Grant Proposals follow.

Applicants competing for service areas in Alabama, Arizona, Arkansas, Connecticut, Delaware, District of Columbia, Florida, Georgia, Guam, Hawaii, Idaho, Illinois, Iowa, Kansas, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Mississippi, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virgin Islands, Washington, Wisconsin, or Wyoming must submit the notice of intent to compete by June 2, 2000, 5:00 p.m. EDT. Grant proposals for service areas in these states must be submitted by June 19, 2000, 5:00 p.m. EDT.

Applicants competing for service areas in California, Colorado, Indiana, Kentucky, Michigan, Missouri, Nebraska, Pennsylvania, Virginia, or West Virginia must submit the notice of intent to compete by June 30, 2000, 5:00 p.m. EDT. Grant proposals for service areas in these states must be submitted by July 17, 2000, 5:00 p.m. EDT.

LSC is seeking proposals from: (1) Non-profit organizations that have as a purpose the furnishing of legal assistance to eligible clients; (2) private attorneys; (3) groups of private attorneys or law firms; (4) State or local governments; and (5) substate regional planning and coordination agencies which are composed of substate areas and whose governing boards are controlled by locally elected officials.

The RFP, containing the grant application, guidelines, proposal content requirements and specific selection criteria, is available from the LSC web site at *www.ain.lsc.gov.* LSC will not FAX the solicitation package to interested parties.

Below are the service areas for which LSC is requesting grant proposals. Service area descriptions are available from Appendix A of the RFP. The RFP will be available April 24, 2000, at *www.ain.lsc.gov.*

State	Service area
Alabama	MAL
Arizona	MAZ
Arkansas	MAR

State	Service area
California	CA–2, CA–12 CA–14, CA–19, CA–26, CA–29, CA–30, CA–31, MCA
Colorado	CO–6, MCO, NCO–1
Connecticut	MMX–1
Delaware	MDE
District of Columbia	DC–1
Florida	FL–4, FL–7, FL–9, MFL, NFL–1
Georgia	MGA
Guam	GU–1
Hawaii	MHI
Idaho	MID
Illinois	IL–6, MIL
Indiana	IN–5, MIN
Iowa	IA–1, IA–2, MIA
Kansas	MKS
Kentucky	KY–2, KY–3, KY–5, KY–9, KY–8, MKY
Louisiana	MLA
Maine	MMX–1
Maryland	MMD
Massachusetts	MMX–1
Michigan	MI–1, MI–2, MI–3, MI–4, MI–5, MI–6, MI–7, MI–8, MI–9, MI–10, MI–11, MMI, NMI–1
Minnesota	MMN
Mississippi	MMS
Missouri	MO–3, MO–4, MO–5, MO–7, MMO
Montana	MMT
Nebraska	NE–4, MNE, NNE–1
Nevada	MNV
New Hampshire	MMX–1
New Jersey	MNJ
New Mexico	MNM
New York	MNY, NNY–1
North Carolina	NC–1, NC–2, NC–3, NC–4, MNC, NNC–1
North Dakota	ND–1, ND–2, MND, NND–1, NND–2
Ohio	OH–21, MOH
Oklahoma	MOK
Oregon	OR–2, OR–4, OR–5, MOR, NOR–1
Pennsylvania	PA–1, PA–5, PA–8, PA–11, PA–23, PA–24, PA–25, PA–26, MPA
Puerto Rico	PR–1, PR–2, MPR
Rhode Island	MMX–1
South Carolina	MSC
South Dakota	SD–1, SD–2, SD–3, MSD, NSD–1
Tennessee	MTN
Texas	TX–4, TX–6, TX–8, TX–9, MTX
Utah	MUT
Vermont	MMX–1
Virgin Islands	VI–1
Virginia	VA–1, VA–3, VA–15, VA–16, VA–17, VA–18, VA–19, MVA
Washington	MWA
West Virginia	WV–3, WV–4, MWV
Wisconsin	WI–1, WI–2, WI–3, WI–4, MWI, NWI–1
Wyoming	WY–4, MWY, NWY–1

Dated: April 14, 2000.

Michael A. Genz,

Director, Office of Program Performance.

[FR Doc. 00–9874 Filed 4–20–00; 8:45 am]

BILLING CODE 7050–01–P

NATIONAL FOUNDATION FOR THE ARTS AND THE HUMANITIES

National Endowment for the Arts

President's Committee on the Arts and the Humanities: Meeting XLVIII

Pursuant to Section 10(a)(2) of the Federal Advisory Committee Act (Public Law 92–463), as amended, notice is hereby given that a meeting of the President's Committee on the Arts and the Humanities will be held on April 28, 2000 from 9:00 a.m. to approximately 12:30 p.m. The meeting will be held at the State House Convention center, Little Rock, Arkansas.

The Committee meeting will begin at 9 a.m. with opening remarks by Chairman Dr. John Brademas and Executive Director's remarks from Harriet Mayor Fulbright. This will be followed by a special presentation on the ''State of the Arts & Humanities in Arkansas.'' The Committee will hear presentations from John W. Roberts, Deputy Chairman of the National Endowments for the Humanities, and Lee Kessler, Director, Federal Partnerships for the National Endowment for the Arts, and Mamie Bittner, Director of Public and Legislative Affairs for the Institute of Museum & Library Services. There will also be Task Force Reports on Ethnic Diversity (presented by Peggy Cooper Cafritz), ''Tutu & Franklin: A Journey Towards Peace'' (presented by Renee Poussaint) and Education (presented by Rich Gurin).

The President's Committee on the Arts and the Humanities was created by Executive Order in 1982 to advise the President, the two Endowments, and the Institute of Museum and Library Services on measures to encourage private sector support for the nation's cultural institutions and to promote public understanding of the arts and the humanities.

If, in the course of discussion, it becomes necessary for the Committee to discuss non-public commercial or financial information of intrinsic value, the Committee will go into closed session pursuant to subsection (c)(4) of the Government in the Sunshine Act, 5 U.S.C. 552b.

Any interested persons may attend as observers, on a space available basis, but seating is limited. Therefore, for this meeting, individuals wishing to attend must contact Georgianna Paul of the President's Committee in advance at (202) 682–5409 or write to the Committee at 1100 Pennsylvania Avenue, NW, Suite 526, Washington, DC 20506. Further information with reference to this meeting can also be obtained from Ms. Paul.

If you need special accommodations due to a disability, please contact Ms. Paul through the Office of AccessAbility, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW, Washington, DC 20506, 202/682–5532, TDY–TDD 202/682–5496.

Dated: April 18, 2000.

Kathy Plowitz-Worden,

Panel Coordinator, Panel Operations, National Endowment for the Arts.

[FR Doc. 00–10129 Filed 4–20–00; 8:45 am]

BILLING CODE 7537–01–M

NUCLEAR REGULATORY COMMISSION

[Docket No. 50–325]

Carolina Power & Light Company, et al.; Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. DPR–71 issued to Carolina Power & Light Company, et al., (the licensee) for operation of the Brunswick Steam Electric Plant, Unit 1, located in Brunswick County, North Carolina.

The proposed amendment would modify Surveillance Requirement (SR) 3.1.3.3 to allow partial insertion of control rod 26–47 instead of insertion of one complete notch. This revised acceptance criterion will be limited to the current Unit No. 1 operating cycle, after which the current one-notch requirement will be re-established.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

The Commission has made a proposed determination that the amendment request involves no

significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Partial insertion of control rod 26–47 versus insertion of one notch does not involve a significant increase in the probability or consequences of an accident previously evaluated.

This change does not affect either the design or operation of the Control Rod Drive Mechanism (CRDM). The affected surveillance is not considered to be an initiator of any analyzed event. Revising the acceptance criterion for SR 3.1.3.3 for control rod 26–47 will not affect the ability of the control rods to shutdown the reactor if required. Allowing partial insertion of control rod 26–47 versus one notch insertion will not affect the overall intent of SR 3.1.3.3 and will provide adequate assurance that control rod 26–47 remains capable of insertion. The proposed change is only applicable to control rod 26–47; all other partially withdrawn control rods will be tested by inserting them one notch. Additionally, the insertion capability of all fully withdrawn control rods is demonstrated on a 7 day frequency. Hence, the overall intent of SR 3.1.3.3, which is to detect either random stuck control rods or identify generic concerns affecting control rod operability, is not significantly affected by the proposed change.

Therefore, the proposed amendment does not significantly increase the probability or consequences of a previously analyzed accident.

2. Partial insertion of control rod 26–47 versus insertion of one notch will not create the possibility of a new or different kind of accident from any accident previously evaluated.

Revising the acceptance criterion of SR 3.1.3.3 for control rod 26–47 does not involve physical modification to the plant and does not introduce a new mode of operation. Therefore, there is no possibility of an accident of a new or different type.

3. Partial insertion of control rod 26–47 versus insertion of one notch does not involve a significant reduction in a margin of safety.

Revising the acceptance criterion of SR 3.1.3.3 only provides a minor reduction in the probability of finding that rod 26–47 is stuck. Partially inserting control rod 26–47 once per 31 days will provide adequate assurance that control rod 26–47 remains capable of insertion.

The proposed change is only applicable to control rod 26–47; all other partially withdrawn control rods will be tested by inserting them one full notch.

Additionally, the insertion capability of all fully withdrawn control rods is demonstrated on a 7 day frequency. Hence, the overall intent of SR 3.1.3.3, which is to detect either random stuck control rods or identify generic concerns affecting control rod operability, is not significantly affected by the proposed change. Additionally, industry experience has shown stuck control rods to be an extremely rare event. Should a stuck control rod be discovered, 100% of the remaining control rods will be tested within 24 hours per the requirements of Action A.3 of TS 3.1.3.

On March 28, 2000, it was determined that BSEP [Brunswick Steam Electric Plant], Unit No. 1 had developed a problem which has resulted in the inability to withdraw control rod 26–47. The control rod remains operable and is fully capable of being automatically or manually inserted. Performance of SR 3.1.3.3, with the current acceptance criterion, will unnecessarily impact the control rod blade by increasing the rate of depletion of its neutron absorption capability as more of the blade will be exposed to the operating core. Performance of SR 3.1.3.3 by partial insertion of control rod 26–47 versus insertion of one notch can be accomplished by observing control rod position indication in the control room. A one notch insertion represents two reed switch positions; notches are located at even numbered reed switch positions. For control rod 26–47, SR 3.1.3.3 will be performed by inserting the control rod sufficiently to cause reed switch movement, as determined by intermediate rod position indication (*i.e.,* blackout of starting rod position on the four rod display) in the control room. At that point, the control rod will be allowed to settle to its original position. This provides adequate assurance of the insertion capability of the control rod.

Based on (1) the ability of control rod 26–47 to be inserted either manually or automatically, (2) the continued demonstration of the ability of control rod 26–47 to insert on a 31 day frequency, (3) the high level of assurance of continued operability of all control rods provided by SR 3.1.3.2 and SR 3.1.3.3, and (4) the benefits derived by limiting the unnecessary depletion of the neutron absorption capability of control rod 26 47, the benefits derived from revising the acceptance criterion of SR 3.1.3.3 for control rod 26–47 outweigh any risks associated with the proposed change. Therefore, the proposed amendment will provide assurance that control rod 26–47 remains operable while avoiding the negative consequences of unnecessarily inserting control rod 26–47.

Based on the above, partial insertion of control rod 26–47 versus insertion of one notch does not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of the 30-day notice period. However, should circumstances change during the notice period such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 30-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish in the **Federal Register** a notice of issuance and provide for opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, and should cite the publication date and page number of this **Federal Register** notice. Written comments may also be delivered to Room 6D59, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, from 7:30 a.m. to 4:15 p.m. Federal workdays. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By May 22, 2000, the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's ''Rules of Practice for Domestic Licensing Proceedings'' in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW.,

Washington, DC, and accessible electronically through the ADAMS Public Electronic Reading Room link at the NRC Web site (http://www.nrc.gov). If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) The nature of the petitioner's right under the Act to be made party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, Attention: Rulemakings and Adjudications Staff, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, by the above date. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, and to William D. Johnson, Vice President and Corporate Secretary, Carolina Power & Light Company, Post Office Box 1551, Raleigh, North Carolina 27602.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)–(v) and 2.714(d).

For further details with respect to this action, see the application for amendment dated April 14, 2000, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and accessible electronically through the ADAMS Public Electronic Reading Room link at the NRC Web site (http://www.nrc.gov).

Dated at Rockville, Maryland, this 17th day of April, 2000.

For the Nuclear Regulatory Commission.

Allen G. Hansen,

Project Manager, Section 2, Project Directorate II, Division of Licensing Project Management, Office of Nuclear Reactor Regulation.

[FR Doc. 00–9965 Filed 4–20–00; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 50–22]

In the Matter of CBS Corporation (Test Reactor at Waltz Mill, PA); Order Approving Transfer of License and Conforming Amendment

I

The CBS Corporation (CBS) is the owner of the Test Reactor located near Waltz Mill in Westmoreland County, Pennsylvania, and is authorized to possess the facility as reflected in License No. TR–2. The facility is presently being decommissioned in accordance with a decommissioning plan approved by the Nuclear Regulatory Commission (NRC or the Commission). The NRC issued Operating License No. TR–2 on June 19, 1959, to the Westinghouse Electric Corporation pursuant to Part 50 of Title 10 of the Code of Federal Regulations (10 CFR Part 50). The license was amended on March 25, 1963, to authorize the licensee to possess but not operate the reactor. The license was amended on July 31, 1998, and March 25, 1999, to reflect the change in the legal name of the licensee for the Test Reactor from the Westinghouse Electric Corporation to the CBS Corporation. The license was further amended on September 30, 1998, to approve the decommissioning of the reactor.

II

Under cover of a letter dated February 14, 2000, CBS submitted an application to transfer the TR–2 license from CBS Corporation to Viacom Inc. (Viacom). This application was supplemented on March 8 and 25, 2000 (collectively referred to herein as ''the application''). According to the application, CBS has entered into an Agreement and Plan of

Merger with Viacom under which CBS will merge with and into Viacom (the ''Merger''). The existing TR–2 license held by CBS will be transferred to and retained by Viacom, and Viacom will have responsibility to decommission the facility and terminate the license. The application asserts that the proposed transfer will not involve any change in the operating organization, location, facilities, equipment, or procedures related to or personnel responsible for the licensed activities. In addition, there will be no effective change in the personnel who are responsible for completion of the decommissioning effort as described in the TR–2 Decommissioning Plan.

The application also sought the approval of a conforming amendment. The conforming amendment would remove references to CBS from the facility license and replace them with references to Viacom, and make other miscellaneous administrative changes, as appropriate, to reflect the transfer of the license.

Approval of the transfer and conforming license amendment was requested pursuant to 10 CFR 50.80 and 10 CFR 50.90. Notice of the application for approval and an opportunity for a hearing was published in the **Federal Register** on February 29, 2000 (65 FR 10841). A supplemental notice was published on March 7, 2000 (65 FR 12040). No hearing requests or written comments were filed.

Under 10 CFR 50.80, no license for a production or utilization facility, or any right thereunder, shall be transferred, directly or indirectly, through transfer of control of the license, unless the Commission shall give its consent in writing. Upon review of the information in the application and other information before the Commission, the NRC staff has determined that Viacom is qualified to hold the license, and that the transfer of the license to Viacom is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission. The NRC staff has further found that the application for the proposed license amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended, and the Commission's rules and regulations set forth in 10 CFR Chapter I; the facility will be possessed in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission; there is reasonable assurance that the activities authorized by the proposed license amendment can be conducted without endangering the health and safety of the public and that such activities will be conducted in compliance with the Commission's regulations; the issuance of the proposed license amendment will not be inimical to the common defense and security or to the health and safety of the public; and the issuance of the proposed amendment will be in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied. The foregoing findings are supported by a Safety Evaluation dated April 13, 2000.

III

Accordingly, *It Is Hereby Ordered* that the transfer of the license as described herein to Viacom is approved, subject to the following condition:

After receipt of all required regulatory approvals of the merger between CBS and Viacom, CBS shall inform the Director, Office of Nuclear Reactor Regulation, in writing of such receipt, and of the date of the closing of the merger no later than five business days prior to the date of closing. Should the transfer of the license not be completed by March 30, 2001, this Order shall become null and void, provided, however, on written application and for good cause shown, such date may in writing be extended.

It Is Further Ordered that, consistent with 10 CFR 2.1315(b), a license amendment that makes changes, as indicated in Enclosure 2 to the cover letter forwarding this Order, to conform the license to reflect the transfer is approved. The amendment shall be issued and made effective at the time the proposed license transfer is completed.

This Order is effective upon issuance.

For further details with respect to this Order, see the initial application dated February 14, 2000, and supplements thereto dated March 8 and 25, 2000, and the safety evaluation dated April 13, 2000, which are available for public inspection at the NRC's Public Document Room, the Gelman Building, 2120 L Street, NW, Washington, DC. Publicly available records will be accessible electronically from the ADAMS Public Library component on the NRC Web Site, *http://www.nrc.gov* (the Electronic Reading Room).

Dated at Rockville, Maryland, this 13th day of April 2000.

For the Nuclear Regulatory Commission.

David B. Matthews,

Director, Division of Regulatory Improvement Programs, Office of Nuclear Reactor Regulation.

[FR Doc. 00–9966 Filed 4–20–00; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 50–320]

GPU Nuclear, Inc., Three Mile Island Nuclear Station, Unit 2; Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing

The U.S. Nuclear Regulatory Commission (NRC or the Commission) is considering issuance of an amendment to Facility Operating License No. DPR–73 issued to GPU Nuclear, Inc. (the licensee) for operation of the permanently shutdown Three Mile Island Nuclear Station, Unit 2 (TMI–2), located in Middletown, Pennsylvannia.

The proposed amendment would reflect an administrative name change from GPU Nuclear Corporation to GPU Nuclear, Inc. Further, the proposed license amendment makes an editorial change to better describe TMI–2's use of site physical security, guard training and qualification, and safeguard contingency plans that are maintained by the Three Mile Island Nuclear Station, Unit 1, licensee, AmerGen Energy Company, LLC. In addition, the licensee requests that minor changes (mainly in titles) be made in Section 6.0 of the Technical Specifications to reflect the TMI–2 organizational and administrative controls that will exist following the sale of the Oyster Creek Nuclear Generating Station.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations.

The Commission has made a proposed determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) Involve a significant increase in the probability or consequences of an accident previously evaluated, (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. The proposed changes to the TMI–2 License and Technical Specifications do not

involve a significant increase in the probability of occurrence or consequences of an accident or malfunction of equipment important to safety previously analyzed in the safety analysis report. The changes have no impact on plant operations or the release of radioactive materials.

2. The proposed changes to the TMI–2 License and Technical Specifications will not create the possibility for an accident or malfunction of a different type than any previously evaluated in the safety analysis report because no plant configuration or operational changes are involved.

3. The changes will not involve a significant reduction in the margin of safety as defined in the basis for any technical specification for TMI–2 because no change to operational limits will be made.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be consideration in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of the 30-day notice Period. However, should circumstances change during the notice period such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 30-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received.

Should the Commission take this action, it will publish in the **Federal Register** a notice of issuance and provide an opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, and should cite the publication date and page number of this **Federal Register** notice. Written comments may also be delivered to Room 6D59, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, from 7:30 a.m. to 4:15 p.m. Federal workdays. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By May 22, 2000, the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's ''Rules of Practice for Domestic Licensing Proceedings'' in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and accessible electronically through the ADAMS Public Electronic Reading Room link at the NRC Web site (http://www.nrc.gov). If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board (the Board), designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) The nature of the petitioner's right under the Act to be made party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specific requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, Attention: Rulemakings and Adjudications Staff, or may be delivered to the Commission's

Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, by the above date. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, and to Ernest L. Blake, Jr., Esq., Shaw, Pittman, Potts & Trowbridge, 2300 N Street, N.W., Washington, DC 20037, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions, and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer, or the presiding Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(i)-(v) and 10 CFR 2.714(d).

For further details with respect to this action, see the application for amendment dated April 6, 2000, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and accessible electronically through the ADAMS Public Electronic Reading Room link at the NRC Web site (http://www.nrc.gov).

Dated at Rockville, Maryland, this 14th day of April 2000.

For the Nuclear Regulatory Commission.

John L. Minns,

Project Manager, Decommissioning Section, Project Directorate IV & Decommissioning, Division of Licensing Project Management, Office of Nuclear Reactor Regulation.

[FR Doc. 00–9964 Filed 4–20–00; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 50–336]

Northeast Nuclear Energy Company, et al.; Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. DPR–65 issued to Northeast Nuclear Energy Company, et al. (the licensee) for operation of the Millstone Nuclear Power Station, Unit No. 2 located in Waterford, Connecticut.

The proposed amendment would correct an administrative error in reference 6.9.1.8b.1 of the list of documents specified in Technical Specification 6.9.8b. This list of documents describes the analytical methods used to determine the core operating limits.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

The Commission has made a proposed determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change will revise the date in reference 6.9.1.8b.1 from ''February 1995'' to ''January 1997.'' The report title and document number are correct and remain the same as identified in Amendment No. 242. This change is administrative in nature since it does not have any impact on the actual analytical methods used to determine the core operating limits, the calculations performed for Cycle 14, and the calculations for future reloads. Therefore, this change will not significantly increase the probability or consequences of an accident previously evaluated.

2. Create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed change will revise the date in reference 6.9.1.8b.1 from ''February 1995'' to ''January 1997.'' This change is administrative in nature. This change will not alter the plant configuration (no new or different type of equipment will be installed) or require any new or unusual operator actions. It does not alter the way any structure, system, or component functions and does not alter the manner in which the plant is operated. Therefore, the proposed change will not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Involve a significant reduction in a margin of safety.

The proposed change will revise the date in reference 6.9.1.8b.1 from ''February 1995'' to ''January 1997.'' This change is administrative in nature. Therefore, the proposed change will not result in a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of the 30-day notice period. However, should circumstances change during the notice period such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 30-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish in the **Federal Register** a notice of issuance and provide for opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, and should cite the publication date and page number of this **Federal Register** notice. Written comments may also be delivered to Room 6D59, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, from 7:30 a.m. to 4:15 p.m., Federal workdays. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By May 22, 2000, the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be

filed in accordance with the Commission's ''Rules of Practice for Domestic Licensing Proceedings'' in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and accessible electronically through the ADAMS Public Electronic Reading Room link at the NRC Web site (http://www.nrc.gov). If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) The nature of the petitioner's right under the Act to be made party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, Attention: Rulemakings and Adjudications Staff, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, by the above date. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, and to Ms. L. M. Cuoco, Senior Nuclear Counsel, Northeast Utilities Service Company, P.O. Box 270, Hartford, CT 06141–0270, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)–(v) and 2.714(d).

For further details with respect to this action, see the application for amendment dated April 12, 2000, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and accessible electronically through the ADAMS Public Electronic Reading Room link at the NRC Web site (http://www.nrc.gov).

Dated at Rockville, Maryland, this 14th day of April 2000.

For the Nuclear Regulatory Commission.

Jacob I. Zimmerman,

Project Manager, Section 2, Project Directorate, Division of Licensing Project Management, Office of Nuclear Reactor Regulation.

[FR Doc. 00–9962 Filed 4–20–00; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[DOCKET NO. 50–388]

PP&L, Inc. Notice of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. NPF–22, issued to PP&L, Inc. (the licensee), for operation of the Susquehanna Steam Electric Station (SSES), Unit 2, located in Luzerne County, Pennsylvania.

The proposed amendment would revise Technical Specification (TS) surveillance requirement (SR) 3.6.1.1.1, which specifies requirements for containment leakage rate testing. Specifically, the proposed amendment would permit deferral of testing of flange o-rings on primary containment penetration spectacle flanges 2S299A and 2S299B until the Unit 2 10th refueling outage, scheduled for spring 2001 or a prior Unit 2 outage requiring entry into Mode 4.

Exigent circumstances exist which cause the Commission to act promptly upon the proposed amendment request. The licensee identified on April 7, 2000, that the previous leakage rate test of spectacle flange o-rings on 2S299A and 2S299B may not have been valid.

The licensee requested in a letter and telephone call on April 8, 2000, that the

Commission grant enforcement discretion to permit continued plant operation until a TS change request could be processed. The licensee stated that a third o-ring erroneously installed in a channel of the flange intended to facilitate leakage rate testing may restrict the ability to adequately test the pressure retaining ability of the spectacle flange to pipe flange interface. The licensee stated that the presence of the third o-ring does not affect the pressure retaining ability of the spectacle flange to pipe flange interface. During the phone call, and in a subsequent letter dated April 10, 2000, the Commission noted its intention to exercise enforcement discretion for the period of time necessary to process a license amendment to change the TSs . Guidance provided in NRC Administrative Letter 95–05, Revision 1, ''Revisions to Staff Guidance for Implementing NRC Policy on Notices of Enforcement Discretion,'' dated February 19, 1999, states that a written request for a notice of enforcement discretion should be followed within 48 hours by a request for an exigent license amendment. Thus, the licensee's application for amendment, dated April 10, 2000, is in response to the invalid leakage rate test of the spectacle flange o-rings and to the Commission's actions in granting enforcement discretion.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

Pursuant to 10 CFR 50.91(a)(6) for amendments to be granted under exigent circumstances, the NRC staff must determine that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

This proposal does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The presence of the third o-ring does not degrade and may improve the pressure retaining capability of the pipe flange to spectacle flange interface. The leakage through the subject lines is not adversely affected by the existence of the third o-ring; therefore the probability of any accident previously evaluated is not significantly increased. The o-rings are passive components and have no active safety function. Similarly, the potential consequences of an accident previously evaluated are not significantly increased by the existence of the third o-ring, since the pressure retaining capability of the pipe flange to spectacle flange interface is not degraded.

This proposal does not create the possibility of a new or different type of accident from any previously evaluated.

Since the pressure retaining capability of the pipe flange to spectacle flange interface is not affected by the existence of the third o-ring as discussed above, the proposed change does not create a new or different type of accident from any previously evaluated.

This change does not involve a significant reduction in a margin of safety.

Since the pressure retaining capability of the pipe flange to spectacle flange interface is not affected by the existence of the third o-ring, the proposed change does not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 14 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of the 14-day notice period. However, should circumstances change during the notice period, such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 14-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish in the **Federal Register** a notice of issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, and should cite the publication date and page number of this **Federal Register** notice. Written comments may also be delivered to Room 6D59, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, from 7:30 a.m. to 4:15 p.m. Federal workdays. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By May 5, 2000, the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's ''Rules of Practice for Domestic Licensing Proceedings'' in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and accessible electronically through the ADAMS Public Electronic Reading Room link at the NRC Web site (http://www.nrc.gov). If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) The nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the

subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If the amendment is issued before the expiration of the 30-day hearing period, the Commission will make a final determination on the issue of no significant hazards consideration. If a hearing is requested, the final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, Attention: Rulemakings and Adjudications Staff, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, by the above date. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, and to Bryan A. Snapp, Esquire, Assoc. General Counsel, PP&L, Inc., 2 North Ninth St., GENTW3, Allentown, PA 18101–1179, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)–(v) and 2.714(d).

For further details with respect to this action, see the application for amendment dated April 10, 2000, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, and accessible electronically through the ADAMS Public Electronic Reading Room link at the NRC Web site (http://www.nrc.gov).

Dated at Rockville, Maryland, this 14th day of April 2000.

For the Nuclear Regulatory Commission.

Robert G. Schaaf,

Project Manager, Section 1, Project Directorate I, Division of Licensing Project Management, Office of Nuclear Reactor Regulation.

[FR Doc. 00–9963 Filed 4–20–00; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 030–20563, License No. 52–21368–01, EA 99–262]

In the Matter of Western Soil, Inc., Mayaguez, Puerto Rico 00681; Order Imposing Civil Monetary Penalty

I

Western Soil, Inc. (Licensee) is the current holder of Materials License No. 52–21368–01 originally issued by the Nuclear Regulatory Commission (NRC or Commission) on December 13, 1983, to Caribbean Soil Testing Company, Inc. On April 12, 1994, an amendment was issued transferring the license to Western Soil, Inc. The license expires on April 30, 2004. The license authorizes Western Soil, Inc. to use sealed sources contained in portable gauging devices for measuring properties of materials.

II

An inspection of the Licensee's activities was conducted on September 28–29, 1999. The results of this inspection indicated that the Licensee had not conducted its activities in compliance with NRC requirements. A written Notice of Violation and Proposed Imposition of Civil Penalty (Notice) was served upon the Licensee by letter dated November 24, 1999. The Notice states the nature of the violations, the provisions of the NRC's requirements that the Licensee violated, and the amount of the civil penalty proposed for the violation cited in Part I of the Notice.

The Licensee responded to the Notice by letters dated December 20, 1999, and February 16, 2000. In its responses, the Licensee admits the violations in Part II of the Notice, but contests the violation in Part I of the Notice insofar as it stated that the licensee failed to maintain constant surveillance of licensed material. The Licensee also took issue with certain statements made in the cover letter forwarding the Notice. In addition, the Licensee requested that NRC consider categorizing the violation in Part I of the Notice as a first offense, rather than as a recurring one.

III

After consideration of the Licensee's responses and the statements of fact, explanation, and argument for mitigation contained therein, the NRC staff has determined, as set forth in the Appendix to this Order, that the violation cited in Part I of the Notice occurred as stated and that the penalty proposed for the violation designated in Part I of the Notice should be imposed.

IV

In view of the foregoing and pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205, *It Is Hereby Ordered That:*

The Licensee pay a civil penalty in the amount of $2,750 within 30 days of the date of this Order, in accordance with NUREG/BR–0254. In addition, at the time of making payment, the Licensee shall submit a statement indicating when and by what method payment was made, to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852–2738.

V

The Licensee may request a hearing within 30 days of the date of this Order. Where good cause is shown, consideration will be given to extending the time to request a hearing. A request for extension of time must be made in writing to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and include a statement of good cause for the extension. A request for a hearing should be clearly marked as a ''Request for an Enforcement Hearing'' and shall be submitted to the Secretary, U.S. Nuclear Regulatory Commission, ATTN: Rulemakings and Adjudications Staff, Washington, DC 20555. Copies also shall be sent to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555, to the Assistant General Counsel for Materials Litigation and Enforcement at the same address, and to the Regional Administrator, NRC Region II, U.S. Nuclear Regulatory Commission, 61 Forsyth St., SW, Suite 23T85, Atlanta, GA 30303.

If a hearing is requested, the Commission will issue an Order designating the time and place of the hearing. If the Licensee fails to request a hearing within 30 days of the date of this Order (or if written approval of an extension of time in which to request a hearing has not been granted), the provisions of this Order shall be effective without further proceedings. If payment has not been made by that time, the matter may be referred to the Attorney General for collection.

In the event the Licensee requests a hearing as provided above, the issues to be considered at such hearing shall be:

(a) whether the Licensee was in violation of the Commission's requirements as set forth in Part I of the Notice referenced in Section II above, and

(b) whether, on the basis of such violation, this Order should be sustained.

Dated this 12th day of April 2000.

For the Nuclear Regulatory Commission.

R.W. Borchardt,

Director, Office of Enforcement.

Appendix—Evaluations and Conclusions

On November 24, 1999, a Notice of Violation and Proposed Imposition of Civil Penalty (Notice) was issued for violations identified during an NRC inspection. The licensee's response denies Violation I in part and provides additional information in support of mitigation of the violation, and admits Violation II.A and B. The NRC's evaluation and conclusion regarding the licensee's arguments are as follows:

Restatement of the Violation in Part I of the Notice

10 CFR 20.1801 requires the licensee to secure from unauthorized removal or access licensed materials that are stored in controlled or unrestricted areas. 10 CFR 20.1802 requires the licensee to control and maintain constant surveillance of licensed material that is in a controlled or unrestricted area and that is not in storage. As defined in 10 CFR 20.1003, controlled area means an area, outside of a restricted area but inside the site boundary, access to which can be limited by the licensee for any reason; unrestricted area means an area, access to which is neither limited nor controlled by the licensee.

Contrary to the above, on June 4, 1999, the licensee failed to secure from unauthorized removal or limit access to a moisture/density portable nuclear gauge containing approximately 10 millicuries of cesium-137 and 50 millicuries of americium-241 in a vehicle while at a temporary job site, which is an unrestricted area, nor did the licensee control and maintain constant surveillance of this licensed material. As a result, the gauge was stolen.

Summary of Licensee's Response to the Violation in Part I of the Notice

In response to the violation, the licensee stated that on June 4, 1999, the technician did not abandon or leave the gauge. The licensee further stated that after completing density tests, the technician secured the gauge to the bed of the pick up truck with only a stabilization belt. The licensee stated that the case was not secured to the vehicle with a chain and padlock because the technician was discussing work with the project manager at a distance of 300–400 feet from the gauge. The licensee admitted the technician's mistake, but indicated that it was not a typical situation during operations and that the gauge was not abandoned.

NRC Evaluation of Licensee's Response to the Violation in Part I of the Notice

Regarding the regulatory basis for the violation of 10 CFR 20.1801 and 20.1802, the technician's presence at a distance of 300–400 feet from the gauge was, in this case, unacceptable for maintaining adequate surveillance and control over unsecured licensed material because the gauge was stolen. This is a clear indication that it was not adequately surveilled or controlled.

Summary of Licensee's Request for Mitigation

The licensee took issue with the characterization of the violation as similar to a violation identified in March 1994 when the license was under the control of the previous owner, Caribbean Soil Testing Company, Inc. The licensee stated that in June 1997, Western Soil, Inc. assumed responsibility for the license and committed to the programs required by the NRC. The licensee noted inadequacies in Carribean Soil's procedures for handling gauges and implemented improvements, including use of a chain and padlock to secure gauges to vehicles. The licensee stated that it was unaware of the previous violation until NRC's letter of November 24, 1999, transmitting the Notice. Furthermore, the licensee asserts that the prior violation, as recalled by the former owner of the company, related to a case padlock, not to stolen equipment. Based on this, the licensee requested that the violation be considered a first time offense and not a recurring one.

The licensee also disagreed with the finding that the transportation case for the stolen gauge contained the gauge key, as stated in NRC's November 24, 1999, cover letter forwarding the Notice. The licensee stated that, during the inspection, the NRC inspector found keys inside an envelope in the transportation case which belonged to a gauge in storage. The licensee further explained that keys are normally stored in the transportation cases of ''out of service'' gauges to ensure that the keys travel with the gauges when they are shipped for service, as opposed to gauges being used in the field, which did not have keys with them. The licensee stated that on the day of the NRC inspection, the transportation case of the gauge returning from the field did not contain its key.

NRC Evaluation of Licensee's Request for Mitigation

In accordance with Section VI.B.2. of the Enforcement Policy, when activities under the license have been the subject of *any* escalated enforcement action within the last two inspections, the NRC considers whether credit is warranted for identification or corrective action in assessing the amount of the civil penalty. In this case, because the activities under the license had been the subject of escalated enforcement action within the last two inspections, the NRC applied these factors in assessing the amount of the civil penalty.

Although the licensee stated that it was unaware of the previous violation until NRC's letter of November 24, 1999, transmitting the Notice, as part of the application, the licensee submitted a letter dated August 19, 1997, which stated that the new owner agreed with all constraints, conditions requirements, representations and commitments identified in the existing

license. This letter is referenced in License Condition 21 of the NRC license which requires, in part, that the licensee maintain the corrective actions for previous enforcement actions. Corrective actions from the previous enforcement action issued on June 14, 1994, regarding security of material, were documented in a letter dated August 29, 1994, from Caribbean Soil Testing Company, Inc. which stated, ''we have attached a chain to the handle of the gauge box and lock it with the open bed of the pick up truck.'' The NRC therefore holds the new owner responsible for the previous escalated enforcement actions and associated corrective action effectiveness. In this case, as explained in the cover letter forwarding the Notice, the licensee did not maintain effective corrective action such as would have prevented this violation from occurring.

In addition, the licensee stated that the previous violation of June 14, 1994, was not associated with a stolen gauge but rather, was associated with a case padlock. The current violation need not be a duplicate of the previous enforcement action, but these two actions are similar in that both of these violations involve the licensee's failure to control licensed material. The fact that the prior violation was not *identical* to this violation had no bearing upon the amount of the civil penalty that was assessed.

Regarding the location of the gauge keys, the inspector observed a gauge in storage with the gauge key in an envelope inside the transportation case, and questioned the licensee about the stolen gauge. The licensee's Radiation Safety Officer (RSO) stated to the inspector that the stolen gauge's transportation case also contained its key in an envelope, and that the practice of transporting gauges with their keys was not uncommon. The RSO told the inspector that the stolen gauge was found with a broken transport case lock; however, the envelope which contained the key inside the transportation case appeared to be untampered with. This finding was documented in the October 19, 1999, inspection report and was neither challenged nor questioned by Western Soil, Inc. during the November 9, 1999, predecisional enforcement conference. In its letters dated December 20, 1999, and February 16, 2000, Western Soil, Inc. provided information contrary to this finding. However, the reconciliation of this conflicting information regarding the location of the keys has no effect on the outcome of the final enforcement action including the potential civil penalty. Although the location of the keys does affect the magnitude of the safety significance; the severity level of the violation and associated civil penalty were based solely on the licensee's failure to maintain adequate security over licensed material which resulted in the gauge being stolen and in the public domain. Such a violation is categorized at Severity Level III in accordance with Supplements IV.C.9 and VI.C.I of the Enforcement Policy.

NRC Conclusion

For the above reasons, the NRC staff concludes that the violation occurred as stated and that mitigation of the civil penalty is not warranted.

[FR Doc. 00–9967 Filed 4–20–00; 8:45 am]
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NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–373 and 50–374]

Commonwealth Edison Company, LaSalle County Station, Units 1 and 2; Environmental Assessment and Finding of No Significant Impact

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of amendments to Facility Operating Licenses Nos. NPF–11 and NPF–18, issued to Commonwealth Edison Company (ComEd, the licensee) for operation of LaSalle County Station, Units 1 and 2, located in LaSalle County, Illinois.

Environmental Assessment

Identification of the Proposed Action

The proposed action would allow ComEd to increase the maximum reactor core power level for facility operation from 3323 megawatts-thermal (MWt) to 3489 MWt, which is a five percent increase in rated core power.

The proposed action is in accordance with ComEd's application for amendments dated July 14, 1999, as supplemented by letters dated January 21, February 15, February 23, March 10, March 24, March 31, and April 7, 2000.

Need for the Proposed Action

The proposed action is needed to allow ComEd to increase the electrical output of each LaSalle unit and, thus, provide additional electrical power to service domestic and commercial areas of the licensee's grid. Power uprate has been widely recognized by the industry as a safe and cost-effective method to increase generating capacity. The proposed uprate will provide the licensee with additional operational flexibility.

Environmental Impacts of the Proposed Action

ComEd has submitted an environmental evaluation supporting the proposed extended power uprate action and provided a summary of its conclusions concerning both the radiological and non-radiological environmental impacts of the proposed action. Based on its independent analyses and the evaluation performed by the licensee, the staff concludes that the proposed increase in power is not expected to result in a significant environmental impact.

Radiological Environmental Assessment

Radwaste Systems

ComEd concluded that the operation of the radwaste systems that process radioactive effluents at LaSalle would not be impacted by operation at uprated power conditions and the slight increase in effluents discharged would continue to meet the requirements of 10 CFR part 20, ''Standards for Protection Against Radiation,'' and 10 CFR part 50, appendix I, ''Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion 'As Low as is Reasonably Achievable' for Radioactive Material in Light-Water-Cooled Nuclear Power Reactor Effluents.'' Therefore, power uprate does not have an adverse effect on the processing of radioactive effluents and there are no significant environmental effects from radiological releases.

Dose Consideration

ComEd evaluated the effects of power uprate on the radiation sources within the plant and the radiation levels during normal and post-accident conditions. For normal operations, the licensee determined that conservatism in the analyses and the margins added to calculated doses and specific shield thickness are sufficient to accommodate any increases attributed to the five percent increase in rated thermal power. For post-accident conditions, the resulting radiation levels were determined to be within current regulatory limits. In addition, the licensee determined that there would be no effect on the plant or habitability or the control room envelope or the Technical Support Center. The licensee evaluated the whole body and thyroid doses at the exclusion area boundary that might result from the postulated design basis loss-of-coolant accident and determined the doses remain below established regulatory limits.

Summary

The proposed power uprate will not significantly increase the probability or consequences of accidents, will not involve any new radiological release pathways, will not result in a significant increase in occupational or public radiation exposure, and will not result in significant additional fuel cycle environmental impacts. Accordingly, the Commission concludes that there are no significant radiological environmental impacts associated with the proposed action.

Non-Radiological Environmental Assessment

The licensee reviewed the non-radiological environmental impacts of power uprate based on information submitted in the Environmental Report—Operating License Stage to support original licensing of LaSalle, Units 1 and 2, the Final Environmental Protection Statement (NUREG–0486), the requirements of the Environmental Protection Plan and the National Pollutant Discharge Elimination System (NPDES) Permit. The proposed power uprate will not affect compliance with NPDES requirements.

As a result of power uprate to 105 percent of current licensed core power, normal heat loads to the cooling lake will increase primarily from an increase in heat load from the condenser and from other increased heat loads rejected by the plant service water system. An increase in steam and condensate flow will result in a corresponding increase in the net heat rejection to the cooling lake. Based on a condenser backpressure of 3.5 inches Hga, a 1 degree Fahrenheit rise in circulating water temperature is expected relative to the current temperature rise value of approximately 24 degrees Fahrenheit. This, in turn, will raise cooling lake temperature, thus, increasing circulating water inlet temperature to the condenser. The lake is expected to experience a 0.4 degree increase in temperature on a long-term basis. Based on this minimal temperature rise, thermal shock to the fish population of the lake is not expected. The effect on lake evaporation, makeup, and blowdown was evaluated and found to be acceptable. The effect on cooling lake total dissolved solids was determined to remain within the licensee's administrative limit of 750 ppm.

The LaSalle cooling lake discharges into the Illinois River. ComEd evaluated the effects of power uprate on the temperature of the water in the river in the vicinity of the cooling lake blowdown and concluded that significant margin exists between the maximum expected edge of mixing zone temperature and imposed regulatory limits.

ComEd also evaluated the noise effects due to operation at uprated power and determined that, because the turbine and reactor building supply and exhaust fans will continue to operate at current speeds and noise levels at uprated conditions, the overall noise level will not increase.

With regard to potential non-radiological impacts, the proposed action does not change the method of generating electricity at LaSalle, Units 1 and 2, nor the methods of handling effluents from the environment or effluents to the environment. No changes to land use would result and the proposed action does not involve any historic sites. Therefore, no new or different types of non-radiological environmental impacts are expected. Accordingly, the Commission concludes that there are no significant non-radiological environmental impacts associated with the proposed action.

Alternatives to the Proposed Action

As an alternative to the proposed action, the staff considered denial of the proposed action (*i.e.,* the ''no-action'' alternative). Denial of the application would result in no significant change in current environmental impacts and would reduce the operational flexibility. The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources

This action does not involve the use of any resources not previously considered in the Final Environmental Statement for LaSalle County Station, Units 1 and 2.

Agencies and Persons Consulted

In accordance with its stated policy, on March 23, 2000, the staff consulted with the Illinois State official, Mr. Frank Nizeolik of the Illinois Department of Nuclear Safety, regarding the environmental impact of the proposed action. The State official had no comments.

Finding of No Significant Impact

Based upon the environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated July 14, 1999, as supplemented on January 21, February 15, February 23, March 10, March 24, March 31, and April 7, 2000, which are available for public inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW., Washington, DC, and accessible electronically through the ADAMS Public Electronic Reading Room link at the NRC Web site *((http://www.nrc.gov)*

Dated at Rockville, Maryland this 12th day of April 2000.

For the Nuclear Regulatory Commission.

Anthony J. Mendiola,

Chief, Section 2, Project Directorate III, Division of Licensing Project Management, Office of Nuclear Reactor Regulation.

[FR Doc. 00–9961 Filed 4–20–00; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

Advisory Committee on Reactor Safeguards; Meeting Notice

In accordance with the purposes of Sections 29 and 182b. of the Atomic Energy Act (42 U.S.C. 2039, 2232b), the Advisory Committee on Reactor Safeguards will hold a meeting on May 11–13, 2000, in Conference Room T–2B3, 11545 Rockville Pike, Rockville, Maryland. The date of this meeting was previously published in the **Federal Register** on Thursday, October 14, 1999 (64 FR 55787).

Thursday, May 11, 2000

8:30 A.M.–8:35 A.M.: Opening Remarks by the ACRS Chairman (Open)—The ACRS Chairman will make opening remarks regarding the conduct of the meeting.

8:35 A.M.–10 A.M.: Initiatives Related to Risk-Informed Technical Specifications (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff and industry groups regarding initiatives related to risk-informed technical specifications, initial industry submittals on risk-informed technical specifications, and related matters.

10:15 A.M.–11:45 A.M.: Potential Revisions to the Pressurized Thermal Shock (PTS) Acceptance Criterion (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding a draft Commission Paper that describes potential revisions to the PTS acceptance criterion.

12:45 P.M.–2:15 P.M.: Proposed Revision to Regulatory Guide 1.174, ''An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis'' (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding proposed revisions to Regulatory Guide 1.174 and associated guidance on the use of risk information in license amendment reviews.

2:30 P.M.–4:00 P.M.: Proposed Regulatory Guide and Standard Review Plan (SRP) Section Associated with NRC Code Reviews (Open)—The Committee

will hear presentations by and hold discussions with representatives of the NRC staff regarding proposed Regulatory Guide and SRP Section associated with the NRC staff's review of the analytical codes.

4 P.M.–5 P.M.: Break and Preparation of Draft ACRS Reports (Open)—Cognizant ACRS members will prepare draft reports for consideration by the full Committee.

5 P.M.–7 P.M.: Discussion of Proposed ACRS Reports (Open)—The Committee will discuss a proposed ACRS report on matters considered during this meeting. In addition, the Committee will discuss a proposed ACRS report on the Human Performance Program.

Friday, May 12, 2000

8:30 A.M.–8:35 A.M.: Opening Remarks by the ACRS Chairman (Open)—The ACRS Chairman will make opening remarks regarding the conduct of the meeting.

8:35 A.M.–10 A.M.: SECY–00–0062, Risk-Informed Regulation Implementation Plan (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding a risk-informed regulation implementation plan described in SECY–00–0062.

10:15 A.M.–11:30 A.M.: Operating Event at E.I. Hatch Nuclear Power Plant, Unit 1 (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding the findings and recommendations of the Augmented Inspection Team, which investigated the January 26, 2000 reactor trip event at E.I. Hatch Nuclear Power Plant, Unit 1.

11:30 A.M.–11:45 A.M.: Reconciliation of ACRS Comments and Recommendations (Open)—The Committee will discuss the responses from the NRC Executive Director for Operations (EDO) to comments and recommendations included in recent ACRS reports and letters. The EDO responses are expected to be made available to the Committee prior to the meeting.

12:45 P.M.–2:15 P.M.: Physical Security Requirements for Power Reactors (Open/Closed)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding the status of revising the physical security requirements for power reactors by incorporating insights gained from threat assessment activities being conducted by the staff in coordination with other Federal agencies.

Note: A portion of this session will be closed to discuss safeguards information.

2:30 P.M.–2:45 P.M.: Future ACRS Activities (Open)—The Committee will discuss the recommendations of the Planning and Procedures Subcommittee regarding items proposed for consideration by the full Committee during future meetings.

2:45 P.M.–3:30 P.M.: Report of the Planning and Procedures Subcommittee (Open)—The Committee will hear a report of the Planning and Procedures Subcommittee on matters related to the conduct of ACRS business.

3:30 P.M.–4:30 P.M.: Break and Preparation of Draft ACRS Reports (Open)—Cognizant ACRS members will prepare draft reports for consideration by the full Committee.

4:30 P.M.–7 P.M.: Discussion of Proposed ACRS Reports (Open)—The Committee will discuss proposed ACRS reports.

Saturday, May 13, 2000

8:30 A.M.–2 P.M.: Discussion of Proposed ACRS Reports (Open)—The Committee will continue its discussion of proposed ACRS reports.

1:30 P.M.–2 P.M.: Miscellaneous (Open)—The Committee will discuss matters related to the conduct of Committee activities and matters and specific issues that were not completed during previous meetings, as time and availability of information permit.

Procedures for the conduct of and participation in ACRS meetings were published in the **Federal Register** on September 28, 1999 (64 FR 52353). In accordance with these procedures, oral or written views may be presented by members of the public, including representatives of the nuclear industry. Electronic recordings will be permitted only during the open portions of the meeting and questions may be asked only by members of the Committee, its consultants, and staff. Persons desiring to make oral statements should notify Mr. Sam Duraiswamy, ACRS, five days before the meeting, if possible, so that appropriate arrangements can be made to allow necessary time during the meeting for such statements. Use of still, motion picture, and television cameras during this meeting may be limited to selected portions of the meeting as determined by the Chairman. Information regarding the time to be set aside for this purpose may be obtained by contacting Mr. Sam Duraiswamy prior to the meeting. In view of the possibility that the schedule for ACRS meetings may be adjusted by the Chairman as necessary to facilitate the conduct of the meeting, persons planning to attend should check with Mr. Sam Duraiswamy if such rescheduling would result in major inconvenience.

In accordance with Subsection 10(d) P.L. 92–463, I have determined that it is necessary to close a portion of this meeting noted above to discuss safeguards information per 5 U.S.C. 552b(c)(3).

Further information regarding topics to be discussed, whether the meeting has been canceled or rescheduled, the Chairman's ruling on requests for the opportunity to present oral statements and the time allotted therefor, can be obtained by contacting Mr. Sam Duraiswamy (telephone 301/415–7364), between 7:30 a.m. and 4:15 p.m., EDT.

ACRS meeting agenda, meeting transcripts, and letter reports are available for downloading or viewing on the internet at http://www.nrc.gov/ACRSACNW.

Videoteleconferencing service is available for observing open sessions of ACRS meetings. Those wishing to use this service for observing ACRS meetings should contact Mr. Theron Brown, ACRS Audio Visual Technician (301–415–8066), between 7:30 a.m. and 3:45 p.m., EDT, at least 10 days before the meeting to ensure the availability of this service. Individuals or organizations requesting this service will be responsible for telephone line charges and for providing the equipment facilities that they use to establish the videoteleconferencing link. The availability of videoteleconferencing services is not guaranteed.

Date: April 17, 2000.

Andrew L. Bates,

Advisory Committee Management Officer.

[FR Doc. 00–9960 Filed 4–20–00; 8:45 am]

BILLING CODE 7590–01–P

SECURITIES AND EXCHANGE COMMISSION

Submission for OMB Review; Comment Request

Upon Written Request Copies Available From: Securities and Exchange Commission, Office of Filings and Information Services, Washington, DC 20549.

Survey on Reciprocal Subpoena Enforcement: SEC File No. 270–479, OMB Control No. 3235–new.

Notice is hereby given that, pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the Securities and Exchange Commission (''Commission'') has submitted to the Office of Management and Budget a

request to approve the collection of information discussed below.

The survey is called the Securities and Exchange Commission Survey on Reciprocal Subpoena Enforcement. The staff created the survey pursuant to a Congressional directive in the Securities Litigation Uniform Standards Act of 1998 (''1998 Act''). The 1998 Act requires the Commission, in consultation with state securities commissions (or similar agencies) to ''seek to encourage the adoption of State laws providing for reciprocal enforcement by State securities commissions of subpoenas issued by another State securities commission. * * *.'' The 1998 Act further requires the SEC to submit a report to Congress by November 2000 which identifies the states that have adopted such laws, describes the actions the Commission and the state commissions have taken to promote such laws, and identifies any further actions the Commission recommends for such purposes.

The survey seeks information regarding (1) the states' laws authorizing providing assistance to other states with subpoenas, (2) the states' experiences in seeking assistance from other states with their subpoenas, (3) the states' experiences in requesting assistance from other states with their subpoenas and (4) each state's proposals and suggestions regarding reciprocal subpoena enforcement. The Commission will use the information gathered in the survey to write the report to Congress.

The survey will be sent to all of the states, the District of Columbia and Puerto Rico. It is estimated that there will be approximately 52 respondents to the survey and that each full response will take approximately 30 minutes. Thus, the total reporting burden of the survey will be about 26 hours. The survey is voluntary and may be completed at the option of the recipient. Responses will not be kept confidential. 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 control number.

General comments regarding the above information should be directed to the following persons: (i) Desk Officer for the Securities and Exchange Commission, Office of Information and Regulatory Affairs, Office of Management and Budget, Room 10102, New Executive Office Building, Washington, DC 20503; and (ii) Michael E. Bartell, Associate Executive Director, Office of Information Technology, Securities and Exchange Commission, 450 Fifth Street, NW, Washington, DC 20549. Comments must be submitted to OMB within 30 days of this notice.

Dated: April 11, 2000.

Margaret H. McFarland,

Deputy Secretary.

[FR Doc. 00–9954 Filed 4–20–00; 8:45 am]

BILLING CODE 8010–01–M

SECURITIES AND EXCHANGE COMMISSION

Sunshine Act Meeting

Notice is hereby given, pursuant to the provisions of the Government in the Sunshine Act, Pub. L. 94–409, that the Securities and Exchange Commission will hold the following meetings during the week of April 24, 2000.

Commissioner Carey, as duty officer, determined that no earlier notice thereof was possible.

An open meeting will held on Tuesday, April 25, 2000 at 10 a.m. in Room 1C30.

The subject matter of the open meeting scheduled for Tuesday, April 25, 2000 at 10:00 a.m. will be: The Commission will consider issuance of an interpretive release providing guidance on the application of the federal securities laws to electronic media, including updating previous guidance on the use of electronic media to deliver documents under the federal securities laws and related matters. For further information, please contact P.J. Himelfarb or Mark A. Borges at (202) 942–2900.

A closed meeting will be held on Thursday April 27, 2000 at 11:00 a.m.

Commissioners, Counsel to the Commissioners, the Secretary to the Commission, and recording secretaries will attend the closed meeting. Certain staff members who have an interest in the matters may also be present.

The General Counsel of the Commission, or his designee, has certified that, in his opinion, one or more of the exemptions set forth in 5 U.S.C. 552b(c)(4), (8), (9)(A) and (10) and 17 CFR 200.402(a)(4), (8), (9)(A) and (10), permit consideration for the scheduled matters at the closed meeting.

The subject matter of the closed meeting scheduled Thursday, April 27, 2000 will be:

Institution and settlement of injunctive actions; and

Institution and settlement of administrative proceedings of an enforcement nature.

At times, changes in Commission priorities require alterations in the scheduling of meeting items. For further information and to ascertain what, if any, matters have been added, deleted or postponed, please contact:

The Office of the Secretary at (202) 942–7070.

Dated: April 19, 2000.

Jonathan G. Katz,

Secretary.

[FR Doc. 00–10205 Filed 4–19–00; 3:52 pm]

BILLING CODE 8010–01–M

SMALL BUSINESS ADMINISTRATION

[Declaration of Disaster #3249]

State of Alabama

Calhoun and Jefferson Counties and the contiguous counties of Bibb, Blount, Cherokee, Cleburne, Etowah, St. Clair, Shelby, Talladega, Tuscaloosa, and Walker in the State of Alabama constitute a disaster area due to damages caused by severe storms and tornadoes that occurred on April 2–3, 2000. Applications for loans for physical damage as a result of this disaster may be filed until the close of business on June 12, 2000 and for economic injury until the close of business on January 16, 2001 at the address listed below or other locally announced locations: U.S. Small Business Administration, Disaster Area 2 Office, One Baltimore Place, Suite 300, Atlanta, GA 30308.

The interest rates are:

	Percent
For Physical Damage:	
Homeowners with credit available elsewhere	7.625
Homeowners without credit available elsewhere	3.812
Businesses with credit available elsewhere	8.000
Businesses and non-profit organizations without credit available elsewhere	4.000
Others (including non-profit organizations) with credit available elsewhere	6.750
For Economic Injury	
Businesses and small agricultural cooperatives without credit available elsewhere	4.000

The numbers assigned to this disaster are 324912 for physical damage and 9H0800 for economic injury.

(Catalog of Federal Domestic Assistance Program Nos. 59002 and 59008)

Dated: April 13, 2000.

Aida Alvarez,

Administrator.

[FR Doc. 00–10021 Filed 4–20–00; 8:45 am]

BILLING CODE 8025–01–P

SMALL BUSINESS ADMINISTRATION

[Declaration of Disaster #3251]

State of California

San Mateo County and the contiguous counties of San Francisco, Santa Clara, and Santa Cruz in the State of California constitute a disaster area as a result of severe winter storms that occurred during the month of February, 2000, and caused debris flows and landslides. Applications for loans for physical damage as a result of this disaster may be filed until the close of business on June 12, 2000 and for economic injury until the close of business on January 16, 2001 at the address listed below or other locally announced locations: U.S. Small Business Administration, Disaster Area 4 Office, P.O. Box 13795, Sacramento, CA 95853–4795.

The interest rates are:

	Percent
For Physical Damage:	
Homeowners with credit available elsewhere	7.625
Homeowners without credit available elsewhere	3.812
Businesses with credit available elsewhere	8.000
Businesses and non-profit organizations without credit available elsewhere	4.000
Others (including non-profit organizations) with credit available elsewhere	6.750
For Economic Injury:	
Businesses and small agricultural cooperatives without credit available elsewhere	4.000

The numbers assigned to this disaster are 325111 for physical damage and 9H1000 for economic injury.

(Catalog of Federal Domestic Assistance Program Nos. 59002 and 59008)

Dated: April 13, 2000.

Aida Alvarez,

Administrator.

[FR Doc. 00–10019 Filed 4–20–00; 8:45 am]

BILLING CODE 8025–01–U

SMALL BUSINESS ADMINISTRATION

[Declaration of Disaster #3250]

State of Texas

As a result of the President's major disaster declaration on April 7, 2000, I find that Tarrant County, Texas constitutes a disaster area due to damages caused by severe storms, tornadoes, and flooding that occurred March 28–29, 2000. Applications for loans for physical damage as a result of this disaster may be filed until the close of business on June 6, 2000, and for loans for economic injury until the close of business on January 8, 2001 at the address listed below or other locally announced locations: U.S. Small Business Administration, Disaster Area 3 Office, 4400 Amon Carter Blvd., Suite 102, Fort Worth, TX 76155.

In addition, applications for economic injury loans from small businesses located in the following contiguous counties in Texas may be filed until the specified date at the above location: Dallas, Denton, Ellis, Johnson, Parker, and Wise.

The interest rates are:

	Percent
For Physical Damage:	
Homeowners with credit available elsewhere	7.625
Homeowners without credit available elsewhere	3.812
Businesses with credit available elsewhere	8.000
Businesses and non-profit organizations without credit available elsewhere	4.000
Others (including non-profit organizations) with credit available elsewhere	6.750
For Economic Injury:	
Businesses and small agricultural cooperatives without credit available elsewhere	4.000

The number assigned to this disaster for physical damage is 325012 and for economic injury the number is 9H0900.

(Catalog of Federal Domestic Assistance Program Nos. 59002 and 59008)

Dated: April 13, 2000.

James E. Rivera,

Acting Associate Administrator for Disaster Assistance.

[FR Doc. 00–10020 Filed 4–20–00; 8:45 am]

BILLING CODE 8025–01–U

DEPARTMENT OF STATE

[Public Notice 3275]

Amendment to Culturally Significant Objects Imported for Exhibition Determinations: ''Spirits of the Water: Art From Alaska and British Columbia''

AGENCY: Department of State.

ACTION: Notice.

SUMMARY: Notice is hereby given of the following determinations: Pursuant to the authority vested in me by the Act of October 19, 1965 (79 Stat. 985, 22 U.S.C. 2459), the Foreign Affairs Reform and Restructuring Act of 1998 (112 Stat. 2681, *et seq.*), Delegation of Authority No. 234 of October 1, 1999, and Delegation of Authority of October 19, 1999, I hereby determine that the objects to be included in the exhibition ''Spirits of the Water: Art from Alaska and British Columbia,'' imported from abroad for the temporary exhibition without profit within the United States, are of cultural significance. These objects are in addition to the subject objects of a notice concerning this exhibit published under Public Notice 3268, 65 FR 16684 (March 29, 2000) and are imported pursuant to a loan agreement with Russian lenders. I also determine that the exhibition or display of the exhibit objects at the Menil Collection, Houston, Texas, from on or about May 5, 2000 to on or about August 13, 2000 is in the national interest. Public Notice of these Determinations is ordered to be published in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: For further information, including a list of exhibit objects, contact Carol Epstein, Attorney-Adviser, Office of the Legal Adviser, U.S. Department of State (telephone: 202/619–6981). The address is U.S. Department of State, SA–44; 301–4th Street, SW., Room 700, Washington, DC 20547–0001.

Dated: April 12, 2000.

William B. Bader,

Assistant Secretary for Educational and Cultural Affairs, Department of State.

[FR Doc. 00–10022 Filed 4–20–00; 8:45 am]

BILLING CODE 4710–08–U

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Proposed Finding of No Significant Impact

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Proposed Finding of No Significant Impact.

SUMMARY: The FAA prepared an Environmental Assessment (EA) evaluating Kistler Aerospace Corporation's proposal to construct and operate commercial launch and reentry/recovery facilities at the Nevada Test Site (NTS) on land withdrawn from the public domain for use by the U.S. Department of Energy (DOE). After reviewing and analyzing currently available data and information on existing conditions, project impacts, and measures to mitigate those impacts, the Federal Aviation Administration (FAA), office of the Associate Administrator for Commercial Space Transportation (AST) proposes to determine that licensing of

the proposed launch and reentry activities are not a major Federal action that would significantly affect the quality of the human environment within the meaning of the National Environmental Policy Act (NEPA) of 1969. Therefore, the preparation of an Environmental Impact Statement (EIS) would not be required and AST is proposing to issue a Finding of No Significant Impact (FONSI).

For a copy of the Environmental Assessment or to provide comments regarding Kistler Aerospace Corporation launch/reentry operations contact: Mr. Nikos Himaras, Office of the Associate Administrator for Commercial Space Transportation, Space Systems Development Division, Suite 331/AST–100, 800 Independence Avenue, SW, Washington, D.C. 20591; phone (202) 267–7926; or refer to the following Internet address: *http://ast.faa.gov.*

DATES: There will be a thirty (30) day comment period before the FAA makes its final determination on the proposed FONSI. Interested individuals, Government agencies, and private organizations are invited to send comments on the proposed FONSI and/or the Environmental Assessment to the address set forth above by May 22, 2000 by mail.

In addition, a public meeting will be held to record verbal comments made by members of the public on May 2, 2000 in Las Vegas, Nevada. Comments received at this meeting will be responded to in a Comment Response document to be produced by the FAA. Additional information about this meeting is available at the following Internet address: http://ast.faa.gov.

Proposed Action

Kistler Aerospace Corporation (Kistler) proposes to conduct commercial launch and reentry/recovery operations at the Nevada Test Site (NTS). The operations would include pre-flight activities, launch/flight operations, and reentry/recovery operations. Kistler proposes to construct a base of operations consisting of a private launch site (including a vehicle processing facility) for its exclusive use, a payload processing facility, and a vehicle landing and recovery area. Upon receipt of a completed license application, AST must determine whether or not to issue a license to Kistler authorizing launch and reentry operations involving the K–1 vehicle. Licensing launch of a launch vehicle and reentry of a reentry vehicle are Federal actions requiring environmental analysis by the FAA in accordance with NEPA. The proposed action is the licensing by FAA of a maximum of 52 launches and reentries per year.

Kistler intends to use a fleet of five K–1 vehicles at a maximum flight rate of 52 launches per year, once the system is fully operational, to deploy payloads into low earth orbit. The K–1 vehicle is a two-stage (*i.e.,* Launch Assist Platform (LAP) and Orbital Vehicle (OV)) fully reusable launch vehicle. Liquid oxygen (LOX) and kerosene (RP–1) fuel both stages, with the LAP using start cartridges containing a small amount of solid propellant to initiate the fuel flow. The K–1 is designed to require less pre-flight and post-flight processing and to minimize electronic, hydraulic, and fuel line connections/disconnections between flights.

The Kistler facilities would be sited within the NTS, an area that is removed from public use. The NTS is primarily an industrial area that previously hosted extensive nuclear tests. The Nevada Test and Training Range (also known as the Nellis Air Force Range) and the Nellis Air Force Base borders the NTS. Both of these are sites of frequent military aircraft training flights. Therefore, the NTS and surrounding communities are accustomed to land use for flight testing purposes. The use of the NTS by Kistler for the purpose of launching and reentering commercial launch vehicles is consistent with community planning activities in the areas around the NTS.

The FAA and Department of Energy (DOE) are directly involved in the proposed action. The FAA is the lead federal agency for the NEPA process and is responsible for licensing and regulating Kistler's launch and reentry operations under 49 U.S.C. subtitle IX, ch. 701. DOE is a cooperating agency for the NEPA process and will provide land and certain infrastructure to the Nevada Test Site Development Corporation (NTSDC) which in turn created a subpermit for Kistler. The DOE prepared a Final Environmental Impact Statement for the Nevada Test Site and Off-Site Locations in the State of Nevada August 1996 (NTS EIS). The DOE issued a Record of Decision (ROD) on December 9, 1996, in which it decided to implement a combination of alternatives including expanded use, no action, and alternative uses i.e., non-defense and private endeavors, for the NTS. It specifically identified Kistler as an example of a potential private use at the NTS. In accordance with Council on Environmental Quality (CEQ) regulations, this EA incorporates by reference the Programmatic Environmental Assessment for Commercial Expendable Launch Vehicles (PEA ELV) (AST 1986), the Final Programmatic Environmental Impact Statement for Commercial Reentry Vehicles (PEIS Reentry Vehicles) (AST 1992), and the NTS EIS (DOE 1996).

Environmental Impacts

Air Quality

Air emissions would result from the construction activities, launch, flight, and reentry operations. Fugitive dust, particulate matter, and engine exhaust concentrations created during construction activities are estimated to be less than federal or state standards. Maximum concentrations of PM_{10} averaged over 24 hours should not exceed 135 micrograms/cubic meter, which is below the national and Nevada State standard of 150 micrograms/cubic meter. This maximum concentration would occur in a controlled area and thus would not pose hazards to the public or to on-site personnel. Carbon monoxide (CO), sulfur dioxide (SO_2), and nitrogen dioxide (NO_2) emissions from vehicle and equipment exhaust during construction were all estimated to be much less than federal or state standards and therefore would pose little to no impact on the environment.

Emissions from the K–1 launch vehicle would include those from the start cartridges (i.e., CO and hydrogen chloride [HCl]) and those from the K–1 engines during the launch (primarily CO_2, H_2O and CO). The 2.14 kilograms (kg) of HCl produced during one launch would be dispersed over a large area and would have little impact on air quality. CO emissions include about 3 kg from start cartridges, 8,179 kg from liftoff through the first 500 meters of the atmosphere, and 35,124 kg in the troposphere (500 meters to 20 kilometers). These estimated emissions from the K–1 were compared to those of the Titan IIIE/Centaur. Titan IIIE/Centaur emissions are well documented. The K–1 CO emissions are estimated to be less than 50 percent of the Titan IIIE/Centaur. CO emissions are also expected to be much less than the 6 parts per million (ppm) Nevada standard for sites above 1,524 meters and less than the national standard of 9 ppm. Thus, CO emissions are not expected to adversely affect air quality.

In the upper atmosphere beginning at about 20 kilometers, H_2O and CO_2 may be considered potential pollutants due to their low natural concentration and possible influence on the Earth's heat balance. Upper atmospheric emissions of the Kistler vehicle were compared to those of the Titan IIIE/Centaur. K–1 CO_2 emissions are greater than those of the Titan IIIE/Centaur are. H_2O emissions are less than the Titan IIIE/Centaur.

Although the K–1 emits more CO_2 than the Titan IIIE/Centaur, emissions are still less than those expected to produce detectable changes in the upper atmosphere. The PEA ELV states that launch emissions of H_2O and CO_2 for the Titan IIIE/Centaur vehicle appear to be considerably lower than those expected to cause significant impacts in the upper atmosphere. Based on the comparison of emissions with the Titan IIIE/Centaur, Kistler launches are not expected to significantly impact the upper atmosphere. Landing and recovery operations and general maintenance of the vehicle processing facility and launch/reentry site are expected to generate negligible emissions in comparison to construction, pre-flight, launch, and recovery activities. Impacts to air quality from the proposed activities are expected to be insignificant.

Noise

Noise impacts would occur during construction, launch of the vehicle, and vehicle reentry. Construction activities and traffic noise would temporarily increase the ambient noise levels. Workers would wear protective hearing equipment in accordance with Occupational Safety and Health Administration (OSHA) regulations. The general public would not be in the immediate vicinity of the construction site. The closest public access is more than 32 km from the vehicle processing facility and launch site and more than 24 km from the landing and recovery area. Maximum predicted construction noise levels at 24 km would be less than 40 dBA, which would be undetectable with normal daytime ambient noise levels. Therefore, adverse impacts to the general public and construction workers as a result of construction noise are not expected.

Noise impacts during launch of operational flights consist of the reusable launch vehicle's engine noise. Predicted noise levels are well within occupational operating parameters for facility work (i.e., only during the first 18 seconds after the launch would workers in the vehicle processing facility need hearing protection with predictions of 106 dBA). Noise levels at the closest public access (about 32 km) are estimated to be below 77 dBA. Off-site locations would experience no significant launch noise impacts.

Sonic booms would be generated during the vehicle ascent and the reentry stages descent to the landing and recovery area. Sonic boom levels generated outside NTS boundaries would resemble distant thunder or fireworks and have no significant impact on surrounding communities.

Socioeconomic and Environmental Justice

The proposed action is expected to create an average of 85 direct full-time jobs and 28 direct part-time jobs during construction and 90 direct full-time and 28 direct part-time jobs during normal operation. Of the total projected increase in workers, the majority is expected to live in the Las Vegas, Clark County area. Positive impacts to the local economy are expected as a result of the proposed action. In addition, no disproportionate effects on economically disadvantaged or minority groups are anticipated as a result of the proposed action.

Visual Resources

Visual resources are analyzed with respect to intensity and context. Kistler actions are classified as either ''not noticeable'' or ''visually subordinate.'' The nearest vantage point is the main highway, U.S. 95, more than 45 km from Kistler facilities. Several ridges of hills obscure the view from this route. Kistler activities would not be visible to the general public. Thus, there are no expected impacts to visual resources.

Biological Resources

Vegetation

Construction of the proposed Kistler facilities would result in surface clearing of vegetation from an area totaling 671 acres. The loss of vegetation, as a result of clearing, would represent approximately 0.008 percent of the total Artemesia Type vegetation on the NTS. Therefore, loss is not expected to adversely affect local or regional diversity of plants and plant communities.

Areas for ground based operations at the payload processing facility (8 acres) and launch site (14 acres) would be cleared as part of construction activities. Buildings or pavement would cover both operational areas. The reentry, landing, and recovery area would be impacted but would be permitted to re-vegetate naturally with herbaceous vegetation.

Launch emissions may damage or destroy vegetation due to high temperature exhaust and small amounts of corrosive HCl exhaust gas. Deposition of greater than 1.0 gram per square meter of HCl is necessary to cause vegetative damage; the K–1 launch vehicle would deposit about 0.009 grams per square meter over an area of 0.26 square kilometers. Therefore, adverse impacts to vegetation from HCl deposition are expected to be negligible.

Wildlife

Potential impacts to wildlife from construction activities would result in a permanent loss of available habitat and possible degradation of adjacent habitats due to an increase in noise and human activity. The habitat loss is not expected to adversely affect the local or regional diversity of animal species or populations.

Day-to-day operations would not extend beyond the developed areas and would not be expected to cause a disturbance to animals inhabiting the adjacent areas. Although the Kistler facilities would be located outside the known habitat of the desert tortoise, the desert tortoise does exist on the NTS. The desert tortoise is listed as threatened by the U.S. Fish and Wildlife Service. Kistler employees would receive desert tortoise protective training as mandated for all NTS employees.

Noise generated by vehicle launches inside the NTS, including sonic booms, could cause a startle response and temporary hearing impairment to birds and mammals. These impacts are not expected to affect the viability or diversity of the wildlife population at the site. Wildlife is not expected to be adversely affected by Kistler launch/reentry activities.

Water Resources

Residues from processing and launch operations would be eliminated using existing drainage systems. Evaporation exceeds precipitation in the area, so there would be little downward migration of residue contaminants into groundwater. Spills of fuel or other materials used on-site during daily operations would be contained and cleaned up and any residue properly disposed. Therefore, no adverse impacts to surface and groundwater are expected from the proposed launch/reentry operations.

Geology and Soils

Kistler facilities would be constructed on the ground surface or near the surface. Channels and berms would be constructed to minimize soil erosion. Operation of the launch facilities is not expected to affect subsurface geological media. Surface soils may show a slight increase in pH, augmenting nutrient uptake by vegetation. Thus, geology and soils are not expected to be adversely impacted.

Cultural and Native American Resources

A cultural resources reconnaissance of the proposed vehicle processing facility did not identify historic

properties; however, a reconnaissance of the proposed launch site and reentry, landing and recovery site identified two potential historic properties. The first site is a previously recorded historic property that has been the subject of two previous data recovery efforts by the DOE. The second site was previously undiscovered. A data recovery plan to avoid adverse impacts to the previously undiscovered site was approved by the Nevada State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation (ACHP). It was also determined that additional data recovery efforts on the previously discovered site would not yield new significant information (Nevada State SHPO September 23, 1997) (ACHP October 1, 1997).

To ensure that Native American concerns are considered and data recovery is conducted in a culturally sensitive manner, representatives of the Owens Valley Paiutes, Western Shoshones, and Southern Paiutes participated in the data recovery. The Rapid Cultural Assessment Team conducted an assessment and recommended measures to mitigate impacts to traditional cultural properties. Activities would be conducted in accordance with Section 106 of the National Historic Preservation Act of 1966.

Transportation

Additional on-site and off-site traffic generated by the Kistler proposed activities is expected to be minimal. Existing roads would accommodate additional traffic. The closing of two paved roads on NTS during launch and reentry activities for approximately one-hour per launch would be a temporary disruption.

Health and Safety

Worker health and safety issues arise primarily from accidents during construction, decontamination, decommissioning, and maintenance activities as well as from explosions, fires, or spills. Generally the impact would be limited to workers within the vicinity of the accident. For hazardous operations, workers would be removed to safe distances in case of a catastrophic event.

The health and safety of the general public would not be affected due to the remote location of the NTS. The potential to affect the public would be limited to actual in-flight emergencies. The flight ascent profile is designed to minimize risk to the public. Current Health and Safety programs at the NTS enhance Kistler's ability to respond to an on-site emergency. Accident scenarios would be detailed and evaluated in the Safety Review conducted by the FAA as part of its licensing and regulatory program.

At no time does the launch vehicle enter airspace controlled by the FAA for general and commercial aviation. Most proposed Kistler flights stay within NTS airspace; however, certain launch trajectories require flight outside restricted airspace and above FAA controlled airspace. On these missions, vehicle altitude remains greater than 45,720 meters (150,000 feet) in airspace not used by general or commercial aviation.

Kistler launch and reentry/recovery facilities would be located within the NTS and adjacent to the Nevada Test and Training Range. The nearest air traffic route used by civil aviation during a launch would be Jet Route 80–58 (J80–58), between Wilson Creek and Tonopah, Nevada. Upon reentry, the nearest air traffic route is J92 between Beatty and Boulder City, Nevada. Because of altitude separation distances, the nearest civil air traffic route structure would not be affected and no significant impacts are expected. Therefore, no adverse impacts to worker, public, or civil aviation health and safety are expected.

Cumulative Impacts

The proposed action has been evaluated for cumulative impacts on air quality, noise, socioeconomic, biological resources, cultural and Native American resources, transportation, and health and safety. The NTS EIS assessed foreseeable future actions, including the proposed Kistler activities. The NTS EIS concluded that no cumulative effects are expected as a result of the proposed Kistler facilities and operations.

No Action Alternative

Under the No Action Alternative, the FAA would issue a license for Kistler to conduct launch operations. The General Use Permit between DOE and the NTSDC would continue to exist but the subpermit between the NTSDC and Kistler would be void. Predicted environmental impacts of the proposed launch and reentry activities would not occur and the project area would remain in its current state.

Determination

An analysis of the proposed action has concluded that there are no significant short-term or long-term effects to the environment or surrounding populations. After careful and thorough consideration of the facts contained herein, the undersigned finds that the proposed Federal action is consistent with existing national environmental policies and objectives as set forth in Section 101(a) of NEPA and that it will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 102 (2) (C) of NEPA. Therefore, an Environmental Impact Statement for the proposed action would not be required.

Issued in Washington, DC on April 13, 2000.

Patricia G. Smith,

Associate Administrator for Commercial Space Transportation.

[FR Doc. 00–9830 Filed 4–20–00; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

[Summary Notice No. PE–2000–15]

Petitions for Exemption; Summary of Petitions Received; Dispositions of Petitions Issued

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of petitions for exemption received and of dispositions of prior petitions.

SUMMARY: Pursuant to FAA's rulemaking provisions governing the application, processing, and disposition of petitions for exemption (14 CFR part 11), this notice contains a summary of certain petitions seeking relief from specified requirements of the Federal Aviation Regulations (14 CFR Chapter I), dispositions of certain petitions previously received, and corrections. The purpose of this notice is to improve the public's awareness of, and participation in, this aspect of FAA's regulatory activities. Neither publication of this notice nor the inclusion or omission of information in the summary is intended to affect the legal status of any petition or its final disposition.

DATES: Comments on petitions received must identify the petition docket number involved and must be received on or before May 15, 2000.

ADDRESSES: Send comments on any petition in triplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attn: Rule Docket (AGC–200), Petition Docket No. _____, 800 Independence Avenue, SW., Washington, DC 20591.

Comments may also be sent electronically to the following internet address: 9-NPRM-cmts@faa.gov.

The petition, any comments received, and a copy of any final disposition are

filed in the assigned regulatory docket and are available for examination in the Rules Docket (AGC–200), Room 915G, FAA Headquarters Building (FOB 10A), 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267–3132.

FOR FURTHER INFORMATION CONTACT: Cherie Jack (202) 267–7271 or Vanessa Wilkins (202) 267–8029 Office of Rulemaking (ARM–1), Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591.

This notice is published pursuant to paragraphs (c), (e), and (g) of § 11.27 of Part 11 of the Federal Aviation Regulations (14 CFR Part 11).

Issued in Washington, DC, on April 18, 2000.

Donald P. Byrne,

Assistant Chief Counsel for Regulations.

Petitions for Exemption

Docket No.: 2857.
Petitioner; Flight Structures.
Section of the FAR Affected: 14 CFR 25.813(b), 25.857(e), 25.785(d), 25.1447(c)(3)(ii).
Description of Relief Sought: To allow carriage of one additional supernumerary increasing the total occupants to 9 on the Airbus Model A300–B4–103, –203 series airplanes.

Docket No.: CE160.
Petitioner; Ayres Corporation.
Section of the FAR Affected: 14 CFR 23.3.
Description of Relief Sought: To permit certification of the Ayres Corporation Model LM200 as a Commuter Category airplane with a novel and unusual twin engine, single-propeller propulsion system.

Docket No.: 27802.
Petitioner; Richmor Aviation.
Section of the FAR Affected: 14 CFR 21.197(c)(2).
Description of Relief Sought: To permit the issuance of a special flight permit with continuous authorization to Richmor for aircraft that are operated and maintained in accordance with 14 CFR 135.411(a)(1) and 135.419, ''Approved Aircraft Inspection Program.''

Docket No.: 29937.
Petitioner; Southern California Aviation, Inc.
Section of the FAR Affected: 14 CFR 145.35 and 145.37.
Description of Relief Sought: To permit SCAI to perform aircraft storage related maintenance without meeting all the housing and facility requirements required by 145.35 and 145.37.

Dispositions of Petitions

Docket No.: 26533.
Petitioner: Parachute Laboratories, Inc., doing business as Jump Shack.
Section of the FAR Affected: 14 CFR 105.43(a).
Description of Relief Sought/ Disposition: To permit (1) Jump Shack to allow its employees, representatives, and other volunteer experimental parachute test jumpers under its direct supervision and control to make intentional tandem parachute jumps while wearing a dual-harness, dual-parachute pack having at least one main parachute and one approved auxiliary parachute packed in accordance with 105.43(a), and (2) pilots in command of aircraft involved in these operations to allow such persons to make these parachute jumps. *Grant, 03/10/2000, Exemption No. 5448D.*

Docket No.: 28797.
Petitioner: Air Tractor Inc.
Section of the FAR Affected: 14 CFR 36.1(a)(2).
Description of Relief Sought/ Disposition: To permit Air Tractor Inc.'s models AT–602, AT–802, and AT–802A airplanes, which are currently excepted from the requirements of 36.1(a)(2) as ''agricultural aircraft,'' to be exempted from the applicable noise certification requirements of 14 CFR part 36 for the purpose of spill eradication. *Denial, 11/29/99, Exemption No. 7080.*

Docket No.: 29577.
Petitioner: Bombardier Aerospace Corporation, Bombardier Business Jet Solutions Inc.
Section of the FAR Affected: 14 CFR 47.13(g) and 49.13(d).
Description of Relief Sought/ Disposition: To permit petitioners to ''use the powers of attorney now on file for the present owners * * * for a period of 6 years from the date of the grant of exemption or until such earlier date as each respective owners has terminated their interest in the concerned aircraft.'' Specific aircraft have been identified to whose owners any waiver would apply. *Denial, 03/29–03/2000, Exemption No. 7138.*

Docket No.: 29721.
Petitioner: LET, a.s.
Section of the FAR Affected: 14 CFR C36.9(e)(1).
Description of Relief Sought/ Disposition: To permit the 1-g stall speed used for the 14 CFR part 25 airworthiness certification to also be used for the 14 CFR part 36 noise certification for the approach reference and test limitations on the LET L–106G model airplane. *Grant, 11/30/99, Exemption No. 7081.*

Docket No.: 28457.
Petitioner: Mr. Clifford L. Hoyle.
Section of the FAR Affected: 14 CFR 21.19(b)(1).
Description of Relief Sought/ Disposition: To permit Mr. Hoyle to apply for a supplemental type certificate for a design change to his Grob 103 Twin II glider (registration N39810, Serial No. 3913) to install a Bombardier Rotax 582 engine providing self-launching and sustained flight capabilities. *Partial Grant, 03/08/2000, Exemption No. 7142.*

Docket No.: 29736.
Petitioner: Tulsa Air & Space Center Airshows, Inc.
Section of the FAR Affected: 14 CFR 91.315, 119.5(g), and 119.21(a).
Description of Relief Sought/ Disposition: To permit Tulsa Air & Space to operate its former military B–52, which is certified in the limited category, for the purpose of carrying passengers on local flights for compensation or hire, subject to certain conditions. *Grant, 02/18/2000, Exemption No. 7126.*

Docket No.: 29836.
Petitioner: Southwest Airlines, Co.
Section of the FAR Affected: 14 CFR 121.434(c) (1) (ii).
Description of Relief Sought/ Disposition: To permit Southwest to substitute a qualified and authorized check airman in place of an FAA inspector to observe a qualifying PIC who is completing initial or upgrade training specified in 121.424 during at least on flight leg that includes a takeoff and a landing. *Grant, 02/28/2000, Exemption No. 7132.*

Docket No.: 29867.
Petitioner: Jetstream Aviation.
Section of the FAR Affected: 14 CFR 135.143 (c)(2).
Description of Relief Sought/ Disposition: To permit Jetstream Aviation to operate its Cessna Model 310N (Registration No. N4165Q, Serial No. 310N–0065) and Piper PA–28 Cherokee 140 (Registration No. N657CA, Serial No. 28–22371) airplanes under part 135 without a TSO–C112 (Mode S) transponder installed on each airplane. *Grant, 03/01/2000, Exemption No. 7134.*

Docket No.: 29951.
Petitioner: Evergreen International Airlines, Inc.
Section of the FAR Affected: 14 CFR SFAR No. 79.
Description of Relief Sought/ Disposition: To permit Evergreen International Airlines, Inc. to operate one flight to Pyongyang, the capital city of the Democratic People's Republic of Korea DPRK, on or about March 15, 2000, subject to certain conditions and limitations. *Grant, 03/10/2000, Exemption No. 7145.*

[FR Doc. 00–10017 Filed 4–20–00; 8:45 am]
BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket NHTSA–99–5087]

Safety Performance Standards Program Meeting.

AGENCY: National Highway Traffic Safety Administration, DOT.

ACTION: Notice of NHTSA rulemaking status meeting.

SUMMARY: This notice announces a public meeting at which NHTSA will answer questions from the public and the automobile industry regarding the agency's vehicle regulatory program.

DATES: The Agency's regular, quarterly public meeting relating to its vehicle regulatory program will be held on Thursday, June 15, 2000, beginning at 9:45 a.m. and ending at approximately 12:00 p.m. at the Vehicle Research and Test Center (VRTC) in East Liberty, Ohio. Questions relating to the vehicle regulatory program must be submitted in writing with a diskette (Wordperfect) by Wednesday, May 24, 2000, to the address shown below or by e-mail. If sufficient time is available, questions received after May 24, may be answered at the meeting. The individual, group or company submitting a questions(s) does not have to be present for the questions(s) to be answered. A consolidated list of the questions submitted by May 24, 2000, and the issues to be discussed, will be posted on NHTSA's web site (www.nhtsa.dot.gov) by Monday, June 12, 2000, and also will be available at the meeting. The agency will hold a second public meeting on June 15, devoted exclusively to a presentation of research and development programs. This meeting will begin at 1:30 p.m. and end at approximately 5:00 p.m.

This meeting is described more fully in a separate announcement. VRTC is gathering a list of names who will be attending the June 15, NHTSA Public Meeting, to expedite clearance into the test facility. Those of you who are attending the NHTSA Public Meeting should contact Susie Weiser at 937–666–4511 by C.O.B. June 13, 2000. The next NHTSA Public Meeting will take place on Thursday, September 14, 2000, at the Tysons Westpark Hotel, 8401 Westpark Drive, in McLean, VA.

ADDRESSES: Questions for the June 15, NHTSA Rulemaking Status Meeting, relating to the agency's vehicle regulatory program, should be submitted to Delia Lopez, NPS–01, National Highway Traffic Safety Administration, Room 5401, 400 Seventh Street, SW., Washington, DC 20590, Fax Number 202–366–4329, e-mail dlopez@nhtsa.dot.gov. The meeting will be held at the NHTSA's Research and Development, Vehicle Research and Test Center, P.O. Box 37, East Liberty, Ohio 43319. Directions to the VRTC, as well as this **Federal Register** notice will be also available on NHTSA's web site (www.nhtsa.dot.gov).

FOR FURTHER INFORMATION CONTACT: Delia Lopez, (202) 366–1810.

SUPPLEMENTARY INFORMATION: NHTSA holds a regular, quarterly meeting to answer questions from the public and the regulated industries regarding the agency's vehicle regulatory program. Questions on aspects of the agency's research and development activities that relate directly to ongoing regulatory actions should be submitted, as in the past, to the agency's Safety Performance Standards Office. The purpose of this meeting is to focus on those phases of NHTSA activities which are technical, interpretative or procedural in nature. Transcripts of these meetings will be available for public inspection in the DOT Docket in Washington, DC, within four weeks after the meeting. Copies of the transcript will then be available at ten cents a page, (length has varied from 80 to 150 pages) upon request to DOT Docket, Room PL–401, 400 Seventh Street, SW., Washington, DC 20590. The DOT Docket is open to the public from 10:00 a.m. to 5:00 p.m. The transcript may also be accessed electronically at *http://dms.dot.gov.at* docket NHTSA–99–5087. Questions to be answered at the quarterly meeting should be organized by categories to help us process the questions into an agenda form more efficiently. Sample format:

I. RULEMAKING
  A. Crash avoidance
  B. Crashworthiness
  C. Other Rulemakings
II. CONSUMER INFORMATION
III. MISCELLANEOUS

NHTSA will provide auxiliary aids to participants as necessary. Any person desiring assistance of ''auxiliary aids'' (*e.g.,* sign-language interpreter, telecommunications devices for deaf persons (TDDs), readers, taped texts, brailled materials, or large print materials and/or a magnifying device), please contact Delia Lopez on (202) 366–1810, by COB June 12, 2000.

Issued: April 18, 2000.

Stephen R. Kratzke,

Acting Associate Administrator for Safety Performance Standards.

[FR Doc. 00–9983 Filed 4–20–00; 8:45 am]

BILLING CODE 4910–59–P

DEPARTMENT OF TRANSPORTATION

Surface Transportation Board

[STB Docket No. AB–33 (Sub–No. 152X)]

Union Pacific Railroad Company—Abandonment Exemption—in Orange County, TX

Union Pacific Railroad Company (UP) has filed a notice of exemption under 49 CFR 1152 Subpart F—*Exempt Abandonments and Discontinuances of Service and Trackage Rights* to abandon a 0.75-mile portion of the Orange Industrial Lead from milepost 486.75 to milepost 487.5 near Kilowatt, in Orange County, TX. The line traverses United States Postal Service Zip Code 77630.

UP has certified that: (1) No local traffic has moved over the line for at least 2 years; (2) there is no overhead traffic moving over the line; (3) no formal complaint filed by a user of rail service on the line (or by a state or local government entity acting on behalf of such user) regarding cessation of service over the line either is pending with the Surface Transportation Board (Board) or with any U.S. District Court or has been decided in favor of complainant within the 2-year period; and (4) the requirements at 49 CFR 1105.7 (environmental reports), 49 CFR 1105.8 (historic reports), 49 CFR 1105.11 (transmittal letter), 49 CFR 1105.12 (newspaper publication), and 49 CFR 1152.50(d)(1) (notice to governmental agencies) have been met.

As a condition to this exemption, any employee adversely affected by the abandonment and discontinuance shall be protected under *Oregon Short Line R. Co.— Abandonment—Goshen,* 360 I.C.C. 91 (1979). To address whether this condition adequately protects affected employees, a petition for partial revocation under 49 U.S.C. 10502(d) must be filed. Provided no formal expression of intent to file an offer of financial assistance (OFA) has been received, this exemption will be effective on May 23, 2000, unless stayed pending reconsideration. Petitions to stay that do not involve environmental issues,[1] formal expressions of intent to file an OFA under 49 CFR

[1] The Board will grant a stay if an informed decision on environmental issues (whether raised by a party or by the Board's Section of Environmental Analysis in its independent investigation) cannot be made before the exemption's effective date. *See Exemption of Out-of-Service Rail Lines,* 5 I.C.C.2d 377 (1989). Any request for a stay should be filed as soon as possible so that the Board may take appropriate action before the exemption's effective date.

1152.27(c)(2),[2] and trail use/rail banking requests under 49 CFR 1152.29 must be filed by May 1, 2000. Petitions to reopen or requests for public use conditions under 49 CFR 1152.28 must be filed by May 11, 2000, with: Surface Transportation Board, Office of the Secretary, Case Control Unit, 1925 K Street, N.W., Washington, DC 20423.

A copy of any petition filed with the Board should be sent to applicant's representative: James P. Gatlin, General Attorney, Union Pacific Railroad Company, 1416 Dodge Street, Room 830, Omaha, NE 68179.

If the verified notice contains false or misleading information, the exemption is void *ab initio.*

UP has filed an environmental report which addresses the abandonment's effects, if any, on the environment and historic resources. The Section of Environmental Analysis (SEA) will issue an environmental assessment (EA) by April 26, 2000. Interested persons may obtain a copy of the EA by writing to SEA (Room 500, Surface Transportation Board, Washington, DC 20423) or by calling SEA, at (202) 565–1545. Comments on environmental and historic preservation matters must be filed within 15 days after the EA becomes available to the public.

Environmental, historic preservation, public use, or trail use/rail banking conditions will be imposed, where appropriate, in a subsequent decision.

Pursuant to the provisions of 49 CFR 1152.29(e)(2), UP shall file a notice of consummation with the Board to signify that it has exercised the authority granted and fully abandoned its line. If consummation has not been effected by UP's filing of a notice of consummation by April 21, 2001, and there are no legal or regulatory barriers to consummation, the authority to abandon will automatically expire.

Board decisions and notices are available on our website at ''WWW.STB.DOT.GOV.''

Decided: April 14, 2000.

By the Board, David M. Konschnik, Director, Office of Proceedings.

Vernon A. Williams,

Secretary.

[FR Doc. 00–9986 Filed 4–20–00; 8:45 am]

BILLING CODE 4915–00–P

[2] Each offer of financial assistance must be accompanied by the filing fee, which currently is set at $1000. *See* 49 CFR 1002.2(f)(25).

DEPARTMENT OF TRANSPORTATION

Surface Transportation Board

[STB Docket No. AB–55 (Sub–No. 578X)]

CSX Transportation, Inc.—Abandonment Exemption—in Clark County, IN

CSX Transportation, Inc. (CSXT) has filed a verified notice of exemption under 49 CFR 1152 Subpart F—*Exempt Abandonments* to abandon its line of railroad between milepost B–40.34 and milepost B–40.60, a distance of approximately .26 miles, at Charlestown, in Clark County, IN (line). The line traverses United States Postal Service Zip Code 47111.

CSXT has certified that: (1) No local traffic has moved over the line for at least 2 years; (2) there is no overhead traffic on the line; (3) no formal complaint filed by a user of rail service on the line (or state or local government agency acting on behalf of such user) regarding cessation of service over the line is either pending with the Surface Transportation Board (Board) or any U.S. District Court or has been decided in favor of complainant within the 2-year period; and (4) the requirements at 49 CFR 1105.7 (environmental reports), 49 CFR 1105.8 (historic reports), 49 CFR 1105.11 (transmittal letter), 49 CFR 1105.12 (newspaper publication), and 49 CFR 1152.50(d)(1) (notice to governmental agencies) have been met.

As a condition to this exemption, any employee adversely affected by the abandonment shall be protected under *Oregon Short Line R. Co.—Abandonment—Goshen*, 360 I.C.C. 91 (1979). To address whether this condition adequately protects affected employees, a petition for partial revocation under 49 U.S.C. 10502(d) must be filed. Provided no formal expression of intent to file an offer of financial assistance (OFA) has been received, this exemption will be effective on May 23, 2000, unless stayed pending reconsideration. Petitions to stay that do not involve environmental issues,[1] formal expressions of intent to file an OFA under 49 CFR 1152.27(c)(2),[2] and trail use/rail banking requests under 49 CFR 1152.29 must be filed by May 1, 2000. Petitions to reopen or requests for public use conditions under 49 CFR 1152.28 must be filed by May 11, 2000, with the Surface Transportation Board, Office of the Secretary, Case Control Unit, 1925 K Street, N.W., Washington, DC 20423–0001.

A copy of any petition filed with the Board should be sent to applicant's representative: Natalie S. Rosenberg, Esq., CSX Transportation, Inc., 500 Water Street, J150, Jacksonville, FL 32202. If the verified notice contains false or misleading information, the exemption is void *ab initio.*

CSXT has filed an environmental report which addresses the abandonment's effects, if any, on the environment and historic resources. The Section of Environmental Analysis (SEA) will issue an environmental assessment (EA) by April 26, 2000. Interested persons may obtain a copy of the EA by writing to SEA (Room 500, Surface Transportation Board, Washington, DC 20423–0001) or by calling SEA, at (202) 565–1545. Comments on environmental and historic preservation matters must be filed within 15 days after the EA becomes available to the public.

Environmental, historic preservation, public use, or trail use/rail banking conditions will be imposed, where appropriate, in a subsequent decision.

Pursuant to the provisions of 49 CFR 1152.29(e)(2), CSXT shall file a notice of consummation with the Board to signify that it has exercised the authority granted and fully abandoned the line. If consummation has not been effected by CSXT's filing of a notice of consummation by April 21, 2001, and there are no legal or regulatory barriers to consummation, the authority to abandon will automatically expire.

Board decisions and notices are available on our website at ''WWW.STB.DOT.GOV.''

Decided: April 13, 2000.

By the Board, David M. Konschnik, Director, Office of Proceedings.

Vernon A. Williams,

Secretary.

[FR Doc. 00–9985 Filed 4–20–00; 8:45 am]

BILLING CODE 4915–00–P

[1] The Board will grant a stay if an informed decision on environmental issues (whether raised by a party or by the Board's Section of Environmental Analysis in its independent investigation) cannot be made before the exemption's effective date. *See Exemption of Out-of-Service Rail Lines,* 5 I.C.C.2d 377 (1989). Any request for a stay should be filed as soon as possible so that the Board may take appropriate action before the exemption's effective date.

[2] Each offer of financial assistance must be accompanied by the filing fee, which currently is set at $1000. *See* 49 CFR 1002.2(f)(25).

DEPARTMENT OF TRANSPORTATION

Surface Transportation Board

[STB Docket No. AB–566X]

Gateway Western Railway Company—Discontinuance of Service Exemption—in Jackson County, MO

On April 3, 2000, Gateway Western Railway Company (Gateway) filed with the Surface Transportation Board (Board) a petition under 49 U.S.C. 10502 for exemption from the provisions of 49 U.S.C. 10903 to discontinue service over a 5.45-mile line of railroad, known as the Coburg Line, extending from milepost 0.0 at Sheffield Interlocking to milepost 5.45 near BV Junction, in Jackson County, MO.[1] The line traverses U.S. Postal Service Zip Codes 64125, 64126, and 64129. There are no stations on the line.

Because Gateway is not the owner of the line, it states that it does not know whether the line contains federally granted rights-of-way. Any documentation in Gateway's possession will be made available promptly to those requesting it.

The interest of railroad employees will be protected by the conditions set forth in *Oregon Short Line R. Co.—Abandonment—Goshen*, 360 I.C.C. 91 (1979).

By issuance of this notice, the Board is instituting an exemption proceeding pursuant to 49 U.S.C. 10502(b). A final decision will be issued by July 21, 2000.

Any offer of financial assistance to subsidize continued rail service under 49 CFR 1152.27(b)(2) will be due no later than 10 days after service of a decision granting the petition for exemption. Each offer must be accompanied by a $1,000 filing fee. *See* 49 CFR 1002.2(f)(25).

This proceeding is exempt from environmental reporting requirements under 49 CFR 1105.6(c) and from historic reporting requirements under 1105.8(b).

All filings in response to this notice must refer to STB Docket No. AB–566X and must be sent to: (1) Surface Transportation Board, Office of the Secretary, Case Control Unit, 1925 K Street, N.W., Washington, DC 20423–0001; and (2) William A. Mullins, Troutman Sanders LLP, 1300 I Street, N.W., Washington, DC 20005. Replies are due May 11, 2000.

Persons seeking further information concerning abandonment and discontinuance procedures may contact the Board's Office of Public Services at (202) 565–1592 or refer to the full abandonment or discontinuance regulations at 49 CFR part 1152. Questions concerning environmental issues may be directed to the Board's Section of Environmental Analysis (SEA) at (202) 565–1545. [TDD for the hearing impaired is available at 1–800–877–8339.]

Board decisions and notices are available on our website at ''WWW.STB.DOT.GOV.''

Decided: April 12, 2000.

By the Board, David M. Konschnik, Director, Office of Proceedings.

Vernon A. Williams,

Secretary.

[FR Doc. 00–9811 Filed 4–20–00; 8:45 am]

BILLING CODE 4915–00–P

[1] The line is owned by The Burlington Northern and Santa Fe Railway Company (BNSF) and was operated under lease by Gateway. The lease expired on July 31, 1999, and BNSF resumed service on the line.

DEPARTMENT OF TRANSPORTATION

Surface Transportation Board

[STB Docket No. AB–33 (Sub–No. 151X)]

Union Pacific Railroad Company—Abandonment Exemption—in Franklin County, IA

Union Pacific Railroad Company (UP) has filed a notice of exemption under 49 CFR 1152 Subpart F—*Exempt Abandonments and Discontinuances of Service and Trackage Rights* to abandon a 0.44-mile line of railroad over the Sheffield Industrial Lead from milepost 184.31 to milepost 184.75 near Hampton, in Franklin County, IA. The line traverses United States Postal Service Zip Code 50441.

UP has certified that: (1) No local traffic has moved over the line for at least 2 years; (2) there is no overhead traffic moving over the line; (3) no formal complaint filed by a user of rail service on the line (or by a state or local government entity acting on behalf of such user) regarding cessation of service over the line either is pending with the Surface Transportation Board (Board) or with any U.S. District Court or has been decided in favor of complainant within the 2-year period; and (4) the requirements at 49 CFR 1105.7 (environmental reports), 49 CFR 1105.8 (historic reports), 49 CFR 1105.11 (transmittal letter), 49 CFR 1105.12 (newspaper publication), and 49 CFR 1152.50(d)(1) (notice to governmental agencies) have been met.

As a condition to this exemption, any employee adversely affected by the abandonment and discontinuance shall be protected under *Oregon Short Line R. Co.—Abandonment—Goshen,* 360 I.C.C. 91 (1979). To address whether this condition adequately protects affected employees, a petition for partial revocation under 49 U.S.C. 10502(d) must be filed. Provided no formal expression of intent to file an offer of financial assistance (OFA) has been received, this exemption will be effective on May 23, 2000, unless stayed pending reconsideration. Petitions to stay that do not involve environmental issues,[1] formal expressions of intent to file an OFA under 49 CFR 1152.27(c)(2),[2] and trail use/rail banking requests under 49 CFR 1152.29 must be filed by May 1, 2000. Petitions to reopen or requests for public use conditions under 49 CFR 1152.28 must be filed by May 11, 2000, with: Surface Transportation Board, Office of the Secretary, Case Control Unit, 1925 K Street, N.W., Washington, DC 20423.

A copy of any petition filed with the Board should be sent to applicant's representative: James P. Gatlin, General Attorney, Union Pacific Railroad Company, 1416 Dodge Street, Room 830, Omaha, NE 68179.

If the verified notice contains false or misleading information, the exemption is void *ab initio.*

UP has filed an environmental report which addresses the effects, if any, of the abandonment and discontinuance on the environment and historic resources. The Section of Environmental Analysis (SEA) will issue an environmental assessment (EA) by April 26, 2000. Interested persons may obtain a copy of the EA by writing to SEA (Room 500, Surface Transportation Board, Washington, DC 20423) or by calling SEA, at (202) 565–1545. Comments on environmental and historic preservation matters must be filed within 15 days after the EA becomes available to the public.

Environmental, historic preservation, public use, or trail use/rail banking conditions will be imposed, where appropriate, in a subsequent decision.

Pursuant to the provisions of 49 CFR 1152.29(e)(2), UP shall file a notice of consummation with the Board to signify that it has exercised the authority granted and fully abandoned its line. If consummation has not been effected by

[1] The Board will grant a stay if an informed decision on environmental issues (whether raised by a party or by the Board's Section of Environmental Analysis in its independent investigation) cannot be made before the exemption's effective date. *See Exemption of Out-of-Service Rail Lines,* 5 I.C.C.2d 377 (1989). Any request for a stay should be filed as soon as possible so that the Board may take appropriate action before the exemption's effective date.

[2] Each offer of financial assistance must be accompanied by the filing fee, which currently is set at $1000. *See* 49 CFR 1002.2(f)(25).

UP's filing of a notice of consummation by April 21, 2001, and there are no legal or regulatory barriers to consummation, the authority to abandon will automatically expire.

Board decisions and notices are available on our website at ''WWW.STB.DOT.GOV.''

Decided: April 7, 2000.

By the Board, David M. Konschnik, Director, Office of Proceedings.

Vernon A. Williams,

Secretary.

[FR Doc. 00–9244 Filed 4–20–00; 8:45 am]

BILLING CODE 4915–00–P

DEPARTMENT OF THE TREASURY

Fiscal Service

Surety Companies Acceptable on Federal Bonds: Termination—Chatham Reinsurance Corporation

AGENCY: Financial Management Service, Fiscal Service, Department of the Treasury.

ACTION: Notice.

SUMMARY: This is Supplement No. 19 to the Treasury Department Circular 570; 1999 Revision, published July 1, 1999, at 64 FR 35864.

FOR FURTHER INFORMATION CONTACT: Surety Bond Branch at (202) 874–6779.

SUPPLEMENTARY INFORMATION: Notice is hereby given that the Certificate of Authority issued by the Treasury to the above named Company, under the United States Code, Title 31, Sections 9304–9308, to qualify as an acceptable surety on Federal bonds is terminated effective today.

The Company was listed as an acceptable surety on Federal bonds at 64 FR on page 35870, July 1, 1999.

With respect to any bonds currently in force with above listed Company, bond-approving officers should secure new bonds with acceptable sureties in those instances where a significant amount of liability remains outstanding. In addition, bonds that are continuous in nature should not be renewed.

The Circular may be viewed and downloaded through the Internet at http://www.fms.treas.gov/c570/index.html. A hard copy may be purchased from the Government Printing Office (GPO), Subscription Service, Washington, DC, telephone (202) 512–1800. When ordering the Circular from GPO, use the following stock number: 048000–00527–6.

Questions concerning this notice may be directed to the U.S. Department of the Treasury, Financial Management Service, Financial Accounting and Services Division, Surety Bond Branch, 3700 East-West Highway, Room 6A04, Hyattsville, MD 20782.

Dated: March 31, 2000.

Wanda J. Rogers,

Director, Financial Accounting and Services Division, Financial Management Service.

[FR Doc. 00–10000 Filed 4–20–00; 8:45 am]

BILLING CODE 4810–35–M

DEPARTMENT OF THE TREASURY

Fiscal Service

Surety Companies Acceptable on Federal Bonds: Name Change—Minnesota Trust Company of Austin

AGENCY: Financial Management Service, Fiscal Service, Department of the Treasury.

ACTION: Notice.

SUMMARY: This is Supplement No. 20 to the Treasury Department Circular 570; 1999 Revision, published July 1, 1999, at 64 FR 35864.

FOR FURTHER INFORMATION CONTACT: Surety Bond Branch at (202) 874–6779.

SUPPLEMENTARY INFORMATION: Minnesota Trust Company of Austin, a Minnesota Corporation, has formally changed its name to Minnesota Surety and Trust Company, effective January 1, 2000. The Company was last listed as an acceptable surety on Federal bonds at 64 FR 35882, July 1, 1999.

A Certificate of Authority as an acceptable surety on Federal bonds, dated today, is hereby issued under Sections 9304 to 9308 of Title 31 of the United States Code, to Minnesota Surety and Trust Company, Austin, Minnesota. This new Certificate replaces the Certificate of Authority issued to the Company under its former name. The underwriting limitation of $166,000 established for the Company as of July 1, 1999, remains unchanged until June 30, 2000.

Certificates of Authority expire on June 30, each year, unless revoked prior to that date. The Certificates are subject to subsequent annual renewal as long as the Company remains qualified (31 CFR, Part 223). A list of qualified companies is published annually as of July 1, in the Department Circular 570, which outlines details as to underwriting limitations, areas in which licensed to transact surety business and other information. Federal bond-approving officers should annotate their reference copies of the Treasury Circular 570, 1999 Revision, at page 35882 to reflect this change.

The Circular may be viewed and downloaded through the Internet at http://www.fms.treas.gov/c570/index.html. A hard copy may be purchased from the Government Printing Office (GPO), Subscription Service, Washington, DC, telephone (202) 512–1800. When ordering the Circular from GPO, use the following stock number: 048000–00527–6.

Questions concerning this notice may be directed to the U.S. Department of the Treasury, Financial Management Service, Financial Accounting and Services Division, Surety Bond Branch, 3700 East-West Highway, Room 6A04, Hyattsville, MD 20782.

Dated: April 13, 2000.

Wanda J. Rogers,

Director, Financial Accounting and Services Division, Financial Management Service.

[FR Doc. 00–10001 Filed 4–20–00; 8:45 am]

BILLING CODE 4810–35–M

Corrections

Federal Register
Vol. 65, No. 78
Friday April 21, 2000

This section of the FEDERAL REGISTER contains editorial corrections of previously published Presidential, Rule, Proposed Rule, and Notice documents. These corrections are prepared by the Office of the Federal Register. Agency prepared corrections are issued as signed documents and appear in the appropriate document categories elsewhere in the issue.

DEPARTMENT OF COMMERCE

International Trade Administration

[A-570-506][A-201-504][A-583-508]

Continuation of Antidumping Duty Orders: Porcelain-on-Steel Cooking Ware from China, Mexico, and Taiwan

Correction

In notice document 00–9374 beginning on page 20136 in the issue of Friday April 14, 2000, make the following correction:

On page 20136, in the second column, in the *EFFECTIVE DATE:* section, ''May 14, 2000'' should read ''April 14, 2000''.

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Federal Register

Friday,
April 21, 2000

Part II

Environmental Protection Agency

40 CFR Part 51

Requirements for Preparation, Adoption, and Submittal of State Implementation Plans (Guideline on Air Quality Models); Proposed Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 51

[AH–FRL–6536–3]

RIN 2060–AF01

Requirements for Preparation, Adoption, and Submittal of State Implementation Plans (Guideline on Air Quality Models)

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA's (*Guideline on Air Quality Models* (*Guideline*) addresses the regulatory application of air quality models for assessing criteria pollutants under the Clean Air Act. In today's action we propose to make several additions and changes to the Guideline. We recommend two new dispersion models, AERMOD and CALPUFF, for adoption in appendix A of the *Guideline.* AERMOD would replace the Industrial Source Complex (ISC3) model in many assessments that now use it; AERMOD also would apply to complex terrain. CALPUFF would become a recommended technique for assessing long-range transport of pollutants and their impacts on Federal Class I areas. We revise two existing models: ISC3, by incorporating a new downwash algorithm (PRIME) and renaming the model ISC–PRIME, and the Emissions Dispersion Modeling System (EDMS), by incorporating improved emissions and dispersion modules. We make various editorial changes to update and reorganize information, and remove obsolete models (CDM, RAM and UAM).

DATES: The period for comment on these proposed changes to the *Guideline* closes on July 20, 2000. We plan to hold a public hearing on the proposed changes in Summer 2000. The specific date and time will be announced in a separate document published in the **Federal Register**.

ADDRESSES: We have established an official record for this rulemaking under docket number A–99–05. You may submit comments pertinent to this proposal to docket no. A–99–05 at the following address: Air Docket (6102), Room M–1500, Waterside Mall, U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC. 20460. This docket is available for public inspection and copying between 8 a.m. and 5:30 p.m., Monday through Friday, at the address above. Please furnish duplicate comments to Tom Coulter, Air Quality Modeling Group (MD–14), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711. You may send electronic versions of comments pertinent to this proposal to: A–AND–R–DOCKET@epamail.epa.gov. Alternatively, comments are acceptable in WordPerfect 6.1 (or higher), preferably zipped (*e.g.,* PKware) as an attachment to the e-mail message. You must include the docket identification (A–99–05) with all electronic submittals. You may file electronic comments on this proposal online at many Federal Depository Libraries.

The hearing will be the main agenda for the 7th Conference on Air Quality Modeling, and the location will be announced in a separate document published in the **Federal Register**.

FOR FURTHER INFORMATION CONTACT: Joseph A. Tikvart, Leader, Air Quality Modeling Group (MD–14), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, NC 27711; telephone (919) 541–5561 or C. Thomas Coulter, telephone (919) 541–0832.

SUPPLEMENTARY INFORMATION:

Background

The *Guideline* is used by EPA, States, and industry to prepare and review new source permits and State Implementation Plan revisions. The *Guideline* is intended to ensure consistent air quality analyses for activities regulated at 40 CFR 51.112, 51.117, 51.150, 51.160, 51.166, and 52.21. We originally published the *Guideline* in April 1978 and it was incorporated by reference in the regulations for the Prevention of Significant Deterioration (PSD) of Air Quality in June 1978. We revised the *Guideline* in 1986, and updated it with supplement A in 1987, supplement B in July 1993, and supplement C in August 1995. We published the *Guideline* as appendix W to 40 CFR part 51 when we issued supplement B. We republished the *Guideline* in August 1996 (61 FR 41838) to adopt the CFR system for labeling paragraphs.

Air Quality Modeling Conference

We held the Sixth Conference on Air Quality Modeling (6th conference) in Washington, DC on August 9–10, 1995. As required by Section 320 of the Clean Air Act, these conferences take place approximately every three years to standardize modeling procedures. The sixth conference featured presentations in several key modeling areas. One presentation, by the Interagency Workgroup on Air Quality Modeling (IWAQM [1]), covered long range transport modeling. Another presentation, by the American Meteorological Society (AMS)/EPA Regulatory Model Improvement Committee (AERMIC), covered developing an enhanced Gaussian dispersion model with boundary layer parameterization: AERMOD [2]. Also at the 6th conference, the Electric Power Research Institute (EPRI) presented recent research efforts to better define and characterize dispersion around buildings (downwash effects). These efforts were part of a program called the Plume RIse Model Enhancements (PRIME), and PRIME is proposed for integration within ISC3 (ISC–PRIME).

The presentations were followed by a critical review/discussion of the CALPUFF and AERMOD modeling systems, facilitated jointly by the Air & Waste Management Association's AB–3 Committee and the American Meteorological Society's Committee of Meteorological Aspects of Air Pollution. For the new and revised models described, we asked the public to address the following questions:

- What is the scientific merit of the models presented?
- What is their accuracy?
- What should be the regulatory use of individual models for specific applications?
- What implementation issues are apparent and what additional guidance is needed?
- What are the resource requirements of modeling systems presented?
- What additional information or analyses are needed?

We placed a transcript of the 6th conference proceedings and a copy of all written comments in Docket AQM–95–01. Answers to the above questions are reflected in the comments, which we reviewed and summarized (II–G–01). To the extent possible, we believe we have addressed the main concerns in the refinements proposed today, which focus on the two new modeling systems, as well as the enhancement of ISC3 with EPRI's PRIME downwash model (ISC–PRIME).

AERMOD

AERMOD is a state-of-the-practice Gaussian plume dispersion model whose formulation is based on planetary boundary layer principles. At the 6th conference, AERMIC members presented interim developmental and

[1] IWAQM was formed in 1991 to provide a focus for development of technically sound air quality models for regulatory assessments of long range transport of pollutant source impacts on federal Class I areas. IWAQM is an interagency collaboration that includes efforts by EPA, U.S. Forest Service, National Park Service, and Fish and Wildlife Service.

[2] AMS/EPA Regulatory MODel

evaluation results of AERMOD. AERMOD provides better characterization of plume dispersion than does the ISC3. Comprehensive comments were submitted on the AERMOD code and formulation document and on the AERMET draft User's Guide (AERMET is the meteorological preprocessor for AERMOD). The comments on the AERMET User's Guide were detailed and generally editorial in nature. Comments on AERMOD identified inconsistencies in the AERMOD code as well as among variables and recommended specific default values.

Commenters expressed concern that data bases historically used by EPA lack the variables required by AERMET and AERMOD. The deficiencies were thought to obstruct or weaken AERMOD's evaluation. We disagree that the data bases used for the AERMOD evaluations (Kincaid, Lovett, Martins Creek, Tracy, etc.) were not of the type used historically by EPA and furthermore believe that they contain the critical variables needed by AERMOD. One comment described a perceived ''persistence of modeling procedures [by EPA] rather than an evolution to other techniques.'' This tendency, the commenter believes, has been influenced by testing candidate techniques with the deficient data bases mentioned earlier. According to the commenter, this leaves the new candidate technique no way to show its possible superiority over existing techniques. The commenter argued for a change in this pattern. We disagree with this criticism in that we believe AERMOD has been adequately tested and represents, through its formulations, a technical advancement over its predecessors.

CALPUFF

CALPUFF is a Lagrangian dispersion model that simulates pollutant releases as a continuous series of *puffs.* IWAQM carefully studied the potential regulatory application of CALPUFF in its Phase 1 report.[3] At the 6th conference, IWAQM recommended that EPA consider CALPUFF as a preferred technique for long-range air pollution transport assessments (for example, for federal Class I areas). In its Phase 2 report,[4] IWAQM has, to the extent possible, attempted to resolve the concern and criticism over applying the CALPUFF modeling system.

On the whole, comments appeared to support IWAQM's efforts to simplify and clarify the modeling methods for addressing long-range transport and dispersion. The comments endorsed IWAQM's recommendation to employ one model for all sources and distances. The comments also endorsed IWAQM's recommendation of an approach whereby a group of stakeholders is established that, through consensus, defines the modeling methods, inventories, data bases, and significance criteria to be applied in assessing impacts for a given Class I area. This activity would precede an actual regulatory assessment.

Comments suggested that the Level 1 screen described in IWAQM's Phase I interim recommendations was not working well and needed improvement. IWAQM has attempted to do this by developing a screening procedure that uses CALPUFF with ISC-type meteorological input data, and has shown the results to be conservative for the case(s) tested (see footnote 4).[5] However, the screening approach may not give conservative concentration estimates in all cases (see below).

Comments suggested that more comparisons with tracer studies were needed for transport distances of 50–200km. IWAQM sponsored four such evaluations.

Commenters also sought clearer guidance on the limits of such modeling assessments, such as cases with intervening terrain between the sources and receptors of interest. IWAQM has attempted to make the modeling community(see footnote 4) aware that conducting a long-range transport assessment requires competent individuals, expert judgement, and strong interaction and coordination with the applicable reviewing authorities.

Comments suggested that comparisons were needed to assess whether CALPUFF can provide results similar to ISC3 and CTDMPLUS for steady-state meteorological conditions. We supported this work and examined CALPUFF for equivalency to ISC3,[6] both in a steady-state mode as well as non-steady-state (that is, when meteorological conditions varied hourly). For steady state conditions, CALPUFF mimicked ISC3 to a substantial degree. In non-steady state conditions, occurrences of calms and recirculations resulted in higher source impacts with CALPUFF than for ISC3 for most comparisons made.

ISC–PRIME

The development of PRIME by EPRI featured four key components: a field effort, laboratory modeling of fluids, developing model codes, and independently evaluating models.[7] The field measurements were made at a combustion turbine site in New Jersey in February and March 1994. Wind tunnel experiments have been done at EPA's Fluid Modeling Facility and at a facility at Monash University in Australia. PRIME is modular, it explicitly takes into account stack location and all three building dimensions, and attempts to model the shape of the ellipsoid cavity and the flow of the streamline descents over the top of the cavity. Plume rise calculations are enhanced to treat plumes that are not neutrally buoyant and have no vertical velocity. Unfortunately, at the time of the 6th modeling conference, evaluation work was incomplete and the PRIME code was unavailable for beta testing.

Comments received at the 6th modeling conference commended EPRI's development of PRIME as ''a significant improvement over the existing ISC algorithm'' and one that could ''provide accurate estimates for idealized building geometries.'' Based on comments, potential problems were anticipated for proper treatment of the myriad combinations of building geometry, wind approach angle, upwind roughnesses, stabilities, etc. Commenters questioned whether all these effects could be parameterized into a robust algorithm to accurately treat downwash at actual sites. Another strong concern was the extent to which the algorithm would work under stable stratification, which is difficult to simulate in a wind tunnel. One commenter even suggested the application of a simpler approach, *i.e.*, the original work by Huber and Snyder who employed a ''building downwash amplification factor'', as careful parameterization of this factor might

[3] Environmental Protection Agency, 1993. Interagency Workgroup on Air Quality Modeling (IWAQM) Phase I report: Interim Recommendation for Modeling Long range Transport and Impacts on Regional Visibility; EPA Publication No. EPA–454/R–93–015.

[4] Environmental Protection Agency, 1998. Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 2 Summary Report and Recommendations for Modeling Long-Range Transport Impacts. EPA Publication No. EPA–454/R–98–019.

[5] Environmental Protection Agency, 1998. Analyses of the CALMET/CALPUFF Modeling System in a Screening Mode. EPA Publication No. EPA–454/R–98–010. Office of Air Quality Planning & Standards, Research Triangle Park, NC.

[6] Environmental Protection Agency, 1998. A Comparison of CALPUFF with ISC3. EPA Publication No. EPA–454/R–98–020. Office of Air Quality Planning & Standards, Reserch Triangle Park, NC.

[7] Schulman, L.L., D.G. Strimaitis, and J.S. Scire, 1999. Development and Evaluation of the PRIME Plume Rise and Building Downwash Model. 34pp. + 10 figures (submitted to Journal of the Air & Waste Management Association) (A–99–05, II–A–13).

lead to acceptable accuracy with other benefits. The commenter also suggested that an integral plume rise model had been shown to yield good agreement with field and wind tunnel observations for treating plume trajectories. In terms of PRIME's evaluation, the commenter suggested using, as a basis for comparison, a version of ISC3 that excluded the Schulman-Scire downwash algorithm.

Since the 6th modeling conference, EPRI released a beta test version of PRIME, which was installed within ISC3 (hence, ISC–PRIME). Beta testing of ISC–PRIME shows significantly improved performance in comparison to ISC3.[8] To the extent possible, EPRI has attempted to address the comments on the PRIME algorithm and its documentation. A consequence analysis for using ISC–PRIME (versus ISC3) has also been prepared.[9]

Proposed Action

AERMOD

We propose revising section 4 of the *Guideline* to replace ISC3 by AERMOD as a state-of-the-practice technique for many air quality impact assessments. Applications for which AERMOD is suited are stated in subsequent sections of the *Guideline* and include assessment of plume impacts from traditional stationary sources in simple, intermediate, and complex terrain. In fact, since differentiation of simple versus complex terrain is unnecessary with AERMOD, we merged pertinent guidance in section 5 (Model Use in Complex Terrain) with that in section 4. You will find developmental, evaluation and peer scientific review references for AERMOD cited as appropriate. A model formulation document,[10] as well as a key evaluation reference for the AERMOD modeling system,[11] have been placed in the docket. We added a summary description of AERMOD to appendix A [12] of the *Guideline*, where you are directed to note additional evaluation references and a series of user's manuals. The essential codes, preprocessors, and test cases have been uploaded to our website (www.epa.gov/scram001; see 7th Conference).

We invite your comment on whether we have reasonably addressed technical concerns and are on sound footing to recommend AERMOD for its intended applications. AERMOD lacks a general (all-terrain) screening tool, so we invite your comment on the practicality of using SCREEN3 as an interim tool for AERMOD and ISC–PRIME screening in simple terrain.

CALPUFF

In its Phase 2 recommendations, IWAQM recommended the CALPUFF modeling system for refined use in modeling long-range transport and dispersion to characterize reasonably attributable impacts from one or a few sources for PSD Class I impacts. We endorse its recommendation and are proposing CALPUFF for addition to appendix A of the *Guideline.* We have imposed conforming revisions to section 6 to recommend CALPUFF for regulatory applications involving long-range transport and have suggested a possible screening approach. We also propose CALPUFF for use for all downwind distances for those applications involving complex wind regimes, with case-by-case justification. Studies that support the above recommendations are summarized in IWAQM's Phase II Report (*op. cit.*).

The essential codes, utilities, preprocessors and test cases have been uploaded to the developers' Internet website (www.src.com/calpuff/calpuff1.htm). The documentation for CALMET and CALPUFF have been properly cited in the *Guideline* and are available from the aforementioned website. A peer review has also been cited and has been placed in the docket.

We solicit your comments on our proposal to recommend CALPUFF for its intended applications.

ISC–PRIME

We have proposed the use of ISC–PRIME [13] in section 4 of the *Guideline,* where we emphasize that if you are interested in treating aerodynamic downwash or dry deposition, ISC–PRIME is the recommended model. We have proposed editorial revisions in sections 5–7 of the *Guideline* to make it clear when use of ISC–PRIME is appropriate instead of AERMOD.

The formulation and evaluation of the PRIME algorithm are described in open literature (*op. cit.*) The essential codes, utilities, and test cases have been uploaded to our website (www.epa.gov/scram001; see 7th Conference). We invite your comment on whether we are on sound footing to recommend use of ISC–PRIME as proposed.

We intend to consider AERMOD, ISC–PRIME, and CALPUFF as our recommended techniques for their intended applications (as specified in the *Guideline*) starting one year after we issue the final rule, and that the models be used in their regulatory default modes. The models *may* be used in the interim (*i.e.*, as soon as we issue the final rule). We invite your comment on the reasonableness of the timing of this implementation schedule.

We are aware that, where downwash is of concern, some potential users of AERMOD and ISC–PRIME might find joint application of the two models burdensome. We invite comment on this matter and seek input on alternative approaches that ensure that the latest science is used (as included in both AERMOD and PRIME) for regulatory modeling applications. One alternative considered by AERMIC is the direct inclusion of the PRIME algorithm in AERMOD. This effort, including testing, performance evaluation for the PRIME data bases, and peer scientific review, could take up to 12 months.

Proposed Editorial Changes

Editorial changes are described by affected sections. For a more detailed showing of before/after effects, you are referred to a redline/strikeout version (WordPerfect format) of appendix W that has been posted on our website (www.epa.gov/scram001; see 7th Conference).

Preface

You will note some minor revisions to reflect current EPA practice.

Section 2

In a streamlining effort, we removed section 2.2 and added a new section 2.3 to address model availability.

Section 3

We revised section 3 to more accurately reflect current EPA practice, *e.g.*, functions of the Model

[8] Paine, R.J. and F. Lew, 1997. Results of the Independent Evaluation of ISCST3 and ISC–PRIME. Prepared for the Electric Power Research Institute, Palo Alto, CA. ENSR Document Number 2460–026–440. (NTIS No. PB 98–156524)

[9] Paine, R.J. and F. Lew, 1997. Consequence Analysis for ISC–PRIME. Prepared for the Electric Power Research Institute, Palo Alto, CA. ENSR Document Number 2460–026–450. (NTIS No. PB 98–156516)

[10] Cimorelli, A.J., S.G. Perry, A. Venkatram, J.C. Weil, R.J. Paine, R.B. Wilson, R.F. Lee and W.D. Peters, 1998. AERMOD: Description of Model Formulation. (12/15/98 Draft Document) Prepared for Environmental Protection Agency, Research Triangle Park, NC. 113pp. (Docket No. A–99–05; II–A–1)

[11] Paine, R.J., R.F. Lee, R.W. Brode, R.B. Wilson, A.J. Cimorelli, S.G., Perry, J.C. Weil, A. Venkatram and W.D. Peters, 1998: Model Evaluation Results for AERMOD (12/17/98 Draft). Prepared for Environmental Protection Agency, Research Triangle Park, NC. (Docket No. A–99–05, II–A–5)

[12] Appendix A of appendix W is a repository for preferred, refined air quality models recommended for regulatory applications.

[13] Schulman, L.L., D.G. Strimaitis, and J.S. Scire, 1997. Addendum to ISC3 User's Guide, *The PRIME Plume Rise and Building Downwash Model.* Prepared for the Electric Power Research Institute, Palo Alto, CA., Earth Tech Document A287. A–99–05, II–A–12)

Clearinghouse and enhanced criteria for the use of alternative models.

Section 4

As mentioned earlier, we revised section 4 to present AERMOD, ISC-PRIME, and CALPUFF as regulatory modeling techniques for particular applications. We revised section 4.2.2 to reflect the widespread use of short-term models for all averaging periods. Hence, we no longer reference long-term models (*e.g.,* ISCLT) in the *Guideline.*[14]

Section 5

As mentioned above, we merged pertinent guidance in section 5 (Modeling in Complex Terrain) with that in section 4. With the anticipated widespread use of AERMOD for all terrain types, there is no longer any utility in the previous differentiation between simple and complex terrain for model selection. To further simplify, the list of acceptable, yet equivalent, screening techniques for complex terrain was removed. CTSCREEN and guidance for its use are retained; CTSCREEN remains acceptable for all terrain above stack top. The screening techniques whose descriptions we removed, *i.e.,* Valley (as implemented in SCREEN3), COMPLEX I (as implemented in ISC3), and RTDM remain available for use in applicable cases where established/accepted procedures are used. Consultation with the appropriate Regional Office is still advised for application of these screening models.

Section 6

We revised section 6 (renumbered to section 5) to reflect the new PM–2.5 and ozone ambient air quality standards that were issued on July 18, 1997 (62 FR 38652 & 62 FR 38856). Footnotes have been inserted to provide caveats pertaining to the recent Court decision to remand or vacate parts of these new standards. You will note that we inserted respective subsections for particulate matter and lead from section 7, so that section 5 now primarily contains modeling guidance for the criteria pollutants regulated in Part 51 (SO_2 analyses are covered in section 4).

- We enhanced the subsection on particulate matter as much as possible to reflect the Agency's current thinking on approaches for fine particulates (PM–2.5). You will note that we removed the references to the Climatological Dispersion Model (CDM 2.0) as well as to RAM from this section, and also deleted CDM and RAM from appendix A (see below).
- We enhanced the subsection on ozone to better reflect modeling approaches we currently envision, and added a reference for current guidance on ozone attainment demonstrations.[15] You will note that we removed the reference to the Urban Airshed Model (UAM–IV) from this section, and deleted UAM from appendix A. UAM–IV is no longer the recommended photochemical model for attainment demonstrations for ozone. We believe that it will frequently be necessary to consider the regional scale for such demonstrations and that, since the last revision to appendix W, newer models have become available. We invite comment on the need to integrate ozone and fine particle impacts (*i.e.,* the ''one atmosphere'' approach). Are modeling tools and air program policies sufficiently developed to provide guidance on an integrated approach at this time? We also invite comments on whether specific validated tools have been sufficiently developed to calculate impacts of individual point sources of ozone and PM–2.5 precursor pollutants. Are there any models that can be recommended for source-specific ozone and PM–2.5 assessments?
- We updated the subsection on carbon monoxide by removing reference to RAM. While UAM–IV is deleted from appendix A, reference to areawide analyses is retained. For refined intersection modeling, CAL3QHCR is specifically mentioned for use on a case-by-case basis.
- In the subsection on NO_2 models, we added a third tier for the screening approach that allows the use of the ozone limiting method on a case-by-case basis. You may recall that this approach was removed with the *Guideline* update promulgated on August 9, 1995 (60 FR 40465).
- In the subsection on lead, we deleted references to 40 CFR 51.83, 51.84, and 51.85, conforming to previous EPA action (51 FR 40661).

Section 7

For regional scale modeling, we removed reference to the Regional Oxidant Model (ROM) and the Regional Acid Deposition Model (RADM) from section 7 because they are outdated and replaced by a reference to Models-3 [16] in section 5. We enhanced the subsection on visibility to reflect the provisions of the Clean Air Act, including those for reasonable attribution of visibility impairment and regional haze, as well as the new NAAQS for PM–2.5. For assessment of reasonably attributable haze impairment due to one or a small group of sources, CALPUFF is available for use on a case-by-case basis. We identify REMSAD and new approaches under the Models-3 umbrella for possible use to develop and evaluate national policy and assist State and local control agencies. For long range transport analyses, we present and recommend the CALPUFF modeling system. To facilitate use of a complex air quality and meteorological modeling system like CALPUFF, we stipulate that a written protocol may be considered for developing consensus in the methods and procedures to be followed. Finally, in the subsection on air pathway analyses, we identify the availability of AERMOD and removed specific reference to DEGADIS (other heavy gas models are also available on a case-by-case basis).

Section 8

We revised section 8 (renumbered to section 7) to better reflect our current regulatory practice for the general modeling considerations addressed.

- In subsection 7.2.4, we introduce the atmospheric stability characterization for AERMOD.
- In subsection 7.2.5, we describe the plume rise approaches used by AERMOD and ISC–PRIME.
- We revised subsection 7.2.6 to refer back to subsection 5.2.3 for details on chemical transformation of NO_X.
- We merged subsection 7.2.8 (Urban/Rural Classification) with subsection 7.2.3 (Dispersion Coefficients).
- We merged discussions in subsections 7.2.9 (Fumigation) and 7.2.10 (Stagnation) into one new subsection (Complex Winds), and identify the availability of CALPUFF for certain situations on a case-by-case basis.
- We removed the distinction between short-term and long-term

[14] Note that because Appendix W is designed to guide assessments for criteria pollutants, the proposed discontinuation of ISCLT for purposes herein does not preclude its use for other pollutant assessments, as applicable. For example, the ASPEN model (Assessment System for Population Exposure Nationwide) uses the capabilities of ISCLT to estimate ambient concentrations of toxic pollutants nationwide by census tract. Such applications require the abbreviated computing possible with ISCLT.

[15] Environmental Protection Agency, 1998. Use of Models and Other Analyses in Attainment Demonstrations for the 8-hr Ozone NAAQS (Draft). Office of Air Quality Planning & Standards, Research Triangle Park, NC. (Docket No. A–99–05, II–A–14) (Also available on SCRAM website, www.epa.gov/scram001, as draft8hr.pdf)

[16] Environmental Protection Agency, 1998. EPA Third-Generation Air Quality Modeling System. Models-3, Volume 9b: User Manual. EPA Publication No. EPA–600/R–98/069(b). Office of Research and Development, Washington, D.C.

models because when assessing the impacts from criteria air pollutants, long-term estimates are now practicable using hour-by-hour meteorological data.

Section 9

We renumbered section 9 as section 8 and made the following changes:

• We revised subsection 8.2.3 (recommendations for estimating background concentrations from nearby sources) to reflect a settlement reached on October 16, 1997 in a petition brought by the Utility Air Regulatory Group (UARG). This petition, *Appalachian Power Company et al.* v. *EPA* (D.C. Circuit), No. 93–1631, was filed on November 3, 1993. The plaintiffs challenged the modeling assumptions required for existing point sources and new (or modified) existing point source compliance demonstrations as set forth in tables 9–1 and 9–2 of the *Guideline.* In accordance with the settlement, we are clarifying the definition of ''nearby sources.'' The ''maximum allowable emission limit,'' specified in Tables 8–1 and 8–1 (formerly 9–1 and 9–2), is tied in certain circumstances [17] to the emission rate representative of a nearby source's maximum physical capacity to emit. We are also clarifying that nearby sources should be modeled only when they operate at the same time as the primary source(s) being modeled. Where a nearby source does not, by its nature, operate at the same time as the primary source being modeled, the burden is on the primary source to demonstrate to the satisfaction of the reviewing authority that this is, in fact, the case. We added footnotes to tables 8–1 and 8–2 to refer back to applicable paragraphs of subsection 8.2.3 that provide the necessary clarification.

• We enhanced section 8.3 (Meteorological Input Data) to develop concepts of meteorological data representativeness, minimum meteorological data requirements, and the use of prognostic mesoscale meteorological models in certain situations. These models (*e.g.,* the Penn State/NCAR MM4 [18, 19, 20] or MM5 [21] model) assimilate meteorological data from several surface and upper air stations in or near a domain and generate a 3-dimensional field of wind, temperature and relative humidity profiles. We revised recommendations for length of record for meteorological data (subsection 8.3.1.2) for long-range transport and complex wind situations.

• We revised subsection 8.3.2 (National Weather Service Data) to inform users that National Weather Service (NWS) surface and upper air meteorological data are available on CD–ROM from the National Climatic Data Center. Recent years of such surface data are derived from the NWS's Automated Surface Observing System (ASOS). We invite you to comment on the usefulness of ASOS meteorological data for air quality modeling. More specifically, we invite comment on whether the policy of modeling with the most recent 5 years of NWS meteorological data (section 8.3.1.2) should include ASOS data. We also invite comment on whether the period of record must be the most recent 5 years—regardless of whether it contains ASOS data. Similarly, should the policy to model with the most recent full year of meteorological data (*i.e.,* section 10.2.3.4) include ASOS data?

• We revised subsection 8.3.3.1 to clarify that, while site-specific measurements are frequently made ''on-property '' (*i.e.,* on the source's premises), acquisition of adequately representative site-specific data does not preclude collecting data from a location off property. Conversely, collection of meteorological data on property does not of itself guarantee adequate representativeness. The subsection was also enhanced by improving the discussion of collection of temperature difference measurements; a paragraph was developed that focuses on measurement of aloft winds for simulation of plume rise, dispersion and transport (some details for AERMOD and CTDMPLUS were moved to their respective appendix A descriptions); a paragraph was added to address collection and use of direct turbulence measurements; and the paragraph that discusses meteorological data preprocessor has been enhanced.

• We revised subsection 8.3.3.2 by removing reference to the STAR processing routine because ISCLT and CDM 2.0 (for which STAR formatted data were developed) have been removed.

• We revised subsection 8.3.4 (Treatment of Calms) to increase accuracy and to include information pertaining to AERMOD.

Section 10

We revised section 10 (renumbered section 9) to include AERMOD, ISC–PRIME, and CALPUFF.

Section 11

We propose minor revisions for section 11 (renumbered section 10) to reflect the new ambient air quality standards for fine particles and ozone. Because EPA has retreated from its emissions trading (''bubble'') policy for SO_2, we have deleted subsection 11.2.3.4.

Section 12 & 13

We redesignated section 13 (Bibliography) as section 11 and retained section 12 (References). We revised them by adding some references, deleting obsolete/superseded ones, and resequencing. You will note that peer scientific reviews for AERMOD, CALPUFF and ISC–PRIME have been included.

Section 14

In a streamlining effort, we removed section 14 (Glossary). Given current familiarity with modeling terminology, we no longer consider that maintenance of such a glossary is as necessary as it once may have been. For these and other reasons relating to Office of Federal Register policy (see discussion of appendix B below), we intend to revise the glossary and place it on EPA's Internet SCRAM website.

We invite your comment on any of the changes proposed above (Proposed editorial changes) for appendix W text, including the merging of sections 4 and 5.

Appendix A

We updated the introduction to appendix A (section A.0). As mentioned before, we added AERMOD and CALPUFF to appendix A, and modified the ISC3 description (now, ISC–PRIME) to include the EPRI downwash

[17] See section 8.2.3. of the *Guideline.*

[18] Stauffer, D.R. and Seaman, N.L., 1990. Use of four-dimensional data assimilation in a limited-area mesoscale model. Part I: Experiments with synoptic-scal data. *Monthly Weather Review,* 118:1250–1277.

[19] Stauffer, D.R., Seaman, N.L., and Binkowski, F.S., 1991. Use of four-dimensional data assimilation in a limited-area mesoscale model. Part II: Effect of data assimilation within the planetary boundary layer. *Monthly Weather Review,* 119: 734–754.

[20] Hourly Modeled Sounding Data. MM4—1990 Meteorological Data, 12-volume CD–ROM. Jointly produced by NOAA's National Climatic Data Center and Atmospheric Sciences Modeling Division. August 1995. Can be ordered from NOAA National Data Center's Internet website @ WWW.NNDC.NOAA.GOV/.

[21] www.mmm.ucar.edu/mm5/mm5-home.html

algorithm. We propose removing the Climatological Dispersion Model (CDM 2.0), the Gaussian-Plume Multiple Source Air Quality Algorithm (RAM), and the Urban Airshed Model (UAM) from appendix A. These models have been superseded and are no longer considered preferred techniques.

In the mid-1980s, the Federal Aviation Administration (FAA) developed the Emissions and Dispersion Modeling System (EDMS) to assess the air quality of proposed airport development projects by. In response to the growing needs of the air quality analysis community and changes in regulations (*e.g.,* conformity requirements from the Clean Air Act Amendment of 1990), FAA updated EDMS to version 3.1. Accordingly, we included a revised summary description for EDMS in appendix A. The emissions module of EDMS 3.1 includes input and methodology enhancements. The dispersion module of EDMS 3.1 also has improved and has been refined to incorporate code from two EPA dispersion models: PAL2 and CALINE3. The dispersion module also has been revised to allow the user greater flexibility in specifying inputs such as dispersion settings and coefficients, hourly operational profiles for aircraft queues, and meteorological data. EDMS 3.1 features provide greater resolution in defining emissions and dispersion concentrations, and have the potential to increase or decrease the results, depending on the individual scenario. EDMS has never been subjected to performance evaluation, and no studies of its performance have been cited. We invite comment on whether this compromises its viability as a recommended/preferred model for assessing airport impacts on air quality. We also invite suggestions as to how this deficiency can be addressed.

Appendix B: To Be Moved to Website (www.epa.gov/scram001)

Appendix B of the *Guideline* has been a repository for over 20 alternate models to be used with case-by-case justification. These models have not necessarily been the subject of any performance evaluation, and their inclusion in appendix B does not mean the Agency sanctions their use. They are listed for convenience, and have been used in few regulatory applications. Production and maintenance of the appendix B information currently in CFR text presents a real burden to EPA. Accordingly, we propose to move the appendix B repository of alternate model summary descriptions to our Internet SCRAM website (www.epa.gov/scram001). Placement of this material on the website offers many advantages. In this format, we will be able to maintain the list and model descriptions more easily and inexpensively. We could, for example, routinely make revisions on a nominally annual basis, whereas the current system imposes a nominally 3-year cycle for such revisions. Model developers could list their own website address for users to obtain more information. We invite your comments on the proposed movement of the list of alternative model descriptions to our website.

Several model developers have submitted new dispersion models for inclusion in this website repository of alternate models:

- Second-Order Closure Integrated Puff Model (SCIPUFF);
- Open Burn/Open Detonation Dispersion Model (OBODM);
- Atmospheric Dispersion Modeling System (ADMS); and
- Comprehensive Air Quality Model with extensions (CAMx).

As described below, codes for these models, as well as applicable documentation, have been uploaded to our Internet SCRAM website for your review. We have included summary descriptions in docket no. A–99–05 for your review and comment. Finally, we propose deleting a model currently listed in appendix B, MESOPUFF II, which CALPUFF replaces.

Appendix C

We also propose removing appendix C (Example Air Quality Analysis Checklist) from the CFR. We believe this checklist is outdated, in need of revision, and would be more practical to maintain if posted on EPA's Internet SCRAM website (as is our intention for appendix B).

Availability of Related Information

Our Air Quality Modeling Group maintains an Internet website (Support Center for Regulatory Air Models—SCRAM) at: www.epa.gov/scram001. You may find codes and documentation for models proposed for adoption in today's action on the SCRAM website. In addition, we have uploaded various support documents (*e.g.,* evaluation reports) that are now available for review.

Administrative Requirements

A. Executive Order 12866

Under Executive Order 12866 [58 FR 51735 (October 4, 1993)], the Agency must determine whether the regulatory action is ''significant'' and therefore subject to review by the Office of Management and Budget (OMB) and the requirements of the Executive Order. The Order defines ''significant regulatory action'' as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs of the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Order.

This rule is not a ''significant regulatory action'' under the terms of Executive Order 12866 and is therefore not subject to OMB review.

B. Paperwork Reduction Act

This proposed rule does not contain any information collection requirements subject to review by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*

C. Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 et seq.

The RFA generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's rule on small entities, small entity is defined as: (1) A small business that meets the RFA default definitions for small business (based on Small Business Administration size standards), as described in 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

We do not anticipate that today's proposal will have any impacts on small entities, because existing and new sources of air emissions that model air

quality for State Implementation Plans and the prevention of significant deterioration are typically not small entities. The modeling techniques described today are primarily used by state air control agencies and by industry.

To the extent that any small entities would ever have to model air quality using the modeling techniques described in today's proposal, the impacts of using updated modeling techniques would be minimal, if not non-existent. The action proposed today incorporates comments received at the 6th Conference on Air Quality Modeling in August 1995 in Washington, D.C. The proposal features several new modeling systems and serves to increase efficiency and accuracy. These systems employ procedural concepts that are very similar to those currently used, changing only mathematical formulations and specific data elements. Any impact on small entities would mainly be ascribed to the proposed use of AERMOD, which will replace ISC3. Computer run times for AERMOD may be longer than those for ISC3, owing to AERMOD's increased sophistication so that more time may be involved in preparing input data using AERMOD's preprocessors (AERMET and AERMAP) relative to an ISC3 run. However, this is more than compensated by AERMOD's capability to treat simple and complex terrain problems in one model, which actually affords a timesaving advantage. Moreover, we designed AERMOD's output formats to mimic those of ISC3, thus easing interpretation of results. Therefore, we do not believe that AERMOD's use poses a significant or unreasonable burden on any small entities. The proposed action imposes no new regulatory burdens and, as such, there will be no additional impact on small entities regarding reporting, recordkeeping, compliance requirements.

After considering the economic impacts of today's proposed rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities.

D. Executive Order 13132 (Federalism)

Executive Order 13132, entitled ''Federalism '' (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' is defined in the Executive Order to include regulations that 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.''

Under Section 6 of Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has federalism implications and that preempts State law, unless the Agency consults with State and local officials early in the process of developing the proposed regulation.

This proposed rule 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, as specified in Executive Order 13132. This rule does not create a mandate on State, local or tribal governments. The rule does not impose any enforceable duties on these entities. The proposal would add better, more accurate techniques for air dispersion modeling analyses and does not impose any additional requirements for any of the affected parties covered under Executive Order 13132. Thus, the requirements of section 6 of the Executive Order do not apply to this rule.

E. Executive Order 13084: Consultation and Coordination With Indian Tribal Governments

Under Executive Order 13084, EPA may not issue a regulation that is not required by statute, that significantly or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the tribal governments, or EPA consults with those governments. If EPA complies by consulting, Executive Order 13084 requires EPA to provide to the Office of Management and Budget, in a separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected officials and other representatives of Indian tribal governments ''to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities.''

Today's proposed rule does not significantly or uniquely affect the communities of Indian tribal governments. As stated above with respect to Executive Order 12875, the proposal does not impose any additional requirements for the regulated community, including Indian Tribal Governments. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

F. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

Executive Order 13045 applies to any rule that EPA determines (1) to be ''economically significant '' as defined under Executive Order 12866, and (2) the environmental health or safety risk addressed by the rule has a disproportionate effect on children. If the regulatory action meets both the criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children; and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This proposed rule is not subject to Executive Order 13045, entitled ''Protection of Children from Environmental Health Risks and Safety Risks '' (62 FR 19885, April 23, 1997) because it does not an economically significant regulatory action as defined by Executive Order 12866 and the action does not involve decisions on environmental health or safety risks that may disproportionately affect children.

G. 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, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with ''Federal mandates'' that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of $100 million or more in any one year. Before

promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan.

The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

Today's rule contains no Federal mandates (under the regulatory provisions of Title II of the UMRA) for State, local, or tribal governments or the private sector.

List of Subjects in 40 CFR Part 51

Environmental protection, Administrative practice and procedure, Air pollution control, Carbon monoxide, Intergovernmental relations, Nitrogen oxides, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides.

Dated: February 8, 2000.

Carol M. Browner,

Administrator.

Part 51, chapter I, title 40 of the Code of Federal Regulations is proposed to be amended as follows:

PART 51—REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS

1. The authority citation for part 51 continues to read as follows:

Authority: 42 U.S.C. 7410, 7414, 7421, 7470–7479, 7491, 7492, 7601, and 7602.

2. Appendix W to Part 51 is revised to read as follows:

Appendix W to Part 51—Guideline on Air Quality Models

Preface

a. Industry and control agencies have long expressed a need for consistency in the application of air quality models for regulatory purposes. In the 1977 Clean Air Act, Congress mandated such consistency and encouraged the standardization of model applications. The Guideline on Air Quality Models (hereafter, Guideline) was first published in April 1978 to satisfy these requirements by specifying models and providing guidance for their use. The Guideline provides a common basis for estimating the air quality concentrations of criteria pollutants used in assessing control strategies and developing emission limits.

b. The continuing development of new air quality models in response to regulatory requirements and the expanded requirements for models to cover even more complex problems have emphasized the need for periodic review and update of guidance on these techniques. Three primary on-going activities provide direct input to revisions of the Guideline. The first is a series of annual EPA workshops conducted for the purpose of ensuring consistency and providing clarification in the application of models. The second activity is the solicitation and review of new models from the technical and user community. In the March 27, 1980 **Federal Register**, a procedure was outlined for the submittal to EPA of privately developed models. After extensive evaluation and scientific review, these models, as well as those made available by EPA, are considered for recognition in the Guideline. The third activity is the extensive on-going research efforts by EPA and others in air quality and meteorological modeling.

c. Based primarily on these three activities, new sections and topics are included as needed. EPA does not make changes to the guidance on a predetermined schedule, but rather on an as needed basis. EPA believes that revisions of the Guideline should be timely and responsive to user needs and should involve public participation to the greatest possible extent. All future changes to the guidance will be proposed and finalized in the **Federal Register**. Information on the current status of modeling guidance can always be obtained from EPA's Regional Offices.

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1.0 Introduction

a. The Guideline recommends air quality modeling techniques that should be applied to State Implementation Plan (SIP) revisions for existing sources and to new source reviews, including prevention of significant deterioration (PSD).[1, 2, 3] Applicable only to criteria air pollutants, it is intended for use by EPA Regional Offices in judging the adequacy of modeling analyses performed by EPA, State and local agencies and by industry. The guidance is appropriate for use by other Federal agencies and by State agencies with air quality and land management responsibilities. The Guideline serves to identify, for all interested parties, those techniques and data bases EPA considers acceptable. The Guideline is not intended to be a compendium of modeling techniques. Rather, it should serve as a common measure of acceptable technical analysis when supported by sound scientific judgement.

b. Due to limitations in the spatial and temporal coverage of air quality measurements, monitoring data normally are not sufficient as the sole basis for demonstrating the adequacy of emission limits for existing sources. Also, the impacts of new sources that do not yet exist can only be determined through modeling. Thus, models, while uniquely filling one program need, have become a primary analytical tool in most air quality assessments. Air quality measurements can be used in a complementary manner to dispersion models, with due regard for the strengths and weaknesses of both analysis techniques. Measurements are particularly useful in assessing the accuracy of model estimates. The use of air quality measurements alone however could be preferable, as detailed in a later section of this document, when models are found to be unacceptable and monitoring data with sufficient spatial and temporal coverage are available.

c. It would be advantageous to categorize the various regulatory programs and to apply a designated model to each proposed source needing analysis under a given program. However, the diversity of the nation's topography and climate, and variations in source configurations and operating characteristics dictate against a strict modeling ''cookbook.'' There is no one model capable of properly addressing all conceivable situations even within a broad category such as point sources. Meteorological phenomena associated with threats to air quality standards are rarely amenable to a single mathematical treatment; thus, case-by-case analysis and judgement are frequently required. As modeling efforts become more complex, it is increasingly important that they be directed by highly competent individuals with a broad range of experience and knowledge in air quality meteorology. Further, they should be coordinated closely with specialists in emissions characteristics, air monitoring and data processing. The judgement of experienced meteorologists and analysts is essential.

d. The model that most accurately estimates concentrations in the area of interest is always sought. However, it is clear from the needs expressed by the States and EPA Regional Offices, by many industries and trade associations, and also by the deliberations of Congress, that consistency in the selection and application of models and data bases should also be sought, even in case-by-case analyses. Consistency ensures that air quality control agencies and the general public have a common basis for estimating pollutant concentrations, assessing control strategies and specifying emission limits. Such consistency is not, however, promoted at the expense of model and data base accuracy. The Guideline provides a consistent basis for selection of the most accurate models and data bases for use in air quality assessments.

e. Recommendations are made in the Guideline concerning air quality models, data bases, requirements for concentration estimates, the use of measured data in lieu of model estimates, and model evaluation procedures. Models are identified for some specific applications. The guidance provided here should be followed in air quality analyses relative to State Implementation Plans and in supporting analyses required by EPA, State and local agency air programs. EPA may approve the use of another technique that can be demonstrated to be more appropriate than those recommended in this guide. This is discussed at greater length in Section 3.0. In all cases, the model applied to a given situation should be the one that provides the most accurate representation of atmospheric transport, dispersion, and chemical transformations in the area of interest. However, to ensure consistency, deviations from this guide should be carefully documented and fully supported.

f. From time to time situations arise requiring clarification of the intent of the guidance on a specific topic. Periodic workshops are held with the headquarters, Regional Office, State, and local agency modeling representatives to ensure consistency in modeling guidance and to promote the use of more accurate air quality models and data bases. The workshops serve to provide further explanations of Guideline requirements to the Regional Offices and workshop reports are issued with this clarifying information. In addition, findings from on-going research programs, new model submittals, or results from model evaluations and applications are continuously evaluated. Based on this information changes in the guidance may be indicated.

g. All changes to the Guideline must follow rulemaking requirements since the Guideline is codified in Appendix W of Part 51. EPA will promulgate proposed and final rules in the **Federal Register** to amend this Appendix. Ample opportunity for public comment will be provided for each proposed change and public hearings scheduled if requested.

h. A wide range of topics on modeling and data bases are discussed in the Guideline. Chapter 2 gives an overview of models and their appropriate use. Chapter 3 provides specific guidance on the use of ''preferred'' air quality models and on the selection of alternative techniques. Chapters 4 through 6 provide recommendations on modeling techniques for application to simple-terrain stationary source problems, complex terrain problems, and mobile source problems. Specific modeling requirements for selected regulatory issues are also addressed. Chapter 7 discusses issues common to many modeling analyses, including acceptable model components. Chapter 8 makes recommendations for data inputs to models including source, meteorological and background air quality data. Chapter 9 covers the uncertainty in model estimates and how that information can be useful to the regulatory decision-maker. The last chapter summarizes how estimates and measurements of air quality are used in assessing source impact and in evaluating control strategies.

i. Appendix W to 40 CFR Part 51 itself contains an appendix: Appendix A. Thus, when reference is made to ''Appendix A'' in this document, it refers to Appendix A to Appendix W to 40 CFR Part 51. Appendix A contains summaries of refined air quality models that are ''preferred'' for specific applications; both EPA models and models developed by others are included.

2.0 Overview of Model Use

a. Before attempting to implement the guidance contained in this document, the reader should be aware of certain general information concerning air quality models and their use. Such information is provided in this section.

2.1 Suitability of Models

a. The extent to which a specific air quality model is suitable for the evaluation of source impact depends upon several factors. These include: (1) The meteorological and topographic complexities of the area; (2) the level of detail and accuracy needed for the analysis; (3) the technical competence of those undertaking such simulation modeling; (4) the resources available; and (5) the detail and accuracy of the data base, *i.e.*, emissions inventory, meteorological data, and air quality data. Appropriate data should be available before any attempt is made to apply a model. A model that requires detailed, precise, input data should not be used when such data are unavailable. However, assuming the data are adequate, the greater the detail with which a model considers the spatial and temporal variations in emissions and meteorological conditions, the greater the ability to evaluate the source impact and to distinguish the effects of various control strategies.

b. Air quality models have been applied with the most accuracy, or the least degree of uncertainty, to simulations of long term averages in areas with relatively simple topography. Areas subject to major topographic influences experience meteorological complexities that are extremely difficult to simulate. Although models are available for such circumstances, they are frequently site specific and resource intensive. In the absence of a model capable of simulating such complexities, only a preliminary approximation may be feasible until such time as better models and data bases become available.

c. Models are highly specialized tools. Competent and experienced personnel are an essential prerequisite to the successful application of simulation models. The need for specialists is critical when the more sophisticated models are used or the area being investigated has complicated meteorological or topographic features. A model applied improperly, or with inappropriate data, can lead to serious misjudgements regarding the source impact or the effectiveness of a control strategy.

d. The resource demands generated by use of air quality models vary widely depending on the specific application. The resources required depend on the nature of the model and its complexity, the detail of the data base, the difficulty of the application, and the amount and level of expertise required. The costs of manpower and computational facilities may also be important factors in the selection and use of a model for a specific analysis. However, it should be recognized that under some sets of physical circumstances and accuracy requirements, no present model may be appropriate. Thus, consideration of these factors should lead to selection of an appropriate model.

2.2 Levels of Sophistication of Models

a. There are two levels of sophistication of models. The first level consists of relatively simple estimation techniques that generally use preset, worst-case meteorological conditions to provide conservative estimates of the air quality impact of a specific source, or source category. These are called screening techniques or screening models. The purpose of such techniques is to eliminate the need of more detailed modeling for those sources that clearly will not cause or contribute to ambient concentrations in excess of either the National Ambient Air Quality Standards (NAAQS)[4] or the allowable prevention of significant deterioration (PSD) concentration increments.[2 3] If a screening technique indicates that the concentration contributed by the source exceeds the PSD increment or the increment remaining to just meet the NAAQS, then the second level of more sophisticated models should be applied.

b. The second level consists of those analytical techniques that provide more detailed treatment of physical and chemical atmospheric processes, require more detailed and precise input data, and provide more specialized concentration estimates. As a result they provide a more refined and, at least theoretically, a more accurate estimate of source impact and the effectiveness of control strategies. These are referred to as refined models.

c. The use of screening techniques followed, as appropriate, by a more refined analysis is always desirable, however there are situations where the screening techniques are practically and technically the only viable option for estimating source impact. In such cases, an attempt should be made to acquire or improve the necessary data bases and to develop appropriate analytical techniques.

2.3 Availability of Models

a. For most of the screening and refined models discussed in the Guideline, codes, associated documentation and other useful information are available for download from EPA's Support Center for Regulatory Air Modeling (SCRAM) Internet website at *www.epa.gov/scram001.* A list of alternate models that can be used with case-by-case justification (Section 3.2), a glossary of terms, and an example air quality analysis checklist are also posted on this website. This is a site with which modelers should become familiar.

3.0 Recommended Air Quality Models

a. This section recommends refined modeling techniques that are preferred for use in regulatory air quality programs. The status of models developed by EPA, as well as those submitted to EPA for review and possible inclusion in this guidance, is discussed. The section also addresses the selection of models for individual cases and provides recommendations for situations where the preferred models are not applicable. Two additional sources of modeling guidance are the Model Clearinghouse[5] and periodic Regional/State/Local Modelers workshops.

b. In all regulatory analyses, especially if other than preferred models are selected for use, early discussions among Regional Office staff, State and local control agencies, industry representatives, and where appropriate, the Federal Land Manager, are invaluable and are encouraged. Agreement on the data base(s) to be used, modeling techniques to be applied and the overall technical approach, prior to the actual analyses, helps avoid misunderstandings concerning the final results and may reduce the later need for additional analyses. The use of an air quality analysis checklist, such as is posted on EPA's Internet SCRAM website (Section 2.3), and the preparation of a written protocol help to keep misunderstandings at a minimum.

c. It should not be construed that the preferred models identified here are to be permanently used to the exclusion of all others or that they are the only models available for relating emissions to air quality. The model that most accurately estimates concentrations in the area of interest is always sought. However, designation of specific models is needed to promote consistency in model selection and application.

d. The 1980 solicitation of new or different models from the technical community[6] and the program whereby these models were evaluated, established a means by which new models are identified, reviewed and made available in the Guideline. There is a pressing need for the development of models for a wide range of regulatory applications. Refined models that more realistically simulate the physical and chemical process in the atmosphere and that more reliably estimate pollutant concentrations are needed. Thus, the solicitation of models is considered to be continuous.

3.1 Preferred Modeling Techniques

3.1.1 Discussion

a. EPA has developed models suitable for regulatory application. Other models have been submitted by private developers for possible inclusion in the Guideline. These refined models have undergone evaluation exercises[7 8 9 10 11 12 13 14 15 16] that include statistical measures of model performance in comparison with measured air quality data as suggested by the American Meteorological Society[17] and, where possible, peer scientific reviews.[18 19 20 21 22 23 24]

b. When a single model is found to perform better than others, it is recommended for application as a preferred model and listed in Appendix A. If no one model is found to clearly perform better through the evaluation exercise, then the preferred model listed in Appendix A is selected on the basis of other factors such as past use, public familiarity, cost or resource requirements, and availability. No further evaluation of a preferred model is required for a particular application if the EPA recommendations for regulatory use specified for the model in the Guideline are followed. Alternative models to those listed in Appendix A should generally be compared with measured air quality data when they are used for regulatory applications consistent with recommendations in Section 3.2.

c. The solicitation of new refined models which are based on sounder scientific principles and which more reliably estimate pollutant concentrations is considered by EPA to be continuous. Models that are submitted in accordance with the established provisions will be evaluated as submitted. These requirements are:

i. The model must be computerized and functioning in a common computer code suitable for use on a variety of computer systems.

ii. The model must be documented in a user's guide which identifies the mathematics of the model, data requirements and program operating characteristics at a level of detail comparable to that available for currently recommended models.

iii. The model must be accompanied by a complete test data set including input parameters and output results. The test data must be included in the user's guide as well as provided in computer-readable form.

iv. The model must be useful to typical users, e.g., State air pollution control agencies, for specific air quality control problems. Such users should be able to operate the computer program(s) from available documentation.

v. The model documentation must include a comparison with air quality data (and/or tracer measurements) or with other well-established analytical techniques.

vi. The developer must be willing to make the model available to users at reasonable cost or make it available for public access

through the Internet or National Technical Information Service: The model cannot be proprietary.

d. The evaluation process will include a determination of technical merit, in accordance with the above six items including the practicality of the model for use in ongoing regulatory programs. Each model will also be subjected to a performance evaluation for an appropriate data base and to a peer scientific review. Models for wide use (not just an isolated case) That are found to perform better will be proposed for inclusion as preferred models in future Guideline revisions.

3.1.2 Recommendations

a. Appendix A identifies refined models that are preferred for use in regulatory applications. If a model is required for a particular application, the user should select a model from that appendix. These models may be used without a formal demonstration of applicability as long as they are used as indicated in each model summary of Appendix A. Further recommendations for the application of these models to specific source problems are found in subsequent sections of the Guideline.

b. If changes are made to a preferred model without affecting the concentration estimates, the preferred status of the model is unchanged. Examples of modifications that do not affect concentrations are those made to enable use of a different computer or those that affect only the format or averaging time of the model results. However, when any changes are made, the Regional Administrator should require a test case example to demonstrate that the concentration estimates are not affected.

c. A preferred model should be operated with the options listed in Appendix A as ''Recommendations for Regulatory Use.'' If other options are exercised, the model is no longer ''preferred.'' Any other modification to a preferred model that would result in a change in the concentration estimates likewise alters its status as a preferred model. Use of the model must then be justified on a case-by-case basis.

3.2 Use of Alternative Models

3.2.1 Discussion

a. Selection of the best techniques for each individual air quality analysis is always encouraged, but the selection should be done in a consistent manner. A simple listing of models in this guide cannot alone achieve that consistency nor can it necessarily provide the best model for all possible situations. EPA reports [25 26] are available to assist in developing a consistent approach when justifying the use of other than the preferred modeling techniques recommended in the Guideline. Reference [27] contains advanced statistical techniques for determining which model performs better than other competing models. In many cases, this protocol should be considered preferentially to the material in Chapter 3 of reference 25. The procedures in these documents provide a general framework for objective decision-making on the acceptability of an alternative model for a given regulatory application. The documents contain procedures for conducting both the technical evaluation of the model and the field test or performance evaluation.

b. This section discusses the use of alternate modeling techniques and defines three situations when alternative models may be used.

3.2.2 Recommendations

a. Determination of acceptability of a model is a Regional Office responsibility. Where the Regional Administrator finds that an alternative model is more appropriate than a preferred model, that model may be used subject to the recommendations below. This finding will normally result from a determination that (1) a preferred air quality model is not appropriate for the particular application; or (2) a more appropriate model or analytical procedure is available and applicable.

b. An alternative model should be evaluated from both a theoretical and a performance perspective before it is selected for use. There are three separate conditions under which such a model may normally be approved for use: (1) if a demonstration can be made that the model produces concentration estimates equivalent to the estimates obtained using a preferred model; (2) if a statistical performance evaluation has been conducted using measured air quality data and the results of that evaluation indicate the alternative model performs better for the given application than a comparable model in Appendix A; or (3) if the preferred model is less appropriate for the specific application, or there is no preferred model. Any one of these three separate conditions may make use of an alternative model acceptable. Some known alternative models that are applicable for selected situations are listed on EPA's SCRAM Internet website (Section 2.3). However, inclusion there does not confer any unique status relative to other alternative models that are being or will be developed in the future.

c. Equivalency, condition (1) in paragraph 3.2.2b, is established by demonstrating that the maximum or highest, second highest concentrations are within 2 percent of the estimates obtained from the preferred model. The option to show equivalency is intended as a simple demonstration of acceptability for an alternative model that is so nearly identical (or contains options that can make it identical) to a preferred model that it can be treated for practical purposes as the preferred model. Two percent was selected as the basis for equivalency since it is a rough approximation of the fraction that PSD Class I increments are of the NAAQS for SO_2, *i.e.*, the difference in concentrations that is judged to be significant. However, notwithstanding this demonstration, models that are not equivalent may be used when one of the two other conditions identified below are satisfied.

d. For condition (2) in paragraph 3.2.2 b, the procedures and techniques for determining the acceptability of a model for an individual case based on superior performance are contained in references 25–27 and should be followed, as appropriate. Preparation and implementation of an evaluation protocol which is acceptable to both control agencies and regulated industry is an important element in such an evaluation.

e. Finally, for condition (3) in paragraph 3.2.2b, an alternative refined model may be used provided that:

i. The model has received a scientific peer review;

ii. The model can be demonstrated to be applicable to the problem on a theoretical basis;

iii. The data bases which are necessary to perform the analysis are available and adequate;

iv. Appropriate performance evaluations of the model have shown that the model is not biased toward underestimates; and

v. A protocol on methods and procedures to be followed has been established.

3.3 Availability of Supplementary Modeling Guidance

a. The Regional Administrator has the authority to select models that are appropriate for use in a given situation. However, there is a need for assistance and guidance in the selection process so that fairness and consistency in modeling decisions is fostered among the various Regional Offices and the States. To satisfy that need, EPA established the Model Clearinghouse [5] and also holds periodic workshops with headquarters, Regional Office, State, and local agency modeling representatives.

b. The Regional Office should always be consulted for information and guidance concerning modeling methods and interpretations of modeling guidance, and to ensure that the air quality model user has available the latest most up-to-date policy and procedures. As appropriate, the Regional Office may request assistance from the Model Clearinghouse after an initial evaluation and decision has been reached concerning the application of a model, analytical technique or data base in a particular regulatory action.

4.0 Traditional Stationary Source Models

4.1 Discussion

a. Guidance in this section applies to modeling analyses for which the predominant meteorological conditions that control the design concentration are steady state and for which the transport distances are nominally 50km or less. The models recommended in this section are generally used in the air quality impact analysis of stationary sources for most criteria pollutants. The averaging time of the concentration estimates produced by these models ranges from 1 hour to an annual average.

b. Simple terrain, as used here, is considered to be an area where terrain features are all lower in elevation than the top of the stack of the source(s) in question. Complex terrain is defined as terrain exceeding the height of the stack being modeled.

c. In the early 1980s, model evaluation exercises were conducted to determine the ''best, most appropriate point source model'' for use in simple terrain.[8 18] No one model was found to be clearly superior, and, based on past use, public familiarity, and

availability, ISC (predecessor to ISC3 [28]) became the recommended model for a wide range of regulatory applications. Other refined models which also employed the basic Gaussian kernel, i.e., BLP, CALINE3, OCD, and EDMS, were developed for specialized applications (Appendix A).

d. Encouraged by the development of pragmatic methods for better characterization of plume dispersion [29 30 31 32], the AMS/EPA Regulatory Model Improvement Committee (AERMIC) developed AERMOD [33]. AERMOD employs state-of-practice parameterizations for characterizing the meteorological influences and dispersion. The model utilizes a probability density function (pdf) and the superposition of several Gaussian plumes to characterize the distinctly non-Gaussian nature of the vertical pollutant distribution for elevated plumes during convective conditions; otherwise the distribution is Gaussian. Also, nighttime urban boundary layers (and plumes within them) have the turbulence enhanced by AERMOD to simulate the influence of the urban heat island. AERMOD has been evaluated using a variety of data sets and has been found to perform better than ISC3 for many applications, and as well or better than CTDMPLUS for several complex terrain data sets (Section A.1; subsection n). Currently, AERMOD does not contain algorithms for dry deposition.

e. A new building downwash algorithm was developed and tested within the ISC3 construct, ISC–PRIME,[24] which is in Appendix A. ISC–PRIME has been evaluated using a variety of data sets and has been found to perform better than ISC3 (Section A.7; subsection n). ISC–PRIME retains the dry deposition inherent in ISC3.

4.2 Recommendations

4.2.1 Screening Techniques

4.2.1.1 Simple Terrain

a. Where a preliminary or conservative estimate is desired, point source screening techniques are an acceptable approach to air quality analyses. EPA has published guidance for screening procedures,[34] and a computerized version of the recommended screening technique, SCREEN, is available.[35]

b. All screening procedures should be adjusted to the site and problem at hand. Close attention should be paid to whether the area should be classified urban or rural in accordance with Section 7.2.3. The climatology of the area should be studied to help define the worst-case meteorological conditions. Agreement should be reached between the model user and the reviewing authority on the choice of the screening model for each analysis, and on the input data as well as the ultimate use of the results.

4.2.1.2 Complex Terrain

a. CTSCREEN [36] can be used to obtain conservative, yet realistic, worst-case estimates for receptors located on terrain above stack height. CTSCREEN accounts for the three-dimensional nature of plume and terrain interaction and requires detailed terrain data representative of the modeling domain. The model description and user's instructions are contained in the user's guide.[36] The terrain data must be digitized in the same manner as for CTDMPLUS and a terrain processor is available.[37] A discussion of the model's performance characteristics is provided in a technical paper.[38] CTSCREEN is designed to execute a fixed matrix of meteorological values for wind speed (u), standard deviation of horizontal and vertical wind speeds (σ_v, σ_w), vertical potential temperature gradient ($d\theta/dz$), friction velocity (u_*), Monin-Obukhov length (L), mixing height (z_i) as a function of terrain height, and wind directions for both neutral/stable conditions and unstable convective conditions. Table 4–1 contains the matrix of meteorological variables that is used for each CTSCREEN analysis. There are 96 combinations, including exceptions, for each wind direction for the neutral/stable case, and 108 combinations for the unstable case. The specification of wind direction, however, is handled internally, based on the source and terrain geometry. Although CTSCREEN is designed to address a single source scenario, there are a number of options that can be selected on a case-by-case basis to address multi-source situations. However, the Regional Office should be consulted, and concurrence obtained, on the protocol for modeling multiple sources with CTSCREEN to ensure that the worst case is identified and assessed. The maximum concentration output from CTSCREEN represents a worst-case 1-hour concentration. Time-scaling factors of 0.7 for 3-hour, 0.15 for 24-hour and 0.03 for annual concentration averages are applied internally by CTSCREEN to the highest 1-hour concentration calculated by the model.

b. Placement of receptors requires very careful attention when modeling in complex terrain. Often the highest concentrations are predicted to occur under very stable conditions, when the plume is near, or impinges on, the terrain. The plume under such conditions may be quite narrow in the vertical, so that even relatively small changes in a receptor's location may substantially affect the predicted concentration. Receptors within about a kilometer of the source may be even more sensitive to location. Thus, a dense array of receptors may be required in some cases. In order to avoid excessively large computer runs due to such a large array of receptors, it is often desirable to model the area twice. The first model run would use a moderate number of receptors carefully located over the area of interest. The second model run would use a more dense array of receptors in areas showing potential for high concentrations, as indicated by the results of the first model run.

c. As mentioned above, digitized contour data must be preprocessed [37] to provide hill shape parameters in suitable input format. The user then supplies receptors either through an interactive program that is part of the model or directly, by using a text editor; using both methods to select receptors will generally be necessary to assure that the maximum concentrations are estimated by either model. In cases where a terrain feature may ''appear to the plume'' as smaller, multiple hills, it may be necessary to model the terrain both as a single feature and as multiple hills to determine design concentrations.

d. Other screening techniques [28 35 39] may be acceptable for complex terrain cases where established procedures are used. The user is encouraged to confer with the Regional Office if any unresolvable problems are encountered, *e.g.,* applicability, meteorological data, receptor siting, or terrain contour processing issues.

4.2.2 Refined Analytical Techniques

a. A brief description of each preferred model for refined applications is found in Appendix A. Also listed in that appendix are availability, the model input requirements, the standard options that should be selected when running the program, and output options.

b. For a wide range of regulatory applications in all types of terrain, the recommended model is AERMOD. This recommendation is based on extensive developmental and performance evaluation (Section A.1; subsection n). Differentiation of simple versus complex terrain is unnecessary with AERMOD. In complex terrain, AERMOD employs the well-known dividing-streamline concept in a simplified simulation of the effects of plume-terrain interactions.

c. If dry deposition or aerodynamic building downwash is important for the modeling analysis, *e.g.,* paragraphs 5.2.2.2(e), 5.2.5(b), 6.2.2(b), and 7.2.7(b), the recommended model is ISC–PRIME. Line sources can be simulated with ISC–PRIME if point or volume sources are appropriately combined. If buoyant plume rise from line sources is important for the modeling analysis, the recommended model is BLP. For other special modeling applications, CALINE3 (or CAL3QHCR on a case-by-case basis), OCD, and EDMS are recommended as described in Sections 5 and 6.

d. If the modeling application involves a well defined hill or ridge and a detailed dispersion analysis of the spatial pattern of plume impacts is of interest, CTDMPLUS, listed in Appendix A, is available. CDTMPLUS provides greater resolution of concentrations about the contour of the hill feature than does AERMOD through a different plume-terrain interaction algorithm.

TABLE 4–1A.—NEUTRAL/STABLE METEOROLOGICAL MATRIX FOR CTSCREEN

Variable:	Specific values				
$U_{\wedge}$(m/s)	1.0	2.0	3.0	4.0	5.0
σ_v(m/s)	0.3	0.75	.....	.....	.....
σ_w(m/s)	0.08	0.15	0.30	0.75	.....
$\Delta\theta/\Delta z$ (K/m)	0.01	0.02	0.035	.....	.....
WD	(Wind direction is optimized internally for each meteorological combination.)				

Exceptions:
(1) If $U \leq 2$ m/s and $\sigma_v \leq 0.3$ m/s, then include $\sigma_w = 0.04$ m/s.
(2) If $\sigma_w = 0.75$ m/s and $U \geq 3.0$ m/s, then $\Delta\theta/\Delta z$ is limited to ≤ 0.01 K/m.
(3) If $U \geq 4$ m/s, then $\sigma_w \geq 0.15$ m/s.
(4) $\sigma_w \leq \sigma_V$

TABLE 4–1B.—UNSTABLE/CONVECTIVE METEOROLOGICAL MATRIX FOR CTSCREEN

Variable:	Specific values				
U (m/s)	1.0	2.0	3.0	4.0	5.0
U_* (m/s)	0.1	0.3	0.5	.....	.....
L (m)	−10	−50	−90	.....	.....
$\Delta\theta/\Delta z$ (K/m)	0.030	(potential temperature gradient above Z_i)			
Z_i (m)	0.5h	1.0h	1.5h	h= terrain height)	

5.0 Models for Ozone, Particulate Matter, Carbon Monoxide, Nitrogen Dioxide, and Lead

5.1 Discussion

a. This section identifies modeling approaches or models appropriate for addressing ozone (O_3),[a] carbon monoxide (CO), nitrogen dioxide (NO_2), particulates (PM–2.5 and PM–10),[b, c] and lead. These pollutants are often associated with emissions from numerous sources. Generally, mobile sources contribute significantly to emissions of these pollutants or their precursors. For cases where it is of interest to estimate concentrations of CO or NO_2 near a single or small group of stationary sources, refer to Section 4. (Modeling approaches for SO_2 are discussed in Section 4.)

b. Several of the pollutants mentioned in the preceding paragraph are closely related to each other in that they share common sources of emissions and/or are subject to chemical transformations of similar precursors.[40 41] For example, strategies designed to reduce ozone could have an effect on the secondary component of PM–2.5 and vice versa. Thus, it makes sense to use models which take into account the chemical coupling between O_3 and PM–2.5, when feasible. This should promote consistency among methods used to evaluate strategies for reducing different pollutants as well as consistency among the strategies themselves. Regulatory requirements for the different pollutants are likely to be due at different times. Thus, the following paragraphs identify appropriate modeling approaches for pollutants individually.

c. The NAAQS for ozone was revised on July 18, 1997 and is now based on an 8-hour averaging period (62 FR 38856). Models for ozone are needed primarily to guide choice of strategies to correct an observed ozone problem in an area not attaining the NAAQS for ozone. Use of photochemical grid models is the recommended means for identifying strategies needed to correct high ozone concentrations in such areas. Such models need to consider emissions of volatile organic compounds (VOC), nitrogen oxides (NO_X) and carbon monoxide (CO), as well as means for generating meteorological data governing transport and dispersion of ozone and its precursors. Other approaches, such as Lagrangian or observational models may be used to guide choice of appropriate strategies to consider with a photochemical grid model. These other approaches may be sufficient to address ozone in an area where observed concentrations are near the NAAQS or only

slightly above it. Such a decision needs to be made on a case-by-case basis in concert with the appropriate Regional Office.

d. A control agency with jurisdiction over one or more areas with significant ozone problems should review available ambient air quality data to assess whether the problem is likely to be significantly impacted by regional transport.[42] Choice of a modeling approach depends on the outcome of this review. In cases where transport is considered significant, use of a nested regional model may be the preferred approach. If the observed problem is believed to be primarily of local origin, use of a model, with a single horizontal grid resolution and geographical coverage that is less than that of a regional model, may suffice.

e. The fine particulate matter NAAQS, promulgated on July 18, 1997 (62 FR 38652), includes particles with an aerodynamic diameter nominally less than or equal to 2.5 micrometers (PM–2.5). Models for PM–2.5 are needed to assess adequacy of a proposed strategy for meeting annual and/or 24-hour NAAQS for PM–2.5. PM–2.5 is a mixture consisting of several diverse components. Because chemical/physical properties and origins of each component differ, it may be appropriate to use either a single model capable of addressing several of the important components or to model primary and secondary components using different models. Effects of a control strategy on PM–2.5 is estimated from the sum of the effects on the components composing PM–2.5. Model users may refer to guidance [43] for further details concerning appropriate modeling approaches.

f. A control agency with jurisdiction over one or more areas with PM–2.5 problems should review available ambient air quality data to assess which components of PM–2.5 are likely to be major contributors to the problem. If it is determined that regional transport of secondary particulates, such as sulfates or nitrates, is likely to contribute significantly to the problem, use of a regional model may be the preferred approach. Otherwise, coverage may be limited to a domain that is urban scale or less. Special care should be taken to select appropriate geographical coverage for a modeling application.[43]

g. The NAAQS for PM–10 was promulgated in July 1987 (40 CFR 50.6). A SIP development guide [44] is available to assist in PM–10 analyses and control strategy development. EPA promulgated regulations for PSD increments measured as PM–10 in a document published on June 3, 1993 (§ 51.166(c)). As an aid to assessing the impact on ambient air quality of particulate matter generated from prescribed burning activities, a reference [45] is available.

h. Models for assessing the impact of CO emissions are needed for a number of different purposes. Examples include evaluating effects of point sources, congested intersections and highways, as well as the cumulative effect of numerous sources of CO in an urban area.

i. Models for assessing the impact of sources on ambient NO_2 concentrations are primarily needed to meet new source review requirements, such as addressing the effect of a proposed source on PSD increments for annual concentrations of NO_2. Impact of an individual source on ambient NO_2 depends, in part, on the chemical environment into which the source's plume is to be emitted. There are several approaches for estimating effects of an individual source on ambient NO_2. One approach is through use of a plume-in-grid algorithm imbedded within a photochemical grid model. However, because of the rigor and complexity involved, and because this approach may not be capable of defining sub-grid concentration gradients, the plume-in-grid approach may be impractical for estimating effects on an annual PSD increment. A second approach is to develop site-specific conversion factors based on measurements. If it is not possible to develop site-specific conversion factors and use of the plume-in-grid algorithm is also not feasible, other screening procedures may be considered.

j. In January 1999 (40 CFR Part 58, Appendix D), EPA gave notice that concern about ambient lead impacts was being shifted away from roadways and toward a focus on stationary point sources. EPA has also issued guidance on siting ambient monitors in the vicinity of such sources. [46] For lead, the SIP should contain an air quality analysis to determine the maximum quarterly lead concentration resulting from major lead point sources, such as smelters, gasoline additive plants, etc. General guidance for lead SIP development is also available.[47]

5.2 Recommendations

5.2.1 Models for Ozone

a. *Choice of Models for Multi-source Applications.* Simulation of ozone formation and transport is a highly complex and resource intensive exercise. Control agencies with jurisdiction over areas with ozone problems are encouraged to use photochemical grid models, such as the Models-3/Community Multi-scale Air Quality (CMAQ) modeling system,[48] to evaluate the relationship between precursor species and ozone. Judgement on the suitability of a model for a given application should consider factors that include use of the model in an attainment test, development of emissions and meteorological inputs to the model and choice of episodes to model.[42] Similar models for the 8-hour NAAQS and for the 1-hour NAAQS are appropriate.

b. *Choice of Models to Complement Photochemical Grid Models.* As previously noted, observational models, Lagrangian models, or the Empirical Kinetics Modeling Approach (EKMA) [49, 50] may be used to help guide choice of strategies to simulate with a photochemical grid model and to corroborate results obtained with a grid model. EPA has issued guidance [42] in selecting appropriate techniques.

c. *Estimating the Impact of Individual Sources.* Choice of methods used to assess the impact of an individual source depends on the nature of the source and its emissions. Thus, model users should consult with the appropriate Regional Office to determine the most suitable approach on a case-by-case basis (Section 3.2.2).

5.2.2 Models for Particulate Matter

5.2.2.1 PM–2.5

a. *Choice of Models for Multi-source Applications.* Simulation of phenomena resulting in high ambient PM–2.5 can be a multi-faceted and complex problem resulting from PM–2.5's existence as an aerosol mixture. Treating secondary components of PM–2.5, such as sulfates and nitrates, can be a highly complex and resource-intensive exercise. Control agencies with jurisdiction over areas with secondary PM–2.5 problems are encouraged to use models which integrate chemical and physical processes important in the formation, decay and transport of these species (*e.g.*, Models-3/CMAQ [48] or REMSAD [51]). Primary components can be simulated using less resource-intensive techniques. Suitability of a modeling approach or mix of modeling approaches for a given application requires technical judgement [43], as well as professional experience in choice of models, use of the model(s) in an attainment test, development of emissions and meteorological inputs to the model and selection of days to model.

b. *Choice of Analysis Techniques to Complement Air Quality Simulation Models.* Observational models may be used to corroborate predictions obtained with one or more air quality simulation models. They may also be potentially useful in helping to define specific source categories contributing to major components of PM–2.5.[43]

c. *Estimating the Impact of Individual Sources.* Choice of methods used to assess the impact of an individual source depends on the nature of the source and its emissions. Thus, model users should consult with the appropriate Regional Office to determine the most suitable approach on a case-by-case basis (Section 3.2.2).

5.2.2.2 PM–10

a. Screening techniques like those identified in Section 4 are applicable to PM–10. Conservative assumptions which do not allow removal or transformation are suggested for screening. Thus, it is recommended that subjectively determined values for ''half-life'' or pollutant decay not be used as a surrogate for particle removal. Proportional models (rollback/forward) may not be applied for screening analysis, unless such techniques are used in conjunction with receptor modeling.[44]

b. Refined models such as those discussed in Section 4 are recommended for PM–10. However, where possible, particle size, gas-to-particle formation, and their effect on ambient concentrations may be considered. For point sources of small particles and for source-specific analyses of complicated sources, use the appropriate recommended steady-state plume dispersion model (Section 4.2.2). For guidance on determination of design concentrations, see paragraph 7.2.1.1(e).

c. Receptor models [52 53 54] have proven useful for helping validate emission inventories and for corroborating source-specific impacts estimated by dispersion models. In regulatory applications, dispersion models have been used in conjunction with receptor models to attribute source (or source category)

contributions. Guidance is available for PM–10 sampling and analysis applicable to receptor modeling.[55]

d. Under certain conditions, recommended dispersion models may not be reliable. In such circumstances, the modeling approach should be approved by the appropriate Regional Office on a case-by-case basis. Analyses involving model calculations for stagnation conditions should also be justified on a case-by-case basis (Section 7.2.8).

e. Fugitive dust usually refers to dust put into the atmosphere by the wind blowing over plowed fields, dirt roads or desert or sandy areas with little or no vegetation. Reentrained dust is that which is put into the air by reason of vehicles driving over dirt roads (or dirty roads) and dusty areas. Such sources can be characterized as line, area or volume sources. Emission rates may be based on site-specific data or values from the general literature. Fugitive emissions include the emissions resulting from the industrial process that are not captured and vented through a stack but may be released from various locations within the complex. Where such fugitive emissions can be properly specified, use the recommended steady-state dispersion model (Section 4.2.2) that handles gravitational settling and dry deposition. In some unique cases a model developed specifically for the situation may be needed. Due to the difficult nature of characterizing and modeling fugitive dust and fugitive emissions, it is recommended that the proposed procedure be cleared by the appropriate Regional Office for each specific situation before the modeling exercise is begun.

5.2.3 Models for Carbon Monoxide

a. Guidance is available for analyzing CO impacts at roadway intersections.[56] The recommended screening model for such analyses is CAL3QHC.[57] [58] This model combines CALINE3 (listed in Appendix A) with a traffic model to calculate delays and queues that occur at signalized intersections. The screening approach is described in reference 56; a refined approach may be considered on a case-by-case basis with CAL3QHCR.[59] The latest version of the MOBILE (mobile source emission factor) model should be used for emissions input to intersection models.

b. For analyses of highways characterized by uninterrupted traffic flows, CALINE3 is recommended, with emissions input from the latest version of the MOBILE model.

c. For urban area wide analyses of CO, an Eulerian grid model should be used. Information on SIP development and requirements for using such models can be found in several references.[56] [60] [61] [62]

d. Where point sources of CO are of concern, they should be treated using the screening and refined techniques described in Section 4 of the Guideline.

5.2.4 Models for Nitrogen Dioxide (Annual Average)

a. A tiered screening approach is recommended to obtain annual average estimates of NO_2 from point sources for New Source Review analysis, including PSD, and for SIP planning purposes. This multi-tiered approach is conceptually shown in Figure 5–1 and described in paragraphs 5.2.4 b through d:

b. For Tier 1 (the initial screen), use an appropriate model from Appendix A to estimate the maximum annual average concentration and assume a total conversion of NO to NO_2. If the concentration exceeds the NAAQS and/or PSD increments for NO_2, proceed to the 2nd level screen.

c. For Tier 2 (2nd level) screening analysis, multiply the Tier 1 estimate(s) by an empirically derived NO_2 / NO_x value of 0.75 (annual national default).[63] The reviewing agency may establish an alternative default NO_2 / NO_x ratio based on ambient annual average NO_2 and annual average NO_x data representative of area wide quasi-equilibrium conditions Alternative default NO_2/NO_x ratios should be based on data satisfying quality assurance procedures that ensure data accuracy for both NO_2 and NO_x within the typical range of measured values. In areas with relatively low NO_x concentrations, the quality assurance procedures used to determine compliance with the NO_2 national ambient air quality standard may not be adequate. In addition, default NO_2/NO_x ratios, including the 0.75 national default value, can underestimate long range NO2 impacts and should be used with caution in long range transport scenarios.

d. For Tier 3 (3rd level) analysis, a detailed screening method may be selected on a case-by-case basis. For point source modeling, other refined screening methods, such as the ozone limiting method [64], may also be considered. Also, a site-specific NO_2/NO_x ratio may be used as a detailed screening method if it meets the same restrictions as described for alternative default NO_2/NO_x ratios. Ambient NO_{2x} monitors used to develop a site-specific ratio should be sited to obtain the NO_2 and NO_x concentrations under quasi-equilibrium conditions. Data obtained from monitors sited at the maximum NO_x impact site, as may be required in a PSD pre-construction monitoring program, likely reflect transitional NO_x conditions. Therefore, NO_x data from maximum impact sites may not be suitable for determining a site-specific NO_2/NO_x ratio that is applicable for the entire modeling analysis. A site-specific ratio derived from maximum impact data can only be used to estimate NO_2 impacts at receptors located within the same distance of the source as the source-to-monitor distance.

e. In urban areas (Section 7.2.3), a proportional model may be used as a preliminary assessment to evaluate control strategies to meet the NAAQS for multiple minor sources, i.e., minor point, area and mobile sources of NO_x; concentrations resulting from major point sources should be estimated separately as discussed above, then added to the impact of the minor sources. An acceptable screening technique for urban complexes is to assume that all NO_x is emitted in the form of NO_2 and to use a model from Appendix A for nonreactive pollutants to estimate NO_2 concentrations. A more accurate estimate can be obtained by: (1) calculating the annual average concentrations of NO_x with an urban model, and (2) converting these estimates to NO_2 concentrations using an empirically derived annual NO_2 / NO_x ratio. A value of 0.75 is recommended for this ratio. However, a spatially averaged alternative default annual NO_2 / NO_x ratio may be determined from an existing air quality monitoring network and used in lieu of the 0.75 value if it is determined to be representative of prevailing ratios in the urban area by the reviewing agency. To ensure use of appropriate locally derived annual average NO_2 / NO_x ratios, monitoring data under consideration should be limited to those collected at monitors meeting siting criteria defined in 40 CFR Part 58, Appendix D as representative of ''neighborhood'', ''urban'', or ''regional'' scales. Furthermore, the highest annual spatially averaged NO_2 / NO_x ratio from the most recent 3 years of complete data should be used to foster conservatism in estimated impacts.

f. To demonstrate compliance with NO_2 PSD increments in urban areas, emissions from major and minor sources should be included in the modeling analysis. Point and area source emissions should be modeled as discussed above. If mobile source emissions do not contribute to localized areas of high ambient NO_2 concentrations, they should be modeled as area sources. When modeled as area sources, mobile source emissions should be assumed uniform over the entire highway link and allocated to each area source grid square based on the portion of highway link within each grid square. If localized areas of high concentrations are likely, then mobile sources should be modeled as line sources using an appropriate steady-state plume dispersion model (e.g., CAL3QHCR; Section 5.2.3).

g. More refined techniques to handle special circumstances may be considered on a case-by-case basis and agreement with the reviewing authority should be obtained. Such techniques should consider individual quantities of NO and NO_2 emissions, atmospheric transport and dispersion, and atmospheric transformation of NO to NO_2. Where they are available, site-specific data on the conversion of NO to NO_2 may be used. Photochemical dispersion models, if used for other pollutants in the area, may also be applied to the NO_x problem.

5.2.5 Models for Lead

a. For major lead point sources, such as smelters, which contribute fugitive emissions and for which deposition is important, use the appropriate recommended steady-state plume dispersion model (Section 4.2.2). To model an entire major urban area or to model areas without significant sources of lead emissions, as a minimum a proportional (rollback) model may be used for air quality analysis. The rollback philosophy assumes that measured pollutant concentrations are proportional to emissions. However, urban or other dispersion models are encouraged in these circumstances where the use of such models is feasible.

b. In modeling the effect of traditional line sources (such as a specific roadway or highway) on lead air quality, dispersion models applied for other pollutants can be used. Dispersion models such as CALINE3 and CAL3QHCR have been used for modeling

carbon monoxide emissions from highways and intersections (Section 5.2.3). However, where deposition is of concern, ISC-PRIME may be used. Also, where there is a point source in the middle of a substantial road network, the lead concentrations that result from the road network should be treated as background (Section 8.2); the point source and any nearby major roadways should be modeled separately using the appropriate recommended steady-state plume dispersion model (Section 4.2.2).

6.0 Other Model Requirements

6.1 Discussion

a. This section covers those cases where specific techniques have been developed for special regulatory programs. Most of the programs have, or will have when fully developed, separate guidance documents that cover the program and a discussion of the tools that are needed. The following paragraphs reference those guidance documents, when they are available. No attempt has been made to provide a comprehensive discussion of each topic since the reference documents were designed to do that. This section will undergo periodic revision as new programs are added and new techniques are developed.

b. Other Federal agencies have also developed specific modeling approaches for their own regulatory or other requirements.[65] Although such regulatory requirements and manuals may have come about because of EPA rules or standards, the implementation of such regulations and the use of the modeling techniques is under the jurisdiction of the agency issuing the manual or directive.

c. The need to estimate impacts at distances greater than 50km (the nominal distance to which EPA considers most steady-state Gaussian plume models are applicable) is an important one especially when considering the effects from secondary pollutants. Unfortunately, models originally available to EPA had not undergone sufficient field evaluation to be recommended for general use. Data bases from field studies at mesoscale and long range transport distances were limited in detail. This limitation was a result of the expense to perform the field studies required to verify and improve mesoscale and long range transport models. Meteorological data adequate for generating three-dimensional wind fields were particularly sparse. Application of models to complicated terrain compounds the difficulty of making good assessments of long range transport impacts. EPA completed limited evaluation of several long range transport (LRT) models against two sets of field data and evaluated results.[13] Based on the results, EPA concluded that long range and mesoscale transport models were limited for regulatory use to a case-by-case basis. However a more recent series of comparisons has been completed for a new model, CALPUFF (Section A.4). Several of these field studies involved three-to-four hour releases of tracer gas sampled along arcs of receptors at distances greater than 50km downwind. In some cases, short-term concentration sampling was available, such that the transport of the tracer puff as it passed the arc could be monitored. Differences on the order of 10 to 20 degrees were found between the location of the simulated and observed center of mass of the tracer puff. Most of the simulated centerline concentration maxima along each arc were within a factor of two of those observed. It was concluded from these case studies that the CALPUFF dispersion model had performed in a reasonable manner, and had no apparent bias toward over or under prediction, so long as the transport distance was limited to less than 300km.[66]

6.2 Recommendations

6.2.1 Visibility

a. Visibility in important natural areas (*e.g.*, Federal Class I areas) is protected under a number of provisions of the Clean Air Act, including Sections 169A and 169B (addressing impacts primarily from existing sources) and Section 165 (new source review). Visibility impairment is caused by light scattering and light absorption associated with particles and gases in the atmosphere. In most areas of the country, light scattering by PM–2.5 is the most significant component of visibility impairment. The key components of PM–2.5 contributing to visibility impairment include sulfates, nitrates, organic carbon, elemental carbon, and crustal material.

b. The visibility regulations as promulgated in December 1980 (40 CFR 51.300—51.307) require States to mitigate visibility impairment, in any of the 156 mandatory Federal Class I areas, that is found to be ''reasonably attributable'' to a single source or a small group of sources. In 1985, EPA promulgated Federal Implementation Plans (FIPs) for several States without approved visibility provisions in their SIPs. The IMPROVE (Interagency Monitoring for Protected Visual Environments) monitoring network, a cooperative effort between EPA, the States, and Federal land management agencies, was established to implement the monitoring requirements in these FIPs. Data has been collected by the IMPROVE network since 1988.

c. In 1999, EPA issued revisions to the 1980 regulations to address visibility impairment in the form of regional haze, which is caused by numerous, diverse sources (*e.g.*, stationary, mobile, and area sources) located across a broad region (40 CFR 51.308—51.309). The state of relevant scientific knowledge has expanded significantly since the Clean Air Act Amendments of 1977. A number of studies and reports [67] [68] have concluded that long range transport (*e.g.*, up to hundreds of kilometers) of fine particulate matter plays a significant role in visibility impairment across the country. Section 169A of the Act requires states to develop SIPs containing long-term strategies for remedying existing and preventing future visibility impairment in 156 mandatory Class I federal areas. In order to develop long-term strategies to address regional haze, many States will need to conduct regional-scale modeling of fine particulate concentrations and associated visibility impairment (*e.g.*, light extinction and deciview metrics).

d. Guidance and a screening model, VISCREEN, are available. [69] VISCREEN can be used to calculate the potential impact of a plume of specified emissions for specific transport and dispersion conditions. If a more comprehensive analysis is required, any refined model should be selected in consultation with the EPA Regional Office and the appropriate Federal Land Manager who is responsible for determining whether there is an adverse effect by a plume on a Class I area. PLUVUE II, an alternative model listed on EPA's Internet SCRAM website (Section 2.3), may be applied on a case-by-case basis when refined plume visibility evaluations are needed.

e. CALPUFF (Section A.4) may be applied on a case-by-case basis when assessment is needed of reasonably attributable haze impairment due to one or a small group of sources. The procedures and analyses should be determined in consultation with the appropriate Regional Office, the appropriate regulatory permitting authority, and the appropriate Federal Land Manager (FLM).

f. Regional scale models are used by EPA to develop and evaluate national policy and assist State and local control agencies. Two such models which can be used to assess visibility impacts from source emissions are Models-3 [48] and REMSAD [51]. Model users should consult with the appropriate Regional Office to determine the most suitable approach on a case-by-case basis (Section 3.2.2).

6.2.2 Good Engineering Practice Stack Height

a. The use of stack height credit in excess of Good Engineering Practice (GEP) stack height or credit resulting from any other dispersion technique is prohibited in the development of emission limitations by 40 CFR 51.118 and 40 CFR 51.164. The definitions of GEP stack height and dispersion technique are contained in 40 CFR 51.100. Methods and procedures for making the appropriate stack height calculations, determining stack height credits and an example of applying those techniques are found in several references [70], [71] [72] [73] which provide a great deal of additional information for evaluating and describing building cavity and wake effects.

b. If stacks for new or existing major sources are found to be less than the height defined by EPA's refined formula for determining GEP height, then air quality impacts associated with cavity or wake effects due to the nearby building structures should be determined. The EPA refined formula height is defined as H + 1.5L (see reference 72). Detailed downwash screening procedures [34] for both the cavity and wake regions should be followed. If more refined concentration estimates are required, the recommended steady-state plume dispersion model in Section 4.2.2 contains algorithms for building wake calculations and should be used.

6.2.3 Long Range Transport (LRT) (*i.e.*, beyond 50km)

a. Section 165(e) of the Clean Air Act requires that suspected adverse impacts on PSD Class I areas be determined. However, 50km is the useful distance to which most steady-state Gaussian plume models are considered accurate for setting emission

limits. Since in many cases PSD analyses show that Class I areas may be threatened at distances greater than 50km from new sources, some procedure is needed to (1) determine if an adverse impact will occur, and (2) identify the model to be used in setting an emission limit if the Class I increments are threatened. In addition to the situations just described, there are certain applications containing a mixture of both long range and short range source-receptor relationships in a large modeled domain (*e.g.*, several industrialized areas located along a river or valley). Historically, these applications have presented considerable difficulty to an analyst if impacts from sources having transport distances greater than 50km significantly contributed to the design concentrations. To properly analyze applications of this type, a modeling approach is needed which has the capability of combining, in a consistent manner, impacts involving both short and long range transport. The CALPUFF modeling system, listed in Appendix A, has been designed to accommodate both the Class I area LRT situation and the large modeling domain situation. Given the judgement and refinement involved, conducting a LRT modeling assessment will require significant consultation with the EPA Regional Office, the appropriate regulatory permitting authority and, for Class I area analyses, the appropriate Federal Land Manager (FLM). While the ultimate decision on whether a Class I area is adversely affected is the responsibility of the permitting authority, the FLM has an affirmative responsibility to protect air quality related values that may be affected, and to provide the appropriate procedures and analysis techniques.

b. If LRT is determined to be important, then refined estimates utilizing the CALPUFF modeling system should be obtained. A screening approach [66] is also available for use on a case-by-case basis that generally provides concentrations that are higher than those obtained using refined characterizations of the meteorological conditions. The meteorological input data requirements for developing the time and space varying three-dimensional winds and dispersion meteorology for refined analyses are discussed in paragraph 8.3.1.2(d). Additional information on applying this model is contained in Appendix A. To facilitate use of complex air quality and meteorological modeling systems, a written protocol may be considered for developing consensus in the methods and procedures to be followed.

6.2.4 Modeling Guidance for Other Governmental Programs

a. When using the models recommended or discussed in the Guideline in support of programmatic requirements not specifically covered by EPA regulations, the model user should consult the appropriate Federal or State agency to ensure the proper application and use of the models. For modeling associated with PSD permit applications that involve a Class I area, the appropriate Federal Land Manager should be consulted on all modeling questions.

b. The Offshore and Coastal Dispersion (OCD) model, described in Appendix A, was developed by the Minerals Management Service and is recommended for estimating air quality impact from offshore sources on onshore, flat terrain areas. The OCD model is not recommended for use in air quality impact assessments for onshore sources. Sources located on or just inland of a shoreline where fumigation is expected should be treated in accordance with Section 7.2.8.

c. The Emissions and Dispersion Modeling System (EDMS), described in Appendix A, was developed by the Federal Aviation Administration and the United States Air Force and is recommended for air quality assessment of primary pollutant impacts at airports or air bases. Regulatory application of EDMS is intended for estimating the cumulative effect of changes in aircraft operations, point source, and mobile source emissions on pollutant concentrations. It is not intended for PSD, SIP, or other regulatory air quality analyses of point or mobile sources at or peripheral to airport property that are independent of changes in aircraft operations. If changes in other than aircraft operations are associated with analyses, a model recommended in Chapter 4 or 5 should be used.

7.0 General Modeling Considerations

7.1 Discussion

a. This section contains recommendations concerning a number of different issues not explicitly covered in other sections of this guide. The topics covered here are not specific to any one program or modeling area but are common to nearly all modeling analyses for criteria pollutants.

7.2 Recommendations

7.2.1 Design Concentrations (see also Section 10.2.3.1)

7.2.1.1 Design Concentrations for SO_2, PM–10, CO, Pb, and NO_2

a. An air quality analysis for SO_2, PM–10, CO, Pb, and NO_2 is required to determine if the source will (1) cause a violation of the NAAQS, or (2) cause or contribute to air quality deterioration greater than the specified allowable PSD increment. For the former, background concentration (Section 8.2) should be added to the estimated impact of the source to determine the design concentration. For the latter, the design concentration includes impact from all increment consuming sources.

b. If the air quality analyses are conducted using the period of meteorological input data recommended in Section 8.3.1.2 (*e.g.*, 5 years of National Weather Service (NWS) data or 1 year of site-specific data; Section 8.3.3), then the design concentration based on the highest, second-highest short term concentration or long term average, whichever is controlling, should be used to determine emission limitations to assess compliance with the NAAQS and PSD increments.

c. When sufficient and representative data exist for less than a 5-year period from a nearby NWS site, or when site-specific data have been collected for less than a full continuous year, or when it has been determined that the site-specific data may not be temporally representative (Section 8.3.3), then the highest concentration estimate should be considered the design value. This is because the length of the data record may be too short to assure that the conditions producing worst-case estimates have been adequately sampled. The highest value is then a surrogate for the concentration that is not to be exceeded more than once per year (the wording of the deterministic standards). Also, the highest concentration should be used whenever selected worst-case conditions are input to a screening technique, as described in EPA guidance.

d. If the controlling concentration is an annual average value and multiple years of data (site-specific or NWS) are used, then the design value is the highest of the annual averages calculated for the individual years. If the controlling concentration is a quarterly average and multiple years are used, then the highest individual quarterly average should be considered the design value.

e. As long a period of record as possible should be used in making estimates to determine design values and PSD increments. If more than 1 year of site-specific data is available, it should be used.

7.2.1.2 Design Concentrations for O_3 and PM–2.5

a. Guidance and specific instructions for the determination of the 1-hr and 8-hr design concentrations for ozone are provided in Appendix H and I (respectively) of reference 4. No definitive guidance for determining design concentrations for PM–2.5 has been issued. For all SIP revisions the user should check with the Regional Office to obtain the most recent guidance documents and policy memoranda concerning the pollutant in question. There are currently no PSD increments for O_3 and PM–2.5.

7.2.2 Critical Receptor Sites

a. Receptor sites for refined modeling should be utilized in sufficient detail to estimate the highest concentrations and possible violations of a NAAQS or a PSD increment. In designing a receptor network, the emphasis should be placed on receptor resolution and location, not total number of receptors. The selection of receptor sites should be a case-by-case determination taking into consideration the topography, the climatology, monitor sites, and the results of the initial screening procedure. For large sources (those equivalent to a 500MW power plant) and where violations of the NAAQS or PSD increment are likely, 360 receptors for a polar coordinate grid system and 400 receptors for a rectangular grid system, where the distance from the source to the farthest receptor is 10km, are usually adequate to identify areas of high concentration. Additional receptors may be needed in the high concentration location if greater

resolution is indicated by terrain or source factors.

7.2.3 Dispersion Coefficients

a. Steady-state Gaussian plume models used in most applications should employ dispersion coefficients consistent with those contained in the preferred models in Appendix A. Factors such as averaging time, urban/rural surroundings (see paragraphs 7.2.3 b through f), and type of source (point vs. line) may dictate the selection of specific coefficients. Coefficients used in some Appendix A models are identical to, or at least based on, Pasquill-Gifford coefficients [74] in rural areas and McElroy-Pooler [75] coefficients in urban areas. A key feature of AERMOD's formulation is the use of directly observed variables of the boundary layer to parameterize dispersion.[33] Research is continuing toward the development of methods to determine dispersion coefficients directly from measured or observed variables.[76] [77]

b. The selection of either rural or urban dispersion coefficients in a specific application should follow one of the procedures suggested by Irwin [78] and briefly described below. These include a land use classification procedure or a population based procedure to determine whether the character of an area is primarily urban or rural.

c. Land Use Procedure: (1) Classify the land use within the total area, A_o, circumscribed by a 3km radius circle about the source using the meteorological land use typing scheme proposed by Auer [79]; (2) if land use types I1, I2, C1, R2, and R3 account for 50 percent or more of A_o, use urban dispersion coefficients; otherwise, use appropriate rural dispersion coefficients.

d. Population Density Procedure: (1) Compute the average population density, p per square kilometer with A_o as defined above; (2) If p is greater than 750 people/km^2, use urban dispersion coefficients; otherwise use appropriate rural dispersion coefficients.

e. Of the two methods, the land use procedure is considered more definitive. Population density should be used with caution and should not be applied to highly industrialized areas where the population density may be low and thus a rural classification would be indicated, but the area is sufficiently built-up so that the urban land use criteria would be satisfied. In this case, the classification should already be ''urban'' and urban dispersion parameters should be used.

f. Sources located in an area defined as urban should be modeled using urban dispersion parameters. Sources located in areas defined as rural should be modeled using the rural dispersion parameters. For analyses of whole urban complexes, the entire area should be modeled as an urban region if most of the sources are located in areas classified as urban.

g. Buoyancy-induced dispersion (BID), as identified by Pasquill, [80] is included in the preferred models and should be used where buoyant sources, *e.g.*, those involving fuel combustion, are involved.

7.2.4 Stability Categories

a. The Pasquill approach to classifying stability is commonly used in preferred models (Appendix A). The Pasquill method, as modified by Turner,[81] was developed for use with commonly observed meteorological data from the National Weather Service and is based on cloud cover, insolation and wind speed.

b. Procedures to determine Pasquill stability categories from other than NWS data are found in Section 8.3. Any other method to determine Pasquill stability categories must be justified on a case-by-case basis.

c. For a given model application where stability categories are the basis for selecting dispersion coefficients, both σ_y and σ_z should be determined from the same stability category. ''Split sigmas'' in that instance are not recommended. Sector averaging, which eliminates the σ_y term, is commonly acceptable in complex terrain screening methods.

d. AERMOD, also a preferred model in Appendix A, uses a planetary boundary layer scaling parameter to characterize stability.[33] This approach represents a departure from the discrete, hourly stability categories estimated under the Pasquill-Gifford-Turner scheme.

7.2.5 Plume Rise

a. The plume rise methods of Briggs [82, 83] are incorporated in many of the preferred models and are recommended for use in many modeling applications. In AERMOD,[33] for the stable boundary layer, plume rise is estimated using an iterative approach, similar to that in the CTDMPLUS model. In the convective boundary layer, plume rise is superposed on the displacements by random convective velocities. [84] In ISC-PRIME, plume rise is computed using the methods of Briggs excepting cases involving building downwash, in which a numerical solution of the mass, energy, and momentum conservation laws is performed.[24] No explicit provisions in these models are made for multistack plume rise enhancement or the handling of such special plumes as flares; these problems should be considered on a case-by-case basis.

b. Since there is insufficient information to identify and quantify dispersion during the transitional plume rise period, gradual plume rise is not generally recommended for use. There are two exceptions where the use of gradual plume rise is appropriate: (1) In complex terrain screening procedures to determine close-in impacts; (2) when calculating the effects of building wakes. The building wake algorithm in ISC–PRIME incorporates and automatically (*i.e.,* internally) exercises the thermodynamically based gradual plume rise calculations as described in paragraph 7.2.5 a . If the building wake is calculated to affect the plume for any hour, gradual plume rise is also used in downwind dispersion calculations to the distance of final plume rise, after which final plume rise is used. Plumes captured by the near wake are re-emitted to the far wake as a ground-level volume source.

c. Stack tip downwash generally occurs with poorly constructed stacks and when the ratio of the stack exit velocity to wind speed is small. An algorithm developed by Briggs [83] is the recommended technique for this situation and is found in the point source preferred models.

7.2.6 Chemical Transformation

a. The chemical transformation of SO_2 emitted from point sources or single industrial plants in rural areas is generally assumed to be relatively unimportant to the estimation of maximum concentrations when travel time is limited to a few hours. However, in urban areas, where synergistic effects among pollutants are of considerable consequence, chemical transformation rates may be of concern. In urban area applications, a half-life of 4 hours [81] may be applied to the analysis of SO_2 emissions. Calculations of transformation coefficients from site-specific studies can be used to define a ''half-life'' to be used in a steady-state Gaussian plume model with any travel time, or in any application, if appropriate documentation is provided. Such conversion factors for pollutant half-life should not be used with screening analyses.

b. Use of models incorporating complex chemical mechanisms should be considered only on a case-by-case basis with proper demonstration of applicability. These are generally regional models not designed for the evaluation of individual sources but used primarily for region-wide evaluations. Visibility models also incorporate chemical transformation mechanisms which are an integral part of the visibility model itself and should be used in visibility assessments.

7.2.7 Gravitational Settling and Deposition

a. An ''infinite half-life'' should be used for estimates of particle concentrations when steady-state Gaussian plume models containing only exponential decay terms for treating settling and deposition are used.

b. Gravitational settling and deposition may be directly included in a model if either is a significant factor. When particulate matter sources can be quantified and settling and dry deposition are problems, use the recommended steady-state plume dispersion model (Section 4.2.2).

7.2.8 Complex Winds

a. *Inhomogeneous Local Winds.* In many parts of the United States, the ground is neither flat nor is the ground cover (or land use) uniform. These geographical variations can generate local winds and circulations, and modify the prevailing ambient winds and circulations. Geographic effects are most apparent when the ambient winds are light or calm.[85] In general these geographically induced wind circulation effects are named after the source location of the winds, *e.g.*, lake and sea breezes, and mountain and valley winds. In very rugged hilly or mountainous terrain, along coastlines, or near large land use variations, the characterization of the winds is a balance of various forces, such that the assumptions of steady-state straight-line transport both in time and space are inappropriate. In the special cases described, the CALPUFF modeling system (described in Appendix A) may be applied on a case-by-case basis for air quality estimates in such complex non-steady-state meteorological conditions. The purpose of choosing a modeling system like CALPUFF is to fully treat the time and space

variations of meteorology effects on transport and dispersion. The setup and application of the model should be determined in consultation with the Regional Office and the appropriate regulatory permitting authority consistent with limitations of paragraph 3.2.2(e). The meteorological input data requirements for developing the time and space varying three-dimensional winds and dispersion meteorology for these situations are discussed in paragraph 8.3.1.2(e).

b. *Inversion Breakup Fumigation.* Inversion breakup fumigation occurs when a plume (or multiple plumes) is emitted into a stable layer of air and that layer is subsequently mixed to the ground through convective transfer of heat from the surface or because of advection to less stable surroundings. Fumigation may cause excessively high concentrations but is usually rather short-lived at a given receptor. There are no recommended refined techniques to model this phenomenon. There are, however, screening procedures [34] that may be used to approximate the concentrations. Considerable care should be exercised in using the results obtained from the screening techniques.

c. *Shoreline Fumigation.* Fumigation can be an important phenomenon on and near the shoreline of bodies of water. This can affect both individual plumes and area-wide emissions. When fumigation conditions are expected to occur from a source or sources with tall stacks located on or just inland of a shoreline, this should be addressed in the air quality modeling analysis. The Shoreline Dispersion Model (SDM) listed on EPA's Internet SCRAM website (Section 2.3) may be applied on a case-by-case basis when air quality estimates under shoreline fumigation conditions are needed.[86] Information on the results of EPA's evaluation of this model together with other coastal fumigation models is available.[87] Selection of the appropriate model for applications where shoreline fumigation is of concern should be determined in consultation with the Regional Office.

d. *Stagnation.* Stagnation conditions are characterized by calm or very low wind speeds, and variable wind directions. These stagnant meteorological conditions may persist for several hours to several days. During stagnation conditions, the dispersion of air pollutants, especially those from low-level emissions sources, tends to be minimized, potentially leading to relatively high ground-level concentrations. When stagnation periods such as these are found to occur, they should be addressed in the air quality modeling analysis. WYNDvalley, listed on EPA's Internet SCRAM website (Section 2.3), may be applied on a case-by-case basis for stagnation periods of 24 hours or longer in valley-type situations. Caution should be exercised when applying WYNDvalley to elevated point sources. If point sources are of interest, users should note the guidance provided for CALPUFF in paragraph 7.2.8 a. Users should consult with the appropriate Regional Office prior to regulatory application of WYNDvalley.

7.2.9 Calibration of Models

a. Calibration of models is not common practice and is subject to much error and misunderstanding. There have been attempts by some to compare model estimates and measurements on an event-by-event basis and then to calibrate a model with results of that comparison. This approach is severely limited by uncertainties in both source and meteorological data and therefore it is difficult to precisely estimate the concentration at an exact location for a specific increment of time. Such uncertainties make calibration of models of questionable benefit. Therefore, model calibration is unacceptable.

8.0 Model Input Data

a. Data bases and related procedures for estimating input parameters are an integral part of the modeling procedure. The most appropriate data available should always be selected for use in modeling analyses. Concentrations can vary widely depending on the source data or meteorological data used. Input data are a major source of uncertainties in any modeling analysis. This section attempts to minimize the uncertainty associated with data base selection and use by identifying requirements for data used in modeling. A checklist of input data requirements for modeling analyses is posted on EPA's Internet SCRAM website (Section 2.3). More specific data requirements and the format required for the individual models are described in detail in the users' guide for each model.

8.1 Source Data

8.1.1 Discussion

a. Sources of pollutants can be classified as point, line and area/volume sources. Point sources are defined in terms of size and may vary between regulatory programs. The line sources most frequently considered are roadways and streets along which there are well-defined movements of motor vehicles, but they may be lines of roof vents or stacks such as in aluminum refineries. Area and volume sources are often collections of a multitude of minor sources with individually small emissions that are impractical to consider as separate point or line sources. Large area sources are typically treated as a grid network of square areas, with pollutant emissions distributed uniformly within each grid square.

b. Emission factors are compiled in an EPA publication commonly known as AP–42 [88]; an indication of the quality and amount of data on which many of the factors are based is also provided. Other information concerning emissions is available in EPA publications relating to specific source categories. The Regional Office should be consulted to determine appropriate source definitions and for guidance concerning the determination of emissions from and techniques for modeling the various source types.

8.1.2 Recommendations

a. For point source applications the load or operating condition that causes maximum ground-level concentrations should be established. As a minimum, the source should be modeled using the design capacity (100 percent load). If a source operates at greater than design capacity for periods that could result in violations of the standards or PSD increments, this load [d] should be modeled. Where the source operates at substantially less than design capacity, and the changes in the stack parameters associated with the operating conditions could lead to higher ground level concentrations, loads such as 50 percent and 75 percent of capacity should also be modeled. A range of operating conditions should be considered in screening analyses; the load causing the highest concentration, in addition to the design load, should be included in refined modeling. For a power plant, the following (b–h) is typical of the kind of data on source characteristics and operating conditions that may be needed. Generally, input data requirements for air quality models necessitate the use of metric units; where English units are common for engineering usage, a conversion to metric is required.

b. *Plant layout.* The connection scheme between boilers and stacks, and the distance and direction between stacks, building parameters (length, width, height, location and orientation relative to stacks) for plant structures which house boilers, control equipment, and surrounding buildings within a distance of approximately five stack heights.

c. *Stack parameters.* For all stacks, the stack height and inside diameter (meters), and the temperature (K) and volume flow rate (actual cubic meters per second) or exit gas velocity (meters per second) for operation at 100 percent, 75 percent and 50 percent load.

d. *Boiler size.* For all boilers, the associated megawatts, 10^6 BTU/hr, and pounds of steam per hour, and the design and/or actual fuel consumption rate for 100 percent load for coal (tons/hour), oil (barrels/hour), and natural gas (thousand cubic feet/hour).

e. *Boiler parameters.* For all boilers, the percent excess air used, the boiler type (*e.g.*, wet bottom, cyclone, etc.), and the type of firing (*e.g.*, pulverized coal, front firing, etc.).

f. *Operating conditions.* For all boilers, the type, amount and pollutant contents of fuel, the total hours of boiler operation and the boiler capacity factor during the year, and the percent load for peak conditions.

g. *Pollution control equipment parameters.* For each boiler served and each pollutant affected, the type of emission control equipment, the year of its installation, its design efficiency and mass emission rate, the date of the last test and the tested efficiency, the number of hours of operation during the latest year, and the best engineering estimate of its projected efficiency if used in conjunction with coal combustion; data for any anticipated modifications or additions.

h. *Data for new boilers or stacks.* For all new boilers and stacks under construction and for all planned modifications to existing boilers or stacks, the scheduled date of completion, and the data or best estimates

[d] Malfunctions which may result in excess emissions are not considered to be a normal operating condition. They generally should not be considered in determining allowable emissions. However, if the excess emissions are the result of poor maintenance, careless operation, or other preventable conditions, it may be necessary to consider them in determining source impact.

available for paragraphs 8.1.2b through g following completion of construction or modification.

i. In stationary point source applications for compliance with short term ambient standards, SIP control strategies should be tested using the emission input shown on Table 8–1. When using a refined model, sources should be modeled sequentially with these loads for every hour of the year. To evaluate SIPs for compliance with quarterly and annual standards, emission input data shown in Table 8–1 should again be used. Emissions from area sources should generally be based on annual average conditions. The source input information in each model user's guide should be carefully consulted and the checklist (paragraph 8.0(a)) should also be consulted for other possible emission data that could be helpful. PSD and NAAQS compliance demonstrations should follow the emission input data shown in Table 8–2. For purposes of emissions trading, new source review and demonstrations, refer to current EPA policy and guidance to establish input data.

j. Line source modeling of streets and highways requires data on the width of the roadway and the median strip, the types and amounts of pollutant emissions, the number of lanes, the emissions from each lane and the height of emissions. The location of the ends of the straight roadway segments should be specified by appropriate grid coordinates. Detailed information and data requirements for modeling mobile sources of pollution are provided in the user's manuals for each of the models applicable to mobile sources.

k. The impact of growth on emissions should be considered in all modeling analyses covering existing sources. Increases in emissions due to planned expansion or planned fuel switches should be identified. Increases in emissions at individual sources that may be associated with a general industrial/commercial/residential expansion in multi-source urban areas should also be treated. For new sources the impact of growth on emissions should generally be considered for the period prior to the start-up date for the source. Such changes in emissions should treat increased area source emissions, changes in existing point source emissions which were not subject to preconstruction review, and emissions due to sources with permits to construct that have not yet started operation.

TABLE 8–1.—MODEL EMISSION INPUT DATA FOR POINT SOURCES [1]

Averaging time	Emission limit (#/MMBtu) [2]	×	Operating level (MMBtu/hr) [2]	×	Operating factor (*e.g.*, hr/yr,hr/day)
Stationary Point Source(s) Subject to SIP Emission Limit(s) Evaluation for Compliance with Ambient Standards (Including Areawide Demonstrations)					
Annual & quarterly	Maximum allowable emission limit or federally enforceable permit limit.		Actual or design capacity (whichever is greater), or federally enforceable permit condition.		Actual operating factor averaged over most recent 2 years.[3]
Short term	Maximum allowable emission limit or federally enforceable permit limit.		Actual or design capacity (whichever is greater), or federally enforceable permit condition [4].		Continuous operation, *i.e.*, all hours of each time period under consideration (for all hours of the meteorological data base).[5]
Nearby Source(s) [6, 7]—Same input requirements as for stationary point source(s) above					
Other Source(s) [7]—If modeled (Section 8.2.3), input data requirements are defined below					
Annual & quarterly	Maximum allowable emission limit or federally enforceable permit limit [6].		Annual level when actually operating, averaged over the most recent 2 years [3].		Actual operating factor averaged over the most recent 2 years.[3]
Short term	Maximum allowable emission limit or federally enforceable permit limit [6].		Annual level when actually operating, averaged over the most recent 2 years [3].		Continuous operation, *i.e.*, all hours of each time period under consideration (for all hours of the meteorological data base).[5]

[1] The model input data requirements shown on this table apply to stationary source control strategies for STATE IMPLEMENTATION PLANS. For purposes of emissions trading, new source review, or prevention of significant deterioration, other model input criteria may apply. Refer to the policy and guidance for these programs to establish the input data.

[2] Terminology applicable to fuel burning sources; analogous terminology (*e.g., #*throughput) may be used for other types of sources.

[3] Unless it is determined that this period is not representative.

[4] Operating levels such as 50 percent and 75 percent of capacity should also be modeled to determine the load causing the highest concentration.

[5] If operation does not occur for all hours of the time period of consideration (*e.g.*, 3 or 24 hours) and the source operation is constrained by a federally enforceable permit condition, an appropriate adjustment to the modeled emission rate may be made (*e.g.*, if operation is only 8 a.m. to 4 p.m. each day, only these hours will be modeled with emissions from the source. Modeled emissions should not be averaged across non-operating time periods.)

[6] See paragraph 8.2.3(c).

[7] See paragraph 8.2.3(d).

TABLE 8–2.—POINT SOURCE MODEL INPUT DATA (EMISSIONS) FOR PSD NAAQS COMPLIANCE DEMONSTRATIONS

Averaging time	Emission limit (#/MMBtu) [1]	×	Operating level (MMBtu/hr) [1]	×	Operating factor (e.g., hr/yr,hr/day)
Proposed Major New or Modified Source					
Annual & quarterly	Maximum allowable emission limit or federally enforceable permit limit.		Design capacity or federally enforceable permit condition.		Continuous operation (i.e., 8760 hours).[2]

TABLE 8–2.—POINT SOURCE MODEL INPUT DATA (EMISSIONS) FOR PSD NAAQS COMPLIANCE DEMONSTRATIONS—Continued

Averaging time	Emission limit (#/MMBtu)[1]	×	Operating level (MMBtu/hr)[1]	×	Operating factor (e.g., hr/yr,hr/day)
Short term: (≤24 hours)	Maximum allowable emis sion limit or federally enforceable permit limit.		Design capacity or federally enforceable permit condition[3].		Continuous operation (i.e., all hours of each time period under consideration) (for all hours of the meteorological data base).[2]
Nearby Source(s)[4, 6]					
Annual & quarterly	Maximum allowable emission limit or federally enforceable permit limit[5].		Actual or design capacity (whichever is greater), or federally enforceable permit condition.		Actual operating factor averaged over the most recent 2 years.[7, 8]
Short term: (≤24 hours)	Maximum allowable emission limit or federally enforceable permit limit[5].		Actual or design capacity (whichever is greater), or federally enforceable permit condition[3].		Continuous operation (i.e., all hours of each time period under consideration) (for all hours of the meteorological data base).[2]
Other Source(s)[6, 9]					
Annual & quarterly	Maximum allowable emission limit or federally enforceable permit limit[5].		Annual level when actually operating, averaged over the most recent 2 years[7].		Actual operating factor averaged over the most recent 2 years.[7, 8]
Short term (≤24 hours)	Maximum allowable emission limit or federally enforceable permit limit[5].		Annual level when actually operating, averaged over the most recent 2 years[7].		Continuous operation (*i.e.*, all hours of each time period under consideration) (for all hours of the meteorological data base).[2]

[1] Terminology applicable to fuel burning sources; analogous terminology (*e.g., #*throughput) may be used for other types of sources.
[2] If operation does not occur for all hours of the time period of consideration (e.g., 3 or 24 hours) and the source operation is constrained by a federally enforceable permit condition, an appropriate adjustment to the modeled emission rate may be made (e.g., if operation is only 8:00 a.m. to 4:00 p.m. each day, only these hours will be modeled with emissions from the source. Modeled emissions should not be averaged across non-operating time periods.
[3] Operating levels such as 50 percent and 75 percent of capacity should also be modeled to determine the load causing the highest concentration.
[4] Includes existing facility to which modification is proposed if the emissions from the existing facility will not be affected by the modification. Otherwise use the same parameters as for major modification.
[5] See paragraph 8.2.3(c).
[6] See paragraph 8.2.3(d).
[7] Unless it is determined that this period is not representative.
[8] For those permitted sources not in operation or that have not established an appropriate factor, continuous operation (i.e., 8760) should be used.
[9] Generally, the ambient inpacts from non-nearby (background) sources can be represented by air quality data unless adequate data do not exist.

8.2 Background Concentrations

8.2.1 Discussion

a. Background concentrations are an essential part of the total air quality concentration to be considered in determining source impacts. Background air quality includes pollutant concentrations due to: (1) natural sources; (2) nearby sources other than the one(s) currently under consideration; and (3) unidentified sources.

b. Typically, air quality data should be used to establish background concentrations in the vicinity of the source(s) under consideration. The monitoring network used for background determinations should conform to the same quality assurance and other requirements as those networks established for PSD purposes.[89] An appropriate data validation procedure should be applied to the data prior to use.

c. If the source is not isolated, it may be necessary to use a multi-source model to establish the impact of nearby sources. Since sources don't typically operate at their maximum allowable capacity (which may include the use of ''dirtier'' fuels), modeling is necessary to express the potential contribution of background sources, and this impact would not be captured via monitoring. Background concentrations should be determined for each critical (concentration) averaging time.

8.2.2 Recommendations (Isolated Single Source)

a. Two options (paragraph 8.2.2b or c) are available to determine the background concentration near isolated sources.

b. Use air quality data collected in the vicinity of the source to determine the background concentration for the averaging times of concern. Determine the mean background concentration at each monitor by excluding values when the source in question is impacting the monitor. The mean annual background is the average of the annual concentrations so determined at each monitor. For shorter averaging periods, the meteorological conditions accompanying the concentrations of concern should be identified. Concentrations for meteorological conditions of concern, at monitors not impacted by the source in question, should be averaged for each separate averaging time to determine the average background value. Monitoring sites inside a 90° sector downwind of the source may be used to determine the area of impact. One hour concentrations may be added and averaged to determine longer averaging periods.

c. If there are no monitors located in the vicinity of the source, a ''regional site'' may be used to determine background. A ''regional site'' is one that is located away from the area of interest but is impacted by similar natural and distant man-made sources.

8.2.3 Recommendations (Multi-Source Areas)

a. In multi-source areas, two components of background should be determined: contributions from nearby sources and contributions from other sources.

b. *Nearby Sources:* All sources expected to cause a significant concentration gradient in the vicinity of the source or sources under consideration for emission limit(s) should be explicitly modeled. The number of such sources is expected to be small except in unusual situations. Owing to both the uniqueness of each modeling situation and the large number of variables involved in identifying nearby sources, no attempt is made here to comprehensively define this term. Rather, identification of nearby sources calls for the exercise of professional judgement by the reviewing authority. This guidance is not intended to alter the exercise of that judgement or to comprehensively define which sources are nearby sources.

c. For compliance with the short-term and annual ambient standards, the nearby sources as well as the primary source(s) should be evaluated using an appropriate Appendix A model with the emission input data shown in Table 8–1 or 8–2. When modeling a nearby source that does not have a permit and the emission limit contained in the SIP for a particular source category is greater than the emissions possible given the source's maximum physical capacity to emit, the ''maximum allowable emission limit'' for such a nearby source may be calculated as the emission rate representative of the nearby source's maximum physical capacity to emit, considering its design specifications and allowable fuels and process materials. However, the burden is on the permit applicant to sufficiently document what the maximum physical capacity to emit is for such a nearby source.

d. It is appropriate to model nearby sources only during those times when they, by their nature, operate at the same time as the primary source(s) being modeled. Where a primary source believes that a nearby source does not, by its nature, operate at the same time as the primary source being modeled, the burden is on the primary source to demonstrate to the satisfaction of the reviewing authority that this is, in fact, the case. Whether or not the primary source has adequately demonstrated that fact is a matter of professional judgement left to the discretion of the reviewing authority. The following examples illustrate two cases in which a nearby source may be shown not to operate at the same time as the primary source(s) being modeled. Some sources are only used during certain seasons of the year. Those sources would not be modeled as nearby sources during times in which they do not operate. Similarly, emergency backup generators that never operate simultaneously with the sources that they back up would not be modeled as nearby sources. To reiterate, in these examples and other appropriate cases, the burden is on the primary source being modeled to make the appropriate demonstration to the satisfaction of the reviewing authority.

e. The impact of the nearby sources should be examined at locations where interactions between the plume of the point source under consideration and those of nearby sources (plus natural background) can occur. Significant locations include: (1) The area of maximum impact of the point source; (2) the area of maximum impact of nearby sources; and (3) the area where all sources combine to cause maximum impact. These locations may be identified through trial and error analyses.

f. *Other Sources:* That portion of the background attributable to all other sources (*e.g.,* natural sources, minor sources and distant major sources) should be determined by the procedures found in Section 8.2.2 or by application of a model using Table 8–1 or 8–2.

8.3 Meteorological Input Data

a. The meteorological data used as input to a dispersion model should be selected on the basis of spatial and climatological (temporal) representativeness as well as the ability of the individual parameters selected to characterize the transport and dispersion conditions in the area of concern. The representativeness of the data is dependent on: (1) The proximity of the meteorological monitoring site to the area under consideration; (2) the complexity of the terrain; (3) the exposure of the meteorological monitoring site; and (4) the period of time during which data are collected. The spatial representativeness of the data can be adversely affected by large distances between the source and receptors of interest and the complex topographic characteristics of the area. Temporal representativeness is a function of the year-to-year variations in weather conditions. Where appropriate, data representativeness should be viewed in terms of the appropriateness of the data for constructing realistic boundary layer profiles and three dimensional meteorological fields, as described in paragraphs 8.3c and d.

b. Model input data are normally obtained either from the National Weather Service or as part of an site-specific measurement program. Local universities, Federal Aviation Administration (FAA), military stations, industry and pollution control agencies may also be sources of such data. Some recommendations for the use of each type of data are included in this subsection.

c. Regulatory application of AERMOD requires careful consideration of minimum data for input to AERMET. Data representativeness, in the case of AERMOD, means utilizing data of an appropriate type for constructing realistic boundary layer profiles. Of paramount importance is the requirement that all meteorological data used as input to AERMOD must be both laterally and vertically representative of the transport and dispersion within the analysis domain. The representativeness of data that were collected off-site should be judged, in part, by comparing the surface characteristics in the vicinity of the meteorological monitoring site with the surface characteristics that generally describe the analysis domain. Furthermore, since the spatial scope of each variable could be different, representativeness should be judged for each variable separately. For example, for a variable such as wind direction, the data may need to be collected very near plume height to be adequately representative, whereas, for a variable such as temperature, data from a station several kilometers away from the source may in some cases be considered to be adequately representative.

d. For long range transport modeling assessments (as discussed in Section 6.2.3) or in assessments where the transport winds are complex and the application involves a non-steady-state dispersion model (as discussed in Section 7.2.8), use of output from prognostic mesoscale meteorological models is encouraged.[90][91][92] Some diagnostic meteorological processors are designed to appropriately blend available NWS comparable meteorological observations, local site-specific meteorological observations, and prognostic mesoscale meteorological data, using empirical relationships, to diagnostically adjust the wind field for mesoscale and local-scale effects. These diagnostic adjustments can sometimes be improved through the use of strategically placed site-specific meteorological observations. The placement of these special meteorological observations (often more than one location is needed) involves expert judgement, and is specific to the terrain and land use of the modeling domain.

8.3.1 Length of Record of Meteorological Data

8.3.1.1 Discussion

a. The model user should acquire enough meteorological data to ensure that worst-case meteorological conditions are adequately represented in the model results. The trend toward statistically based standards suggests a need for all meteorological conditions to be adequately represented in the data set selected for model input. The number of years of record needed to obtain a stable distribution of conditions depends on the variable being measured and has been estimated by Landsberg and Jacobs[93] for various parameters. Although that study indicates in excess of 10 years may be required to achieve stability in the frequency distributions of some meteorological variables, such long periods are not reasonable for model input data. This is due in part to the fact that hourly data in model input format are frequently not available for such periods and that hourly calculations of concentration for long periods may be prohibitively expensive. Another study[94] compared various periods from a 17-year data set to determine the minimum number of years of data needed to approximate the concentrations modeled with a 17-year period of meteorological data from one station. This study indicated that the variability of model estimates due to the meteorological data input was adequately reduced if a 5-year period of record of meteorological input was used.

8.3.1.2 Recommendations

a. Five years of representative meteorological data should be used when estimating concentrations with an air quality model. Consecutive years from the most recent, readily available 5-year period are preferred. The meteorological data should be adequately representative, and may be site specific or from a nearby NWS station.

b. The use of 5 years of NWS meteorological data or at least 1 year of site-specific data is required. If one year or more (including partial years), up to five years, of

site-specific data is available, these data are preferred for use in air quality analyses. Such data should have been subjected to quality assurance procedures as described in Section 8.3.3.2.

c. For permitted sources whose emission limitations are based on a specific year of meteorological data, that year should be added to any longer period being used (*e.g.,* 5 years of NWS data) when modeling the facility at a later time.

d. For LRT situations (as discussed in Section 6.2.3) and for complex wind situations (as discussed in paragraph 7.2.8(a)), if only NWS or comparable standard meteorological observations are employed, five years of meteorological data (within and near the modeling domain) should be used. Consecutive years from the most recent, readily available 5-year period are preferred. Less than five years of meteorological data may be used if mesoscale meteorological fields are available, as discussed in paragraph 8.3(d). These mesoscale meteorological fields should be used in conjunction with available standard NWS or comparable meteorological observations within and near the modeling domain. If site-specific meteorological data are available, these data may be especially helpful for local-scale complex wind situations, when appropriately blended together with standard NWS or comparable observations and mesoscale meteorological fields.

8.3.2 National Weather Service Data

8.3.2.1 Discussion

a. The NWS meteorological data are routinely available and familiar to most model users. Although the NWS does not provide direct measurements of all the needed dispersion model input variables, methods have been developed and successfully used to translate the basic NWS data to the needed model input. Direct measurements of model input parameters have been made for limited model studies and those methods and techniques are becoming more widely applied; however, many model applications still rely heavily on the NWS data.

b. Many models use the standard hourly weather observations available from the National Climatic Data Center (NCDC). These observations are then ''preprocessed'' before they can be used in the models.

8.3.2.2 Recommendations

a. The preferred models listed in Appendix A all accept as input the NWS meteorological data preprocessed into model compatible form. If NWS sata are judged to be adequately representative for a particular modeling application, they may be used. NCDC makes available surface [95] [96] and upper air [97] meteorological data in CD–ROM format.

b. Although most NWS measurements are made at a standard height of 10 meters, the actual anemometer height should be used as input to the preferred model. Note that AERMOD at a minimum requires wind observations at a height above ground between seven times the local surface roughness height and 100 meters.

c. Wind directions observed by the National Weather Service are reported to the nearest 10 degrees. A specific set of randomly generated numbers has been developed for use with the preferred EPA models and should be used to ensure a lack of bias in wind direction assignments within the models.

d. Data from universities, FAA, military stations, industry and pollution control agencies may be used if such data are equivalent in accuracy and detail to the NWS data, and they are judged to be adequately representative for the particular application.

8.3.3 Site-Specific Data

8.3.3.1 Discussion

a. Spatial or geographical representativeness is best achieved by collection of all of the needed model input data in close proximity to the actual site of the source(s). Site-specific measured data are therefore preferred as model input, provided that appropriate instrumentation and quality assurance procedures are followed and that the data collected are adequately representative (free from undue local or ''micro'' influences) and compatible with the input requirements of the model to be used. It should be noted that, while site-specific measurements are frequently made ''on-property'' (*i.e.,* on the source's premises), acquisition of adequately representative site-specific data does not preclude collection of data from a location off property. Conversely, collection of meteorological data on property does not of itself guarantee adequate representativeness. For help in determining representativeness of site-specific measurements, technical guidance [98] is available. Site-specific data should always be reviewed for consistency by a qualified meteorologist.

8.3.3.2 Recommendations

a. EPA guidance [98] provides recommendations on the collection and use of site-specific meteorological data. Recommendations on characteristics, siting, and exposure of meteorological instruments and on data recording, processing, completeness requirements, reporting, and archiving are also included. This publication should be used as a supplement to other limited guidance on these subjects.[89] Detailed information on quality assurance is also available.[99] As a minimum, site-specific measurements of ambient air temperature, transport wind speed and direction, and the variables necessary to estimate atmospheric dispersion should be available in meteorological data sets to be used in modeling. Care should be taken to ensure that meteorological instruments are located to provide representative characterization of pollutant transport between sources and receptors of interest. The Regional Office will determine the appropriateness of the measurement locations.

b. All site-specific data should be reduced to hourly averages. Table 8–3 lists the wind related parameters and the averaging time requirements.

c. *Missing Data Substitution.* After valid data retrieval requirements have been met, hours in the record having missing data should be treated according to an established data substitution protocol provided that data from an adequately representative alternative site are available. Such protocols are usually part of the approved monitoring program plan. Data substitution guidance is provided in Section 5.3 of reference 98. If no representative alternative data are available for substitution, the absent data should be coded as missing using missing data codes appropriate to the applicable meteorological pre-processor. Appropriate model options for treating missing data, if available in the model, should be employed.

d. *Solar Radiation Measurements.* Total solar radiation or net radiation should be measured with a reliable pyranometer or net radiometer, sited and operated in accordance with established site-specific meteorological guidance.[98] [99]

e. *Temperature Measurements.* Temperature measurements should be made at standard shelter height (2m) in accordance with established site-specific meteorological guidance.[98]

f. *Temperature Difference Measurements.* Temperature difference (ΔT) measurements should be obtained using matched thermometers or a reliable thermocouple system to achieve adequate accuracy. Siting, probe placement, and operation of ΔT systems should be based on guidance found in Chapter 3 of reference 98, and such guidance should be followed when obtaining vertical temperature gradient data for use in plume rise estimates or in determining the critical dividing streamline height.

g. *Winds Aloft.* For simulation of plume rise and dispersion of a plume emitted from a stack, characterization of the wind profile up through the layer in which the plume disperses is required. This is especially important in complex terrain and/or complex wind situations. For tall stacks when site specific data are needed, these winds have been obtained traditionally using meteorological sensors mounted on tall towers. A feasible alternative to tall towers is the use of meteorological remote sensing instruments (*e.g.,* acoustic sounders or radar wind profilers) to provide winds aloft, coupled with 10-meter towers to provide the near-surface winds. (For specific requirements for AERMOD and CTDMPLUS, see Appendix A.) Specifications for wind measuring instruments and systems are contained in reference 98.

h. *Turbulence.* There are several dispersion models that are capable of using direct measurements of turbulence (wind fluctuation) in the characterization of the vertical and lateral dispersion (*e.g.,* CTDMPLUS, AERMOD, CALPUFF). For specific requirements for CTDMPLUS, AERMOD and CALPUFF, see Appendix A. For technical guidance on measurement and processing of turbulence parameters, see reference 98. When turbulence data are used in this manner to directly characterize the vertical and lateral dispersion, the averaging time for the turbulence measurements should be one hour (Table 8–3). There are other dispersion models (*e.g.,* ISC-PRIME, BLP, and CALINE3) that employ P–G stability categories for the characterization of the vertical and lateral dispersion. Methods for using site-specific turbulence data for the characterization of P–G stability categories

are discussed in reference 98. When turbulence data are used in this manner to determine the P–G stability category, the averaging time for the turbulence measurements should be 15-minutes.

i. *Stability Categories.* For dispersion models that employ P–G stability categories for the characterization of the vertical and lateral dispersion (*e.g.,* ISC-PRIME), the P–G stability categories, as originally defined, couple near-surface measurements of wind speed with subjectively determined insolation assessments based on hourly cloud cover and ceiling height observations. The wind speed measurements are made at or near 10m. The insolation rate is typically assessed using observations of cloud cover and ceiling height based on criteria outlined by Turner.[74] It is recommended that the P–G stability category be estimated using the Turner method with site-specific wind speed measured at or near 10m and representative cloud cover and ceiling height. Implementation of the Turner method, as well as considerations in determining representativeness of cloud cover and ceiling height in cases for which site-specific cloud observations are unavailable, may be found in Section 6 of reference 98. In the absence of requisite data to implement the Turner method, the SRDT method or wind fluctuation statistics (*i.e.,* the σ_E and σ_A methods) may be used.

j. The SRDT method, described in Section 6.4.4.2 of reference 98, is modified slightly from that published from earlier work [100] and has been evaluated with three site-specific data bases.[101] The two methods of stability classification which use wind fluctuation statistics, the σ_E and σ_A methods, are also described in detail in Section 6.4.4 of reference 106 (note applicable tables in Section 6). For additional information on the wind fluctuation methods, several references are available.[102] [103] [104] [105]

k. *Meteorological Data Preprocessors.* The following meteorological preprocessors are recommended by EPA: AERMET,[106] PCRAMMET,[107] MPRM,[108] METPRO,[109] and CALMET. [110] AERMET, which is patterned after MPRM, should be used to preprocess all data for use with AERMOD. Except for applications that employ AERMOD, PCRAMMET is the recommended meteorological preprocessor for use in applications employing hourly NWS data. MPRM is a general purpose meteorological data preprocessor which supports regulatory models requiring PCRAMMET formatted (NWS) data. MPRM is available for use in applications employing site-specific meteorological data. The latest version (MPRM 1.3) has been configured to implement the SRDT method for estimating P–G stability categories. METPRO is the required meteorological data preprocessor for use with CTDMPLUS. CALMET is available for use with applications of CALPUFF. All of the above mentioned data preprocessors are available for downloading from EPA's Internet SCRAM website (Section 2.3).

TABLE 8–3.—AVERAGING TIMES FOR SITE-SPECIFIC WIND AND TURBULENCE MEASUREMENTS

Parameter	Averaging time (hours)
Surface wind speed (for use in stability determinations)	1
Transport direction	1
Dilution wind speed	1
Turbulence measurements (σ_E and σ_A) for use in stability determinations	([1])
Turbulence Measurements for direct input to dispersion models	1

[1] To minimize meander effects in σ_A when wind conditions are light and/or variable, determine the hourly average σ value from four sequential 15-minute σ's according to the following formula:

$$\sigma_{1\text{-hr}} = \sqrt{\frac{\sigma_{15}^2 + \sigma_{15}^2 + \sigma_{15}^2 + \sigma_{15}^2}{4}}$$

8.3.4 Treatment of Calms

8.3.4.1 Discussion

a. Treatment of calm or light and variable wind poses a special problem in model applications since steady-state Gaussian plume models assume that concentration is inversely proportional to wind speed. Furthermore, concentrations may become unrealistically large when wind speeds less than l m/s are input to the model. Procedures have been developed to prevent the occurrence of overly conservative concentration estimates during periods of calms. These procedures acknowledge that a steady-state Gaussian plume model does not apply during calm conditions, and that our knowledge of wind patterns and plume behavior during these conditions does not, at present, permit the development of a better technique. Therefore, the procedures disregard hours which are identified as calm. The hour is treated as missing and a convention for handling missing hours is recommended.

b. NWS meteorological data preprocessed by PCRAMMET for input to ISC–PRIME may take one of two formats: ASCII or binary (unformatted). If the format is ASCII, PCRAMMET does not modify wind speeds having a value of zero. If the format is binary and PCRAMMET detects the occurrence of a calm, it sets the wind speed value of zero to 1.00 m/s and repeats the wind direction from the previous non-calm hour. Models such as ISC–PRIME identify the original calm cases by checking for the occurrence of a 1.00 m/s wind speed coincident with a wind direction equal to that for the previous hour. ISC–PRIME then treats these calm hours as missing, and no concentration is calculated.

c. AERMOD, while fundamentally a steady-state Gaussian plume model, contains improved algorithms for dealing with low wind speed (near calm) conditions. As a result, AERMOD can produce model estimates for conditions when the wind speed may be less than 1 m/s, but still greater than the instrument threshold. Required input to AERMET, the meteorological processor for AERMOD, includes a threshold wind speed and a reference wind speed. The threshold wind speed is typically the threshold of the instrument used to collect the wind speed data. The reference wind speed is selected by the model as the lowest level of non-missing wind speed and direction data where the speed is greater than the wind speed threshold, and the height of the measurement is between seven times the local surface roughness and 100 meters. If the only valid observation of the reference wind speed between these heights is less than the threshold, the hour is considered calm, and no concentration is calculated. None of the observed wind speeds in a measured wind profile that are less than the threshold speed are used in construction of the modeled wind speed profile in AERMOD.

8.3.4.2 Recommendations

a. Hourly concentrations calculated with steady-state Gaussian plume models using calms should not be considered valid; the wind and concentration estimates for these hours should be disregarded and considered to be missing. Critical concentrations for 3-, 8-, and 24-hour averages should be calculated by dividing the sum of the hourly concentrations for the period by the number of valid or non-missing hours. If the total number of valid hours is less than 18 for 24-hour averages, less than 6 for 8-hour averages or less than 3 for 3-hour averages, the total concentration should be divided by 18 for the 24-hour average, 6 for the 8-hour average and 3 for the 3-hour average. For annual averages, the sum of all valid hourly concentrations is divided by the number of non-calm hours during the year. ISC–PRIME and AERMOD have been coded to implement these instructions. For other models listed in Appendix A, a post-processor computer program, CALMPRO [111] has been prepared, is available on the SCRAM Internet website (Section 2.3), and should be used.

b. Stagnant conditions that include extended periods of calms often produce high concentrations over wide areas for relatively long averaging periods. The standard steady-state Gaussian plume models are often not applicable to such situations. When stagnation conditions are of concern, other modeling techniques should be considered on a case-by-case basis (see also Section 7.2.8).

c. When used in steady-state Gaussian plume models except AERMOD, measured site-specific wind speeds of less than l m/s but higher than the response threshold of the instrument should be input as l m/s; the corresponding wind direction should also be input. Wind observations below the response threshold of the instrument should be set to zero, with the input file in ASCII format. For input to AERMOD, no adjustment should be made to the site-specific wind data. In all cases involving steady-state Gaussian plume models, calm hours should be treated as missing, and concentrations should be calculated as in paragraph 8.3.4.2a.

9.0 Accuracy and Uncertainty of Models

9.1 Discussion

a. Increasing reliance has been placed on concentration estimates from models as the primary basis for regulatory decisions concerning source permits and emission control requirements. In many situations, such as review of a proposed source, no practical alternative exists. Therefore, there is an obvious need to know how accurate models really are and how any uncertainty in the estimates affects regulatory decisions. EPA recognizes the need for incorporating such information and has sponsored workshops [112] on model accuracy, the possible ways to quantify accuracy, and on considerations in the incorporation of model accuracy and uncertainty in the regulatory process. The Second (EPA) Conference on Air Quality Modeling, August 1982,[113] was devoted to that subject.

9.1.1 Overview of Model Uncertainty

a. Dispersion models generally attempt to estimate concentrations at specific sites that really represent an ensemble average of numerous repetitions of the same event. The event is characterized by measured or ''known'' conditions that are input to the models, *e.g.,* wind speed, mixed layer height, surface heat flux, emission characteristics, etc. However, in addition to the known conditions, there are unmeasured or unknown variations in the conditions of this event, *e.g.,* unresolved details of the atmospheric flow such as the turbulent velocity field. These unknown conditions, may vary among repetitions of the event. As a result, deviations in observed concentrations from their ensemble average, and from the concentrations estimated by the model, are likely to occur even though the known conditions are fixed. Even with a perfect model that predicts the correct ensemble average, there are likely to be deviations from the observed concentrations in individual repetitions of the event, due to variations in the unknown conditions. The statistics of these concentration residuals are termed ''inherent'' uncertainty. Available evidence suggests that this source of uncertainty alone may be responsible for a typical range of variation in concentrations of as much as ±50 percent.[114]

b. Moreover, there is ''reducible'' uncertainty [115] associated with the model and its input conditions; neither models nor data bases are perfect. Reducible uncertainties are caused by: (1) Uncertainties in the input values of the known conditions (*i.e.,* emission characteristics and meteorological data); (2) errors in the measured concentrations which are used to compute the concentration residuals; and (3) inadequate model physics and formulation. The ''reducible'' uncertainties can be minimized through better (more accurate and more representative) measurements and better model physics.

c. To use the terminology correctly, reference to model accuracy should be limited to that portion of reducible uncertainty which deals with the physics and the formulation of the model. The accuracy of the model is normally determined by an evaluation procedure which involves the comparison of model concentration estimates with measured air quality data.[116] The statement of accuracy is based on statistical tests or performance measures such as bias, noise, correlation, *etc.*[17] However, information that allows a distinction between contributions of the various elements of inherent and reducible uncertainty is only now beginning to emerge. As a result most discussions of the accuracy of models make no quantitative distinction between (1) limitations of the model versus (2) limitations of the data base and of knowledge concerning atmospheric variability. The reader should be aware that statements on model accuracy and uncertainty may imply the need for improvements in model performance that even the ''perfect'' model could not satisfy.

9.1.2 Studies of Model Accuracy

a. A number of studies [117] [118] have been conducted to examine model accuracy, particularly with respect to the reliability of short-term concentrations required for ambient standard and increment evaluations. The results of these studies are not surprising. Basically, they confirm what leading atmospheric scientists have said for some time: (1) models are more reliable for estimating longer time-averaged concentrations than for estimating short-term concentrations at specific locations; and (2) the models are reasonably reliable in estimating the magnitude of highest concentrations occurring sometime, somewhere within an area. For example, errors in highest estimated concentrations of ±10 to 40 percent are found to be typical,[119] *i.e.,* certainly well within the often quoted factor-of-two accuracy that has long been recognized for these models. However, estimates of concentrations that occur at a specific time and site, are poorly correlated with actually observed concentrations and are much less reliable.

b. As noted in paragraph 9.1.2 a, poor correlations between paired concentrations at fixed stations may be due to ''reducible'' uncertainties in knowledge of the precise plume location and to unquantified inherent uncertainties. For example, Pasquill [120] estimates that, apart from data input errors, maximum ground-level concentrations at a given hour for a point source in flat terrain could be in error by 50 percent due to these uncertainties. Uncertainty of five to 10 degrees in the measured wind direction, which transports the plume, can result in concentration errors of 20 to 70 percent for a particular time and location, depending on stability and station location. Such uncertainties do not indicate that an estimated concentration does not occur, only that the precise time and locations are in doubt.

9.1.3 Use of Uncertainty in Decision-Making

a. The accuracy of model estimates varies with the model used, the type of application, and site-specific characteristics. Thus, it is desirable to quantify the accuracy or uncertainty associated with concentration estimates used in decision-making. Communications between modelers and decision-makers must be fostered and further developed. Communications concerning concentration estimates currently exist in most cases, but the communications dealing with the accuracy of models and its meaning to the decision-maker are limited by the lack of a technical basis for quantifying and directly including uncertainty in decisions. Procedures for quantifying and interpreting uncertainty in the practical application of such concepts are only beginning to evolve; much study is still required.[112] [113] [115]

b. In all applications of models an effort is encouraged to identify the reliability of the model estimates for that particular area and to determine the magnitude and sources of error associated with the use of the model. The analyst is responsible for recognizing and quantifying limitations in the accuracy, precision and sensitivity of the procedure. Information that might be useful to the decision-maker in recognizing the seriousness of potential air quality violations includes such model accuracy estimates as accuracy of peak predictions, bias, noise, correlation, frequency distribution, spatial extent of high concentration, *etc.* Both space/time pairing of estimates and measurements and unpaired comparisons are recommended. Emphasis should be on the highest concentrations and the averaging times of the standards or increments of concern. Where possible, confidence intervals about the statistical values should be provided. However, while such information can be provided by the modeler to the decision-maker, it is unclear how this information should be used to make an air pollution control decision. Given a range of possible outcomes, it is easiest and tends to ensure consistency if the decision-maker confines his judgement to use of the ''best estimate'' provided by the modeler (*i.e.,* the design concentration estimated by a model recommended in the Guideline or an alternate model of known accuracy). This is an indication of the practical limitations

imposed by current abilities of the technical community.

c. To improve the basis for decision-making, EPA has developed and is continuing to study procedures for determining the accuracy of models, quantifying the uncertainty, and expressing confidence levels in decisions that are made concerning emissions controls.[121] [122] However, work in this area involves ''breaking new ground'' with slow and sporadic progress likely. As a result, it may be necessary to continue using the ''best estimate'' until sufficient technical progress has been made to meaningfully implement such concepts dealing with uncertainty.

9.1.4 Evaluation of Models

a. A number of actions have been taken to ensure that the best model is used correctly for each regulatory application and that a model is not arbitrarily imposed. First, the Guideline clearly recommends the most appropriate model be used in each case. Preferred models, based on a number of factors, are identified for many uses. General guidance on using alternatives to the preferred models is also provided. Second, the models have been subjected to a systematic performance evaluation and a peer scientific review. Statistical performance measures, including measures of difference (or residuals) such as bias, variance of difference and gross variability of the difference, and measures of correlation such as time, space, and time and space combined as recommended by the AMS Woods Hole Workshop, [17] were generally followed. Third, more specific information has been provided for justifying the site specific use of alternative models in previously cited EPA guidance.[25] [27] Together these documents provide methods that allow a judgement to be made as to what models are most appropriate for a specific application. For the present, performance and the theoretical evaluation of models are being used as an indirect means to quantify one element of uncertainty in air pollution regulatory decisions.

b. In addition to performance evaluation of models, sensitivity analyses are encouraged since they can provide additional information on the effect of inaccuracies in the data bases and on the uncertainty in model estimates. Sensitivity analyses can aid in determining the effect of inaccuracies of variations or uncertainties in the data bases on the range of likely concentrations. Such information may be used to determine source impact and to evaluate control strategies. Where possible, information from such sensitivity analyses should be made available to the decision-maker with an appropriate interpretation of the effect on the critical concentrations.

9.2 Recommendations

a. No specific guidance on the quantification of model uncertainty for use in decision-making is being given at this time. As procedures for considering uncertainty develop and become implementable, this guidance will be changed and expanded. For the present, continued use of the ''best estimate'' is acceptable; however, in specific circumstances for O_3, PM–2.5 and regional haze, additional information and/or procedures may be appropriate.[42] [43]

10.0 Regulatory Application of Models

10.1 Discussion

a. Procedures with respect to the review and analysis of air quality modeling and data analyses in support of SIP revisions, PSD permitting or other regulatory requirements need a certain amount of standardization to ensure consistency in the depth and comprehensiveness of both the review and the analysis itself. This section recommends procedures that permit some degree of standardization while at the same time allowing the flexibility needed to assure the technically best analysis for each regulatory application.

b. Dispersion model estimates, especially with the support of measured air quality data, are the preferred basis for air quality demonstrations. Nevertheless, there are instances where the performance of recommended dispersion modeling techniques, by comparison with observed air quality data, may be shown to be less than acceptable. Also, there may be no recommended modeling procedure suitable for the situation. In these instances, emission limitations may be established solely on the basis of observed air quality data as would be applied to a modeling analysis. The same care should be given to the analyses of the air quality data as would be applied to a modeling analysis.

c. The current NAAQS for SO_2 and CO are both stated in terms of a concentration not to be exceeded more than once a year. There is only an annual standard for NO_2 and a quarterly standard for Pb. Standards for fine particulate matter (PM–2.5) are expressed in terms of both long-term (annual) and short-term (daily) averages. The long-term standard is calculated using the three year average of the annual averages while the short-term standard is calculated using the three year average of the 98th percentile of the daily average concentration. For PM–10, the convention is to compare the arithmetic mean, averaged over 3 consecutive years, with the concentration specified in the NAAQS (50 $\mu g/m^3$). The 24-hour NAAQS (150 $\mu g/m^3$) is met if, over a 3-year period, there is (on average) no more than one exceedance per year. For ozone the short term 1-hour standard is expressed in terms of an expected exceedance limit while the short term 8-hour standard is expressed in terms of a three year average of the annual fourth highest daily maximum 8-hour value. The NAAQS are subjected to extensive review and possible revision every 5 years.

d. This section discusses general requirements for concentration estimates and identifies the relationship to emission limits. The following recommendations apply to: (1) Revisions of State Implementation Plans and (2) the review of new sources and the prevention of significant deterioration (PSD).

10.2 Recommendations

10.2.1 Analysis Requirements

a. Every effort should be made by the Regional Office to meet with all parties involved in either a SIP revision or a PSD permit application prior to the start of any work on such a project. During this meeting, a protocol should be established between the preparing and reviewing parties to define the procedures to be followed, the data to be collected, the model to be used, and the analysis of the source and concentration data. An example of requirements for such an effort is contained in the Air Quality Analysis Checklist posted on EPA's Internet SCRAM website (Section 2.3). This checklist suggests the level of detail required to assess the air quality resulting from the proposed action. Special cases may require additional data collection or analysis and this should be determined and agreed upon at this preapplication meeting. The protocol should be written and agreed upon by the parties concerned, although a formal legal document is not intended. Changes in such a protocol are often required as the data collection and analysis progresses. However, the protocol establishes a common understanding of the requirements.

b. An air quality analysis should begin with a screening model to determine the potential of the proposed source or control strategy to violate the PSD increment or NAAQS. For traditional stationary sources, EPA guidance should be followed.[34] Guidance is also available for mobile sources.[56]

c. If the concentration estimates from screening techniques indicate that the PSD increment or NAAQS may be approached or exceeded, then a more refined modeling analysis is appropriate and the model user should select a model according to recommendations in Sections 4–7. In some instances, no refined technique may be specified in this guide for the situation. The model user is then encouraged to submit a model developed specifically for the case at hand. If that is not possible, a screening technique may supply the needed results.

d. Regional Offices should require permit applicants to incorporate the pollutant contributions of all sources into their analysis. Where necessary this may include emissions associated with growth in the area of impact of the new or modified source. PSD air quality assessments should consider the amount of the allowable air quality increment that has already been granted to any other sources. Therefore, the most recent source applicant should model the existing or permitted sources in addition to the one currently under consideration. This would permit the use of newly acquired data or improved modeling techniques if such have become available since the last source was permitted. When remodeling, the worst case used in the previous modeling analysis should be one set of conditions modeled in the new analysis. All sources should be modeled for each set of meteorological conditions selected and for all receptor sites used in the previous applications as well as new sites specific to the new source.

10.2.2 Use of Measured Data in Lieu of Model Estimates

a. Modeling is the preferred method for determining emission limitations for both new and existing sources. When a preferred model is available, model results alone (including background) are sufficient. Monitoring will normally not be accepted as

the sole basis for emission limitation. In some instances when the modeling technique available is only a screening technique, the addition of air quality data to the analysis may lend credence to model results.

b. There are circumstances where there is no applicable model, and measured data may need to be used. However, only in the case of an existing source should monitoring data alone be a basis for emission limits. In addition, the following in paragraphs 10.2.2 b.i through iv should be considered prior to the acceptance of the measured data:

i. Does a monitoring network exist for the pollutants and averaging times of concern?

ii. Has the monitoring network been designed to locate points of maximum concentration?

iii. Do the monitoring network and the data reduction and storage procedures meet EPA monitoring and quality assurance requirements?

iv. Do the data set and the analysis allow impact of the most important individual sources to be identified if more than one source or emission point is involved?

v. Is at least one full year of valid ambient data available?

vi. Can it be demonstrated through the comparison of monitored data with model results that available models are not applicable?

c. The number of monitors required is a function of the problem being considered. The source configuration, terrain configuration, and meteorological variations all have an impact on number and placement of monitors. Decisions can only be made on a case-by-case basis. Guidance is available for establishing criteria for demonstrating that a model is not applicable.[25]

d. Sources should obtain approval from the Regional Office or reviewing authority for the monitoring network prior to the start of monitoring. A monitoring protocol agreed to by all concerned parties is highly desirable. The design of the network, the number, type and location of the monitors, the sampling period, averaging time as well as the need for meteorological monitoring or the use of mobile sampling or plume tracking techniques, should all be specified in the protocol and agreed upon prior to start-up of the network.

10.2.3 Emission Limits

10.2.3.1 Design Concentrations

a. Emission limits should be based on concentration estimates for the averaging time that results in the most stringent control requirements. The concentration used in specifying emission limits is called the design value or design concentration and is a sum of the concentration contributed by the source and the background concentration.

b. To determine the averaging time for the design value, the most restrictive NAAQS should be identified by calculating, for each averaging time, the ratio of the difference between the applicable NAAQS (S) and the background concentration (B) to the (model) predicted concentration (P) (*i.e.,* (S − B)/P). The averaging time with the lowest ratio identifies the most restrictive standard. If the annual average is the most restrictive, the highest estimated annual average concentration from one or a number of years of data is the design value. When short term standards are most restrictive, it may be necessary to consider a broader range of concentrations than the highest value. For example, for pollutants such as SO_2, the highest, second-highest concentration is the design value. For pollutants with statistically based NAAQS, the design value is found by determining the more restrictive of: (1) The short-term concentration over the period specified in the standard, or (2) the long-term concentration that is not expected to exceed the long-term NAAQS. Determination of design values for PM–10 is presented in more detail in EPA guidance.[44]

10.2.3.2 NAAQS Analyses for New or Modified Sources

a. For new or modified sources predicted to have a significant ambient impact [89] and to be located in areas designated attainment or unclassifiable for the SO_2, Pb, NO_2, or CO NAAQS, the demonstration as to whether the source will cause or contribute to an air quality violation should be based on: (1) The highest estimated annual average concentration determined from annual averages of individual years; or (2) the highest, second-highest estimated concentration for averaging times of 24-hours or less; and (3) the significance of the spatial and temporal contribution to any modeled violation. For Pb, the highest estimated concentration based on an individual calendar quarter averaging period should be used. Background concentrations should be added to the estimated impact of the source. The most restrictive standard should be used in all cases to assess the threat of an air quality violation. For new or modified sources predicted to have a significant ambient impact [89] in areas designated attainment or unclassifiable for the PM–10 NAAQS, the demonstration of whether or not the source will cause or contribute to an air quality violation should be based on sufficient data to show whether: (1) The projected 24-hour average concentrations will exceed the 24-hour NAAQS more than 1 percent of the time, on average ; (2) the expected (*i.e.,* average) annual mean concentration will exceed the annual NAAQS; and (3) the source contributes significantly, in a temporal and spatial sense, to any modeled violation.

10.2.3.3 PSD Air Quality Increments and Impacts

a. The allowable PSD increments for criteria pollutants are established by regulation and cited in 40 CFR 51.166. These maximum allowable increases in pollutant concentrations may be exceeded once per year at each site, except for the annual increment that may not be exceeded. The highest, second-highest increase in estimated concentrations for the short term averages as determined by a model should be less than or equal to the permitted increment. The modeled annual averages should not exceed the increment.

b. Screening techniques defined in Section 4 can sometimes be used to estimate short term incremental concentrations for the first new source that triggers the baseline in a given area. However, when multiple increment-consuming sources are involved in the calculation, the use of a refined model with at least 1 year of on-site or 5 years of off-site NWS data is normally required. In such cases, sequential modeling must demonstrate that the allowable increments are not exceeded temporally and spatially, *i.e.,* for all receptors for each time period throughout the year(s) (time period means the appropriate PSD averaging time, *e.g.,* 3-hour, 24-hour, etc.).

c. The PSD regulations require an estimation of the SO_2, particulate matter (PM–10), and NO_2 impact on any Class I area. Normally, steady-state Gaussian plume models should not be applied at distances greater than can be accommodated by the steady state assumptions inherent in such models. The maximum distance for refined steady-state Gaussian plume model application for regulatory purposes is generally considered to be 50km. Beyond the 50km range, screening techniques may be used to determine if more refined modeling is needed. If refined models are needed, long range transport models should be considered in accordance with Section 6.2.4. As previously noted in Sections 3 and 6, the need to involve the Federal Land Manager in decisions on potential air quality impacts, particularly in relation to PSD Class I areas, cannot be overemphasized.

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Appendix A to Appendix W of Part 51—Summaries of Preferred Air Quality Models

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A.0 Introduction and Availability
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A.0 Introduction and Availability

(1) This appendix summarizes key features of refined air quality models preferred for specific regulatory applications. For each model, information is provided on availability, approximate cost (where applicable), regulatory use, data input, output format and options, simulation of atmospheric physics, and accuracy. These models may be used without a formal demonstration of applicability provided they satisfy the recommendations for regulatory use; not all options in the models are necessarily recommended for regulatory use.

(2) Many of these models have been subjected to a performance evaluation using comparisons with observed air quality data. Where possible, several of the models contained herein have been subjected to evaluation exercises, including (1) statistical performance tests recommended by the American Meteorological Society and (2) peer scientific reviews. The models in this appendix have been selected on the basis of the results of the model evaluations, experience with previous use, familiarity of the model to various air quality programs, and the costs and resource requirements for use.

(3) With the exception of EDMS, codes and documentation for all models listed in this appendix are available from EPA's Support Center for Regulatory Air Models (SCRAM) website at *www.epa.gov/scram001.* Documentation is also available from the National Technical Information Service (NTIS), U.S. Department of Commerce, Springfield, VA 22161; phone: (800) 553–6847. Where possible, accession numbers are provided.

A.1 AMS/EPA Regulatory Model—AERMOD

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Availability

The model codes and associated documentation are available on EPA's Internet SCRAM website (Section A.0).

Abstract

AERMOD is a steady-state plume dispersion model for assessment of pollutant concentrations from a variety of sources. AERMOD simulates transport and dispersion from multiple point, area, or volume sources based on an up-to-date characterization of the atmospheric boundary layer. Sources may be located in rural or urban areas, and receptors may be located in simple or complex terrain. AERMOD accounts for building wake effects (*i.e.,* plume downwash). The model employs hourly sequential preprocessed meteorological data to estimate concentrations for averaging times from one hour to one year. AERMOD is designed to operate in concert with two pre-processor codes: AERMET processes meteorological data for input to AERMOD, and AERMAP processes terrain elevation data and generates receptor information for input to AERMOD.

a. Recommendations for Regulatory Use

(1) AERMOD is appropriate for the following applications:

- Point, volume, and area sources;
- Surface, near-surface, and elevated releases;
- Rural or urban areas;
- Simple and complex terrain;
- Transport distances over which steady-state assumptions are appropriate, up to 50 km;
- 1-hour to annual averaging times; and
- Continuous toxic air emissions.

(2) For regulatory applications of AERMOD, the regulatory default option should be set, *i.e.,* the parameter DFAULT should be employed in the MODELOPT record in the COntrol Pathway. The DFAULT option requires the use of terrain elevation data, stack-tip downwash, sequential date checking, and does not permit the use of the model in the SCREEN mode. In the regulatory default mode, pollutant half life or decay options are not employed, except in the case of an urban source of sulfur dioxide where a four-hour half life is applied. Terrain elevation data from the U.S. Geological Survey 7.5-Minute Digital Elevation Model (edcwww.cr.usgs.gov/doc/edchome/ndcdb/ndcdb.html) or equivalent (approx. 30-meter resolution) should be used in all applications. In some cases, exceptions of the terrain data requirement may be made in consultation with the permit/SIP reviewing authority.

b. Input Requirements

(1) Source data: Required input includes source type, location, emission rate, stack height, stack inside diameter, stack gas exit velocity, stack gas temperature, area and volume source dimensions, and source elevation. Building dimensions and variable emission rates are optional.

(2) Meteorological data: The AERMET meteorological preprocessor requires input of surface characteristics, including surface roughness (z_o), Bowen ratio, and albedo by sector and season or month, as well as, hourly observations of wind speed between $7z_o$ and 100m (reference wind speed measurement from which a vertical profile can be developed), wind direction, cloud cover, and temperature between z_o and 100m (reference temperature measurement from which a vertical profile can be developed). A morning sounding (in National Weather Service format) from a representative upper air station, latitude, longitude, time zone, and wind speed threshold are also required in AERMET. Additionally, measured profiles of wind, temperature, vertical and lateral turbulence may be required in certain applications (*e.g.,* in complex terrain) to adequately represent the meteorology affecting plume transport and dispersion. Optionally, measurements of solar, or net radiation may be input to AERMET. Two files are produced by the AERMET meteorological preprocessor for input to the AERMOD dispersion model. The surface file contains observed and calculated surface variables, one record per hour. The profile file contains the observations made at each level of a meteorological tower (or remote sensor), or the one-level observations taken from other representative data (*e.g.,* National Weather Service surface observations), one record per level per hour.

(i) Data used as input to AERMET should possess an adequate degree of representativeness to insure that the wind, temperature and turbulence profiles derived by AERMOD are both laterally and vertically representative of the source area. The adequacy of input data should be judged independently for each variable. The values for surface roughness, Bowen ratio, and albedo should reflect the surface characteristics in the vicinity of the meteorological tower, and should be adequately representative of the modeling domain. Finally, the primary atmospheric input variables including wind speed and direction, ambient temperature, cloud cover, and a morning upper air sounding should also be adequately representative of the source area.

(ii) For recommendations regarding the length of meteorological record needed to perform a regulatory analysis with AERMOD, see Section 8.3.1.

(3) Receptor data: Receptor coordinates, elevations, height above ground, and height scales are produced by the AERMAP terrain preprocessor for input to AERMOD. Discrete receptors and/or multiple receptor grids, Cartesian and/or polar, may be employed in AERMOD. AERMAP requires input of Digital Elevation Model (DEM) terrain data produced by the U.S. Geological Survey (USGS), or other equivalent data. AERMAP can be used optionally to estimate source elevations.

c. Output

Printed output options include input information, high concentration summary tables by receptor for user-specified averaging periods, maximum concentration summary tables, and concurrent values summarized by receptor for each day processed. Optional output files can be generated for: A listing of occurrences of exceedances of user-specified threshold value; a listing of concurrent (raw) results at each receptor for each hour modeled, suitable for post-processing; a listing of design values that can be imported into graphics software for plotting contours; an unformatted listing of raw results above a threshold value with a special structure for use with the TOXX model component of TOXST; a listing of concentrations by rank (*e.g.,* for use in quantile-quantile plots); and, a listing of concentrations, including arc-maximum normalized concentrations, suitable for model evaluation studies.

d. Type of Model

AERMOD is a steady-state plume model, using Gaussian distributions in the vertical and horizontal for stable conditions, and in the horizontal for convective conditions. The vertical concentration distribution for convective conditions results from an assumed bi-Gaussian probability density function of the vertical velocity.

e. Pollutant Types

AERMOD is applicable to primary pollutants and continuous releases of toxic and hazardous waste pollutants. Chemical transformation is treated by simple exponential decay. Settling and deposition are not yet simulated by AERMOD.

f. Source-Receptor Relationships

AERMOD applies user-specified locations for sources and receptors. Actual separation between each source-receptor pair is used. Source and receptor elevations are user input or are determined by AERMAP using USGS DEM terrain data. Receptors may be located at user-specified heights above ground level.

g. Plume Behavior

(1) In the convective boundary layer (CBL), the transport and dispersion of a plume is characterized as the superposition of three modeled plumes: The direct plume (from the stack), the indirect plume, and the penetrated plume, where the indirect plume accounts for the lofting of a buoyant plume near the top of the boundary layer, and the penetrated plume accounts for the portion of a plume that, due to its buoyancy, penetrates above the mixed layer, but can disperse downward and re-enter the mixed layer. In the CBL, plume rise is superposed on the displacements by random convective velocities (Weil *et al.,* 1997).

(2) In the stable boundary layer, plume rise is estimated using an iterative approach, similar to that in the CTDMPLUS model (Perry, 1992; Section 11.0, ref. 33).

(3) Stack-tip downwash and buoyancy induced dispersion effects are modeled. Building wake effects are simulated for stacks less than good engineering practice height using the methods contained in ISCST (Section 11.0, ref. 60). For stacks higher than building height plus one-half the lesser of the building height or building width, the building wake algorithm of Huber and Snyder (1976) is used. For lower stacks, the building wake algorithm of Schulman and Scire (Schulman and Hanna, 1986) is used, but stack-tip downwash and buoyancy-induced dispersion are not used.

(4) For elevated terrain, AERMOD incorporates the concept of the critical dividing streamline height, in which flow below this height remains horizontal, and flow above this height tends to rise up and over terrain (Snyder *et al.,* 1985). Plume

concentration estimates are the weighted sum of these two limiting plume states. However, consistent with the steady-state assumption of uniform horizontal wind direction over the modeling domain, straight-line plume trajectories are assumed, with adjustment in the plume/receptor geometry used to account for the terrain effects.

h. Horizontal Winds

Vertical profiles of wind are calculated for each hour based on measurements and surface-layer similarity (scaling) relationships. At a given height above ground, for a given hour, winds are assumed constant over the modeling domain. The effect of the vertical variation in horizontal wind speed on dispersion is accounted for through simple averaging over the plume depth.

i. Vertical Wind Speed

In convective conditions, the effects of random vertical updraft and downdraft velocities are simulated with a bi-Gaussian probability density function. In both convective and stable conditions, the mean vertical wind speed is assumed equal to zero.

j. Horizontal Dispersion

Gaussian horizontal dispersion coefficients are estimated as continuous functions of the parameterized (or measured) ambient lateral turbulence and also account for buoyancy-induced and building wake-induced turbulence. Vertical profiles of lateral turbulence are developed from measurements and similarity (scaling) relationships. Effective turbulence values are determined from the portion of the vertical profile of lateral turbulence between the plume height and the receptor height. The effective lateral turbulence is then used to estimate horizontal dispersion.

k. Vertical Dispersion

In the stable boundary layer, Gaussian vertical dispersion coefficients are estimated as continuous functions of parameterized vertical turbulence. In the convective boundary layer, vertical dispersion is characterized by a bi-Gaussian probability density function, and is also estimated as a continuous function of parameterized vertical turbulence. Vertical turbulence profiles are developed from measurements and similarity (scaling) relationships. These turbulence profiles account for both convective and mechanical turbulence. Effective turbulence values are determined from the portion of the vertical profile of vertical turbulence between the plume height and the receptor height. The effective vertical turbulence is then used to estimate vertical dispersion.

l. Chemical Transformation

Chemical transformations are generally not treated by AERMOD. However, AERMOD does contain an option to treat chemical transformation using simple exponential decay, although this option is typically not used in regulatory applications, except for sources of sulfur dioxide in urban areas. Either a decay coefficient or a half life is input by the user.

m. Physical Removal

Neither wet or dry deposition of particulate or gaseous pollutants is currently simulated by AERMOD.

n. Evaluation Studies

API, 1998: Evaluation of State of the Science of Air Quality Dispersion Model, Scientific Evaluation, prepared by Woodward-Clyde Consultants, Lexington, Massachusetts, for American Petroleum Institute, Washington, D.C., 20005–4070.

Paine, R.J., R.F. Lee, R.W. Brode, R.B. Wilson, A.J Cimorelli, S.G. Perry, J.C. Weil, A. Venkatram and W.D. Peters, 1998: Model Evaluation Results for AERMOD (12/17/98 Draft). Prepared for Environmental Protection Agency, Research Triangle Park, NC. (Docket No. A–99–05, II–A–5)

A.2 Buoyant Line and Point Source Dispersion Model (BLP)

Reference

Schulman, Lloyd L. and Joseph S. Scire, 1980. Buoyant Line and Point Source (BLP) Dispersion Model User's Guide. Document P–7304B. Environmental Research and Technology, Inc., Concord, MA. (NTIS No. PB 81–164642)

Availability

The computer code is available on EPA's Internet SCRAM website and also on diskette (as PB 90–500281) from the National Technical Information Service (see Section A.0).

Abstract

BLP is a Gaussian plume dispersion model designed to handle unique modeling problems associated with aluminum reduction plants, and other industrial sources where plume rise and downwash effects from stationary line sources are important.

a. Recommendations for Regulatory Use

(1) The BLP model is appropriate for the following applications:

- Aluminum reduction plants which contain buoyant, elevated line sources;
- Rural areas;
- Transport distances less than 50 kilometers;
- Simple terrain; and
- One hour to one year averaging times.

(2) The following options should be selected for regulatory applications:

(i) Rural (IRU=1) mixing height option;

(ii) Default (no selection) for plume rise wind shear (LSHEAR), transitional point source plume rise (LTRANS), vertical potential temperature gradient (DTHTA), vertical wind speed power law profile exponents (PEXP), maximum variation in number of stability classes per hour (IDELS), pollutant decay (DECFAC), the constant in Briggs' stable plume rise equation (CONST2), constant in Briggs' neutral plume rise equation (CONST3), convergence criterion for the line source calculations (CRIT), and maximum iterations allowed for line source calculations (MAXIT); and

(iii) Terrain option (TERAN) set equal to 0.0, 0.0, 0.0, 0.0, 0.0, 0.0

(3) For other applications, BLP can be used if it can be demonstrated to give the same estimates as a recommended model for the same application, and will subsequently be executed in that mode.

(4) BLP can be used on a case-by-case basis with specific options not available in a recommended model if it can be demonstrated, using the criteria in Section 3.2, that the model is more appropriate for a specific application.

b. Input Requirements

(1) Source data: Point sources require stack location, elevation of stack base, physical stack height, stack inside diameter, stack gas exit velocity, stack gas exit temperature, and pollutant emission rate. Line sources require coordinates of the end points of the line, release height, emission rate, average line source width, average building width, average spacing between buildings, and average line source buoyancy parameter.

(2) Meteorological data: Hourly surface weather data from punched cards or from the preprocessor program PCRAMMET which provides hourly stability class, wind direction, wind speed, temperature, and mixing height.

(3) Receptor data: locations and elevations of receptors, or location and size of receptor grid or request automatically generated receptor grid.

c. Output

(1) Printed output (from a separate post-processor program) includes:

(2) Total concentration or, optionally, source contribution analysis; monthly and annual frequency distributions for 1-, 3-, and 24-hour average concentrations; tables of 1-, 3-, and 24-hour average concentrations at each receptor; table of the annual (or length of run) average concentrations at each receptor;

(3) Five highest 1-, 3-, and 24-hour average concentrations at each receptor; and

(4) Fifty highest 1-, 3-, and 24-hour concentrations over the receptor field.

d. Type of Model

BLP is a gaussian plume model.

e. Pollutant Types

BLP may be used to model primary pollutants. This model does not treat settling and deposition.

f. Source-Receptor Relationship

(1) BLP treats up to 50 point sources, 10 parallel line sources, and 100 receptors arbitrarily located.

(2) User-input topographic elevation is applied for each stack and each receptor.

g. Plume Behavior

(1) BLP uses plume rise formulas of Schulman and Scire (1980).

(2) Vertical potential temperature gradients of 0.02 Kelvin per meter for E stability and 0.035 Kelvin per meter are used for stable plume rise calculations. An option for user input values is included.

(3) Transitional rise is used for line sources.

(4) Option to suppress the use of transitional plume rise for point sources is included.

(5) The building downwash algorithm of Schulman and Scire (1980) is used.

h. Horizontal Winds

(1) Constant, uniform (steady-state) wind is assumed for an hour.

(2) Straight line plume transport is assumed to all downwind distances.

(3) Wind speeds profile exponents of 0.10, 0.15, 0.20, 0.25, 0.30, and 0.30 are used for stability classes A through F, respectively. An option for user-defined values and an option to suppress the use of the wind speed profile feature are included.

i. Vertical Wind Speed

Vertical wind speed is assumed equal to zero.

j. Horizontal Dispersion

(1) Rural dispersion coefficients are from Turner (1969), with no adjustment made for variations in surface roughness or averaging time.

(2) Six stability classes are used.

k. Vertical Dispersion

(1) Rural dispersion coefficients are from Turner (1969), with no adjustment made for variations in surface roughness.

(2) Six stability classes are used.

(3) Mixing height is accounted for with multiple reflections until the vertical plume standard deviation equals 1.6 times the mixing height; uniform mixing is assumed beyond that point.

(4) Perfect reflection at the ground is assumed.

l. Chemical Transformation

Chemical transformations are treated using linear decay. Decay rate is input by the user.

m. Physical Removal

Physical removal is not explicitly treated.

n. Evaluation Studies

Schulman, L.L. and J.S. Scire, 1980. Buoyant Line and Point Source (BLP) Dispersion Model User's Guide, P–7304B. Environmental Research and Technology, Inc., Concord, MA.

Scire, J.S. and L.L. Schulman, 1981. Evaluation of the BLP and ISC Models with SF_6 Tracer Data and SO_2 Measurements at Aluminum Reduction Plants. APCA Specialty Conference on Dispersion Modeling for Complex Sources, St. Louis, MO.

A.3 CALINE3

Reference

Benson, Paul E, 1979. CALINE3—A Versatile Dispersion Model for Predicting Air Pollutant Levels Near Highways and Arterial Streets. Interim Report, Report Number FHWA/CA/TL–79/23. Federal Highway Administration, Washington, D.C. (NTIS No. PB 80–220841)

Availability

The CALINE3 model is available on diskette (as PB 95–502712) from NTIS. The source code and user's guide are also available on EPA's Internet SCRAM website (Section A.0).

Abstract

CALINE3 can be used to estimate the concentrations of nonreactive pollutants from highway traffic. This steady-state Gaussian model can be applied to determine air pollution concentrations at receptor locations downwind of ''at-grade,'' ''fill,'' ''bridge,'' and ''cut section'' highways located in relatively uncomplicated terrain. The model is applicable for any wind direction, highway orientation, and receptor location. The model has adjustments for averaging time and surface roughness, and can handle up to 20 links and 20 receptors. It also contains an algorithm for deposition and settling velocity so that particulate concentrations can be predicted.

a. Recommendations for Regulatory Use

CALINE–3 is appropriate for the following applications:

- Highway (line) sources;
- Urban or rural areas;
- Simple terrain;
- Transport distances less than 50 kilometers; and
- One-hour to 24-hour averaging times.

b. Input Requirements

(1) Source data: up to 20 highway links classed as ''at-grade,'' ''fill'' ''bridge,'' or ''depressed''; coordinates of link end points; traffic volume; emission factor; source height; and mixing zone width.

(2) Meteorological data: wind speed, wind angle (measured in degrees clockwise from the Y axis), stability class, mixing height, ambient (background to the highway) concentration of pollutant.

(3) Receptor data: coordinates and height above ground for each receptor.

c. Output

Printed output includes concentration at each receptor for the specified meteorological condition.

d. Type of Model

CALINE–3 is a Gaussian plume model.

e. Pollutant Types

CALINE–3 may be used to model primary pollutants.

f. Source-Receptor Relationship

(1) Up to 20 highway links are treated.

(2) CALINE–3 applies user input location and emission rate for each link. User-input receptor locations are applied.

g. Plume Behavior

Plume rise is not treated.

h. Horizontal Winds

(1) User-input hourly wind speed and direction are applied.

(2) Constant, uniform (steady-state) wind is assumed for an hour.

i. Vertical Wind Speed

Vertical wind speed is assumed equal to zero.

j. Horizontal Dispersion

(1) Six stability classes are used.

(2) Rural dispersion coefficients from Turner (1969) are used, with adjustment for roughness length and averaging time.

(3) Initial traffic-induced dispersion is handled implicitly by plume size parameters.

k. Vertical Dispersion

(1) Six stability classes are used.

(2) Empirical dispersion coefficients from Benson (1979) are used including an adjustment for roughness length.

(3) Initial traffic-induced dispersion is handled implicitly by plume size parameters.

(4) Adjustment for averaging time is included.

l. Chemical Transformation

Not treated.

m. Physical Removal

Optional deposition calculations are included.

n. Evaluation Studies

Bemis, G.R. *et al.,* 1977. Air Pollution and Roadway Location, Design, and Operation—Project Overview. FHWA–CA–TL–7080–77–25, Federal Highway Administration, Washington, D.C.

Cadle, S.H. *et al.,* 1976. Results of the General Motors Sulfate Dispersion Experiment, GMR–2107. General Motors Research Laboratories, Warren, MI.

Dabberdt, W.F., 1975. Studies of Air Quality on and Near Highways, Project 2761. Stanford Research Institute, Menlo Park, CA.

A.4 CALPUFF

References

Scire, J.S., D.G. Strimaitis, and R.J. Yamartino, 1998. A User's Guide for the CALPUFF Dispersion Model (Version 5.0). Earth Tech, Inc., Concord, MA.

Scire J.S., F. R. Robe, M.E. Fernau, and R.J. Yamartino, 1998. A User's Guide for the CALMET Meteorological Model (Version 5.0). Earth Tech, Inc., Concord, MA.

Availability

The model code and its documentation are available for download from the model developers' Internet website: www.src.com/calpuff/calpuff1.htm. You may also contact Joseph Scire, Earth Tech, Inc., 196 Baker Avenue, Concord, MA 01742; Telephone: (978) 371–4200, Fax: (978) 371–2468, e-mail: jss@src.com.

Abstract

CALPUFF is a multi-layer, multi-species non-steady-state puff dispersion modeling that simulates the effects of time-and space-varying meteorological conditions on pollutant transport, transformation, and removal. CALPUFF is intended for use on scales from tens of meters from a source to hundreds of kilometers. It includes algorithms for near-field effects such as building downwash, transitional buoyant and momentum plume rise, partial plume penetration, subgrid scale terrain and coastal interactions effects, and terrain impingement as well as longer range effects such as pollutant removal due to wet scavenging and dry deposition, chemical transformation, vertical wind shear, overwater transport, plume fumigation, and visibility effects of particulate matter concentrations.

a. Recommendations for Regulatory Use

(1) CALPUFF is appropriate for long range transport (source-receptor distances of 50km to 200km) of emissions from point, volume, area, and line sources. The meteorological input data should be fully characterized with

time-and-space-varying three dimensional wind and meteorological conditions using CALMET, as discussed in paragraphs 8.3(d) and 8.3.1.2(d) of Appendix W.

(2) CALPUFF may also be used on a case-by-case basis if it can be demonstrated using the criteria in Section 3.2 that the model is more appropriate for the specific application. The purpose of choosing a modeling system like CALPUFF is to fully treat stagnation, wind reversals, and time and space variations of meteorology effects on transport and dispersion, as discussed in paragraph 7.2.9(a).

(3) For regulatory applications of CALMET and CALPUFF, the regulatory default option should be used. Inevitably, some of the model control options will have to be set specific for the application using expert judgement and in consultation with the relevant reviewing authorities.

b. Input Requirements

Source Data:

1. Point sources: source location, stack height, diameter, exit velocity, exit temperature, base elevation, wind direction specific building dimensions (for building downwash calculations), and emission rates for each pollutant. Particle size distributions may be entered for particulate matter. Temporal emission factors (diurnal cycle, monthly cycle, hour/season, wind speed/stability class, or temperature-dependent emission factors) may also be entered. Arbitrarily-varying point source parameters may be entered from an external file.

2. Area sources: source location and shape, release height, base elevation, initial vertical distribution (σ_z) and emission rates for each pollutant. Particle size distributions may be entered for particulate matter. Temporal emission factors (diurnal cycle, monthly cycle, hour/season, wind speed/stability class, or temperature-dependent emission factors) may also be entered. Arbitrarily-varying area source parameters may be entered from an external file. Area sources specified in the external file are allowed to be buoyant and their location, size, shape, and other source characteristics are allowed to change in time.

3. Volume sources: source location, release height, base elevation, initial horizontal and vertical distributions (σ_y, σ_z) and emission rates for each pollutant. Particle size distributions may be entered for particulate matter. Temporal emission factors (diurnal cycle, monthly cycle, hour/season, wind speed/stability class, or temperature-dependent emission factors) may also be entered. Arbitrarily-varying volume source parameters may be entered from an external file.

4. Line sources: source location, release height, base elevation, average buoyancy parameter, and emission rates for each pollutant.

Particle size distributions may be entered for particulate matter. Temporal emission factors (diurnal cycle, monthly cycle, hour/season, wind speed/stability class, or temperature-dependent emission factors) may also be entered. Arbitrarily-varying line source parameters may be entered from an external file.

Meteorological Data (different forms of meteorological input can be used by CALPUFF):

1. Time-dependent three-dimensional meteorological fields generated by CALMET. This is the preferred mode for running CALPUFF. Inputs into CALMET include surface observations of wind speed, wind direction, temperature, cloud cover, ceiling height, relative humidity, surface pressure, and precipitation (type and amount), and upper air sounding data (wind speed, wind direction, temperature, and height). Optional large-scale model output (*e.g.,* from MM5) can be used by CALMET as well.

2. Single station surface and upper air meteorological data in CTDMPLUS data file formats (SURFACE.DAT and PROFILE.DAT files). This allows a vertical variation in the meteorological parameters but no spatial variability.

3. Single station meteorological data in ISCST3 data file format. This option does not account for variability of the meteorological parameters in the horizontal or vertical, except as provided for by the use of stability-dependent wind shear exponents and average temperature lapse rates.

Gridded terrain and land use data are required as input into CALMET when Option 1 is used. Geophysical processor programs are provided that interface the modeling system to standard terrain and land use data bases provided by the U.S. Geological Survey (USGS).

Receptor Data:

CALPUFF includes options for gridded and non-gridded (discrete) receptors. Special subgrid-scale receptors are used with the subgrid-scale complex terrain option.

Other Input:

CALPUFF accepts hourly observations of ozone concentrations for use in its chemical transformation algorithm. Subgrid-scale coastlines can be specified in its coastal boundary file. Optional, user-specified deposition velocities and chemical transformation rates can also be entered. CALPUFF accepts the CTDMPLUS terrain and receptor files for use in its subgrid-scale terrain algorithm.

c. Output

CALPUFF produces files of hourly concentrations of ambient concentrations for each modeled species, wet deposition fluxes, dry deposition fluxes, and for visibility applications, extinction coefficients. Postprocessing programs (PRTMET and CALPOST) provide options for analysis and display of the modeling results.

d. Type of Model

(1) CALPUFF is a non-steady-state time- and space-dependent Gaussian puff model. CALPUFF includes parameterized gas phase chemical transformation of SO_2, $SO_4^=$, NO, $NO_2^=$, HNO_3, NO_3-, and organic aerosols. A model for aqueous phase chemical transformation of SO_2 to $SO_4^=$ is included. CALPUFF can treat primary pollutants such as PM–10, toxic pollutants, ammonia, and other passive pollutants. The model includes a resistance-based dry deposition model for both gaseous pollutants and particulate matter. Wet deposition is treated using a scavenging coefficient approach. The model has detailed parameterizations of complex terrain effects, including terrain impingement, side-wall scrapping, and steep-walled terrain influences on lateral plume growth. A subgrid-scale complex terrain module based on a dividing streamline concept divides the flow into a lift component traveling over the obstacle and a wrap component deflected around the obstacle.

(2) The meteorological fields used by CALPUFF are produced by the CALMET meteorological model. CALMET includes a diagnostic wind field model containing objective analysis and parameterized treatments of slope flows, valley flows, terrain blocking effects, and kinematic terrain effects, lake and sea breeze circulations, and a divergence minimization procedure. An energy-balance scheme is used to compute sensible and latent heat fluxes and turbulence parameters over land surfaces. A profile method is used over water. CALMET contains interfaces to prognostic meteorological models such as the Penn State/NCAR Mesoscale Model (MM4, MM5; Section 11.0, ref. 100).

e. Pollutant Types

CALPUFF may be used to model gaseous pollutants or particulate matter that are inert or undergo linear chemical reactions, such as SO_2, $SO_4^=$, NO, NO_2, HNO_3, NO_3-, NH_3, PM–10, and toxic pollutants. For regional haze analyses, sulfate and nitrate particulate components are explicitly treated.

f. Source-Receptor Relationships

CALPUFF contains no fundamental limitations on the number of sources or receptors. Parameter files are provided that allow the user to specify the maximum number of sources, receptors, puffs, species, grid cells, vertical layers, and other model parameters. Its algorithms are designed to be suitable for source-receptor distances from tens of meters to hundreds of kilometers.

g. Plume Behavior

Momentum and buoyant plume rise is treated according to the plume rise equations of Briggs (1974, 1975) for non-downwashing point sources, Schulman and Scire (1980) for line sources and point sources subject to building downwash effects, and Zhang (1993) for buoyant area sources. Stack tip downwash effects and partial plume penetration into elevated temperature inversions are included.

h. Horizontal Winds

A three-dimensional wind field is computed by the CALMET meteorological model. CALMET combines an objective analysis procedure using wind observations with parameterized treatments of slope flows, valley flows, terrain kinematic effects, terrain blocking effects, and sea/lake breeze circulations. CALPUFF may optionally use single station (horizontally-constant) wind fields in the CTDMPLUS or ISC–PRIME data formats.

i. Vertical Wind Speed

Vertical wind speeds are not used explicitly by CALPUFF. Vertical winds are used in the development of the horizontal wind components by CALMET.

j. Horizontal Dispersion

Turbulence-based dispersion coefficients provide estimates of horizontal plume dispersion based on measured or computed values of σ_v. The effects of building downwash and buoyancy-induced dispersion are included. The effects of vertical wind shear are included through the puff splitting algorithm. Options are provided to use Pasquill-Gifford (rural) and McElroy-Pooler (urban) dispersion coefficients. Initial plume size from area or volume sources is allowed.

k. Vertical Dispersion

Turbulence-based dispersion coefficients provide estimates of vertical plume dispersion based on measured or computed values of σ_w. The effects of building downwash and buoyancy-induced dispersion are included. Vertical dispersion during convective conditions is simulated with a probability density function (pdf) model based on Weil *et al.* (1997). Options are provided to use Pasquill-Gifford (rural) and McElroy-Pooler (urban) dispersion coefficients. Initial plume size from area or volume sources is allowed.

l. Chemical Transformation

Gas phase chemical transformations are treated using parameterized models of SO_2 conversion to SO_4= and NO conversion to NO_2, HNO_3, and SO_4=. Aqueous phase oxidation of SO_2 to SO_4= by precipitating and non-precipitating clouds is included. Organic aerosol formation is treated.

m. Physical Removal

Dry deposition of gaseous pollutants and particulate matter is parameterized in terms of a resistance-based deposition model. Gravitational settling, inertial impaction, and Brownian motion effects on deposition of particulate matter is included. Wet deposition of gases and particulate matter is parameterized in terms of a scavenging coefficient approach.

n. Evaluation Studies

Berman, S., J.Y. Ku, J. Zhang, and S.T. Rao, 1977: Uncertainties in estimating the mixing depth—Comparing three mixing depth models with profiler measurements, Atmospheric Environment, 31: 3023–3039.

Environmental Protection Agency, 1998. Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 2 Summary Report and Recommendations for Modeling Long-Range Transport Impacts. EPA publication No. EPA–454/R–98–019. U.S. Environmental Protection Agency, Research Triangle Park, NC.

Irwin, J.S. 1997. A Comparison of CALPUFF Modeling Results with 1997 INEL Field Data Results. In *Air Pollution Modeling and its Application, XII.* Edited by S.E. Gyrning and N. Chaumerliac. Plenum Press, New York, NY.

Irwin, J.S., J.S. Scire, and D.G. Strimaitis, 1996. A Comparison of CALPUFF Modeling Results with CAPTEX Field Data Results. In *Air Pollution Modeling and its Application, XI.* Edited by S.E. Gyrning and F.A. Schiermeier. Plenum Press, New York, NY.

Strimaitis, D.G., J.S. Scire and J.C. Chang. 1998. Evaluation of the CALPUFF Dispersion Model with Two Power Plant Data Sets. Tenth Joint Conference on the Application of Air Pollution Meteorology, Phoenix, Arizona. American Meteorological Society, Boston, MA. January 11–16, 1998.

A.5 Complex Terrain Dispersion Model Plus Algorithms for Unstable Situations (CTDMPLUS)

Reference

Perry, S.G., D.J. Burns, L.H. Adams, R.J. Paine, M.G. Dennis, M.T. Mills, D.G. Strimaitis, R.J. Yamartino and E.M. Insley, 1989. User's Guide to the Complex Terrain Dispersion Model Plus Algorithms for Unstable Situations (CTDMPLUS). Volume 1: Model Descriptions and User Instructions. EPA Publication No. EPA–600/8–89–041. Environmental Protection Agency, Research Triangle Park, NC. (NTIS No. PB 89–181424)

Perry, S.G., 1992. CTDMPLUS: A Dispersion Model for Sources near Complex Topography. Part I: Technical Formulations. Journal of Applied Meteorology, 31(7): 633–645.

Availability

This model code is available on EPA's Internet SCRAM website and also on diskette (as PB 90–504119) from the National Technical Information Service (Section A.0).

Abstract

CTDMPLUS is a refined point source Gaussian air quality model for use in all stability conditions for complex terrain applications. The model contains, in its entirety, the technology of CTDM for stable and neutral conditions. However, CTDMPLUS can also simulate daytime, unstable conditions, and has a number of additional capabilities for improved user friendliness. Its use of meteorological data and terrain information is different from other EPA models; considerable detail for both types of input data is required and is supplied by preprocessors specifically designed for CTDMPLUS. CTDMPLUS requires the parameterization of individual hill shapes using the terrain preprocessor and the association of each model receptor with a particular hill.

a. Recommendation for Regulatory Use

CTDMPLUS is appropriate for the following applications:

- Elevated point sources;
- Terrain elevations above stack top;
- Rural or urban areas;
- Transport distances less than 50 kilometers; and
- One hour to annual averaging times when used with a post-processor program such as CHAVG.

b. Input Requirements

(1) Source data: For each source, user supplies source location, height, stack diameter, stack exit velocity, stack exit temperature, and emission rate; if variable emissions are appropriate, the user supplies hourly values for emission rate, stack exit velocity, and stack exit temperature.

(2) Meteorological data: For applications of CTDMPLUS, multiple level (typically three or more) measurements of wind speed and direction, temperature and turbulence (wind fluctuation statistics) are required to create the basic meteorological data file (''PROFILE''). Such measurements should be obtained up to the representative plume height(s) of interest (*i.e.,* the plume height(s) under those conditions important to the determination of the design concentration). The representative plume height(s) of interest should be determined using an appropriate complex terrain screening procedure (*e.g.,* CTSCREEN) and should be documented in the monitoring/modeling protocol. The necessary meteorological measurements should be obtained from an appropriately sited meteorological tower augmented by SODAR and/or RASS if the representative plume height(s) of interest is above the levels represented by the tower measurements. Meteorological preprocessors then create a SURFACE data file (hourly values of mixed layer heights, surface friction velocity, Monin-Obukhov length and surface roughness length) and a RAWINsonde data file (upper air measurements of pressure, temperature, wind direction, and wind speed).

(3) Receptor data: receptor names (up to 400) and coordinates, and hill number (each receptor must have a hill number assigned).

(4) Terrain data: user inputs digitized contour information to the terrain preprocessor which creates the TERRAIN data file (for up to 25 hills).

c. Output

(1) When CTDMPLUS is run, it produces a concentration file, in either binary or text format (user's choice), and a list file containing a verification of model inputs, *i.e.,*

- Input meteorological data from ''SURFACE'' and ''PROFILE''
- Stack data for each source
- Terrain information
- Receptor information
- Source-receptor location (line printer map).

(2) In addition, if the case-study option is selected, the listing includes:

- Meteorological variables at plume height
- Geometrical relationships between the source and the hill
- Plume characteristics at each receptor, *i.e.,*

—distance in along-flow and cross flow direction
—effective plume-receptor height difference
—effective σ_y & σ_z values, both flat terrain and hill induced (the difference shows the effect of the hill)
—concentration components due to WRAP, LIFT and FLAT.

(3) If the user selects the TOPN option, a summary table of the top 4 concentrations at each receptor is given. If the ISOR option is selected, a source contribution table for every hour will be printed.

(4) A separate disk file of predicted (1-hour only) concentrations (''CONC'') is written if the user chooses this option. Three forms of output are possible:

(i) A binary file of concentrations, one value for each receptor in the hourly sequence as run;

(ii) A text file of concentrations, one value for each receptor in the hourly sequence as run; or

(iii) A text file as described above, but with a listing of receptor information (names,

positions, hill number) at the beginning of the file.

(5) Hourly information provided to these files besides the concentrations themselves includes the year, month, day, and hour information as well as the receptor number with the highest concentration.

d. Type of Model

CTDMPLUS is a refined steady-state, point source plume model for use in all stability conditions for complex terrain applications.

e. Pollutant Types

CTDMPLUS may be used to model non-reactive, primary pollutants.

f. Source-Receptor Relationship

Up to 40 point sources, 400 receptors and 25 hills may be used. Receptors and sources are allowed at any location. Hill slopes are assumed not to exceed 15°, so that the linearized equation of motion for Boussinesq flow are applicable. Receptors upwind of the impingement point, or those associated with any of the hills in the modeling domain, require separate treatment.

g. Plume Behavior

(1) As in CTDM, the basic plume rise algorithms are based on Briggs' (1975) recommendations.

(2) A central feature of CTDMPLUS for neutral/stable conditions is its use of a critical dividing-streamline height (H_c) to separate the flow in the vicinity of a hill into two separate layers. The plume component in the upper layer has sufficient kinetic energy to pass over the top of the hill while streamlines in the lower portion are constrained to flow in a horizontal plane around the hill. Two separate components of CTDMPLUS compute ground-level concentrations resulting from plume material in each of these flows.

(3) The model calculates on an hourly (or appropriate steady averaging period) basis how the plume trajectory (and, in stable/neutral conditions, the shape) is deformed by each hill. Hourly profiles of wind and temperature measurements are used by CTDMPLUS to compute plume rise, plume penetration (a formulation is included to handle penetration into elevated stable layers, based on Briggs (1984)), convective scaling parameters, the value of H_c, and the Froude number above H_c.

h. Horizontal Winds

CTDMPLUS does not simulate calm meteorological conditions. Both scalar and vector wind speed observations can be read by the model. If vector wind speed is unavailable, it is calculated from the scalar wind speed. The assignment of wind speed (either vector or scalar) at plume height is done by either:

- Interpolating between observations above and below the plume height, or
- Extrapolating (within the surface layer) from the nearest measurement height to the plume height.

i. Vertical Wind Speed

Vertical flow is treated for the plume component above the critical dividing streamline height (H_c); see ''Plume Behavior''.

j. Horizontal Dispersion

Horizontal dispersion for stable/neutral conditions is related to the turbulence velocity scale for lateral fluctuations, σ_v, for which a minimum value of 0.2 m/s is used. Convective scaling formulations are used to estimate horizontal dispersion for unstable conditions.

k. Vertical Dispersion

Direct estimates of vertical dispersion for stable/neutral conditions are based on observed vertical turbulence intensity, *e.g.,* σ_w (standard deviation of the vertical velocity fluctuation). In simulating unstable (convective) conditions, CTDMPLUS relies on a skewed, bi-Gaussian probability density function (pdf) description of the vertical velocities to estimate the vertical distribution of pollutant concentration.

l. Chemical Transformation

Chemical transformation is not treated by CTDMPLUS.

m. Physical Removal

Physical removal is not treated by CTDMPLUS (complete reflection at the ground/hill surface is assumed).

n. Evaluation Studies

Burns, D.J., L.H. Adams and S.G. Perry, 1990. Testing and Evaluation of the CTDMPLUS Dispersion Model: Daytime Convective Conditions. Environmental Protection Agency, Research Triangle Park, NC.

Paumier, J.O., S.G. Perry and D.J. Burns, 1990. An Analysis of CTDMPLUS Model Predictions with the Lovett Power Plant Data Base. Environmental Protection Agency, Research Triangle Park, NC.

Paumier, J.O., S.G. Perry and D.J. Burns, 1992. CTDMPLUS: A Dispersion Model for Sources near Complex Topography. Part II: Performance Characteristics. Journal of Applied Meteorology, 31(7): 646–660.

A.6 Emissions and Dispersion Modeling System (EDMS) 3.1

Reference

Benson, Paul E., 1979. CALINE3—A Versatile Dispersion Model for Predicting Air Pollutant Levels Near Highways and Arterial Streets. Interim Report, Report Number FHWA/CA/TL–79/23. Federal Highway Administration, Washington, D.C. (NTIS No. PB 80–220841)

Federal Aviation Administration, 1997. Emissions and Dispersion Modeling System (EDMS) Reference Manual. FAA Report No. FAA–AEE–97–01, USAF Report No. AL/EQ–TR–1997–0010, Federal Aviation Administration, Washington, D.C. 20591. See Availability below. (Note: this manual includes supplements that are available on the EDMS Internet website: http://www.aee.faa.gov/aee-100/aee-120/edms/banner.htm)

Petersen, W.B. and E.D. Rumsey, 1987. User's Guide for PAL 2.0—A Gaussian-Plume Algorithm for Point, Area, and Line Sources. EPA Publication No. EPA–600/8–87–009. Office of Research and Development, Research Triangle Park, NC. (NTIS No. PB 87–168 787/AS)

Availability

EDMS is available for $200 from: Federal Aviation Administration, Attn: Ms. Julie Ann Draper, AEE, 800 Independence Avenue, S.W., Washington, D.C. 20591, Phone: (202) 267–3494.

Abstract

EDMS is a combined emissions/dispersion model for assessing pollution at civilian airports and military air bases. This model, which was jointly developed by the Federal Aviation Administration (FAA) and the United States Air Force (USAF), produces an emission inventory of all airport sources and calculates concentrations produced by these sources at specified receptors. The system stores emission factors for fixed sources such as fuel storage tanks and incinerators and also for mobile sources such as aircraft or automobiles. The EDMS emissions inventory module incorporates methodologies described in AP–42 for calculating aircraft emissions, on-road and off-road vehicle emissions, and stationary source emissions. The dispersion modeling module incorporates PAL2 and CALINE3 (Section A.3) for the various emission source types. Both of these components interact with the database to retrieve and store data. The dispersion module, which processes point, area, and line sources, also incorporates a special meteorological preprocessor for processing up to one year of National Climatic Data Center (NCDC) hourly data.

a. Recommendations for Regulatory Use

EDMS is appropriate for the following applications:

- Cumulative effect of changes in aircraft operations, point source and mobile source emissions at airports or air bases;
- Simple terrain;
- Non-reactive pollutants;
- Transport distances less than 50 kilometers; and
- 1-hour to annual averaging times.

b. Input Requirements

(1) All data are entered through the EDMS graphical user interface. Typical entry items are annual and hourly source activity, source and receptor coordinates, etc. Some point sources, such as heating plants, require stack height, stack diameter, and effluent temperature inputs.

(2) Wind speed, wind direction, hourly temperature, and Pasquill-Gifford stability category (P–G) are the meteorological inputs. They can be entered manually through the EDMS data entry screens or automatically through the processing of previously loaded NCDC hourly data.

c. Output

Printed outputs consist of:

- A summary emission inventory report with pollutant totals by source category and detailed emission inventory reports for each source category; and
- A concentration summary report for up to 8760 hours (one year) of meteorological data that lists the number of sources, receptors, and the five highest concentrations for applicable averaging periods for the respective primary NAAQS.

d. Type of Model

For its emissions inventory calculations, EDMS uses algorithms consistent with the EPA Compilation of Air Pollutant Emission Factors, AP–42 (Section 11.0, ref. 96). For its dispersion calculations, EDMS uses the Point Area & Line (PAL2) model and the CALifornia LINE source (CALINE3) model, both of which use Gaussian algorithms.

e. Pollutant Types

EDMS includes emission factors for carbon monoxide, nitrogen oxides, sulfur oxides, hydrocarbons, and suspended particles and calculates the dispersion for all except hydrocarbons.

f. Source-Receptor Relationship

(1) Within hardware and memory constraints, there is no upper limit to the number of sources and receptors that can be modeled simultaneously.

(2) The Gaussian point source equation estimates concentrations from point sources after determining the effective height of emission and the upwind and crosswind distance of the source from the receptor. Numerical integration of the Gaussian point source equation is used to determine concentrations from line sources (runways). Integration over area sources (parking lots), which includes edge effects from the source region, is done by considering finite line sources perpendicular to the wind at intervals upwind from the receptor. The crosswind integration is done analytically; integration upwind is done numerically by successive approximations. Terrain elevation differences between sources and receptors are neglected.

(3) A reasonable height above ground level may be specified for each receptor.

g. Plume Behavior

(1) Briggs final plume rise equations are used. If plume height exceeds mixing height, concentrations are assumed equal to zero. Surface concentrations are set to zero when the plume centerline exceeds mixing height.

(2) For roadways, plume rise is not treated.

(3) Building and stack tip downwash effects are not treated.

h. Horizontal Winds

(1) Steady state winds are assumed for each hour. Winds are assumed to be constant with altitude.

(2) Winds are entered manually by the user or automatically by reading previously loaded NCDC annual data files.

i. Vertical Wind Speed

Vertical wind speed is assumed to be zero.

j. Horizontal Dispersion

(1) Six stability classes are used (P–G classes A through F).

(2) Aircraft runways, vehicle parking lots, stationary sources, and training fires are modeled using PAL2. Either rural (Pasquill-Gifford) or urban (Briggs) dispersion settings may be specified globally for these sources.

(3) Vehicle roadways, aircraft taxiways, and aircraft queues are modeled using CALINE3. CALINE3 assumes urban dispersion curves. The user specifies terrain roughness.

k. Vertical Dispersion

(1) Six stability classes are used (P–G classes A through F).

(2) Aircraft runways, vehicle parking lots, stationary sources, and training fires are modeled using PAL2. Either rural (Pasquill-Gifford) or urban (Briggs) dispersion settings may be specified globally for these sources.

(3) Vehicle roadways, aircraft taxiways, and aircraft queues are modeled using CALINE3. CALINE3 assumes urban dispersion curves. The user specifies terrain roughness.

l. Chemical Transformation

Chemical transformations are not accounted for.

m. Physical Removal

Deposition is not treated.

n. Evaluation Studies

None cited.

A.7 Industrial Source Complex Model With Prime Downwash Algorithm (ISC–PRIME)

Reference

Environmental Protection Agency, 1995. User's Guide for the Industrial Source Complex (ISC3) Dispersion Models, Volumes 1 and 2. EPA Publication Nos. EPA–454/B–95–003a & b. Environmental Protection Agency, Research Triangle Park, NC. (NTIS Nos. PB 95–222741 and PB 95–222758, respectively)

Schulman, L.L., D.G. Strimaitis, and J.S. Scire, 1997. Addendum to ISC3 User's Guide, *The PRIME Plume Rise and Building Downwash Model*. Prepared for the Electric Power Research Institute, Palo Alto, CA., Earth Tech Document A287. A–99–05, II–A–12)

Schulman, L.L., D.G. Strimaitis, and J.S. Scire, 1998. Development and Evaluation of the PRIME Plume Rise and Building Downwash Model. (submitted to Journal of the Air & Waste Management Association) 34pp. + 10 figures (A–99–05, II–A–13)

Availability

The model code and its documentation are available for download from EPA's SCRAM Internet website (Section A.0).

Abstract

The ISC–PRIME model is a steady-state Gaussian plume model which can be used to assess pollutant concentrations from a wide variety of sources associated with an industrial source complex. The model is based on ISC3, with the PRIME (Plume RIse Model Enhancements) algorithm added for improved treatment of building downwash. This model can account for the following: settling and dry deposition of particles; building downwash; area, line, and volume sources; plume rise as a function of downwind distance, building dimensions and stack placement with respect to a building; separation of point sources; and limited terrain adjustment.

a. Recommendations for Regulatory Use

(1) ISC–PRIME is appropriate for the following applications:

- Industrial source complexes where aerodynamic downwash or deposition is important;
- Rural or urban areas;
- Flat or rolling terrain;
- Transport distances less than 50 kilometers;
- 1-hour to annual averaging times; and
- Continuous toxic air emissions.

(2) The following options should be selected for regulatory applications: For short term or long term modeling, set the regulatory ''default option''; *i.e.,* use the keyword DFAULT, which automatically selects stack tip downwash, final plume rise, buoyancy induced dispersion (BID), the vertical potential temperature gradient, a treatment for calms, the appropriate wind profile exponents, and the appropriate value for pollutant half-life; set the ''rural option'' (use the keyword RURAL) or ''urban option'' (use the keyword URBAN); and set the ''concentration option'' (use the keyword CONC).

b. Input Requirements

(1) Source data: location, emission rate, physical stack height, stack gas exit velocity, stack inside diameter, and stack gas temperature. Optional inputs include source elevation, building dimensions, particle size distribution with corresponding settling velocities, and surface reflection coefficients.

(2) Meteorological data: ISC–PRIME requires hourly surface weather data from the preprocessor program PCRAMMET, which provides hourly stability class, wind direction, wind speed, temperature, and mixing height.

(3) Receptor data: coordinates and optional ground elevation for each receptor.

c. Output

Printed output options include:

- Program control parameters, source data, and receptor data;
- Tables of hourly meteorological data for each specified day;
- ''N''-day average concentration or total deposition calculated at each receptor for any desired source combinations;
- Concentration or deposition values calculated for any desired source combinations at all receptors for any specified day or time period within the day;
- Tables of highest and second highest concentration or deposition values calculated at each receptor for each specified time period during a(n) ''N''-day period for any desired source combinations, and tables of the maximum 50 concentration or deposition values calculated for any desired source combinations for each specified time period.

d. Type of Model

ISC–PRIME is a Gaussian plume model. It has been revised to perform a double integration of the Gaussian plume kernel for area sources. The PRIME algorithm modifies plume rise and dispersion during downwash conditions.

e. Pollutant Types

ISC–PRIME may be used to model primary pollutants and continuous releases of toxic and hazardous waste pollutants. Settling and deposition are treated.

f. Source-Receptor Relationships

(1) ISC–PRIME applies user-specified locations for point, line, area and volume

sources, and user-specified receptor locations or receptor rings.

(2) User input topographic evaluation for each receptor is used. Elevations above stack top are reduced to the stack top elevation, *i.e.,* ''terrain chopping''.

(3) User input height above ground level may be used when necessary to simulate impact at elevated or ''flag pole'' receptors, *e.g.,* on buildings.

(4) Actual separation between each source-receptor pair is used.

g. Plume Behavior

(1) ISC–PRIME uses Briggs (1969, 1971, 1975) plume rise equations for final rise.

(2) Stack tip downwash equation from Briggs (1974) is used.

(3) For plume rise affected by the presence of a building, the PRIME downwash algorithm is used. Plume rise is computed using a numerical solution of the mass, energy and momentum conservation laws (Zhang and Ghoniem, 1993). Streamline deflection and the position of the stack relative to the building affect plume trajectory and dispersion. Enhanced dispersion is based on the approach of Weil (1996). Plume mass captured by the cavity is well-mixed within the cavity. The captured plume mass is re-emitted to the far wake as a volume source. For GEP height stacks, buildings downwash is not used.

(4) For rolling terrain (terrain not above stack height), plume centerline is horizontal at height of final rise above source.

(5) Fumigation is not treated.

h. Horizontal Winds

(1) For each source, a constant, uniform (steady-state) stack-top wind is assumed for each hour except for PRIME downwash calculations, which use a power-law speed profile with height and account for velocity deficits in building wakes.

(2) Straight line plume transport is assumed to all downwind distances.

(3) Separate wind speed profile exponents (Irwin, 1979; EPA, 1980) for both rural and urban cases are used.

(4) An optional treatment for calm winds is included for short term modeling.

i. Vertical Wind Speed

Vertical wind speed is assumed equal to zero.

j. Horizontal Dispersion

(1) Rural dispersion coefficients from Turner (1969) are used, with no adjustments for surface roughness or averaging time.

(2) Urban dispersion coefficients from Briggs (Gifford, 1976) are used.

(3) Buoyancy induced dispersion (Pasquill, 1976) is included.

(4) Six stability classes are used.

(5) Dispersion is enhanced by the presence of a building.

k. Vertical Dispersion

(1) Rural dispersion coefficients from Turner (1969) are used, with no adjustments for surface roughness.

(2) Urban dispersion coefficients from Briggs (Gifford, 1976) are used.

(3) Buoyancy induced dispersion (Pasquill, 1976) is included.

(4) Six stability classes are used.

(5) Mixing height is accounted for with multiple reflections until the vertical plume standard deviation equals 1.6 times the mixing height; uniform vertical mixing is assumed beyond that point.

(6) Perfect reflection is assumed at the ground.

(7) Dispersion is enhanced by the presence of a building.

l. Chemical Transformation

Chemical transformations are treated using exponential decay. Time constant is input by the user.

m. Physical Removal

Dry deposition effects for particles are treated using a resistance formulation in which the deposition velocity is the sum of the resistances to pollutant transfer within the surface layer of the atmosphere, plus a gravitational settling term (EPA, 1994), based on the modified surface depletion scheme of Horst (1983).

n. Evaluation Studies

Bowers, J.F. and A.J. Anderson, 1981. An Evaluation Study for the Industrial Source Complex (ISC) Dispersion Model, EPA Publication No. EPA–450/4–81–002. U.S. Environmental Protection Agency, Research Triangle Park, NC.

Environmental Protection Agency, 1992. Comparison of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model and Wind Tunnel Data. EPA Publication No. EPA–454/R–92–014. U.S. Environmental Protection Agency, Research Triangle Park, NC. (NTIS No. PB 93–226751)

Environmental Protection Agency, 1992. Sensitivity Analysis of a Revised Area Source Algorithm for the Industrial Source Complex Short Term Model. EPA Publication No. EPA–454/R–92–015. U.S. Environmental Protection Agency, Research Triangle Park, NC. (NTIS No. PB 93–226769)

Environmental Protection Agency, 1992. Development and Evaluation of a Revised Area Source Algorithm for the Industrial Source Complex Long Term Model. EPA Publication No. EPA–454/R–92–016. U.S. Environmental Protection Agency, Research Triangle Park, NC. (NTIS No. PB 93–226777)

Environmental Protection Agency, 1994. Development and Testing of a Dry Deposition Algorithm (Revised). EPA Publication No. EPA–454/R–94–015. U.S. Environmental Protection Agency, Research Triangle Park, NC. (NTIS No. PB 94–183100)

Paine, R.J. and F. Lew, 1997. Results of the Independent Evaluation of ISCST3 and ISC–PRIME. Prepared for the Electric Power Research Institute, Palo Alto, CA. ENSR Document Number 2460–026–440. (NTIS No. PB 98–156524)

Paine, R.J. and F. Lew, 1997. Consequence Analysis for ISC–PRIME. Prepared for the Electric Power Research Institute, Palo Alto, CA. ENSR Document Number 2460–026–450. (NTIS No. PB 98–156516)

Schulman, L.L., D.G. Strimaitis, and J.S. Scire, 1998. Development and Evaluation of the PRIME Plume Rise and Building Downwash Model. {submitted to Journal of the Air & Waste Management Association} 34pp. + figures (A–99–05, II–A–13)

Scire, J.S. and L.L. Schulman, 1981. Evaluation of the BLP and ISC Models with SF_6 Tracer Data and SO_2 Measurements at Aluminum Reduction Plants. Air Pollution Control Association Specialty Conference on Dispersion Modeling for Complex Sources, St. Louis, MO.

Scire, J.S., L.L. Schulman and D.G. Strimaitis, 1995. Observations of Plume Descent Downwind of Buildings. 88th Annual Meeting of the Air & Waste Management Association, Paper 95-WP75B.01, AWMA, Pittsburgh, PA.

A.8 Offshore and Coastal Dispersion Model (OCD)

Reference

DiCristofaro, D.C. and S.R. Hanna, 1989. OCD: The Offshore and Coastal Dispersion Model, Version 4. Volume I: User's Guide, and Volume II: Appendices. Sigma Research Corporation, Westford, MA. (NTIS Nos. PB 93–144384 and PB 93–144392)

Availability

This model code is available on the Support Center for Regulatory Air Models Bulletin Board System and also on diskette (as PB 91–505230) from the National Technical Information Service (see Section A.0).

Technical Contact

Minerals Management Service, Attn: Mr. Dirk Herkhof, Parkway Atrium Building, 381 Elden Street, Herndon, VA 22070–4817, Phone: (703) 787–1735.

Abstract

(1) OCD is a straight-line Gaussian model developed to determine the impact of offshore emissions from point, area or line sources on the air quality of coastal regions. OCD incorporates overwater plume transport and dispersion as well as changes that occur as the plume crosses the shoreline. Hourly meteorological data are needed from both offshore and onshore locations. These include water surface temperature, overwater air temperature, mixing height, and relative humidity.

(2) Some of the key features include platform building downwash, partial plume penetration into elevated inversions, direct use of turbulence intensities for plume dispersion, interaction with the overland internal boundary layer, and continuous shoreline fumigation.

a. Recommendations for Regulatory Use

OCD has been recommended for use by the Minerals Management Service for emissions located on the Outer Continental Shelf (50 FR 12248; 28 March 1985). OCD is applicable for overwater sources where onshore receptors are below the lowest source height. Where onshore receptors are above the lowest source height, offshore plume transport and dispersion may be modeled on a case-by-case basis in consultation with the EPA Regional Office.

b. Input Requirements

(1) Source data: point, area or line source location, pollutant emission rate, building height, stack height, stack gas temperature, stack inside diameter, stack gas exit velocity,

stack angle from vertical, elevation of stack base above water surface and gridded specification of the land/water surfaces. As an option, emission rate, stack gas exit velocity and temperature can be varied hourly.

(2) Meteorological data (over water): wind direction, wind speed, mixing height, relative humidity, air temperature, water surface temperature, vertical wind direction shear (optional), vertical temperature gradient (optional), turbulence intensities (optional).

(3) Meteorological data (over land): wind direction, wind speed, temperature, stability class, mixing height.

(4) Receptor data: location, height above local ground-level, ground-level elevation above the water surface.

c. Output

(1) All input options, specification of sources, receptors and land/water map including locations of sources and receptors.

(2) Summary tables of five highest concentrations at each receptor for each averaging period, and average concentration for entire run period at each receptor.

(3) Optional case study printout with hourly plume and receptor characteristics. Optional table of annual impact assessment from non-permanent activities.

(4) Concentration files written to disk or tape can be used by ANALYSIS postprocessor to produce the highest concentrations for each receptor, the cumulative frequency distributions for each receptor, the tabulation of all concentrations exceeding a given threshold, and the manipulation of hourly concentration files.

d. Type of Model

OCD is a Gaussian plume model constructed on the framework of the MPTER model.

e. Pollutant Types

OCD may be used to model primary pollutants. Settling and deposition are not treated.

f. Source-Receptor Relationship

(1) Up to 250 point sources, 5 area sources, or 1 line source and 180 receptors may be used.

(2) Receptors and sources are allowed at any location.

(3) The coastal configuration is determined by a grid of up to 3600 rectangles. Each element of the grid is designated as either land or water to identify the coastline.

g. Plume Behavior

(1) As in ISC, the basic plume rise algorithms are based on Briggs' recommendations.

(2) Momentum rise includes consideration of the stack angle from the vertical.

(3) The effect of drilling platforms, ships, or any overwater obstructions near the source are used to decrease plume rise using a revised platform downwash algorithm based on laboratory experiments.

(4) Partial plume penetration of elevated inversions is included using the suggestions of Briggs (1975) and Weil and Brower (1984).

(5) Continuous shoreline fumigation is parameterized using the Turner method where complete vertical mixing through the thermal internal boundary layer (TIBL) occurs as soon as the plume intercepts the TIBL.

h. Horizontal Winds

(1) Constant, uniform wind is assumed for each hour.

(2) Overwater wind speed can be estimated from overland wind speed using relationship of Hsu (1981).

(3) Wind speed profiles are estimated using similarity theory (Businger, 1973). Surface layer fluxes for these formulas are calculated from bulk aerodynamic methods.

i. Vertical Wind Speed

Vertical wind speed is assumed equal to zero.

j. Horizontal Dispersion

(1) Lateral turbulence intensity is recommended as a direct estimate of horizontal dispersion. If lateral turbulence intensity is not available, it is estimated from boundary layer theory. For wind speeds less than 8 m/s, lateral turbulence intensity is assumed inversely proportional to wind speed.

(2) Horizontal dispersion may be enhanced because of obstructions near the source. A virtual source technique is used to simulate the initial plume dilution due to downwash.

(3) Formulas recommended by Pasquill (1976) are used to calculate buoyant plume enhancement and wind direction shear enhancement.

(4) At the water/land interface, the change to overland dispersion rates is modeled using a virtual source. The overland dispersion rates can be calculated from either lateral turbulence intensity or Pasquill-Gifford curves. The change is implemented where the plume intercepts the rising internal boundary layer.

k. Vertical Dispersion

(1) Observed vertical turbulence intensity is not recommended as a direct estimate of vertical dispersion. Turbulence intensity should be estimated from boundary layer theory as default in the model. For very stable conditions, vertical dispersion is also a function of lapse rate.

(2) Vertical dispersion may be enhanced because of obstructions near the source. A virtual source technique is used to simulate the initial plume dilution due to downwash.

(3) Formulas recommended by Pasquill (1976) are used to calculate buoyant plume enhancement.

(4) At the water/land interface, the change to overland dispersion rates is modeled using a virtual source. The overland dispersion rates can be calculated from either vertical turbulence intensity or the Pasquill-Gifford coefficients. The change is implemented where the plume intercepts the rising internal boundary layer.

l. Chemical Transformation

Chemical transformations are treated using exponential decay. Different rates can be specified by month and by day or night.

m. Physical Removal

Physical removal is also treated using exponential decay.

n. Evaluation Studies

DiCristofaro, D.C. and S.R. Hanna, 1989. OCD: The Offshore and Coastal Dispersion Model. Volume I: User's Guide. Sigma Research Corporation, Westford, MA.

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Hanna, S.R. and D.C. DiCristofaro, 1988. Development and Evaluation of the OCD/API Model. Final Report, API Pub. 4461, American Petroleum Institute, Washington, D.C.

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Pasquill, F., 1976. Atmospheric Dispersion Parameters in Gaussian Plume Modeling Part II. Possible Requirements for Change in the Turner Workbook Values. EPA Publication No. EPA–600/4–76–030b. U.S. Environmental Protection Agency, Research Triangle Park, NC.

Petersen, W.B., 1980. User's Guide for HIWAY–2 A Highway Air Pollution Model. EPA Publication No. EPA–600/8–80–018. U.S. Environmental Protection Agency, Research Triangle Park, NC. (NTIS PB 80–227556)

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Federal Register

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April 21, 2000

Part III

Environmental Protection Agency

40 CFR Part 435

Effluent Limitations Guidelines for the Oil and Gas Extraction Point Source Category; Proposed Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 435

[FRL–6581–4]

Effluent Limitations Guidelines for the Oil and Gas Extraction Point Source Category

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed Rule; Supplemental information and notice of meeting.

SUMMARY: On February 3, 1999 (64 FR 5488), EPA proposed technology-based effluent limitations guidelines and standards under the Clean Water Act (CWA) for the discharge of pollutants from oil and gas drilling operations associated with the use of synthetic-based drilling fluids (SBFs) and other non-aqueous drilling fluids into waters of the United States. This proposed rule would apply to certain existing and new facilities in the offshore subcategory beyond three miles from shore and offshore of Alaska, and the Cook Inlet, Alaska, portion of the coastal subcategory of the oil and gas extraction point source category.

This document presents a summary of all data received and collected by EPA since publication of the proposal; an assessment of the usefulness of the data in EPA's analyses; summary descriptions of revised engineering and economic models; and updated modeling results incorporating the new data. This notice also discusses ''best management practices'' (BMPs) as potential alternative requirements to reduce the discharges of toxic and hazardous pollutants.

DATES: Submit your comments by June 20, 2000. A public meeting will be held on Tuesday, April 25, 2000, from 1:00 p.m. to 5:30 p.m. Central Standard Time.

ADDRESSES: Submit comments by mail to Mr. Carey A. Johnston at the following address: U.S. Environmental Protection Agency; Engineering and Analysis Division (4303); 1200 Pennsylvania Avenue, NW; Washington, DC 20460. Please submit any references cited in your comments. EPA would appreciate an original and two copies of your comments and enclosures (including references). Hand delivered comments may be submitted at the EPA Headquarters Water Docket (address below). Comments may also be filed electronically to ''johnston.carey@epa.gov.'' Electronic comments sent to the above e-mail address will be treated like all other submitted comments.

The data and analyses being announced today are available for review in the EPA Water Docket at EPA Headquarters at Waterside Mall, Room EB–57, 401 M. St. SW, Washington, DC 20460. For access to the docket materials, call (202) 260–3027 between 9:00 a.m. and 4:00 p.m. for an appointment. A reasonable fee may be charged for copying.

The public meeting will be held at the Minerals Management Service (MMS), Gulf of Mexico OCS Region Office, Room 111, 1201 Elmwood Park Boulevard, New Orleans, LA, 70123–2394.

FOR FURTHER INFORMATION CONTACT: For additional technical information, contact Mr. Carey A. Johnston at (202) 260–7186 or at the following e-mail address: johnston.carey@epa.gov. For additional economic information contact Mr. James Covington at (202) 260–5132 or at the following e-mail address: covington.james@epa.gov.

SUPPLEMENTARY INFORMATION: Visitors attending the New Orleans public meeting (*see* **ADDRESSES**) will need to sign in at the MMS guard booth and obtain a visitors badge. If you wish to present formal comments at the public meeting you should have a written copy for submittal. No meeting materials will be distributed in advance of the public meeting; all materials will be distributed at the meeting. Limited teleconferencing capability will be available for the meeting. Persons wishing to participate via telephone or who have special audio-visual needs should contact Mr. Carey A. Johnston, (202) 260–7186.

The Agency invites all parties to coordinate their data collection activities with EPA to facilitate mutually beneficial and cost-effective data submissions. Please refer to the **FOR FURTHER INFORMATION CONTACT** for technical contacts at EPA.

To ensure that EPA can properly respond to comments, the Agency prefers that commenters cite, where possible, the paragraph(s) or sections in the notice or supporting documents to which each comment refers. Please submit an original and two copies of your comments and enclosures (including references).

Commenters who want EPA to acknowledge receipt of their comments should enclose a self-addressed, stamped envelope. No facsimiles (faxes) will be accepted. Comments and data will also be accepted on disks in Wordperfect, ASCII, or Adobe Acrobat (*.pdf) format.

All comments will be organized by EPA's Engineering and Analysis Division (EAD) and submitted by EAD to the record supporting this rulemaking (Docket No. W–98–26) in the EPA Water Docket. Electronic comments must be submitted as a Wordperfect, ASCII, or Adobe Acrobat (*.pdf) format file avoiding the use of any form of encryption. Electronic comments must be identified by the docket number W–98–26 and may be filed online at many Federal Depository Libraries. No confidential business information (CBI) should be sent via e-mail. EPA's information technology services (e.g., e-mail, website) were temporarily shut down, beginning Thursday, February 17, in order to review and improve security measures. EPA's e-mail services are now operational. However, EPA recommends that persons submitting comments electronically call Mr. Carey A. Johnston, (202) 260–7186, to confirm EPA receipt.

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I. Purpose of This Notice

On February 3, 1999 (64 FR 5488), EPA proposed technology-based effluent limitations guidelines and standards under the Clean Water Act (CWA) for the discharge of pollutants from oil and gas drilling operations associated with the use of synthetic-based drilling fluids (SBFs) and other non-aqueous drilling fluids into waters of the United States. This proposed rule would apply to certain existing and new facilities in the offshore subcategory (i.e., facilities seaward of the inner territorial boundary) and the Cook Inlet, Alaska, portion of the coastal subcategory of the oil and gas extraction point source category.

In this notice, EPA is making new data submissions available for comment. Additionally, EPA is providing descriptions of revised economic and engineering models incorporating the new data. Summary descriptions of updated modeling results are also given in this notice. This notice also discusses ''best management practices'' (BMPs) as potential alternative requirements to reduce the discharges of toxic and hazardous pollutants. Finally, this notice announces that EPA has submitted an Information Collection Request (ICR) to the Office of Management and Budget (OMB) for these BMP alternatives to numeric effluent limitations and standards. EPA solicits public comment on any of the

issues or information presented in this notice of data availability and in the administrative record supporting this notice.

II. Overview of Proposal and Data Acquired Since the Proposal

Since about 1990, the oil and gas extraction industry developed SBFs with synthetic and non-synthetic oleaginous (oil-like) materials as the base fluid to provide the drilling performance characteristics of traditional oil-based fluids (OBFs) based on diesel and mineral oil, but with lower environmental impact and greater worker safety through lower toxicity, elimination of polynuclear aromatic hydrocarbons (PAHs), faster biodegradability, lower bioaccumulation potential, and, in some drilling situations, less drilling waste volume.

EPA's information to date, including limited seabed surveys in the Gulf of Mexico, indicate that the effect zone of the discharge of certain SBFs is within a few hundred meters of the discharge point. These surveys also indicate that the sea floor may significantly recover in one to two years. EPA believes that impacts are primarily due to smothering by the drill cuttings, changes in sediment grain size and composition (physical alteration of habitat), and anoxia (absence of oxygen) caused by the decomposition of the base fluid. The benthic smothering and changes in grain size and composition from the cuttings are effects that are also associated with the discharge of water-based drilling fluids (WBFs) and associated cuttings. Based on the record to date, EPA finds that these impacts, which are believed to be of limited duration, are less harmful to the environment than the non-water quality environmental impacts associated with the option of prohibiting the discharge of all SBF-wastes. Moreover, EPA prefers SBFs over OBFs as there are operational accidents that lead to spills and loss of drilling fluid to the environment.

The proposed rule, published on February 3, 1999 (64 FR 5488), identified possible methods to control SBF discharges associated with cuttings (SBF-cuttings) in a way that reflects the appropriate level of technology. EPA proposed using stock limitations and standards on the base fluids from which the drilling fluids are formulated. This would ensure that substitution of synthetic and other oleaginous base fluids for traditional mineral oil and diesel oil reflects the appropriate level of technology. In other words, EPA wants to ensure that only the SBFs formulated from the ''best'' base fluids are allowed for discharge. Parameters that distinguish the various base fluids are the PAH content, sediment toxicity, rate of biodegradation, and potential for bioaccumulation.

EPA also proposed that SBF-cuttings should be controlled with discharge limitations and standards, such as a limitation on the toxicity of the SBF at the point of discharge, and a limitation on the mass (as volume) or concentration of SBFs discharged. The latter type of limitation would take advantage of the solids separation efficiencies achievable with SBFs, and consequently minimize the discharge of organic and toxic components. Additionally, EPA proposed that SBF discharges not associated with cuttings (e.g., incidental spills, accumulated solids, deck drainage) should meet zero discharge requirements, as this is the current industry practice due to the value of these drilling fluids.

Since proposal, EPA has obtained additional data and information from the industry and the Agency's continued data collection activities. The Agency has included these data, information, and the preliminary results of EPA's evaluation in sections III.A through III.H of the supporting record of this notice, available for review in the Water Docket (see **ADDRESSES** section at the beginning of this notice).

The industry data submittals are related to stock limitations and standards on base fluid (e.g., PAH content, sediment toxicity, biodegradation, bioaccumulation), discharge limitations and standards (e.g., free oil, formation oil contamination, retention of SBF on cuttings), technical performance of ester-based drilling fluids, subsea pumping systems, cuttings microencapsulation systems, best management practices (BMPs), and health and safety considerations. The specific data, information, and comments provided to EPA are discussed below in detail.

The Agency's collected data are related to stock limitations and standards (e.g., sediment toxicity and biodegradation); non-water quality environmental impacts (NWQI) including on-shore disposal capacity of exploration and production wastes and monetization of air emissions; economic costs related to deepwater projects; discharge limitations and standards; and projected environmental outcomes such as sediment pore water quality.

EPA will evaluate all analytical data in the rulemaking record to set limitations and standards that represent the appropriate level of technology using a combination of methods referenced below. Specifically, for sediment toxicity and biodegradation limitations and standards, EPA will evaluate each of the various sediment toxicity and biodegradation method test data for the various synthetic base fluids against known standards such as diesel. Moreover, EPA will use all sediment toxicity and biodegradation data to assess the ability of each sediment toxicity and biodegradation method identified below to discriminate between different types of synthetic base fluids and produce consistent results.

In addition, a list of SBF rulemaking stakeholder meetings and the respective minutes can be found in section III.A.(c) of the rulemaking record.

A. Industry Data Submissions Since Proposal Publication

1. Sediment Toxicity Test Results and Revised Methods

In the February 1999 proposal, EPA set the Best Available Technology Economically Achievable (BAT) and New Source Performance Standards (NSPS) stock limitation for sediment toxicity as: ''10-day LC_{50} of stock base fluid minus 10-day LC_{50} of C_{16}–C_{18} internal olefin shall not be less than zero.'' [The term ''LC_{50}'' is used to identify how much of a substance is needed to kill half of a group of experimental organisms in a given time; a higher LC_{50} value means the material is less toxic]. EPA also proposed a compliance method, American Society for Testing and Material (ASTM) method E1367–92, and sediment preparation procedures for this stock limitation (Appendix 3 to Subpart A of Part 435).

In addition to sediment toxicity tests using ASTM method E1367–92, industry has recently conducted several studies using alternative sediment toxicity test methods including a method based on determining toxicity to the mysid shrimp, *Mysidopsis bahia,* in a sediment-water interface system. As a result of this effort, industry has supplied information on the use of formulated sediments and the shortening of the exposure period of synthetic base fluids to marine amphipods. EPA proposes to use one of these methods (i.e., ASTM method E1367–92 or alternative industry mysid shrimp sediment toxicity test method) for: (1) the establishment of an appropriate sediment toxicity rate stock limitation in the final rule; and (2) use as a compliance tool.

Several papers published by M–I Drilling Fuids, L.L.C. (MIDF) provided data on the toxicity of the synthetic base fluid C_{16}–C_{18} internal olefin (IO) and

diesel in formulated sediments as well as data on the results of tests conducted with a 96-hour exposure period as compared to the standard 10-day exposure as specified in ASTM E1367–92 (Rabke and Candler, 1998; Rabke and Candler, 1999; Still, et al., 1999).

This work conducted by MIDF was done in an effort to increase the discriminatory power of the test between the toxicity of synthetic base fluids and diesel, as well as between the different synthetic base fluids. MIDF believes that the longer exposure time reduces discriminatory power because the test sediment toxicity becomes a greater factor relative to the test base fluid toxicity over time. Therefore, the test sediment's toxicity would tend to normalize and obscure the differences in toxicities of the test base fluids as test duration increases. Table II.A.1.1 summarizes the LC_{50} industry sediment toxicity data with various drilling fluids [i.e., diesel, internal olefin (IO), linear alpha olefin (LAO), poly alpha olefin (PAO), and ester]. A more complete review of these procedures and data can be found in section III.B.(b) of the rulemaking record.

TABLE II.A.1.1: INDUSTRY LC_{50} SEDIMENT TOXICITY DATA FOR VARIOUS DRILLING BASE FLUIDS AT TWO DIFFERENT TIME PERIODS

	Drilling base fluid	LC_{50} (mg/Kg)	95% Confidence interval
Baker Hughes INTEQ-Generated Data			
96-Hour Test	C14/16/18 IO	4020	2926–8219
	C14/16/18/20 IO	>5111	NA
	C16/18 IO	3515	2726–5215
	C14/15/16/17/18 LAO/IO	1497	1299–1725
10-Day Test	Diesel	343	297–391
	C14/16/18 IO	646	625–1250
	C14/16/18/20 IO	1218	1070–1453
	C16/18 IO	1464	1172–1681
	C14 LAO	205	187–223
	C16 LAO	407	353–473
	C14/15/16/17/18 LAO/IO	854	696–1018
	C30+PAO	2359	1478–5156
	Enhanced Mineral Oil	79	37–117
	Linear Paraffin	1047	846–1257
	Paraffin	111	101–122
Baroid-Generated Data			
96-Hour Test	Diesel	453	416–493
	IO	876	442–1663
	LAO	490	291–924
	Ester	>20000	NA
	Ester (Low viscosity)	>20000	NA
10-Day Test	Diesel	230	209–251
	IO	564	447–639
	LAO	338	294–378
	Ester	>10000	NA
	Ester (Low viscosity)	2447	2197–2701
MIDF Drilling-Generated Data			
96-Hour Test	Diesel	566	510–629
	IO	3686	2890–4893

Method Reference: EPA February 1999 Proposal (64 FR 5488).

Finally, one commenter on the February 1999 proposal, Baroid Drilling Fluids, provided preliminary sediment toxicity data for two of its ester-based drilling fluids. The data provided in the comments indicate that both esters may have lower toxicities than other base fluids (e.g., C_{16}–C_{18} IO, paraffin, mineral oil, diesel oil). However, EPA data presented in Table II.B.1.1 indicate that the sediment toxicity of IO and ester are significantly better than other alternative base fluids.

2. Biodegradation Test Results and Revised Methods

In the February 1999 proposal, EPA set the BAT and NSPS stock limitation for biodegradation rate as: ''percent stock base fluid degraded at 120 days minus percent C_{16}–C_{18} internal olefin degraded at 120 days shall not be less than zero.'' EPA also proposed a compliance method for this stock limitation (Appendix 4 to Subpart A of Part 435).

Industry stakeholders conducted a series of biodegradation tests for determining biodegradation of SBFs and OBFs using the method proposed by EPA (Appendix 4). Industry stakeholders also identified alternative analytical biodegradation methods and used these alternative methods to generate data. EPA solicits comment in this notice on use of these alternative methods and corresponding data to set biodegradation limitations and standards and compliance methods. EPA proposes to use one of these methods for: (1) The establishment of an appropriate biodegradation rate stock limitation in the final rule; and (2) use as a compliance tool. The first analytical test method is the solid-phase degradation test as EPA proposed in February 1999 (Appendix 4). This method consists of spiking ''clean'' marine or estuarine sediment with a base fluid and placing these test samples in exposure tanks filled with seawater. The concentration of base fluid is measured at regular intervals during the test to monitor the degradation of the base fluid.

Industry-supplied data using the solid phase test are summarized in Table II.A.2.1.

TABLE II.A.2.1: INDUSTRY SOLID PHASE BIODEGRADATION TEST RESULTS

Elapsed time of test	Percent loss relative to day 0				
	Olive oil (percent)	Finagreen ester (percent)	Diesel (percent)	C16–C18 Internal olefin	Neodene 1518 (percent)
Day 10	84	56	*	*	*
Day 20	88	59	*	*	*
Day 45	96	90	−2	39	2
Day 110	99	95	22	73	58
Day 186	99	99	55	93	83

Method Reference: EPA February 1999 Proposal (64 FR 5488).
*Not tested.

The second biodegradation method evaluated by industry is the marine anaerobic closed bottle test. This test procedure places a mixture of SBFs or OBFs, marine sediment, and sea water into a tightly capped clean serum bottle. The conditions within the closed bottle result in the anaerobic degradation of SBFs or OBFs. The anaerobic processes degrading the base fluids produce gas. This gas production is monitored as a measure of the degradation process. Industry-supplied data using the closed bottle test are summarized in Table II.A.2.2.

TABLE II.A.2.2: INDUSTRY MARINE ANAEROBIC CLOSED BOTTLE BIODEGRADATION TEST RESULTS

Elapsed time of test	Cumulative gas production over time (ml)					
	Olive oil	C_{16}–C_{18} internal olefin	C_{14}–C_{16} linear alpha olefin	Synthetic paraffin	C_{30}	Blank control
Day 0	0.00	0.00	0.00	0.00	0.00	0.00
Day 5	9.29	2.77	3.67	3.32	3.32	3.88
Day 25	50.00	8.59	10.00	7.05	6.62	5.99
Day 33	103.50	12.50	15.00	10.00	8.00	8.30
Day 67	150.41	18.38	22.15	13.67	10.45	11.12
Day 77	152.50	22.21	26.46	15.83	12.42	12.28
Day 95	160.61	24.60	32.74	18.16	12.18	12.98
Day 113	162.88	29.71	42.91	21.14	12.80	13.30
Day 132	164.78	39.74	55.50	23.17	13.38	14.01
Day 155	169.18	59.00	88.16	27.19	15.42	16.07
Day 194	167.74	92.36	114.50	25.82	13.97	14.57
Day 231	171.57	104.50	138.22	29.49	17.47	17.63
Day 271	175.58	119.88	151.20	33.33	21.63	22.11

Method Reference: ISO 11734: ''Water quality—Evaluation of the 'ultimate' anaerobic biodegradability of organic compounds in digested sludge—Method by measurement of the biogas production'' (1995 edition).

The third biodegradation test method is the respirometry test. This analytical method determines biodegradation by measuring the carbon dioxide production and/or oxygen consumption due to microbial oxidation of the test fluid in sediment. Industry-supplied data using the respirometry test are summarized in Table II.A.2.3.

TABLE II.A.2.3: INDUSTRY RESPIROMETRY BIODEGRADATION TEST RESULTS

Elapsed time of test	Cumulative oxygen consumption over time (mg)		
	Blank control	Rapeseed oil control	Amodrill 1000 SBF
Day 1	3.38	4.57	4.46
Day 2	6.26	8.26	6.62
Day 3	6.52	9.03	10.49
Day 4	12.68	22.29	14.13
Day 5	16.42	34.29	18.43
Day 6	18.50	41.33	21.02
Day 7	21.40	50.02	24.67
Day 8	24.02	58.42	27.96
Day 9	26.66	66.12	31.19
Day 10	29.10	72.88	34.36
Day 11	31.48	78.86	37.25
Day 12	33.88	84.26	39.96
Day 13	36.27	89.00	42.67
Day 14	38.80	93.33	45.48
Day 15	41.28	97.26	48.24
Day 16	43.31	100.76	50.96
Day 17	45.19	103.86	53.47

TABLE II.A.2.3: INDUSTRY RESPIROMETRY BIODEGRADATION TEST RESULTS—Continued

Elapsed time of test	Cumulative oxygen consumption over time (mg)		
	Blank control	Rapeseed oil control	Amodrill 1000 SBF
Day 19	49.29	110.34	58.86
Day 20	50.80	112.69	60.76
Day 21	52.53	115.34	62.78
Day 22	54.23	117.98	64.83
Day 23	55.73	120.38	66.57
Day 26	60.94	127.73	72.97
Day 27	62.32	129.64	74.76
Day 28	64.00	131.77	76.66
Day 29	65.60	133.81	78.81
Day 30	67.14	135.75	81.04
Day 31	68.59	137.53	82.97
Day 32	70.10	139.32	84.96
Day 33	71.66	141.13	86.98
Day 34	73.09	143.45	88.84
Day 35	74.82	144.51	91.08
Day 36	76.29	146.15	93.17
Day 37	77.47	147.59	94.68
Day 38	79.11	149.22	96.82
Day 39	80.64	150.80	98.87
Day 40	82.31	152.51	101.26
Day 41	83.44	153.83	102.68

Note: data were not collected on Days 18, 24, and 25.
Method Reference: Modification of OPPTS 835.3110: ''Fate, Transport and Transformation Test Guidelines: Ready Biodegradability,'' EPA 712–C–98–076, January 1998.

A more complete review of these procedures and data can be found in section III.B.(b) of the rulemaking record.

Finally, one commenter on the February 1999 proposal, American Petroleum Institute/National Ocean Industries Association (API/NOIA), stated, without any supporting data, that esters biodegrade more quickly than the alternative non-aqueous fluid systems. EPA agrees with this statement based on recent EPA biodegradation test results (*see* section II.B.2).

3. Formation Oil Contamination (Offshore and On-shore Tests)

In the February 1999 proposal, EPA proposed the BAT limitation and NSPS for formation oil as zero discharge. EPA also proposed a screening method [Reverse Phase Extraction (RPE) method given in Appendix 6 to Subpart A of Part 435] and an assurance method [Gas Chromatograph/Mass Spectrometer (GC/MS) method given in Appendix 5 to Subpart A of Part 435] for determining compliance. These methods continue to be EPA's preferred option for the final rule.

Industry has sponsored research regarding both of these analytical methods for determining formation oil contamination. The RPE procedure is to be used offshore. It measures ultraviolet (UV) fluorescence to detect the presence of aromatic compounds. Since proposal, refinements have been made in the test to minimize interference from emulsifiers. A more complete review of this procedure can be found in section III.B.(b) of the rulemaking record.

The GC/MS method is expected to be performed in a land-based laboratory. This procedure, which measures the area under GC peaks and target aromatics, is a dependable laboratory technique proposed by EPA to supplement the RPE test for verification purposes. A more complete review of this procedure can be found in section III.B.(b) of the rulemaking record.

4. SBF on Cuttings Retention Data

In this section, EPA summarizes the relationship of the industry supplied data to EPA's proposal, the relationship of these data to reductions in discharges to the environment, and the SBF on cuttings data submitted by industry.

a. SBF on Cuttings Data in Relation to EPA's Proposal. In February 1999, EPA proposed a BAT limitation and NSPS for base fluid retained on cuttings as a maximum value of 10.2 percent, not to be exceeded by the weighted average for retention over the course of drilling a well. EPA also proposed a method for demonstrating compliance with this discharge limitation (Appendix 7 to Subpart A of Part 435). In today's notice EPA, with input from industry, presents the proposed option along with several alternatives utilizing Best Management Practices (BMPs). EPA is considering three options for the final rule for the BAT limitation and NSPS controlling SBF retained on discharged cuttings: (1) a single numeric discharge limitation with an accompanying compliance test method; (2) allowing operators to choose either a single numeric discharge limitation with an accompanying compliance test method, or as an alternative, a set of BMPs that employs limited cuttings monitoring; or (3) allowing operators to choose either a single numeric discharge limitation with an accompanying compliance test method or an alternative set of BMPs that employ no cuttings monitoring.

Further EPA corrected technical errors in the proposed rule based on the statistical analysis of the SBF on cuttings data obtained from the Gulf of Mexico (GOM). The average percent SBF on cuttings was corrected from 11.5 to 11.4 for current practice and from 7.11 to 7.09 for the BAT/NSPS technology. The proposed well averaged maximum limitation and standard were corrected from 10.2 to 9.42. Cost and loading calculations presented in the February 1999 SBF technical support documents were not affected by these changes because these calculations were based on the rounded values of 11 for current practice and 7 for the BAT/NSPS technology. The technical errors requiring these changes were related to EPA's calculation of drilling intervals.

EPA calculates drilling intervals as the depth drilled since the last measurement for retention on cuttings.

EPA uses this measurement in conjunction with pipe diameter to estimate the volume of cuttings associated with a particular retention on cuttings measurement. EPA then uses this volume in the weighted summary statistics for the retention on cuttings data. Some data used at proposal were submitted with drilling intervals already calculated and other data were submitted with depth measurements calculated from the ocean floor. In the proposed rule as published in the **Federal Register**, EPA used both sets of measurements as if they all represented drilling intervals. However, in the record for the proposed rule, EPA calculated and used drilling intervals for those data submitted with depth measurements calculated from the ocean floor. More information on these errors and the corrections is given in section I.C(d)(59) of the rulemaking record.

Several comments received on the February 1999 proposal related to the use of cuttings retention data from the North Sea to set the GOM numeric guidelines and standards for percent retention. As discussed below, EPA has subsequently obtained sufficient data from the GOM to set limitations and standards without use of the North Sea data.

b. Relationship of SBF on Cuttings Retention Data to Protection of the Environment. Cuttings retention data measure the amount of residual drilling fluid retained on cuttings. A higher cuttings retention value indicates that more drilling fluid is adhering to the cuttings. EPA is interested in the cuttings retention measurement not only as an indicator of the amount drilling fluid discharged into the ocean but also as an indicator of the ability of cuttings to biodegrade and disperse and not form deleterious cuttings piles and mats. Moreover, understanding the fate and transport of discharged cuttings is an important step in modeling and monitoring potential environmental and human health impacts.

SBFs are a subcategory of non-aqueous drilling fluids (NAFs) which do not easily disperse in the water column. The effects of NAF-cuttings on benthic fauna may be categorized as being caused by: (1) physical smothering; (2) the presence of potential toxic and hazardous pollutants and biodegradation by-products (*e.g.,* heavy metals, aromatics, hydrocarbons, sulfides); and (3) the organic enrichment of sediment which may produce anoxic conditions (Limia and Peresich, 1992). Field studies indicate that the responses shown by benthic communities to cuttings discharges are the result of a combination of these effects. Numerous field studies show that the most harmful benthic effects are generally within 500 meters of development drilling operations and within 250 meters of single well sites (Davies et al., 1989).

Reducing the amount of initial base fluid on cuttings is beneficial in promoting biodegradation of SBFs in the benthic environment. Literature data make clear that the biodegradation of SBFs in the environment is not simply an exponential decay (Getliff et al., 1997). The half-life of the base fluid decreases as the initial concentration of base fluid on cuttings decreases. Therefore, it is vital to minimize the initial concentration of base fluid on cuttings discharged to maximize the rates of biodegradation and seabed recovery.

Reducing the amount of initial base fluid on cuttings is also beneficial in preventing the build-up of deleterious cuttings piles and mats. A decrease in benthic individuals within the zone of maximum cuttings deposition (*i.e.,* cuttings piles and mats) is a result of physical smothering and organic enrichment which produces anoxic conditions and toxic sulfide biodegradation by-products (Daan et al., 1996; Limia, 1996). A reduction of benthic individuals beyond the immediate area of physical impact may be indicative of a toxic effect (Davies and Kingston, 1992). The build-up of these harmful cuttings piles and mats is controlled by several factors including the conditions of the receiving waters (*e.g.,* currents, distance from discharge to seabed) and the retention of SBF on cuttings. A study of cuttings piles in the North Sea found that piles of cuttings are found predominantly at particular sites in the central and northern North Sea, where water depths are greater, and currents less than, the southern North Sea (Bell et al., 1998).

Results from laboratory experiments modeling typical ocean conditions show that high NAF content on cuttings (i.e., high cuttings retention values) lead to ''lumps'' of material, rather than separate particles, which rapidly settle out (i.e., have high fall velocities) to the benthic environment (Delvigne, 1996). Moreover, field results show that cuttings are dispersed during transit to the seabed and no cuttings piles are formed when SBF concentrations on cuttings are held below 5% (Getliff et al., 1997; Hanni et al., 1998). Additionally, cuttings discharged from cuttings dryers (with SBF retention values under 5%) in combination with a sea water flush, hydrate very quickly and disperse like water-based cuttings (Hanni et al., 1998).

Overall, lowering the percentage of residual drilling fluid retained on cuttings increases the recovery rate of the seabed receiving the cuttings (Getliff et al., 1997; Vik et al., 1996). Therefore, limiting the amount of NAF content in discharged cuttings controls: (1) The amount of NAF discharged to the ocean; (2) the biodegradation rate of discharged NAF; and (3) the potential for NAF-cuttings to develop cuttings piles and mats which are detrimental to the benthic environment.

c. SBF on Cuttings Data Submitted by Industry. Subsequent to proposal, SBF on cuttings data from various formations within the GOM have been submitted by an industry workgroup, individual operators, and by equipment vendors. These data characterize performance for a variety of cuttings treatment technologies, including existing shaker technologies and add-on equipment. Several comments on the February 1999 proposal also provided cursory information and data related to the performance of new and existing solids control equipment and drilling fluids. For example, one comment by Derrick Equipment Company described SBF cuttings retention values in the range of 8 to 9% by weight for a GOM well using a new shale shaker design. A comment by Baroid Drilling Fluids stated that the lower viscosity of its new ester-based drilling fluid will lead to greater recovery of its ester-based fluid from cuttings.

Based on these data and other GOM data presented at proposal, EPA has modeled and analyzed the cuttings retention performance of several technologies. A summary of the revised models is presented in section III.D. A summary of the analyses developed by EPA, including the development of numeric guidelines and standards, is presented in section IV.D. Detailed descriptions of the statistical methods, summary statistics, overall averages, and percentiles associated with each technology can be found in section III.C.(a) of the rulemaking record.

5. Industry Seabed Survey

Permits authorizing the discharge of SBF-cuttings are required to meet (a) technology-based requirements, and (b) CWA section 403(c) Ocean Discharge Criteria, or, in State waters of Cook Inlet, Alaska, State water quality criteria. The February 1999 proposal described the CWA 403(c) requirements and the seabed surveys EPA thinks would be occurring, based on information available at that time to satisfy these permit requirements. Today's notice updates the description

of the seabed survey efforts that industry is currently planning.

EPA understands that the industry is planning a cooperative effort to address the CWA section 403(c) requirements in the GOM. Industry representatives have told EPA that their cooperative seafloor study would include a review of historical data on SBF usage on the shelf and slope, and these data would be analyzed to select a representative series of platforms.

The overall objective of the study is to assess the fate and effects (physical, chemical, and biological) of discharged SBF-cuttings at continental shelf (40 m to 300 m water depth) and deepwater (>300 m water depth) GOM sites. Specific sub-objectives include determining the thickness and areal extent of cuttings accumulations, determining the temporal behavior of SBF concentrations in sediments, documenting the physical-chemical sediment conditions, and determining whether a zone of biological effect exists.

The study will include four cruises: a scouting cruise, a screening cruise, and two sampling cruises. The purpose of the scouting cruise, which is intended to take place in late spring of 2000, is to conduct a preliminary physical survey of ten continental shelf sites to: (1) assess the extent of cuttings accumulations; (2) assess the suitability of each site for further sampling; and (3) guide further sampling operations. The results of this cruise will be used to select five continental shelf sites where the subsequent screening cruise will be conducted.

During the screening cruise, five continental shelf sites and three deepwater sites will be surveyed. The purpose of this cruise is to: (1) Assess SBF concentrations and other sediment physical-chemical conditions (*e.g.,* oxidation-reduction profile, grain size, mineralogy, metals, total organic carbon) at all eight sites; (2) test and refine the proposed field and laboratory methods; and (3) make preliminary benthic infaunal and sediment toxicity assessments at the five continental shelf sites. Based on data acquired during this cruise, sampling strata will be designated and platform sites will be designated as primary or secondary. The three deepwater sites and three of the five continental shelf sites will be primary sites, and the remaining two continental shelf platforms will be secondary sites.

The sampling cruise will be similar to the screening cruise in terms of physical-chemical analyses, but will include an increased number of samples. Infaunal and sediment toxicity analyses will be included at the three primary continental shelf sites. Sampling at the two secondary continental shelf sites will be similar to that at the primary sites, but the suite of analyses will not be as extensive (e.g., it will not include metals, infaunal, or sediment toxicity analyses).

EPA plans on using the data from the first survey to identify any negative environmental effects from SBF discharges. If this data becomes available in time, EPA might use that information in its assessment of a controlled discharge option as compared to the NWQIs of a zero discharge option. The current work plan for the seabed survey can be found in section III.F.(a) of the rulemaking record.

6. Bioaccumulation

Several comments related to bioaccumulation were submitted to EPA in response to the February 1999 proposal. In particular, one industry commenter stated, without supporting data, that there is currently sufficient data available amongst the various companies to show that synthetic base fluids are not believed to bioaccumulate; further, that most members of the industry groups maintain operations in the European sector where bioaccumulation testing of base fluids has already been conducted in compliance with the Harmonized Offshore Chemical Notification Format (HOCNF) requirements. However, another commenter stated, also without supporting data, that marine organisms higher in the food chain are at significant risk due to bioaccumulation of SBF. EPA is again requesting any data related to the potential of SBF to bioaccumulate and the related chronic or toxic effects on higher level organisms.

7. Technical Performance of Ester-based Drilling Fluids

In the proposed rule, EPA proposed its sediment toxicity and biodegradation BAT limitations and NSPS based on product substitution with C_{16}–C_{18} Internal Olefins. Several commenters on the February 1999 proposal and other industry stakeholders offered data related to the technical and environmental performance of SBFs (e.g., Limia and Peresich, 1992). Specifically, three commenters provided data on the dynamic or kinematic viscosity of several SBFs (e.g., isomerized olefins, esters). Baroid Drilling Fluids provided data on its ''new ester'' with a dynamic viscosity comparable to a C_{16}–C_{18} IO. This drilling fluid manufacturer claims that the new ester allows formulation of fluids which have cold water performance comparable to, if not better than, some IOs (*e.g.,* C_{16}–C_{18} IO). Moreover, Baroid Drilling Fluids noted that the price of esters-based drilling fluids in the GOM have been reduced in half since their introduction and use in the GOM. EPA has also received information that indicates that esters still remain 40–90% more expensive than IOs (Johnston, 2000a). EPA has also received information that original and new ester technology continues to exhibit higher viscosity that could result in higher downhole losses of whole drilling fluids and higher cutting retention values (Friedheim and Conn, 1996; Johnston, 2000a). Finally, EPA has received information on the technical limitations (e.g., stability, elastomer swelling, sediment toxicity, lack of field experience) of original and new esters (Daan et al., 1996; Johnston, 2000a; Patel, 1998; Schaanning et al., 1996).

Due to the potential for better environmental performance of ester-based drilling fluids, EPA is considering basing the sediment toxicity and biodegradation stock limitations and standards on original esters instead of the proposed C_{16}–C_{18} IO. EPA is also considering sub-categorizing the regulation, based on the use of esters. The different sub-categorization options under consideration by EPA include: (1) limiting SBF discharges by setting numeric limitations and standards based on ester-based drilling fluids when water temperatures are above the practical limitations of esters; and (2) limiting SBF discharges by setting numeric limitations and standards based on C_{16}–C_{18} IOs, thus allowing the discharge of SBFs other than ester-based drilling fluids, when water temperatures are below the practical limitations of esters.

EPA solicits comment on this subcategory approach, and again is requesting any information and data related to the cost, technical performance, potential environmental impacts (e.g., sediment and aquatic toxicity, biodegradation), and frequency of industry use of ester-based drilling fluids.

8. Subsea Pumping Systems

In the February 1999 proposal (64 FR 5495), EPA outlined an innovative technology, generally referred to as ''subsea pumping,'' that may potentially outperform conventional drilling techniques in very deepwater conditions (generally greater than 3,000 feet of water). Subsea pumping is claimed by the developer to contribute

to a number of environmental, technical, and economic benefits.

The technology involves pumping the drilling fluid up a separate riser by means of pumps at or near the seafloor. Rotary drilling methods in a system using subsea pumping are generally similar to conventional drilling methods, with the exception that the drilling fluid and small cuttings (i.e., < one-quarter inch) are boosted by one or more pumps near the seafloor. By boosting the drilling fluid, the adverse effects on the wellbore caused by the drilling fluid pressure from the seafloor to the surface are eliminated, thereby allowing wells to be drilled with as much as 50 percent reduction in the number of casing strings generally required to line the well wall. Wells are drilled in less time, including less trouble time.

The developer of this technology claims that subsea pumping can significantly improve drilling efficiencies and thereby reduce the volume of drilling fluid discharged, as well as reduce the non-water quality effects of fuel use and air emissions. Because fewer casing strings are needed, the hole diameter in the upper sections of the well can be smaller, which reduces the amount of cuttings produced. Also, the well bore will require fewer casing strings of smaller diameter, resulting in a reduction in steel consumption. An additional benefit of subsea pumping systems is the potential to extend the use of ester-based fluids in the cooler, deeper waters of the GOM. Finally, subsea system drilling may double or triple the reach of horizontal or directional deepwater delineation sidetrack wells. Accordingly, this may reduce the number of delineation wells needed to characterize a oil and gas formation.

To enable the pumping of drilling fluids and cuttings to the surface, about half of the drill cuttings, comprising the cuttings larger than approximately one-quarter inch, are separated from the drilling fluid and discharged at the seafloor since these cuttings cannot reliably be pumped to the surface. With a currently reported design, the drill cuttings that are separated at the seafloor are discharged through an eductor hose at the seafloor within a 150-foot radius of the well site. The drilling fluid, which is boosted at the seafloor and transports the remainder of the drill cuttings back to the surface, is conventionally processed.

Since the February 1999 proposal, the subsea pumping system developer has reviewed the technology with staff from Minerals Management Service (MMS) GOM Office, EPA Region 6, and EPA Headquarters. In a letter dated May 24, 1999, MMS provided conditional approval to the developer for using its subsea system for exploratory and development wells in Outer Continental Shelf (OCS) waters. In a letter dated July 30, 1999, EPA Region 6 concluded that discharges from the developers subsea system are generally authorized by the general permit for the western GOM (Permit No. GMG290000) provided that the subsea discharges are monitored.

EPA Headquarters staff met with the developers of the subsea pumping system on January 18, 2000, to discuss the technical and environmental performance of the new technology. As part of the meeting, the technology developers submitted a technical basis for supporting their improved environmental, technical, and economic performance. The developers also discussed with EPA Headquarters staff their current plans to field test their subsea pump system solids removal equipment offshore under atmospheric, not subsea, conditions. The tests are scheduled to begin in May 2000 with data becoming available in July 2000. The developers are planning to collect SBF retention data as well as other data to determine the fractions and concentrations of SBF discharged subsea. Notes from the January 18, 2000, meeting (including the technology developer technical report), anticipated subsea pumping field test plans, and the two previously mentioned letters are given in section III.B.(b) of the rulemaking record.

The subsea system developer commented on the February 1999 proposal and suggested that a definition for ''subsea pumping'' and a clarification of subsea pumping discharge sampling and monitoring requirements be added to this notice. In the supporting documentation for the proposed rule, Development Document for Proposed Effluent Limitations Guidelines and Standards for Synthetic-Based Drilling Fluids and other Non-Aqueous Drilling Fluids in the Oil and Gas Extraction Point Source Category (EPA–821–B–98–021), EPA stated that for purposes of monitoring, samples of the subsea discharge can be transported to the surface for analysis.

Based on the potential for reducing discharges to the environment and as previously stated in the SBF Development Document, EPA is considering different technology options for this subsea discharge. These options include limiting the type of drilling fluids available for use in subsea pumping systems; different monitoring and sampling requirements for subsea discharges; subsea cuttings discharge dispersal techniques; and cuttings retention requirements that are different from surface discharges. EPA is requesting comments on the most appropriate limitations and combination of limitations for these subsea discharges. EPA is also requesting more information about the anticipated percentage of future deepwater drilling operations that will employ subsea pumping systems.

9. Cuttings Micro-encapsulation Systems

EPA Headquarters staff met with the developers of a new cuttings management system, silica micro-encapsulation, on September 23, 1999, to discuss the technical and environmental performance of the new technology. Silica micro-encapsulation is a process by which the NAF attached to the cuttings is physically encapsulated in an insoluble matrix of amorphous silicate. More information on this technology is given in section III.B.(b) of the rulemaking record.

The technology developer claims that the encapsulated oils do not leach and do not biodegrade. The stated benefit of the micro-encapsulation process is the ability to convert non-aqueous fluid cuttings into water wet particles. Consequently, the non-aqueous fluid cuttings behave in the water column similarly to water-based fluid cuttings. The developer claims that this allows for maximum dispersion of non-aqueous fluid cuttings. Finally, the developer claims that the dispersion of the cuttings into a much greater area substantially reduces the potential for benthic smothering and other toxic and chronic environmental effects.

One issue related to this technology is the incompatibility of the micro-encapsulation technology with the February 1999 proposal method for determining the amount of drilling fluid that adheres to drill cuttings. This method, Appendix 7 to Subpart A of Part 435–API Recommended Practice 13B–2 (64 FR 5547), is designed to measure the relative weights of liquid and solid components in a sample of wet drill cuttings. The method uses a known weight of wet cuttings that is heated in a retort chamber to vaporize the liquids contained in the sample. The high heat of the retort analysis (approximately 930 °F) can break down the micro-encapsulation coating and release the previously sequestered oil droplet. Therefore EPA's proposed requirements for minimizing oil on cuttings and use of the retort method may eliminate the incentive to use the micro-encapsulation technology.

EPA may consider different technology options for these micro-encapsulated cuttings discharges. These options include product substitution of only certain types of drilling fluids available for use in micro-encapsulating systems; different monitoring and sampling requirements for micro-encapsulated discharges; different toxicity tests; and different cuttings retention requirements. Specifically, EPA is proposing that this technology may be more beneficial in combination with other technologies (e.g., product substitution, add-on solids removal equipment) to assist operators in meeting site specific CWA section 403 NPDES permit requirements. As stated previously, switching to less toxic and more biodegradable drilling fluids, reducing the oil on cuttings, and increasing the dispersion of the cuttings is instrumental in preventing build-up of cuttings piles and reducing impacts to the benthic environment. Use of this micro-encapsulation technology to promote cuttings dispersion and further sequester the oil on cuttings, after use of new solids control equipment, may provide addition environmental protection. EPA is requesting comments and information related to the environmental, technical, and economic performance of this and similar micro-encapsulation technologies and the incentive/disincentive issue with respect to the proposed retention limitation and standard using the retort method as the compliance test method.

B. EPA Data Collection Since Proposal Publication

1. Sediment Toxicity Test Results

Because of the limited data available for the proposal on the sediment toxicity of both the base fluids and whole drilling fluid systems, EPA has begun a study using sediment toxicity test methods to: (1) determine the toxicity of various base fluids and whole synthetic fluid drilling systems on amphipods for purposes of selecting fluids that represent the appropriate level of technology; and (2) evaluate possible sediment toxicity compliance method options. The initial tests conducted in December 1999 at the EPA Gulf Breeze Laboratory evaluated the sediment toxicity of three synthetic base fluids compared to diesel and have consisted of 96-hour and 10-day exposure tests with an IO, a LAO, and an ester as the base fluids as compared to No. 2 diesel oil. At the same time, EPA's contract laboratory, Battelle, also conducted initial sediment toxicity tests on mineral oil and paraffin in addition to the same three synthetic base fluids evaluated by the EPA Gulf Breeze Laboratory.

EPA is currently conducting tests to determine influences of whole fluid compositions and crude oil contamination on the sediment toxicity of an internal olefin (IO), linear alpha olefin (LAO), and ester. Current and previous sediment toxicity tests conducted by EPA have used the ASTM E1367–92 sediment toxicity method supplemented with a sediment preparation procedure (*see* 64 FR 5536: Appendix 3 to Subpart A of Part 435). Table II.B.1.1 summarizes the sediment toxicity data that EPA has collected since proposal.

TABLE II.B.1.1: EPA-COLLECTED LC_{50} SEDIMENT TOXICITY DATA WITH VARIOUS DRILLING BASE FLUIDS FOR TWO DIFFERENT TIME PERIODS

	Drilling base fluid	LC50 (mg/Kg)	95% Confidence interval
EPA Gulf Breeze Laboratory—Generated Data			
96-Hour Test	Internal Olefin	ND	NA
	Linear Alpha Olefin	750	677–930
	Ester	10812	9138–12793
	Diesel	463	426–505
10-Day Test	Internal Olefin	660	423–1029
	Linear Alpha Olefin	419	350–502
	Ester	ND	NA
	Diesel	199	171–232
EPA Contract Laboratory (Battelle)—Generated Data			
96-Hour Test	Internal Olefin	>8000	NA
	Linear Alpha Olefin	2921	2260—3775
	Ester	7686	7158—8253
	Mineral Oil	436	485—391
	Paraffin	2263	1936—2644
10-Day Test	Internal Olefin	2530	2225—2876
	Linear Alpha Olefin	1208	1089—1339
	Ester	4275	3921—4662
	Mineral Oil	176	163—190
	Paraffin	1151	1038—1276

Method Reference: EPA February 1999 Proposal (64 FR 5488).
ND—Not determined; NA—Not applicable.

In addition, EPA is assessing the toxicity potential for degradation by-products. EPA has some information related to SBF by-products (Candler et al., 1995; Getliff et al., 1997; Johnston, 2000a). These data show that aerobic and anaerobic degradation mechanisms for many SBFs (especially linear hydrocarbons) produce by-products that include biodegradable alcohols and fatty acids. Some SBFs, such as linear paraffins, are still the subject of some debate as to their exact mode of biodegradation and associated by-products under anaerobic conditions. In addition, ester-based drilling fluids by-products (e.g., alcohols) may exhibit toxic effects in the water column (Johnston, 2000a). EPA solicits comments and data on whether there are any known persistent or toxic by-products created by the biodegradation of synthetic base fluids. This information will allow EPA to assess the

overall environmental impact of using synthetic base fluids.

Finally, as originally stated in the February 1999 proposal (64 FR 5491), EPA may require additional or alternative controls as part of the BAT/NSPS discharge options based on method development and data gathering subsequent to today's notice: (1) Maximum sediment toxicity of drilling fluid at point of discharge (minimum LC_{50}, mL drilling fluid/kg dry sediment by 10-day sediment toxicity test or amended test); (2) maximum aqueous phase toxicity of drilling fluid at point of discharge (minimum LC_{50} by Suspended Particulate Phase (SPP) test (*see* Appendix 2 of Subpart A of Part 435) or amended SPP test); and (3) maximum potential for bioaccumulation of stock base fluid (maximum concentration in sediment-eating organisms). In particular, EPA is interested in controlling the toxicity of SBFs in the sediment and the water column and may require both a sediment toxicity test and an aqueous phase toxicity test to assess overall toxicity.

A more complete review of the sediment toxicity procedures and data can be found in section III.B.(a) of the rulemaking record.

2. Biodegradation Test Results

Because of the limited data available for the proposal on the biodegradation of SBFs, EPA has begun a study using the solid phase biodegradation test, proposed in February 1999, to: (1) determine the biodegradation of various synthetic base fluids for purposes of selecting fluids that represent the appropriate level of technology; and (2) evaluate possible biodegradation compliance options. This project began in January 2000 and results are anticipated to be finalized in March 2000. Table II.B.2.1 summarizes the data collected to date. A more complete review of these procedures and data can be found in section III.B.(a) of the rulemaking record.

TABLE II.B.2.1: EPA SOLID PHASE BIODEGRADATION TEST

	Percent loss relative to day 0					
	Ester (percent)	Paraffin (percent)	Poly (alpha) olefin (percent)	Mineral oil (percent)	Internal olefin (percent)	Linear alpha olefin (percent)
Day 0	0	0	0	0	0	0
Day 14	53	21	22	20	9	8
Day 28	60	19	25	21	18	16

Method Reference: EPA February 1999 Proposal (64 FR 5488).

3. EPA Engineering Data Collection Activities

During the week of October 25, 1999, EPA staff traveled to Texas and Louisiana to observe onshore and offshore equipment used for treating and disposing of SBF and SBF-cuttings. Highlights of the onshore portion of the field trip include visits to an operating cuttings dryer unit, a fracture slurry injection facility, and a barge facility on the GOM intercoastal waterway.

Offshore highlights included visits to two oil and gas drilling operations to observe waste management and pollution prevention practices. EPA staff also observed working solids control equipment including cuttings dryers. These cuttings dryers are designed to recover more SBF from cuttings generated by primary and secondary shale shakers. This field trip also included an all day meeting with cuttings dryer equipment vendor representatives and members of industry. Field notes from the site visit and minutes of the all day meeting can be found in section III.B.(a) of the rulemaking record.

EPA also obtained information from the industry primarily related to the per-well aspects of drilling with SBF in three subject areas: (1) Drilling operations; (2) solids control equipment and systems; and (3) costs, in order to better understand current and emerging SBF and SBF-waste management practices.

Finally, EPA collected information from MMS regarding accidental spills of OBFs and SBFs. Spills can release small and large quantities of drilling fluid. In particular, undetected leaking lines can release several hundred barrels of drilling fluid while accidental riser disconnects can release several thousand barrels of whole drilling fluid into the environment. Specifically, EPA is interested in: (1) the occurrences of accidents and events that can cause the release of OBF and SBF whole drilling fluid (e.g., riser disconnects, blow-outs, shallow water flow problems); (2) the number of these accidents and events over the past five years for each MMS region (Alaska, California, GOM); (3) the location of these events (i.e., shallow or deepwater); and (4) the volumes associated with these accidents and events. Preliminary information is that there have been several spills of OBFs over the past five years, but most were small volumes. In addition, MMS data identifies three events, including two riser disconnects, that resulted in significant releases of SBFs into the environment for the months of January and February 2000. Under the zero discharge option EPA assumes that all operators requiring NAF will switch to OBFs. As the toxicity of OBFs is greater than SBFs, EPA will use this spill data as a factor in supporting the selection of a controlled discharge option in the final rule.

A more complete review of the EPA collected engineering data can be found in section III.B.(a) of the rulemaking record.

4. Non-Water Quality Environmental Impacts (NWQI)

The additional cuttings retention data submitted to EPA (*see* section II.A.4) were used in the revision of the engineering models that form the basis for all per-well numeric compliance analyses. Based on changes in the engineering models described below in section III.A, EPA revised the numeric NWQIs of fuel usage, air emissions, and solid waste generation.

The U.S. Department of Energy (DOE) collected information about currently operating onshore commercial disposal facilities that are permitted to receive offshore drilling wastes. The Argonne National Laboratory (DOE) contacted State officials in Louisiana, Texas, California, and Alaska to obtain this information. EPA also identified a list of Louisiana commercial non-hazardous oilfield wastes (NOW) facilities from the Louisiana Department of Natural Resources.

EPA also contacted Alaska, Texas, and Louisiana regulatory agencies to obtain current information concerning

management of offshore and coastal exploration and production wastes. The Texas Natural Resource Conservation Commission (TNRCC) provided permit information and waste disposal limitations for the Texas fracture slurry injection facility visited by EPA staff (*see* section II.B.3). The Alaska Oil and Gas Conservation Commission (AOGCC) provided information related to Cook Inlet formation disposal of drilling fluids and cuttings.

EPA also reviewed two papers that detail operations of a large Louisiana onshore fracture slurry injection facility operated by Chevron for Naturally Occurring Radioactive Materials/Non-Hazardous Oilfield Wastes (NORM/NOW) (Baker et al., 1999a; Baker et al., 1999b). Currently, this Chevron facility is limited by its permit to only handle exploration and production wastes from Chevron GOM operations.

EPA also contacted Cook Inlet, Alaska, operators to identify the current and projected use of SBF and the most current waste management options for drill cuttings and fluids. Operators noted that few wells were being drilled with SBF due to NPDES general permit prohibition of SBF discharges. Furthermore, Cook Inlet operators noted that the only drill cuttings and fluid management options available to them are land disposal of cuttings or grinding and injection of the cuttings back into the formation. Land disposal of OBF- and SBF-cuttings was identified as cost prohibitive.

In considering all options for management of non-aqueous fluids (NAF) and NAF-cuttings, EPA is also identifying possible scenarios for cross-media contamination. In particular, EPA is trying to identify former NOW treatment, storage, or disposal facilities that are now CERCLA (or ''Superfund''), RCRA Corrective Action, or State lead cleanup sites. An initial search by EPA identified several such sites including several sites around Abbeville, Louisiana. Accordingly, EPA is requesting additional information related to other sites (Superfund, RCRA Corrective Action, or State lead) that have been contaminated with NOW from offshore operations.

The findings of current onshore waste management options and former NOW facilities that are now cleanup sites outlined in this section are presented in section III.B.(a) of the rulemaking record.

Also subsequent to the proposal, EPA has monetized the human health benefits associated with volatile organic compound (VOC), particulate matter (PM), and sulfur dioxide (SO_2) emission reductions for the two controlled discharge options. The valuation methodology is presented in section III. The results of these revisions are presented in section IV below.

5. Economic Data (including Deep Water Model Wells)

EPA collected information from industry regarding model deepwater project costs for the Gulf of Mexico, produced water treatment costs, wellhead oil and gas prices, and drilling activity forecasts. A summary of the data is provided in section III.G of the rulemaking record.

EPA is developing a methodology to examine the economic and financial impacts of the SBF guidelines on both existing and new deepwater oil and gas projects in response to comments from industry that these projects are vastly different from the projects analyzed as part of the Offshore Oil and Gas Effluent Guidelines economic analysis. At proposal, EPA relied on the results of that latter analysis showing Gulf of Mexico projects to be only minimally affected by even the most stringent drilling waste option (the zero discharge option). Because of the unique nature of deepwater projects and because of their greater distance from shore, industry believes deepwater projects need to be evaluated for economic impacts resulting from options considered for the rule.

EPA is thus developing a computer model similar to the one used for the Offshore rule, and also nearly identical to the one developed for the Main Pass operations in the Gulf of Mexico investigated during the Coastal Oil and Gas Effluent Guidelines rule. The general structure of the model is based on the Main Pass Model with a few minor variations [for example, severance tax is not an issue, so this line item is not used (*see* Economic Impact Analysis of Final Effluent Limitations Guidelines and Standards for the Coastal Subcategory of the Oil and Gas Extraction Point Source Category, Appendices A and B, EPA–821–R–96–022)].

The major differences of this model compared to the Main Pass model are the inputs. EPA investigated a number of deepwater projects for use as model projects. These projects included all currently operating projects, as well as a number that should come on line shortly. Over 30 projects fit this description. From these initial projects, EPA selected as many as possible to use in modeling deepwater projects. Data availability was the primary criterion used in selecting the model projects. EPA selected all deepwater projects for analysis that operated in 1998 and that had original proved reserves data available in public documents. The most recent publicly available documents on proved reserves are those provided by MMS on its website and these documents are current through December 31, 1996. Proved reserves are used to distinguish the relative size of projects, since the indication of the ultimate size of a project is reserves, not necessarily the current production (new projects that have not completed the maximum number of wells that would be productive at any one time would end up classified as smaller than they will eventually become). Size of project is important, since results will be reported over a group of projects (i.e, results for small, medium, and large projects) rather than project-by-project. Size of reserves also allows EPA to determine how many wells might be drilled at a project over time.

Using the data availability criterion, EPA reduced the number of projects that can be modeled to twenty. One project did not operate in 1998, and the others either have not yet started producing, or are so new that original proved reserves had not been calculated for them in December 1996. The twenty projects include four small projects (original proved reserves of 10 million barrels of oil equivalent (BOE) or less, eight medium-size projects (original proved reserves approximately between 10 million and 100 million BOE), and eight large projects (original proved reserves over 100 million BOE). BOE for each project is the sum of the oil (42 gal. oil = 1 BOE) and natural gas (1,000 scf = 0.178 BOE). To model new projects, however, five of the twenty projects were dropped from the analysis as being too old or as using construction technologies unlikely to be used in the future. The remaining 15 projects generally had been producing less than 5 years in 1998.

Other information was obtained either from industry contacts or was based on data developed by EPA and used either in analyzing the economic impacts of the Offshore or Coastal Subcategory Oil and Gas Effluent Guidelines. Section III.G of the rulemaking record provides data on projects used to model deepwater projects as well as assumptions and sources of data for the oil and gas financial model.

6. Environmental Assessment Data

a. Water and Sediment Quality Criteria. Subsequent to conducting water quality analyses for the Environmental Assessment (EA) for the proposed rule, EPA published its revised recommended water quality criteria for arsenic (deletion of human

health criterion); copper (increased from 2.4 µg/l to 4.8 µg/l and 3.1 µg/l for acute and chronic aquatic community criteria, respectively); mercury (increased from 0.025 µg/l to 0.94 µg/l for chronic aquatic community criterion), and phenol (deletion of human health criterion) in the **Federal Register** (December 10, 1998; 63 FR 68354). In addition Alaska promulgated new State water quality standards for toxic pollutants on May 27, 1999 (*see* Alaska Administrative Code, Title 18, Chapter 70 or section III.F.(a).2 of the rulemaking record). These deletions and corrections are incorporated in revisions to the analyses of water column, pore water, and sediment guidelines quality outlined in the February 1999 Environmental Assessment Document (EPA–821–B–98–019).

b. *Dilution Data.* The same model used in the February 1999 proposal, Brandsma (1996), was used in this notice to estimate the concentration of synthetic fluids within the water column for assessment of attainment with recommended water quality criteria. These revised dilution calculations are used for the water column water quality analyses and for the calculations of exposure concentrations for the health benefits analyses.

c. *Review of the Seabed Surveys.* In response to comments and new data received, EPA revised the Seabed Survey portion of the Environmental Assessment. All of the studies presented in the original EA were re-analyzed to correct omissions and errors identified by commenters. One additional study was submitted by a commenter, BP Amoco, entitled Deepwater Sampling at a Synthetic Drilling Mud Discharge Site on the Outer Continental Shelf, Northern Gulf of Mexico (Fechhelm et al., 1999). EPA reviewed this study which investigated the deepwater benthic effects of a SBF (90% linear-alpha olefins and 10% esters) discharge and added relevant data to the EPA EA analyses.

EPA EA models use a mean of SBF sediment concentrations from various seabed surveys found in the literature. EPA updated the mean SBF sediment concentration (at 100m from the modeled discharge) from 13,892 mg/kg to 14,741 mg/kg to incorporate new data identified in the BP Amoco benthic study.

d. *Receipt of the United Kingdom Offshore Operators Association (UKOOA) Research Reports.* In June 1998, UKOOA, supported by the Oil Industry International Exploration and Production Forum (E & P Forum) and in co-operation with the Norwegian oil association (OLF), launched an initiative to tackle the historical legacy of accumulated drill cuttings beneath offshore installations in the North Sea. Many of these North Sea cuttings piles were generated from the practice of discharging cuttings from multiple wells into a single deposition point. These drilling operations also used OBFs which contain a high PAH content. The ultimate goal of the UKOOA research is to identify the best environmental practice and the best techniques available for managing these accumulations.

Immediately prior to publication of this notice, EPA acquired several reports related to the UKOOA industry research activities in the North Sea. These UKOOA reports are based on literature review and field studies. Specifically, EPA received UKOOA reports related to cuttings pile toxicity, faunal colonization of cuttings piles, contaminant leaching from drill cuttings piles, and natural degradation and estimated recovery time-scale.

EPA plans to incorporate the relevant major findings and conclusions into the final EPA SBF Environmental Assessment document and analyses. Specifically, EPA plans on using relevant North Sea data in assessing its method alternatives for determining sediment toxicity, biodegradation, and bioaccumulation. Moreover, EPA plans to incorporate relevant data from North Sea field studies into assessing the various discharge and zero discharge options for SBF-wastes. Section III.B.(a) of the rulemaking record gives summary of the data collected to support the EPA SBF Environmental Assessment.

III. Revised Models

A. Revised Engineering Models

1. Large Volume Discharges

Through discussions with stakeholders and the October 1999 site visits to offshore drilling operations, EPA has obtained more information about current and emerging solids control practices. Regarding current practices, EPA has re-evaluated its model of the ''standard'' or ''baseline'' solids control system. The baseline model presented in the February 1999 proposal consisted of a primary shale shaker that discharges cuttings and a secondary shale shaker that discharges fine-particle cuttings (referred to as ''fines'').

Since proposal, EPA learned that cuttings are discharged from both primary and secondary shale shakers, and that fines are generated from additional equipment such as high-speed shale shakers (called ''mud cleaners'') and centrifuges whose purpose is to treat the drilling fluid by removing undesirable fine solids. These fines were reported by one industry commenter on the February 1999 proposal to have SBF cuttings retention values as high as 20 percent by weight.

Therefore, the revised baseline model consists of primary and secondary shale shakers, plus a ''fines removal unit'' that may be either a mud cleaner or a centrifuge. Discharges from the baseline model system consist of cuttings from the primary shale shaker, cuttings from the secondary shale shaker, and fines from the fines removal unit. Based on data provided in the spreadsheets submitted by industry representatives, the baseline model volume fractions of the three discharges, expressed as percentages of the total volume of all cuttings discharged from the baseline model well, are 78.5% for the primary shakers, 18.5% for the secondary shakers, and 3% for the fines removal unit.

EPA received sufficient additional cuttings retention data from GOM sources to re-evaluate the discharges of these three units and to calculate a revised baseline long-term average retention value of 11.4% by weight of SBF on cuttings. Despite the revision of the retention data and the model baseline system, the revised long-term average retention value is only slightly higher than the 11% originally calculated for the proposal, providing further confidence in the accuracy of the baseline model and associated data.

Since the February 1999 proposal, the GOM offshore drilling industry has increased its use of ''add-on'' cuttings drying equipment, ''cuttings dryers,'' to reduce the amount of SBF adhering to the cuttings prior to discharge. Specifically, over twenty GOM SBF well projects utilized these cuttings dryers in the recent past to reduce the amount of SBF discharged (Johnston, 2000a). Current data available to EPA indicates that these cuttings dryers can operate consistently and efficiently when properly installed and maintained. Specifically, vendor supplied data associated with these cuttings dryer deployments suggest that the overall cuttings dryer downtime (i.e., time when cuttings dryer equipment is not operable) is approximately one percent of the overall operating time (Johnston, 2000a).

At the time of the February 1999 proposal, EPA had obtained retention data from only one such add-on technology, namely the Mud-10 vibrating centrifugal dryer. Since then, EPA has observed the operation of another drying technology, generally

referred to as a vertical centrifuge dryer. The vertical centrifuge dryer unit serves the same purpose and occupies the same location in the treatment train as the Mud-10 unit. EPA generically refers to the Mud-10 unit and the vertical centrifuge dryer as the ''cuttings dryer.''

Immediately prior to publication of this notice, EPA also received limited cuttings retention data from a third type of add-on equipment referred to as a ''squeeze press'' mud recovery unit. When installed, the squeeze press mud recovery unit occupies the same location as the above-mentioned cuttings dryers and serves to reduce the amount of SBF adhering to the cuttings prior to discharge. The specific data for the squeeze press were received too late to include in the statistical determination of retention values for today's notice. However, these data are included in the public record for the rule and EPA solicits comments on them (Johnston, 2000b). These data, along with additional retention data received from other industry sources, will be evaluated and included in the appropriate engineering and statistical analyses used to support the cuttings retention limitation in the final rule.

Most cuttings dryer applications include a centrifuge or mud cleaner in the treatment train, to serve the same purpose as the fines removal unit in the baseline system (i.e., to remove undesirable fine solids from the drilling fluid recovered by the cuttings dryer). Therefore, EPA's revised model of BAT/NSPS-level solids control includes primary and secondary shale shakers that send all their cuttings to a cuttings dryer, followed by a fines removal unit. There are two discharges from the BAT/NSPS-level model solids control system: one from the cuttings dryer and one from the fines removal unit. The BAT/NSPS-model volume fractions of the two discharges, expressed as percentages of the total volume of all cuttings discharged from the BAT/NSPS-model well, are 97% for the cuttings dryer and 3% from the fines removal unit. EPA, however, solicits more volume fraction data to further refine its baseline and BAT/NSPS discharge models.

For today's notice, EPA evaluated two different scenarios based on the above BAT/NSPS-model solids control system. The first scenario assumes that both the cuttings from the cuttings dryer and the fines from the fines removal unit are discharged. This first BAT/NSPS-model scenario is essentially unchanged from the BAT/NSPS-model presented at the February 1999 proposal. The long-term average SBF cuttings retention value for this first BAT/NSPS-model scenario is 2.68% by weight. This new long-term average cuttings retention value is lower than the February 1999 proposal BAT/NSPS-model long-term average cuttings retention value of 7% by weight. The difference is attributable to the replacement of the North Sea data with data from recent GOM drilling projects. The second BAT/NSPS-model scenario assumes that only the cuttings are discharged, and the fines, which represent a comparably smaller volume of waste, are retained for zero discharge via hauling to shore for land-based disposal. Therefore, the long-term average cuttings retention value for this second BAT/NSPS-model scenario is equal to the retention value for the cuttings dryer, 2.45% by weight.

At this time, EPA thinks that data from the GOM are adequate to represent field conditions throughout the United States. These data include variations in geological formations, drilling conditions, and rates of penetration. However, EPA is still requesting cuttings retention data from offshore and coastal drilling operations that use SBFs. In particular, EPA is requesting SBF cuttings retention data from United States offshore or coastal oil and gas exploration and production facilities operating outside of the GOM. If EPA does not receive additional non-GOM data, EPA is comfortable with applying the GOM data to other offshore and coastal regions in the United States.

The analyses for compliance costs, pollutant loadings, and numeric non-water quality environmental impacts are based on the volumes of waste solids and adhering drilling fluid estimated to be discharged from each of four model wells. The model wells are defined in terms of four categories: deep water (i.e., ≥1000 ft) development, deep water exploratory, shallow water (i.e., <1000 ft) development and shallow water exploratory. While the model well sizes are unchanged, the volumes of adhering drilling fluid were revised based on the revised retention values. Based on further communication since the February 1999 proposal with industry about current and future drilling plans in the GOM, California, Alaska, and North Carolina, the numbers of each type of model well drilled annually are also unchanged. EPA is, however, requesting more data detailing the annual number of shallow water and deep water SBF-wells. EPA is also requesting data on the conditions and frequency when SBFs are chosen over water-based drilling fluids, when both drilling fluids are technically acceptable for drilling (i.e., some shallow water wells).

EPA also re-evaluated the zero-discharge option using the updated baseline retention data. The only notable change in the approach to the zero-discharge analysis is the distribution of wells using land-based disposal versus wells using onsite injection. The original analysis assumed that 80% of the affected wells would use land-based disposal and 20% would use onsite injection. While this assumption remains applicable to shallow water wells, EPA learned from industry sources that onsite injection is currently less applicable to deep water wells, due to limitations of mechanical equipment, geology, and well placement. Therefore, the zero discharge analysis now assumes that all deep water wells will haul cuttings to shore for land-based disposal. As zero discharge remains a proposed management option, EPA is requesting additional data and information related to what drilling fluids and waste management practices operators will likely use and the overall impact on the annual number of drilling projects if EPA selects the zero discharge management option for SBFs.

The current engineering cost analysis also assigns the installation and downtime costs to every well. However, EPA recognizes that it is likely that multiple wells would be drilled from a single installation, thereby reducing the effect of the installation cost on each well's total compliance cost. It is also likely that some drilling rigs will purchase and permanently install cuttings dryers and fines removal units, further reducing the effect of installation costs on any one well. The data EPA has gathered to date are limited in this regard. Therefore, EPA requests additional information pertaining to the average number of wells drilled annually with SBF per platform, and the number of platforms capable of permanently installing cuttings dryers and fines removal units.

Details of the revised engineering models are provided in a technical support document in section III.C.(b) of the rulemaking record.

2. Small Volume Discharges

In its study of current solids control practices, EPA learned that SBF is controlled with zero discharge practices at the drill floor, in the form of vacuums and sumps to retrieve spilled fluid. EPA also learned that approximately 75 barrels of solids coated with SBF can accumulate in the dead spaces of the mud pit, sand trap, and other equipment in the drilling fluid circulation system. Current practice is to either wash these solids out with water for overboard

discharge, or to retain the waste solids for disposal.

Since zero discharge practices at the drill floor during drilling are the current practice, no additional costs were considered for controlling spills of SBF at this location. However, EPA did investigate options for controlling the discharges of accumulated solids generated by equipment cleaning procedures at the end of a drilling project. Assuming that every drilling project generates approximately 75 barrels of these small-volume waste accumulated solids, the costs vary only by: (1) geographic region; and (2) the numbers of wells in each regulatory scenario. EPA used the line-item costs developed for the zero discharge compliance cost analysis to calculate per-well and total costs for existing and new sources to dispose of accumulated solids via hauling to land based disposal facilities. The industry-wide costs resulting from this analysis are given below in section IV, Table IV.A.2.1.

B. Revised Economic Models

EPA plans to use the same methodologies in analyzing firm-level impacts used at proposal, but will update information to include at a minimum 1998 financial data as well as 1997 financial data. The year 1998 was not a good year for the oil and gas industry, whereas 1997 was a good year, so these two years should provide some sense of the volatility of the industry. EPA still expects that the impact on firms will be minimal, even given the difficult year the industry had in 1998. Additionally, EPA will use the same methodology for the small business analysis that was used at proposal. EPA does not expect the analysis to change significantly from proposal because: (1) Costs have not changed substantially; (2) only a few small operators are believed to be using SBFs; and (3) very few wells are drilled by small operators in a year.

Instead of relying on the Offshore Oil and Gas Effluent Guidelines EIA to provide a sense of financial impact at the facility level, however, EPA is changing the approach to allow deepwater projects to be modeled financially, as discussed in section II.

At the time of this notice, EPA believes that economic impacts from even the most stringent option (*i.e.,* zero discharge of SBFs) will have only minimal influence on most deepwater projects. However, as zero discharge remains a proposed management option, EPA is requesting additional data and information related to whether or not the selection of the zero discharge management option for SBFs will affect the overall annual number of drilling projects in deep and shallow waters in the United States. Further technical details are presented in supporting documentation in section III.G of the rulemaking record, which discusses potential impacts on typical, or average, deepwater projects.

However, because averages can obscure the effects at the most vulnerable projects, EPA will be looking closely at the potential for option costs to cause any measurable impacts at projects that do not conform to the parameters of the average project using the financial model. Although model outputs will be reported in the aggregate by project size, each individual project will be represented in the model inputs to allow EPA to identify impacts more precisely.

The projects likeliest to show some potential for impact are the smallest projects (both existing and new, if the existing projects continue to drill), the oldest existing projects (such as Lena and Cognac, which have produced over 80 percent of their original proved reserves as of 1996), or very marginal projects. Because any project could be marginal when all the factors are accounted for, even the relatively small cost of the SBF rule could have an impact on one or more projects, although, at this time, EPA believes this possibility is small.

C. Revised Environmental Assessment (EA) Models

Revisions to the regulatory options such as the revised retention on cuttings values and the addition of another controlled discharge option has resulted in changes in the SBF environmental assessment. The retention on cuttings affects both the pollutant loadings and the volume of waste discharged, thereby affecting the water quality, sediment quality and human health impacts. EPA has therefore re-iterated the various EA analyses and the results are presented in section IV below. There are, however, no changes in the EA models as outlined in the February 1999 proposal and the Environmental Assessment Document (EPA–821–B–98–019).

The models developed to calculate the NWQIs of air emissions, fuel usage, and solid waste generation have been revised parallel to the revisions in the engineering models described in section III.A. The revised waste volumes that resulted from new retention data required adjustments of such NWQI model elements as numbers of boat trips, cuttings boxes, and crane lifts. An additional NWQI model was developed for the BAT/NSPS discharge scenario based on 2.45% retention on cuttings. For both of the discharge scenarios, the energy requirements for the cuttings dryer and fines removal units were revised to reflect the newer technologies now accounted for in the engineering models. Finally, the zero discharge model was changed according to the new finding that deep water wells cannot readily utilize onsite injection and, rather, haul cuttings to shore-based disposal facilities.

Also subsequent to the February 1999 proposal, EPA monetized the human health benefits for the two controlled discharge options associated with reducing volatile organic compound (VOC), particulate matter (PM), and sulfur dioxide (SO_2) emissions. The valuation methodology used to conduct the monetized benefits analysis is presented in Environmental Assessment of the Final Effluent Limitations Guidelines and Standards for the Pharmaceutical Manufacturing Industry (EPA–821–B–98–008). The results of these revisions are presented in section IV below.

D. Revised Models for the Performance of Cuttings Treatment Technologies

As stated in the February 1999 proposal, EPA is considering setting limitations and standards for the percent retention of synthetic-based drilling fluids on cuttings that may be discharged from the cuttings dryer and fines removal technologies. EPA received cuttings retention data after the February 1999 proposal (*see* section II.A.4). This section of the notice outlines the revisions made to the statistical models for the performance of cuttings treatment technologies. A summary of the output of these revised models with new data is given in section IV.D.

EPA analyzed cuttings treatment data presented at proposal using well averages where each cuttings retention value is weighted by an associated hole volume. Since publication of the proposed statistical support document in February 1999, EPA incorporated four changes into the statistical methods used to estimate summary statistics which support the development of numeric limitations and standards for the retention of synthetic-based drilling fluids on cuttings. These changes are: (1) Imputation of volume-weighted factors for zero and negative drilling intervals; (2) correction to the estimator for volume-weighted variances; (3) the addition of uniformly-weighted summary statistics; and (4) consideration of the 99th percentile rather than the 95th percentile for the development of numeric limitations and standards for the maximum well

averaged percent retention of SBF on cuttings.

EPA generally estimated the volume of cuttings using the drilling interval and the pipe diameter immediately preceding a retention measurement. However, at times, the drilling intervals are reported as zero or negative. A negative drilling interval indicates that the drill pipe has been pulled up to facilitate drilling in a new direction. EPA excluded negative interval data from the proposal. In this report, negative drilling intervals are treated in the same fashion as zero drilling intervals.

At proposal, EPA estimated weighted variances as if the weights could only take on a small number of possible values. However, those weights are based on the volume of cuttings associated with a particular drilling interval and that volume may take on infinitely many values. In this report, EPA estimated weighted variances as if the weights could only take on infinitely many values.

Under the assumption that the retention on cuttings increased with the depth drilled, EPA proposed numeric guidelines and standards using retention values weighted by the volume drilled. However, the graphics showing percent retention versus depth drilled do not indicate that this is true (EPA, 2000). Therefore, EPA has added the use of uniformly-weighted summary statistics as part of EPA's statistical models. With no apparent relationship between depth drilled and percent retention, the uniformly-weighted summary statistics are more appropriate. Basing numeric guidelines and standards on a single type of measurement, as opposed to a combination of multiple types of measurements, will reduce the measurement variability associated with the guidelines and standards. Additional benefits of setting numeric guidelines and standards based on uniformly-weighted summary statistics include eliminating the need to: (1) Calculate the length of interval drilled; (2) impute volumes where zero or negative intervals exist; and (3) use unusual variance estimation procedures. EPA prefers to set numeric guidelines and standards for percent retention based on uniformly-weighted summary statistics as opposed to volume weighted summary statistics.

EPA proposed numeric limitations and standards under the assumption that, on a long-term average basis, good engineering practice would allow appropriately designed and well operated solids control equipment systems to perform at least as well as approximately 95% of the systems whose data were used to develop the limitations and standards. Operationally, cuttings retention values are averaged over the course of drilling an individual well and EPA's candidate BAT limitation or NSPS is the estimated 95th percentile for the available well averages.

The CWA confers considerable discretion in determining what constitutes best available technology and best available demonstrated technology. In exercising this discretion, the Agency has proposed and promulgated limitations and standards that provide for the variability observed in application of these technologies. This allowance provides for variation in the performance of the recommended treatment technologies and establishes a standard that EPA expects well operated treatment systems to be capable of achieving at all times.

Given that there is less experience to date with the application of the cuttings dryer technology than many other candidate BAT and NSPS technologies generally, the Agency is also considering setting numeric limitations and standards based on the 99th percentile. This would provide a larger allowance for treatment variability than is provided by the proposed limitations and standards based on the 95th percentile.

Detailed descriptions of the statistical methods, summary statistics, overall averages, and percentiles associated with each technology can be found in section III.C.(a) of the rulemaking record.

IV. Revised Analyses

A. Revised Compliance Costs Results

1. Large Volume Discharges

Based on the revised engineering models described in section III.A above, EPA revised its calculations of baseline, compliance option, and incremental compliance costs. The industry profile and the methodology for estimating costs that were presented with the proposed rule have not changed for today's notice. The results of the revised compliance cost analyses are presented in Table IV.A.1.1 for existing sources and in Table IV.A.1.2 for new sources.

TABLE IV.A.1.1: SUMMARY ANNUAL COST/SAVINGS, EXISTING SOURCES (1998$/YEAR)

Technology basis	Costs (savings) in 1998$/year [wells/year]			
	Gulf of Mexico [wells/yr]	Offshore California [wells/yr]	Cook Inlet, Alaska [wells/yr]	Total [wells/yr]
Baseline/Current Practice Technology Costs:				
Discharge with 11.4% retention of SBF on cuttings	20,032,850 [94 wells/yr]	NA[a]	NA[a]	20,032,850 [94 wells/yr]
Zero Discharge via land disposal or onsite injection (current OBF-drilled wells only).	3,494,062 [23 wells/yr]	2,287,281 [12 wells/yr]	214,237 [1 well/yr]	5,995,580 [36 wells/yr]
Total Baseline Costs per Area	23,526,912 [117 wells/yr]	2,287,281 [12 wells/yr]	214,237 [1 well/yr]	26,028,430 [130 wells/yr]
Technology Option Costs:				
Discharge with 2.68% retention of SBF on cuttings	20,257,350 [117 wells/yr]	2,463,440 [12 wells/yr]	211,350 [1 well/yr]	22,932,140 [130 wells/yr]
Discharge with 2.45% retention of SBF on cuttings	20,365,837 [117 wells/yr]	2,472,517 [12 wells/yr]	214,672 [1 well/yr]	23,053,026 [130 wells/yr]
Zero Discharge of SBF-wastes via land disposal or on-site injection.	31,666,153[b] [94 wells/yr]	NA[a]	NA[a]	31,666,153 [94 wells/yr]
Incremental Tech. Option Costs (Savings):				
Discharge with 2.68% retention of SBF on cuttings	(3,269,562) [117 wells/yr]	176,159 [12 wells/yr]	(2,887) [1 well/yr]	(3,096,290) [130 wells/yr]
Discharge with 2.45% retention of SBF on cuttings	(3,161,075) [117 wells/yr]	185,236 [12 wells/yr]	435 [1 well/yr]	(2,975,404) [130 wells/yr]

TABLE IV.A.1.1: SUMMARY ANNUAL COST/SAVINGS, EXISTING SOURCES (1998$/YEAR)—Continued

Technology basis	Costs (savings) in 1998$/year [wells/year]			
	Gulf of Mexico [wells/yr]	Offshore California [wells/yr]	Cook Inlet, Alaska [wells/yr]	Total [wells/yr]
Zero Discharge of SBF-wastes via land disposal or on-site injection.	11,633,303[c] ..... [94 wells/yr]	NA[a]	NA[a]	11,633,303 [94 wells/yr]

[a] NA: Not applicable since currently there are no discharges of SBF-cuttings in these waters.
[b] This technology option cost estimates zero discharge costs associated with the 94 GOM wells that are currently allowed to discharge SBF.
[c] This incremental technology option cost only covers the 94 GOM wells that are currently allowed to discharge SBF and does not include baseline compliance costs of zero discharge for the 23 GOM OBF wells (i.e., $3,494,062).

TABLE IV.A.1.2: SUMMARY ANNUAL COST/SAVINGS, NEW SOURCES (1998$/YEAR)

Technology basis	Gulf of Mexico
Baseline/Current Practice Technology Costs:	
Discharge with 11.4% retention of SBF on cuttings	2,306,325
Technology Option Costs:	
Discharge with 2.68% retention of SBF on cuttings	1,388,250
Discharge with 2.45% retention of SBF on cuttings	1,395,913
Zero Discharge of SBF-wastes via land disposal or onsite injection	4,581,838
Incremental Technology Option Costs (Savings):	
Discharge with 2.68% retention of SBF on cuttings	(918,075)
Discharge with 2.45% retention of SBF on cuttings	(910,412)
Zero Discharge of SBF-wastes via land disposal or onsite injection	2,275,513

Note: All cost estimates in this table are based on an assumption of 19 new source wells per year.

Details of the revised compliance cost data and analyses are available in a technical support document in section III.C.(b) of the rulemaking record.

2. Small Volume Discharges

As stated in section III.A.2 of this notice, EPA learned that SBF is controlled with zero discharge practices at the drill floor, in the form of vacuums and sumps to retrieve spilled fluid. Industry estimated that essentially all of the SBF that spills on the rig floor is recovered using the controls described above. The amount of SBF spilled on the rig floor that is not captured by current practices is estimated at less than 1 gallon SBF per 100 feet drilled.

Industry representatives have stated that industry is split on the practice of discharging accumulated solids with some discharging accumulated solids provided permit limitations and standards are met and others opting to haul this material to shore for disposal (*see* section II.B.3). Approximately 75 barrels per well of fine solids and barite, of which up to 25% is SBF, accumulate in the rig mud pits, sand traps, and other equipment. Several hundred barrels (approximately 200 to 400 barrels) of water are used to wash out the mud pits. Industry representatives also indicated to EPA that those oil and gas extraction operations that discharge wash water and accumulated solids first recover free SBF.

EPA used the line-item costs developed for the zero discharge compliance cost analysis to calculate per-well and total costs for existing and new sources to dispose of accumulated solids via hauling to land based disposal facilities. Section III.A.2 outlines the assumptions used to calculate the annual zero discharge costs for small volume wastes given below in Table IV.A.2.1. Overall, the estimated per-well costs (1998$) were $1,221 for GOM wells, $2,186 for Offshore California wells, and $10,638 for Cook Inlet wells.

TABLE IV.A.2.1: ANNUAL ZERO DISCHARGE COSTS FOR SMALL-VOLUME SBF WASTES (1998$/YEAR)

Technology Basis	Gulf of Mexico	California	Cook Inlet, AK	Total
Existing Sources:				
Baseline and BAT/NSPS Discharge Scenarios[a]	$142,857	$26,235	$10,638	$179,730
Zero Discharge[b]	114,774	[d] NA	[d] NA	114,774
New Sources:				
All Scenarios (Baseline, BAT/NSPS Discharge, and Zero Discharge)[c] ..	23,199	[d] NA	[d] NA	23,199

[a] Costs are the same for baseline and two discharge scenarios because each analysis is based on 117 wells.
[b] Zero discharge costs for existing sources are based on 94 wells.
[c] Costs are the same for all new-source scenarios because each analysis is based on 19 wells.
[d] NA: Not Applicable.

B. Revised Pollutant Loadings Results

EPA reviewed additional information regarding drilling fluid additives provided by the industry representatives in response and subsequent to the February 1999 proposal, and found no information prompting changes to the concentrations or list of pollutants presented at the time of proposal. EPA revised the pollutant loadings analysis according to the changes in the engineering and statistical models described in section III.A and III.D of this notice.

The loadings analysis depends on the estimated volumes of cuttings and SBF discharged per model well for each discharge scenario. Other than adjusting the loadings to the revised waste volumes and revised discharge scenarios, the analysis remains unchanged from the February 1999 analyses. Tables IV.B.1 and IV.B.2 present the revised loadings for existing and new sources, respectively. EPA assumes that operators will switch from OBFs in the current baseline model to SBFs under both SBF controlled discharge options. These tables present the loadings associated with discharges of SBF and entrained fines [e.g., <5 microns (10^{-6} meters)]. EPA also calculated the loadings associated with SBF solids that can be removed by solids control equipment (e.g., >5 microns).

TABLE IV.B.1: SUMMARY ANNUAL SBF POLLUTANT LOADINGS FOR EXISTING SOURCES (LBS/YEAR) [a]

Technology basis	SBF pollutant loadings (reductions) in pounds/year [a] [wells/year]			
	Gulf of Mexico	Offshore California	Cook Inlet, Alaska	Total
Baseline/Current Practice Tech. Loadings:				
Discharge with 11.4% retention of SBF on cuttings	34,364,661 [94 wells/yr]	[b] NA	[b] NA	34,364,661 [94 wells/yr]
Zero Discharge via land disposal or onsite injection (current OBF-drilled wells only).	0 [23 wells/yr]	0 [12 wells/yr]	0 [1 well/yr]	0 [36 wells/yr]
Total Baseline Loadings per Area	34,364,661 [117 wells/yr]	0 [12 wells/yr]	0 [1 well/yr]	34,364,661 [130 wells/yr]
Technology Option Loadings:				
Discharge with 2.68% retention of base fluid on cuttings	7,328,175 [117 wells/yr]	466,072 [12 wells/yr]	26,413 [1 well/yr]	7,820,660 [130 wells/yr]
Discharge with 2.45% retention of base fluid on cuttings	6,464,827 [117 wells/yr]	411,167 [12 wells/yr]	23,302 [1 well/yr]	6,889,295 [130 wells/yr]
Zero Discharge of SBF-wastes via land disposal or on-site injection.	0 [94 wells/yr]	[b] NA	[b] NA	0 [94 wells/yr]
Increm. Tech. Opt. Loadings (Reductions):				
Discharge with 2.68% retention of base fluid on cuttings	(27,036,486) [117 wells/yr]	466,072 [12 wells/yr]	26,413 [1 well/yr]	(26,544,001) [130 wells/yr]
Discharge with 2.45% retention of base fluid on cuttings	(27,899,834) [117 wells/yr]	411,167 [12 wells/yr]	23,302 [1 well/yr]	(27,465,365) [130 wells/yr]
Zero Discharge of SBF-wastes via land disposal or on-site injection.	(34,364,661) [94 wells/yr]	[b] NA	[b] NA	(34,364,661) [94 wells/yr]

[a] SBF pollutant loadings only includes loadings associated with discharges of SBF and entrained fines (e.g., < 5 microns)
[b] NA Not Applicable

TABLE IV.B.2: SUMMARY ANNUAL POLLUTANT LOADINGS FOR NEW SOURCES (LBS/YEAR) [a]

Technology basis	Gulf of Mexico
Baseline/Current Practice Technology Loadings:	
Discharge with 11.4% retention of SBF on cuttings	3,949,786
Technology Option Loadings:	
Discharge with 2.68% retention of SBF on cuttings	745,855
Discharge with 2.45% retention of SBF on cuttings.	657,981
Zero Discharge of SBF-wastes via land disposal or onsite injection	0
Incremental Technology Option Loadings (Reductions):	
Discharge with 2.68% retention of SBF on cuttings	(3,203,931)
Discharge with 2.45% retention of SBF on cuttings.	(3,291,805)
Zero Discharge of SBF-wastes via land disposal or onsite injection	(3,949,786)

Note: All loading (reduction) estimates in this table are based on an assumption of 19 new source wells/yr.
[a] Only includes loadings associated with discharges of SBF and entrained fines (e.g., <5 microns)

The zero discharge option also reduces the amount of SBF-solids [i.e., solids that can be removed by solids control equipment (e.g., >5 microns)] from the current baseline. The estimated annual baseline discharges of SBF-solids from existing sources is 126,321,650 lbs./year. The estimated annual loadings (in lbs./year) of SBF-solids for existing sources are: 152,240,270 (2.68% retention controlled discharge option); 147,673,062 (2.45% retention controlled discharge option); and 0 (zero discharge option). The estimated annual baseline discharge of SBF-solids from new sources is 14,519,050 lbs./year. The estimated annual loadings (in lbs./year) of SBF-solids for new sources are: 14,519,050 (2.68% retention controlled discharge option); 14,083,488 (2.45% retention controlled discharge option); and 0 (zero discharge option). Complete details of the loadings analysis are available in a technical support document in the rulemaking record for this notice.

C. Revised Non-Water Quality Environmental Impacts (NWQI) Results

1. Air Emissions and Fuel Usage

EPA revised the analysis of the numeric NWQIs of air emissions and fuel usage pursuant to the changes in the engineering models described in section III.A of today's notice. Changes to the numeric NWQI analysis derive from the revised waste volumes, as well as changes in the BAT/NSPS discharge scenarios.

In both the first and second BAT/NSPS discharge scenarios, additional air

emissions and fuel usage result from the addition of the fines removal unit. Both scenarios also incorporate the average energy and fuel requirements of the two types of cuttings dryer that EPA observed in October 1999 (*see* section II.B.3). In the second BAT/NSPS discharge scenario in which the fines waste stream is retained for shipping to land-based disposal, additional air emissions and fuel usage are incurred for a portion of the supply boat trip, and for trucks and other equipment involved in the land disposal zero discharge scenario.

As described in section III.A, EPA learned from industry representatives that onsite injection is not generally technologically practicable for deep water drilling projects. Therefore, NWQIs attributable to hauling and land disposing drilling wastes were assigned to all deep water wells in the zero discharge analysis. Tables IV.C.1 and IV.C.2 present the revised air emissions (tons/yr) and fuel (BOE/yr) usage for existing and new sources, respectively.

Other than the specific changes described above, the methodology for the numeric NWQI analysis is unchanged since the February 1999 proposal. Details of this analysis are available in a technical support document located in the rulemaking record for this notice.

TABLE IV.C.1: SUMMARY ANNUAL NON-WATER QUALITY ENVIRONMENTAL IMPACTS, EXISTING SOURCES

Technology basis	Non-water quality environmental impacts reductions (increases) [wells/year—wpr]							
	Gulf of Mexico		Offshore California		Cook Inlet, AK		Total	
	Air emissions (tons/yr)	Fuel usage (BOE/yr)	Air emissions (tons/yr)	Fuel usage (BOE/yr)	Air emissions (tons/yr)	Fuel usage (BOE/yr)	Air emissions (tons/yr)	Fuel usage (BOE/yr)
Baseline/Current Practice NWQIs:								
Discharge with 11.4% retention of base fluid on cuttings.	42 ..... [94 wpy] ...	4,512 ..... [94 wpy] ...	[a]NA	[a]NA	[a]NA	[a]NA	42 ..... [94 wpy] ...	4,512 [94 wpy]
Zero Discharge (current OBF-wells only).	65 ..... [23 wpy] ...	4,811 ..... [23 wpy] ...	47 ..... [12 wpy] ...	2,940 ..... [12 wpy] ...	2.5 ..... [1 wpy]	338 ..... [1 wpy]	115 ..... [36 wpy] ...	8,089 [36 wpy]
Total Baseline NWQIs per Area.	107 ..... [117 wpy]	9,323 ..... [117 wpy]	47 ..... [12 wpy] ...	2,940 ..... [12 wpy] ...	2.5 ..... [1 wpy]	338 ..... [1 wpy]	157 ..... [130 wpy]	12,601 [36 wpy]
Technology Option NWQIs:								
Discharge with 2.68% retention of SBF on cuttings.	127 ..... [117 wpy]	10,422 ..... [117 wpy]	7.6 ..... [12 wpy] ...	673 ..... [12 wpy] ...	0.06 ..... [1 wpy]	40 ..... [1 wpy]	135 ..... [130 wpy]	11,135 [130 wpy]
Discharge with 2.45% retention of SBF on cuttings.	191 ..... [117 wpy]	15,685 ..... [117 wpy]	52 ..... [12 wpy] ...	853 ..... [12 wpy] ...	0.20 ..... [1 wpy]	67 ..... [1 wpy]	243 ..... [130 wpy]	16,605 [130 wpy]
Zero Discharge of SBF-wastes via land disposal or onsite injection.	561 ..... [94 wpy] ...	39,702 ..... [94 wpy] ...	[a]NA	[a]NA	[a]NA	[a]NA	561	39,702 [94 wpy]
Incr. Tech. Opt. NWQI Red. (Incr.):								
Discharge with 2.68% retention of SBF on cuttings.	20 ..... [117 wpy]	(1,099) ..... [117 wpy]	40 ..... [12 wpy] ...	2,267 ..... [12 wpy] ...	2.45 ..... [1 wpy]	298 ..... [1 wpy]	22 ..... [130 wpy]	1,466 [130 wpy]
Discharge with 2.45% retention of SBF on cuttings.	(84) ..... [117 wpy]	(6,362) ..... [117 wpy]	(4.8) ..... [12 wpy] ...	2,087 ..... [12 wpy] ...	2.31 ..... [1 wpy]	271 ..... [1 wpy]	(87) ..... [130 wpy]	(4,004) [130 wpy]
Zero Discharge of SBF-wastes via land disposal or onsite injection.	(519) ..... [94 wpy] ...	(35,191) ... [94 wpy] ...	[a]NA	[a]NA	[a]NA	[a]NA	(519) ..... [94 wpy] ...	(35,191) [94 wpy]

Note: 1 ton = 2000 lbs; BOE = barrels of oil equivalent
[a] NA: Not Applicable

TABLE IV.C.2: SUMMARY ANNUAL NON-WATER QUALITY ENVIRONMENTAL IMPACTS, NEW SOURCES

Technology basis	Gulf of Mexico	
	Air emissions (tons/yr)	Fuel usage (BOE/yr)
Baseline/Current Practice Technology NWQIs:		
Discharge with 11.4% retention of SBF on cuttings	4.8	515
Technology Option NWQIs:		
Discharge with 2.68% retention of SBF on cuttings	13	1,073
Discharge with 2.45% retention of SBF on cuttings.	23	1,923
Zero Discharge of SBF-wastes via land disposal or onsite injection	68	4,784
Incremental Technology Option NWQIs Reductions (Increases):		
Discharge with 2.68% retention of SBF on cuttings	(8.2)	(558)
Discharge with 2.45% retention of SBF on cuttings.	(18)	(1,408)
Zero Discharge of SBF-wastes via land disposal or onsite injection	(63)	(4,269)

Note: All NWQI reductions (increases) in this table are based on an assumption of 19 new source wells/yr
Note: 1 ton = 2000 lbs; BOE = barrels of oil equivalent

2. Solid Waste Generation and Management

EPA assumes that based on the relative cheaper cost of OBF (approximately 5 times less expensive per barrel than SBFs), operators will use OBFs rather than SBFs if EPA selects the zero discharge option for all SBF-wastes. Consequently, operators will be land disposing or injecting OBFs if EPA selects the zero discharge option for all SBF-wastes.

As stated in the February 1999 proposal, the regulatory options considered for this rule will not cause generation of additional solids. However, EPA calculated the amount of waste cuttings that would be land disposed and injected onsite in each regulatory scenario, and determined that there would be a considerable reduction in the amount of mineral-oil or diesel oil-contaminated cuttings land disposed and injected with the implementation of either of the controlled discharge options.

Applying the revised waste volumes and discharge scenarios described above, the accounting of disposed waste is revised as follows. In the baseline analysis, wells that currently drill using OBFs generate 27 million (MM) pounds of waste cuttings that are land disposed, and 6.8 MM pounds that are injected onsite, for a total of 34 MM pounds of waste cuttings disposed. This amount of disposed waste would be reduced to zero under the BAT/NSPS options allowing discharge at 2.68% retention, and would be reduced to 6.4 MM pounds under the BAT/NSPS option allowing discharge at 2.45%. The 6.4 MM pounds disposed in the second discharge scenario is the fine particle waste retained for hauling to land based disposal. Under the zero discharge option, the baseline amount of waste disposed is increased to 152 MM pounds.

3. Safety Issues

The impact of the effluent limitation guidelines (ELG) on safety is one factor considered in the non-water quality environmental impact analysis. EPA has identified two safety issues related to drilling fluids: (1) deleterious vapors generated by organic materials in drilling fluids; and (2) waste hauling activities that increase the risk of injury to workers. EPA is requesting comments and data related to these two safety issues as well as other safety issues related to drilling fluid selection and waste management.

a. *Vapors Generated by Organic Materials in Drilling Fluids.* One of the key concerns in exploration and production projects is the exposure of wellsite personnel to vapors generated by organic materials in drilling fluids (Candler et al., 1995). Areas on the drilling location with the highest exposure potentials are sites near solids control and open pits. These areas are often enclosed in rooms and ventilated to prevent unhealthy levels of vapors from accumulating. If the total volume of organic vapors can be reduced then any potential health effects will also be reduced regardless of the nature of the vapors.

Generally speaking the aromatic fraction of the vapors is the most toxic to the mammalian system. The high volatility and absorbability through the lungs combined with their high lipid solubility serve to increase their toxicity. OBFs have a high aromatic content and vapors generated from using these drilling fluids include aromatics (e.g., alkybenzenes, naphthalenes, and alkyl-naphthalenes), alkanes (e.g., C_7–C_{18} straight chained and branched), and alkenes. Some minerals oils also generate vapors that contain the same types of chemical compounds, but generally at lower concentrations, as those found in the diesel vapors (e.g, aromatics, alkanes, cyclic alkanes, and alkenes). Because SBF are manufactured from compounds with specifically defined compositions, the subsequent compound can exclude toxic aromatics. Consequently, toxic aromatics can be excluded from the vapors generated by using SBFs.

In general, SBFs (e.g., esters, LAOs, PAOs, IOs) generate much lower concentrations of vapors than do OBFs (Candler et al., 1995). Moreover, the vapors generated by these SBFs are less toxic than traditional OBFs because they do not contain aromatics.

b. *Waste Hauling Activities.* Industry has commented in previous effluent guidelines, such as the Coastal Subcategory Oil and Gas Extraction and Development ELG, that a zero discharge requirement would increase the risk of injury to workers due to increased waste hauling activities. These activities include vessel trips to and from the drilling platform to haul waste, transfer of waste from the platform onto a service vessel, and transfer in port onto a barge or dock.

EPA has identified and reviewed additional data sources to determine the likelihood that imposition of a zero discharge limitation on cuttings contaminated with SBF could increase risk of injury due to additional waste hauling demands. The sources of safety data are the U.S. Coast Guard (USCG), the Minerals Management Service (MMS), the American Petroleum Institute (API), and the Offshore Marine Service Association (OMSA). The following is a summary of the findings from this review.

The data indicate that there are reported incidents that are associated with the collection, hauling, and onshore disposal of wastes from offshore. However, the data do not distinguish whether any of these incidents can be attributed to specific waste management activities.

Most offshore incidents are due to human error or equipment failure. The rate at which these incidents occur will not be changed significantly by increased waste management activities. However, if the number of man hours and/or equipment hours are increased, there will be more reportable incidents given an unchanged incident rate. These potential increases may be offset by reduced incident rates through increased training or equipment maintenance and inspection; but these changes cannot be predicted. One indication that training and maintenance can reduce incident rates is a 1998 API report entitled ''1997 Summary of U.S. Occupational Injuries, Illnesses, and Fatalities in the Petroleum Industry,'' which established that injury incident rates have been decreasing over the last 14 years. If this decrease continues, there should be no increase in the number of safety incidents due to a requirement to haul SBF-contaminated cuttings to shore for disposal. The details of this analysis are available in a technical support document in the rulemaking record for today's notice.

4. Monetized Health Benefits

EPA estimated emissions associated with each of the regulatory options as part of the NWQI analyses. The pollutants considered in the NWQI analyses are nitrogen oxides (NO_X), volatile organic carbon (VOC), particulate matter (PM), sulfur dioxide (SO_2), and carbon monoxide (CO). Of these pollutants, EPA has monetized the human health benefits or impacts associated with VOC, PM, and SO_2 emissions using the methodology presented in the Environmental Assessment of the Final Effluent Limitations Guidelines and Standards for the Pharmaceutical Manufacturing Industry (EPA–821–B–98–008). Each of these pollutants have human health impacts and reducing these emissions can reduce these impacts.

Several VOCs exhibit carcinogenic and systemic effects and VOCs, in general, are precursors to ground-level ozone, which negatively affects human health and the environment. PM impacts include aggravation of

respiratory and cardiovascular disease and altered respiratory tract defense mechanisms. SO_2 impacts include nasal irritation and breathing difficulties in humans and acid deposition in aquatic and terrestrial ecosystems.

The unit values (in 1990 dollars) are $489 to $2,212 per megagram (Mg) of VOC; $10,823 per Mg of PM; and $3,516 to $4,194 per Mg of SO_2. Using the Engineering News Record Construction Cost Index (*see* www.enr.com/cost/costcci.asp) these conversion factors are scaled up using the ratio of 5920:4732 (1998$:1990$). EPA currently does not have unit values for CO and NO_X and is soliciting information regarding their valuation. Following is a summary of the monetized benefits for each of the regulatory options for both existing and new sources.

TABLE IV.C.3: SUMMARY OF MONETIZED HUMAN HEALTH BENEFITS OR IMPACTS ASSOCIATED WITH VOC, PM, AND SO_2 EMISSIONS, EXISTING SOURCES (1998$/YR)

	Criteria air pollutant		
	VOC	PM	SO_2
Baseline/Current Practice Air Emissions, Mg/yr:			
Discharge with 11.4% retention of SBF on cuttings	2.15	1.87	1.74
Zero Discharge (current OBF wells only)	9.57	1.93	1.68
Total Baseline Air Emissions, Mg/yr	11.72	3.80	3.42
Compliance Air Emissions, Mg/yr:			
(1) Discharge with 2.68% retention of SBF on cuttings	6.90	5.98	5.57
(2) Discharge with 2.45% retention of SBF on cuttings	25.68	9.65	8.45
(3) Zero Discharge [a]	113.84	20.96	18.42
Incremental Compliance Emission Reductions (Increases), Mg/yr:			
(1) Discharge with 2.68% retention of SBF on cuttings	4.82	(2.18)	(2.15)
(2) Discharge with 2.45% retention of SBF on cuttings	(13.96)	(5.85)	(5.03)
(3) Zero Discharge [a]	(11.69)	(19.09)	(16.68)
Unit Value of Poll. Reductions, 1990$/Mg: [b]	489 to 2,212	10,823	3,516 to 4,194
Unit Value of Poll. Reductions, 1998$/Mg: [c]	612 to 2,767	13, 540	4,399 to 5,247
Incremental Compliance Benefits (Costs), 1998$/yr:			
(1) Discharge with 2.68% retention of SBF on cuttings	2,950 to 13,337.	(29,517)	(9,458) to (11,281)
(2) Discharge with 2.45% retention of SBF on cuttings	(8,544) to (38,627).	(79,209)	(22,127) to (26,392)
(3) Zero Discharge [a]	(68,354) to (309,046).	(258,479)	73,375) to (87,520)

[a] Via land disposal or on-site offshore injection

[b] Conversion factors from Environmental Assessment of the Final Effluent Limitations Guidelines and Standards for the Pharmaceutical Manufacturing Industry¢ (EPA–821–B–98–008).

[c] Scaled from 1990$ using the Engineering News Record Construction Cost Index.

TABLE IV.C.4: SUMMARY OF MONETIZED HUMAN HEALTH BENEFITS OR IMPACTS ASSOCIATED WITH VOC, PM, AND SO_2 EMISSIONS, NEW SOURCES (1998$/YR)

	Criteria air pollutant		
	VOC	PM	SO2
Baseline/Current Industry Practice Air Emissions, Mg/yr:			
Discharge with 11.4% retention of SBF on cuttings.	0.25	0.21	0.20
Compliance Air Emissions, Mg/yr:			
(1) Discharge with 2.68% retention of SBF on cuttings	0.66	0.57	0.53
(2) Discharge with 2.45% retention of SBF on cuttings	2.73	0.91	0.88
(3) Zero Discharge [a]	14.62	2.67	2.32
Incremental Compliance Emission Reductions (Increases), Mg/yr:			
(1) Discharge with 2.68% retention of SBF on cuttings	(0.41)	(0.36)	(0.33)
(2) Discharge with 2.45% retention of SBF on cuttings	(2.48)	(0.70)	(0.68)
(3) Zero Discharge [a]	(14.37)	(2.45)	(2.13)
Unit Value of Poll. Reductions, 1990$/Mg: [b]	489 to 2,212	10,823	3,516 to 4,194
Unit Value of Poll. Reductions, 1998$/Mg: [c]	612 to 2,767	13,540	4,399 to 5,247
Incremental Compliance Benefits (Costs), 1998$/yr:			
(1) Discharge with 2.68% retention of SBF on cuttings	(251) to (1,134)	(4,874)	(1,452) to (1,731)
(2) Discharge with 2.45% retention of SBF on cuttings	(1,518) to (6,862)	(9,478)	(2,991) to (3,568)
(3) Zero Discharge [a]	(8,794) to (39,762)	(33,173)	(9,370) to (11,176)

[a] Via land disposal or on-site offshore injection.

[b] Conversion factors from Environmental Assessment of the Final Effluent Limitations Guidelines and Standards for the Pharmaceutical Manufacturing Industry (EPA–821–B–98–008).
[c] Scaled from 1990$ using the Engineering News Record Construction Cost Index.

D. Revised Cuttings Retention Limitations and Standards

As stated in the February 1999 proposal, EPA is considering setting limitations and standards for the percent retention of synthetic-based drilling fluids on cuttings that may be discharged from the cuttings dryer and fines removal technologies. EPA received cuttings retention data after the February 1999 proposal (*see* section II.A.4) and revised its statistical models (*see* section III.D).

As demonstrated by oil drilling operations in various geologic formations within the Gulf of Mexico (*see* section II.A.4), the average of the individual well averages for percent SBF retention on cuttings from the cuttings dryer is 2.45, the estimated 95th percentile is 3.11, and the estimated 99th percentile is 3.38. The observed individual well averaged SBF cuttings retention values are all less than the 95th percentile. For fines removal equipment, the average of the individual well averages for percent SBF retention on cuttings is 10.0, the estimated 95th percentile is 13.1, and the estimated 99th percentile is 14.4. Only one of the observed individual well SBF cuttings retention values for fines removal equipment exceeds the 95th percentile and none exceed the 99th percentile.

Based on these summary statistics, EPA has revised the proposed limitations and standards for percent retention of drilling fluids on cuttings. Assuming that: (a) 97% of the volume of cuttings discharged come from the cuttings dryer and 3% from fines removal; and (b) the limit will be based on a 95th percentile; the new discharge limitation of base fluid retained on cuttings is 3.41% [i.e., (0.97)(3.11%) + (0.03)(13.1%) = 3.41%]. Assuming that: (a) 97% of the volume of cuttings discharged come from the cuttings dryer and 3% from fines removal; and (b) the limit will be based on a 99th percentile; the new discharge limitation of base fluid retained on cuttings is 3.71% [i.e., (0.97)(3.38%) + (0.03)(14.4%) = 3.71%].

EPA is also considering basing percent retention limitations and standards on the cuttings dryer alone, in conjunction with zero discharge for all other cuttings. In that case, the discharge limitation of base fluid retained on cuttings would be 3.11% when using the 95th percentile or 3.38% when established using the 99th percentile.

If EPA selects numeric maximum well averaged cuttings retention discharge limitations and standards as the only method for controlling SBF discharges associated with cuttings in the final rule, then all operators would be expected to either: (1) meet the numeric maximum well averaged cuttings retention limitations and standards; or (2) dispose of their waste through on-site formation injection or ship their cuttings to shore for land disposal. In addition, EPA may elect in the final rule to allow operators the flexibility of choosing either numeric limitations and standards or BMPs to control SBF discharges associated with cuttings (*see* section V). A detailed description of the statistical analyses used to develop the proposed limitations and standards for percent retention of drilling fluids on cuttings is given in section III.C.(a) of the rulemaking record.

E. Revised Environmental Assessment Results

The complete results of the revised EA analyses are given in section III.F.(b) of the rulemaking record.

1. Water Column Water Quality Analyses

In the February 1999 proposal EA analyses, there were no exceedances of water quality criteria in the water column. Based on the revised EA analyses using updated dilution values and Federal water quality criteria, there are still no water quality criteria exceedances in the water column for any of the regulatory options being considered.

2. Pore Water Quality Analyses

The revised EA analyses estimate that baseline-model (or BPT) pore water pollutant concentrations at 100 m from the discharge exceed water-quality criteria for: (1) three pollutants (Cr, Pb, Ni) for the deep water exploratory well; (2) one pollutant (Cr) for the shallow exploratory well; and one pollutant (Cr) for the deepwater development well. Barite is used as a weighting agent in the drilling fluid and is also the primary source of heavy metals (e.g., Cr, Pb, Ni) in SBF. Therefore, the baseline-model pore water exceedances are not due to the synthetic material in the SBF but rather the SBF weighting agents.

The revised EA analyses estimate that both BAT/NSPS-model controlled discharge options result in no pore water pollutant concentrations that exceed water-quality criterion.

3. Sediment Guidelines Analyses

In the February 1999 proposal, the BAT/NSPS-model controlled discharge option resulted in sediment guidelines exceedances for the deep water and shallow water exploratory wells. EPA proposed sediment guidelines can be found in section I.D.(a).13 of the rulemaking record. The revised EA sediment guidelines analyses, based on updated water quality criteria, loadings, and dilution data, result in exceedances under the baseline model (or BPT) scenario only. There are no sediment guidelines exceedances for any of the BAT/NSPS-models.

V. Best Management Practices (BMPs) Alternatives to Numeric Limitations and Standards

A. General

EPA is considering three options for the final rule for the BAT limitation and NSPS controlling SBF retained on discharged cuttings: (1) a single numeric discharge limitation with an accompanying compliance test method; (2) allowing operators to choose either a single numeric discharge limitation with an accompanying compliance test method, or as an alternative, a set of BMPs that employs limited cuttings monitoring; or (3) allowing operators to choose either a single numeric discharge limitation with an accompanying compliance test method or an alternative set of BMPs that employ no cuttings monitoring. Additionally, EPA is considering two options in the final rule for BAT limitation and NSPS for controlling SBFs not associated with SBF drill cuttings: (1) zero discharge; or (2) allowing operators to choose either zero discharge or an alternative set of BMPs with an accompanying compliance method.

EPA has initial data on the effectiveness of BMPs for controlling SBF-discharges (Farmer, 2000; Hanni et al, 1998). The initial data on BMP effectiveness was generated from over 12 deepwater projects in the North Sea and 11 deepwater projects in the GOM. Data from Farmer (2000) was received by EPA just before publication of this notice and was unable to be fully analyzed. This data set represented North Sea and GOM wells that did not employ a cuttings dryer, however, certain drilling projects in the data set did use an extra technician (''mud cop'') to assist in improving the efficiency of the existing solids control equipment through use of BMPs.

EPA is requesting additional data on the use of BMPs to reduce or prevent SBF-discharges. In particular, EPA would like to see BMP documentation associated with cuttings retention spreadsheets similar to those submitted to support the development of the numeric guidelines and standards for the retention of SBF on cuttings. EPA will be using these data sets to determine the effectiveness of BMPs and their use as alternatives to numeric limitations and standards. EPA may select any of these BMP alternative options or any combination of these BMP alternative options in the final rule.

Sections 304(e), 308(a), 402(a), and 501(a) of the Clean Water Act authorize the Administrator to prescribe BMPs as part of effluent limitations guidelines and standards or as part of a permit. EPA's BMP regulations are found at 40 CFR 122.44(k). Section 304(e) of the CWA authorizes EPA to include BMPs in effluent limitation guidelines for certain toxic or hazardous pollutants for the purpose of controlling ''plant site runoff, spillage or leaks, sludge or waste disposal, and drainage from raw material storage.'' Section 402(a)(1) and NPDES regulations [40 CFR 122.44(k)] also provide for best management practices to control or abate the discharge of pollutants when numeric limitations and standards are infeasible. In addition, section 402(a)(2), read in concert with section 501(a), authorizes EPA to prescribe as wide a range of permit conditions as the Administrator deems appropriate in order to ensure compliance with applicable effluent limitations and standards and such other requirements as the Administrator deems appropriate.

SBFs adhered to discharged cuttings may contain barite (used as a weighting agent in the drilling fluid system), and can also be contaminated with formation crude oil. Barite is a mineral principally composed of barium sulfate, however, barite ore is generally known to have trace contaminants of several heavy metals such as mercury, cadmium, arsenic, chromium, copper, lead, nickel, and zinc. Formation oil is an ''indicator'' pollutant for the many toxic and hazardous pollutant components present in the formation (crude) oil, such as aromatic and polynuclear aromatic hydrocarbons. These formation oil pollutants include benzene, toluene, ethylbenzene, naphthalene, phenanthrene, and phenol. For a complete listing of pollutants associated with SBF readers should turn to Table VII–1 in the EPA February 1999 proposal SBF Development Document (EPA–821–B–98–021). Many of these SBF pollutants are designated as hazardous pollutants under CWA section 307(a)(1), *see* 40 CFR. 410.15, and oil is a hazardous substance under section 311 of the CWA.

It should also be noted that many of these same pollutants can also be found in SBF discharges not associated with cuttings (e.g., incidental spills, accumulated solids, deck drainage). Also, the drilling fluid (SBF based) can contain barite and trace contaminants of several heavy metals. Incidental spills of SBF can release these toxic and hazardous pollutants into the environment. In addition, approximately 75 barrels per well of solids, of which up to 25% is SBF, accumulate in the rig mud pits, sand traps, and other equipment. These accumulated solids may be discharged during equipment cleaning operations.

SBF discharges such as spills and leaks and accumulated solids may also be co-mingled with deck drainage which may also contain other toxic and hazardous pollutants. Deck drainage includes all water resulting from spills, platform washings, deck washings, tank cleaning operations and run-off from curbs, gutters, and drains including drip pans and work areas. Lists of pollutants and pollutant concentrations, including toxic and hazardous pollutants, in untreated deck drainage are contained in Tables X–17, X–18, and X–19 of the Final Offshore Development Document (EPA–821–R–93–003).

Therefore, the BMP alternatives to numeric limitations and standards in this notice are directed, among other things, at preventing or otherwise controlling leaks, spills, and discharges of toxic and hazardous pollutants in SBF cuttings and non-cuttings wastes.

B. BMP Alternatives for SBF Discharges Associated with Cuttings

As previously stated, EPA is considering three options for the final rule for the BAT limitation and NSPS controlling SBF retained on discharged cuttings: (1) A single numeric discharge limitation with an accompanying compliance test method; (2) allowing operators to choose either a single numeric discharge limitation with an accompanying compliance test method, or as an alternative, a set of BMPs that employs limited cuttings monitoring; or (3) allowing operators to choose either a single numeric discharge limitation with an accompanying compliance test method or an alternative set of BMPs that employ no cuttings monitoring. The BMP alternatives were developed with input from EPA Regional permit writers and industry. Under the third alternative cuttings discharge, BMPs option (i.e., cuttings not monitored), EPA is also considering whether to require as a BMP the use of a cuttings dryer discussed above as representative of BAT/NSPS or to make the use of a cuttings dryer optional.

Some industry representatives have expressed an interest in using BMPs that are not demonstrated through limited cuttings monitoring as equivalent to a numeric cuttings retention limit to control discharges of SBF associated with cuttings. Two issues were identified by the industry representatives as a basis for their support of using BMPs as an alternative discharge limitation: (1) Low gravity solids (or ''fines'') build-up in an active mud system; and (2) engineering limitations in the installation of cuttings dryers and supporting equipment on certain rigs. If operators are correct in their assertion that setting a numeric cuttings retention limit is infeasible, EPA may use BMPs to control SBF-wastes.

As discussed in the Development Document for the February 1999 Proposal (EPA–821–B–98–021), solids control equipment generally increases the mechanical degradation of drill solids (i.e., larger particles are broken into smaller particles). An undesirable increase in drilling fluid weight and viscosity can occur when drill solids degrade into fines that cannot be removed by solids control equipment [i.e., generally classified as < 5 microns (10^{-6} meters) in length]. An unacceptable high fines content (i.e., generally > 5% of total drilling fluid weight) may consequently lead to drilling problems (e.g., undesirable rheological properties, stuck pipe). Therefore, it is possible that the increased recovery of SBF from cuttings for re-use in the active mud system, often achieved through use of the cuttings dryer in solids control systems, may lead to a build-up in fines for certain formation characteristics (e.g., high reactivity of formation cuttings, limited loss of drilling fluid into the formation).

In order to meet EPA's proposed numeric cuttings retention value where there are unfavorable formation characteristics, operators may be limited to: (1) Diluting the fines in the active mud system through the addition of ''fresh'' SBF; and/or (2) capturing a portion of the fines in a container and sending the fines to shore for disposal. One SBF manufacturer stated in a verbal conversation with EPA that over the course of the past year (1999), a Canadian operator generated 12,000 barrels of SBF which had a fines content

that rendered it unusable and untreatable for future drilling applications.

Currently, however, EPA does not have documentation that the build-up of fines in SBF drilling is a widespread problem in the United States or one that cannot be handled by operators in the United States. The absence of documented fines build-up problems in the GOM may be due to a sufficient loss of SBF drilling fluid with fines down-hole. This loss of fluid into the formation would require the addition of fresh SBF drilling fluid and minimize the build-up of fines. In addition, drilling rigs are now being designed and constructed to incorporate cuttings dryer and fines removal equipment into the solids control system. EPA is requesting data and comments on the expected frequency and conditions where operators are not able to meet EPA's new proposed SBF numeric cuttings retention numbers (*see* section IV.C.5) based on fines build-up in the active mud system.

Some industry representatives have also suggested that some rigs are incapable of installing the equipment needed to meet EPA's proposed numeric cuttings retention limit (*e.g.,* cuttings dryers, fines removal equipment). EPA staff visited two offshore GOM rigs where cuttings dryer and fines removal equipment was and was not able to be installed successfully into the existing solids control equipment system. The cuttings dryer that was able to be installed into the existing solids control system was smaller than the other cuttings dryer system on the other visited rig. Moreover, the successful installation also relied on an auger transport system for moving cuttings from the existing solids control system to the new cuttings dryer and fines removal equipment. The key cuttings dryer and fines removal equipment installation limitations appear to be whether rigs can install cuttings dryers and fines removal equipment near the existing solids control units and whether an auger cuttings transport system can be used to move cuttings from the existing solids control units to the new equipment. EPA's site visit and statements by industry representatives give differing viewpoints on how many rigs cannot incorporate new equipment to meet EPA's proposed cuttings retention number. Therefore, EPA requests further information and data to identify the name and number of rigs that cannot incorporate new equipment to meet EPA's cuttings retention number.

C. BMP Alternatives for SBF Discharges Not Associated with Cuttings

As previously stated, EPA is considering two options in the final rule for BAT limitation and NSPS for controlling SBFs not associated with SBF drill cuttings: (1) zero discharge; or (2) allowing operators to choose either zero discharge or an alternative set of BMPs with an accompanying compliance method. The follow sections describe several types of SBF discharges not associated with cuttings that can be controlled through either zero discharge or a set of BMPs. At this time, EPA's preferred option for these SBF non-cuttings wastes is to give operators the choice of selecting either zero discharge or using a set of BMPs to control these discharges (Option 2 identified above). This approach would give operators the flexibility of selecting a single numeric effluent limitation or a set of BMPs designed for their respective facility.

1. Accumulated Solids

Accumulated solids is one example of a non-cuttings SBF discharge. Industry representatives have stated that industry is split on the practice of discharging accumulated solids with some discharging accumulated solids provided permit limitations and standards are met and others opting to haul this material to shore for disposal (*see* section II.B.3). Approximately 75 barrels per well of fine solids and barite, of which up to 25% is SBF, accumulate in the rig mud pits, sand traps, and other equipment. Several hundred barrels (approximately 200 to 400 barrels) of water are used to wash out the mud pits. Industry representatives also indicated that those oil and gas extraction operations that discharge wash water and accumulated solids first recover free SBF.

Industry has submitted to EPA Region 6 and EPA Headquarters a list of BMPs that can minimize these discharges. Accordingly, Industry may wish to select BMPs as the method for controlling these discharges instead of zero discharge.

2. SBF Spills During Drilling Operations

Industry also noted that BMPs are already in place on most rigs to prevent spills during connections and disconnections of the drill string. Typical waste minimizing techniques include slugging the pipe (a small volume of heavy mud is pumped into the drill pipe to create a hydrostatic differential inside the drill pipe) with heavy mud. Rubber wipers may also be used on the inside and outside of the drill pipe to remove any residual mud before racking the pipe in the derrick (*i.e.,* storing the pipe on the rig). In some cases, the mud is captured with mud buckets and returned to the active mud system. Any spills on the rig floor can also be squeegeed back through the rotary into the mud system. A mud vacuum is also sometimes used. Pipe racks and the rig floor may also be designed with drip pans underneath to capture any remaining spillage. Captured fluid may go to the rig's oil/water sump for treatment and possible recovery. Industry estimated that essentially all of the SBF that spills on the rig floor is recovered using the controls described above. The amount of SBF spilled on the rig floor that is not captured by current practices is estimated by industry to be less than 1 gallon SBF per 100 feet drilled.

Industry may wish to select BMPs as the method for controlling these discharges instead of zero discharge.

D. Implementation of BMP Alternative (the BMP Plan)

BMPs are inherently pollution prevention practices. BMPs may include the universe of pollution prevention encompassing production modifications, operational changes, material substitution, materials and water conservation, and other such measures. BMPs include methods to prevent toxic and hazardous pollutants from reaching receiving waters. Because BMPs are most effective when organized into a comprehensive facility BMP Plan, EPA solicits comments on a BMP Plan requirement as a component of BMPs as an alternative to a numeric limitation or standard.

A BMP Plan would not be required if operators did not use BMPs to control SBF discharges. Moreover, EPA is proposing that operators be allowed to choose whether one or both of the two SBF wastestream (*i.e.,* SBF discharges associated with cuttings, SBF discharges not associated with cuttings) be managed through the BMP alternatives.

Accordingly, EPA is also proposing that operators only be required to develop and implement a BMP Plan for those SBF wastestreams it elects to manage through the BMP alternatives. Moreover, EPA is proposing that operators only be required to develop one BMP Plan if it elects to manage both SBF wastestreams (*e.g.,* discharges associated with cuttings and SBF discharges not associated with cuttings) through use of the BMP alternatives. As there are common elements in BMP Plans that cover both SBF wastestreams, EPA has grouped common elements together and identified specific elements for specific SBF wastestreams

in separate sections. Table V.D.1 is a guide on what BMP Plan elements are required for the different BMP alternatives.

The SBF BMP common elements were compiled from several Regional permits, an EPA guidance document [*i.e.,* Guidance Document for Developing Best Management Practices (BMP)'' (EPA 833–B–93–004, U.S. EPA, 1993)], and draft industry BMPs. EPA feels that these common elements represent the appropriate mix of broad directions needed to complete a BMP Plan along with specific tasks common to all drilling operations.

TABLE V.D.1: BMP PLAN ELEMENTS REQUIRED FOR THE DIFFERENT BMP ALTERNATIVES TO SBF NUMERIC EFFLUENT LIMITATIONS GUIDELINES AND STANDARDS

BMP plan alternatives [a]	SBF wastestreams operator elects to manage with BMP alternatives			BMP plan elements [e] (listed by section of this notice)
	SBF discharges not associated with cuttings [b]	SBF discharges associated with cuttings (no monitoring) [c]	SBF discharges associated with cuttings (monitoring) [d]	
1	X			Sec. V.D.1 to 5,6.
2	X	X		Sec. V.D.1 to 5,6,7.
3	X		X	Sec. V.D.1 to 5,6,8.
4		X		Sec. V.D.1 to 5,7.
5			X	Sec. V.D.1 to 5,8.

[a] Operators that elect to meet numeric limitations and standards are not required to develop BMPs or a BMP Plan.
[b] This includes incidental SBF spills, accumulated solids, and deck drainage (*see* section V.C).
[c] This includes SBF discharges associated with cuttings with no equivalency determination through monitoring (*see* section V.B).
[d] This includes SBF discharges associated with cuttings with an equivalency determination through monitoring (*see* section V.B).
[e] Operators are only required to develop one BMP Plan if the operator elects to manage both SBF wastestreams (*e.g.,* discharges associated with cuttings and SBF discharges not associated with cuttings) through use of the BMP alternatives.

1. SBF BMP Plan Purpose and Objectives

The BMP Plan must be designed to prevent or minimize the generation and the potential for the discharge of SBF from the facility to the waters of the United States through normal operations and ancillary activities. The Permittee must establish specific objectives for the control of SBF by conducting the following evaluations:

a. The Permittee should identify which SBF wastestreams (i.e., cuttings related or non-cuttings related) are to be controlled through use of the BMP alternatives and which SBF wastestreams are to be controlled through use of numeric effluent limitation guidelines and standards.

b. Each facility component or system controlled through use of BMP alternatives must be examined for its SBF-waste minimization opportunities and its potential for causing a discharge of SBF to waters of the United States due to equipment failure, improper operation, natural phenomena (e.g., rain, snowfall).

c. For each SBF wastestream controlled through BMP alternatives where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural condition (e.g., precipitation), or other circumstances to result in SBF reaching surface waters, the BMP Plan should include a prediction of the direction, rate of flow and total quantity of SBF which could be discharged from the facility as a result of each condition or circumstance.

2. Requirements

The BMP Plan must be consistent with the objectives in section V.D.1. The BMP Plan may reflect requirements within spill response plans required by the Minerals Management Service (*see* 30 CFR 254) or other Federal or State requirements and incorporate any part of such plans into the BMP Plan by reference.

The Permittee must certify that its BMP Plan is complete, on-site, and available upon request to EPA or the NPDES Permit controlling authority. This certification should identify the NPDES permit number and be signed by an authorized representative of the Permittee. For new exploratory operations, the certification should be submitted no later than the written notice of intent to commence discharge. For existing dischargers, the certification should be submitted within one year of permit issuance. The BMP Plan must:

a. Be documented in narrative form, and must include any necessary plot plans, drawings or maps, and must be developed in accordance with good engineering practices. At a minimum, the BMP Plan must contain the planning, development and implementation, and evaluation/reevaluation components. Examples of these components are contained in ''Guidance Document for Developing Best Management Practices (BMP)'' (EPA 833–B–93–004, U.S. EPA, 1993).

b. Include the following provisions concerning BMP Plan review:

(i) Be reviewed by plant engineering staff and the plant manager as warranted by changes in the operation or at the facility which are covered by the BMP.

(ii) Be reviewed and endorsed by the individuals responsible for development and implementation of the BMP Plan. Such review and endorsement may be performed by the establishment of a program of documented initial and annual refresher training of drilling equipment operators, maintenance personnel, and other technical and supervisory personnel who have responsibility for operating, maintaining, or supervising the operation and maintenance of drilling equipment.

(iii) Include a statement that the above reviews have been completed and that the BMP Plan fulfills the requirements set forth in this section of the notice. The statement must be certified by the dated signatures of the individuals responsible for development and implementation of the BMP Plan.

c. Establish specific best management practices to meet the objectives identified in section V.D.1, addressing each component or system capable of generating or causing a release of significant amounts of SBF, and identifying specific preventative or remedial measures to be implemented.

3. Documentation

The Permittee must maintain a copy of the BMP Plan and related documentation (e.g., training certifications, summary of the monitoring results, records of SBF-equipment spills, repairs, and maintenance) at the facility and must make the BMP Plan and related

documentation available to EPA or the NPDES Permit controlling authority upon request. Submission of the BMP Plan and related documentation shall be at the frequency established by the NPDES permit control authority (i.e., Permit monitoring reports), but in no case less than once per five years.

4. BMP Plan Modification

For those SBF wastestreams controlled through BMP alternatives, the Permittee must amend the BMP Plan whenever there is a change in the facility or in the operation of the facility which materially increases the generation of those SBF-wastes or their release or potential release to the receiving waters. At a minimum the BMP Plan must be reviewed once every five years and amended within three months if warranted. Any such changes to the BMP Plan must be consistent with the objectives and specific requirements listed above. All changes in the BMP Plan must be reviewed by the plant engineering staff and plant manager.

5. Modification for Ineffectiveness

At any time, if the BMP Plan proves to be ineffective in achieving the general objective of preventing and minimizing the generation of SBF-wastes and their release and potential release to the receiving waters and/or the specific requirements above, the permit and/or the BMP Plan must be subject to modification to incorporate revised BMP requirements.

6. Specific Pollution Prevention Activities for SBF Discharges Not Associated With Cuttings

An approved BMP Plan may include the following examples of specific pollution prevention activities for controlling SBF discharges not associated with cuttings.

a. Establishing programs for identifying, documenting, and repairing leaking SBF equipment, tracking SBF equipment repairs, and training personnel to report and evaluate SBF spills, as detailed in section V.E.2.c and V.E.2.d below.

b. Establishing programs for identifying, documenting, and repairing malfunctioning SBF equipment, tracking SBF equipment repairs, and training personnel to report and evaluate malfunctioning SBF equipment.

c. Recovering and returning to the process or an appropriate storage container to the maximum extent practicable spilled or leaked drilling fluids to prevent their discharge.

d. Immediately recovering spills of drilling fluid on the drill floor using a vacuum, grated trough, or comparable system.

e. Providing adequate containment for SBF spills on the drill deck to minimize potential spills.

f. Establishing mud pit and equipment cleaning methods in such a way as to minimize the potential for drilling fluids discharges, including but not limited to the following:

(i) Ensuring proper operation and efficiency of mud pit agitation equipment.

(ii) Using mud gun lines during mixing to provide agitation in dead spaces to minimize solids accumulation.

(iii) Pumping drilling fluids off for use, recycle, or disposal before using wash water to dislodge solids.

(iv) Limiting the volume of wash water used to the minimum needed to dislodge and slurry solids for overboard discharge.

(v) Using water-minimizing techniques (e.g., steam or compressed air) where possible to clean the sides of the mud pit.

g. The Permittee must also include the number and dates of non-cuttings SBF-discharges managed by BMPs in their NPDES permit reports. The description of these discharges must also include estimated volume of SBF discharged and any corrective actions taken to respond to such non-cuttings SBF-discharges.

7. Specific Pollution Prevention Activities for SBF Discharges Associated With Cuttings (No-Verification Cuttings Monitoring)

The following specific pollution prevention activities are required in a BMP Plan when operators elect to control SBF discharges associated with cuttings by a set of BMPs where no equivalency determination is made through limited cuttings monitoring.

a. Establishing programs for identifying, documenting, and repairing malfunctioning SBF equipment, tracking SBF equipment repairs, and training personnel to report and evaluate malfunctioning SBF equipment.

b. Establishing operating and maintenance procedures for each component in the solids control system in a manner consistent with the manufacturer's design criteria for flow, fluid type, density, and rheological properties, which may include, but are not limited to, the following:

(i) Maintaining shale shakers such that units have adequate capacity for circulating the active drilling fluid volume, have screens of such mesh size that no more than 75% of screen area is wet, and maintain the manufacturer's design screen tension, maximum ''G'' force, maximum positive screen deck angle, and maximum vibrator assembly angle to screen deck;

(ii) Maintaining centrifuges such that units have sufficient capacity for active drilling fluid volume (note: for most situations where 8.5″ or larger hole sizes are drilled, multiple units may be required), have bowl revolutions per minute (RPM) adjusted as high as practical to maximize ''G'' force, have bowl/conveyor RPM differential minimized to subject cuttings to ''G'' Force for the maximum time period before leaving the unit, have feed tube adjusted to introduce cuttings to the maximum bowl diameter as they enter the unit, and have processing rates closely monitored to maximize cuttings discharge with minimum SBF retention.

c. Using gel pills or other applicable measures in order to minimize contamination of drilling fluids when changing from water-based to non-aqueous based drilling fluids and vice versa.

d. Sending interface muds through the mud recovery system prior to discharge or disposal.

8. Specific Pollution Prevention Activities for SBF Discharges Associated With Cuttings (Verification Cuttings Monitoring)

The following specific pollution prevention activities are required in a BMP Plan when operators elect to control SBF discharges associated with cuttings by a set of BMPs that are demonstrated, through limited cuttings monitoring, to meet the same level of control as the BAT/NSPS cuttings retention limit.

a. All the specific pollution prevention activities in section V.D.7

b. A daily retort analysis must be performed (in accordance with Appendix 7 to Subpart A of Part 435) during the first 0.33 X days where X is the anticipated total time (in days) to drill that particular well. The retorts analyses will be documented in the well retort log.

(i) When the arithmetic average of the cuttings retort analyses is less than the numeric cuttings retention limitation and standard, monitoring of cuttings may cease for that individual well.

(ii) When the arithmetic average of the cuttings retort analyses is greater than the numeric cuttings retention limitation and standard, monitoring will continue for the second 0.33X days where X is the anticipated total time (in days) to drill that particular well. If after the second 0.33X, the arithmetic average of the cuttings retort analyses is still greater than numeric cuttings retention

limitation and standard then monitoring will continue for the remainder of the well operation. Moreover, this incident will be reported within one week to EPA or the NPDES Permit controlling authority for review and recommendations.

c. The Permittee must also include the cuttings monitoring data and dates of monitored and non-monitored SBF-cuttings discharges managed by BMPs in their NPDES permit reports.

E. Paperwork Reduction Act Requirements Related to BMPs Alternatives

The information collection requirements related to the BMP alternatives in this notice have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1953.01) and a copy may be obtained from Sandy Farmer by mail at Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW, Washington, DC 20460; by e-mail at farmer.sandy@epa.gov, or by calling (202) 260–2740. A copy may be downloaded from the Internet at http://www.epa.gov/icr.

The BMP alternatives identified in this notice include information collection requirements that are intended to control the discharges of SBF in place of numeric effluent limitations and standards. These information collection requirements include, for example: (1) Training personnel; (2) analyzing spills that occur; (3) identifying equipment items that might need to be maintained, upgraded, or repaired; (4) identifying procedures for waste minimization; (4) performing monitoring (including the operation of monitoring systems) to establish equivalence with a numeric cuttings retention limitation and to detect leaks, spills, and intentional diversion; and (5) generally to periodically evaluate the effectiveness of the BMP alternatives.

The BMP alternatives also require operators to develop and, when appropriate, amend plans specifying how operators will implement the specified BMP alternatives, and to certify to the permitting authority that they have done so in accordance with good engineering practices and the requirements of the regulation. The purpose of those provisions is, respectively, to facilitate the implementation of BMP alternatives on a site-specific basis and to help the regulating authorities to ensure compliance without requiring the submission of actual BMP Plans. Finally, the recordkeeping provisions are intended to facilitate training, to signal the need for different or more vigorously implemented BMP alternatives, and to facilitate compliance assessment.

EPA has structured the BMP alternatives to provide maximum flexibility to the regulated community and to minimize administrative burdens on National Pollutant Discharge Elimination System (NPDES) permit authorities that regulate oil and gas extraction facilities. Although EPA does not anticipate that operators will be required to submit any confidential business information or trade secrets as part of this ICR, all data claimed as confidential business information will be handled by EPA pursuant to 40 CFR Part 2.

For the five SBF BMP alternatives (*see* Table V.D.1), the public reporting burdens range from an estimated 515 hours per respondent per year [i.e., (12,500 initial hours/3 years + 21,604 annual hours/year)/50 SBF well operators] to 1,363 hours per respondent per year [i.e., (17,500 initial hours/3 years + 62,334 annual hours/year)/50 SBF well operators]. EPA also estimated the annual burden for EPA Regions, the NPDES permit controlling authorities, to review BMPs and ensure compliance. EPA estimates that essentially all of the SBF discharges will occur in Federal offshore waters or in Cook Inlet, Alaska, where EPA Region X retains NPDES permit controlling authority. The EPA Regional burden for reviewing BMP Plans is estimated at 5.7 hours per year [i.e., (8 initial hours/3 years + 3 annual hours/year)/50 SBF well operators].

For new exploratory operations, the certification of BMP Plan completion should be submitted to the permit control authority no later than the written notice of intent to commence discharge. For existing dischargers, the certification should be submitted within one year of permit issuance. In addition, a copy of the completed BMP Plan may be requested by the NPDES permit control authority at any time. Submission of records to the permit control authority demonstrating periodic review of the BMP Plan are due at a minimum once every five years. Monitoring reports demonstrating compliance with the BMP Plan are due to the permit control authority at the frequency set by the permit control authority (e.g., monthly or annually) and may be requested by the permit control authority on demand. Re-fresher training certifications demonstrating compliance with the BMP Plan are due to the permit control authority at the frequency set by the permit control authority (e.g., semi-annually) and may be requested by the permit control authority on demand.

For the five SBF BMP alternatives (*see* Table V.D.1), the public reporting costs range from approximately $18,600 per respondent per year [i.e., ($921,875 initial costs/3 years + $623,625 annual costs/year)/50 SBF well operators] to $38,000 hours per respondent per year [i.e., ($1,290,625 initial costs/3 years + $1,465,100 annual costs/year)/50 SBF well operators]. The EPA Regional costs for reviewing BMP Plans is estimated at approximately $180 per year [i.e., ($12,800 initial costs/3 years + $4,800 annual costs/year) / 50 SBF well operators].

Burden means 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. This includes time needed to: review instructions; develop, acquire, install, and 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 previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

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. The OMB control numbers for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15.

Comments are requested on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques. Send comments on the ICR to the Director, Collection Strategies Division; U.S. Environmental Protection Agency (2822); 1200 Pennsylvania Ave., NW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th St., NW, Washington, DC 20503, marked ''Attention: Desk Officer for EPA.'' Include the ICR number in any correspondence. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after April 21, 2000, a comment to OMB is best assured of having its full effect if OMB receives it by May 22, 2000. The final rule will respond to any OMB or public comments on the information collection requirements contained in this notice.

Dated: April 12, 2000.

J. Charles Fox,

Assistant Administrator for Water.

[FR Doc. 00–9655 Filed 4–20–00; 8:45 am]

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Federal Register

Friday,
April 21, 2000

Part IV

Environmental Protection Agency

40 CFR Parts 141 and 142

National Primary Drinking Water Regulations; Radionuclides; Notice of Data Availability; Proposed Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 141 and 142

[FRL–6580–8]

RIN–2040–AC98

National Primary Drinking Water Regulations; Radionuclides; Notice of Data Availability

AGENCY: Environmental Protection Agency.

ACTION: Notice of data availability for proposed rules with request for comments.

SUMMARY: The Environmental Protection Agency (EPA) proposed regulations to limit the amount of radionuclides found in drinking water on July 18, 1991. In general, the proposal revised current National Primary Drinking Water regulations (NPDWR); a NPDWR was proposed for uranium which is unregulated. Since that time, new information has become available which the Agency is considering in finalizing these proposed regulations. In addition, the 1996 Amendments to the Safe Drinking Water Act (SDWA) contained provisions which directly affect the 1991 proposed rule.

This document presents additional information relevant to the Maximum Contaminant Level Goals (MCLGs), the Maximum Contaminant Levels (MCLs), and monitoring requirements contained in the 1991 proposal. EPA is seeking public review and comment on these new data. The Agency is also soliciting comments on several implementation options that are being evaluated for inclusion in the final regulations.

DATES: Written comments should be postmarked or delivered by hand by June 20, 2000.

ADDRESSES: Send written comments to the W–00–12 Radionuclides Rule Comment Clerk, Water Docket (MC–4101), 1200 Pennsylvania Ave., NW, Washington, DC 20460 or by sending electronic mail (e-mail) to ow-docket@epa.gov. Hand deliveries should be delivered to: EPA's Drinking Water Docket at 401 M Street, SW, East Basement (Room EB 57), Washington, DC 20460. Please submit an original and three copies of your comments and enclosures (including references). If you wish to hand-deliver your comments, please call (202) 260–3027 between 9:00 a.m. and 4:00 p.m., Monday through Friday, excluding Federal holidays, to obtain the room number for the Docket. Please see Supplementary Information under the heading ''Additional Information for Commenters'' for detailed filing instructions, including electronic submissions.

The record for the proposal has been established under the docket name: National Primary Drinking Water Regulations for Radionuclides (W–00–12). The record includes supporting documentation as well as printed, paper versions of electronic comments. The record is available for inspection from 9 a.m. to 4 p.m., Monday through Friday, excluding Federal holidays at the Water Docket, 401 M Street SW, East Basement (Room EB 57), Washington, DC 20460. For access to the Docket materials, please call (202) 260–3027 to schedule an appointment.

FOR FURTHER INFORMATION CONTACT: For technical inquiries, contact David Huber, Standards and Risk Management Division, Office of Ground Water and Drinking Water, EPA (MC–4607), 401 M Street SW, Washington, DC 20460; telephone (202) 260–9566. In addition, the Safe Drinking Water Hotline is open Monday through Friday, excluding Federal holidays, from 9:00 a.m. to 5:30 p.m. Eastern Standard Time. The Safe Drinking Water Hotline, toll free 1–800–426–4791.

SUPPLEMENTARY INFORMATION:

Regulated Entities

Entities potentially regulated by the Radionuclides Rule are public water systems that are classified as either community water systems (CWSs) or non-transient non-community water systems (NTNCWSs). Regulated categories and entities include:

Category	Examples of regulated entities
Industry	Privately-owned CWSs and NTNCWSs.
State, Tribal, and Local Governments.	Publicly-owned CWSs and NTNCWSs.

This table lists the types of entities, currently known to EPA, that could potentially be regulated by the Radionuclides Rule. It is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by the Radionuclides Rule. Other types of entities not listed in the table could also be regulated. To determine whether your facility is regulated by the Radionuclides Rule, you should carefully examine the applicability criteria in §§ 141.15 and 141.26 of title 40 of the Code of Federal Regulations, and the definitions of Community Water systems and Non-Transient, Non-Community water systems in § 141.2 If you have questions regarding the applicability of the Radionuclides Rule to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

Additional Information for Commenters

To ensure that EPA can read, understand and therefore properly respond to your comments, the Agency requests that commenters follow the following format: type or print comments in ink, and cite, where possible, the paragraph(s) in this document to which each comment refers. Please use a separate paragraph for each issue discussed and limit your comments to the issues addressed in today's Document.

If you want EPA to acknowledge receipt of your comments, enclose a self-addressed, stamped envelope. No facsimiles (faxes) will be accepted. Comments also may be submitted electronically to ow-docket@epamail.epa.gov. Electronic comments must be submitted as a WordPerfect 8.0 or ASCII file avoiding the use of special characters and forms of encryption and must be transmitted by midnight June 20, 2000. Electronic comments must be identified by the docket name, number, or title of the **Federal Register**. Comments and data also will be accepted on disks in WordPerfect 8.0 or in ASCII file format. Electronic comments on this document may be filed online at many Federal Depository Libraries.

Abbreviations and Acronyms Used in This Notice

Organizations

APHA—American Public Health Association
ASTM—American Society for Testing and Materials
AWWA—American Water Works Association
ICRP—International Commission on Radiological Protection
NBS—National Bureau of Standards
NSF—National Sanitation Foundation
ANPRM—Advanced Notices of Proposed Rulemaking
ATSDR—Agency for Toxic Substances and Disease Registry
BNL—Brookhaven National Laboratory
CFR—Code of Federal Regulations
EML—Environmental Measurements Laboratory
ERAMS—Environmental Radiation Ambient Monitoring System
ERD—Environmental Radiation Data
ERIC—Educational Resources Information Center
FGR–13—Federal Guidance Report 13
FR—Federal Register
FRC—Federal Radiation Council
NAS—National Academy of Sciences
NCHS—National Center for Health Statistics
NESHAP—National Emissions Standards for Hazardous Air Pollutants
NIRS—National Inorganic and Radionuclide Survey

NIST—National Institute of Standards and Technology
NODA—Notice of Data Availability
NPDES—National Pollutant Discharge Elimination System
NPDWRs—National Primary Drinking Water Regulations
NRC—National Research Council
NRC—Nuclear Regulatory Commission
NTIS—National Technical Information Service
ORNL—Oak Ridge National Laboratory
SAB—Science Advisory Board
RADRISK—a computer code for radiation risk estimation
SWTR—Surface Water Treatment Rule
T&C—Technologies and Cost document
UCMR—Unregulated Contaminant Monitoring Rule
USDOE—United States Department of Energy
USDW—underground source of drinking water
USEPA—United States Environmental Protection Agency
USGS—United States Geological Survey
USSCEAR—United Nations Scientific Committee on the Effects of Atomic Radiation

Units of Measurement

Bq—Becquerel
Ci—Curie
EDE/yr—effective dose equivalent per year
kBq—kiloBecquerels
kBq/m ^{3}—kiloBecquerels per cubic meter
kg—kilogram
kgpd—kilogram per day
Mgkd—milligram per kilogram per day
L—liter
L/day—liter per day
mg—milligram
mg/L—milligram per liter
mg/kg—milligram per kilogram
mg UN/L—milligram uranyl nitrate per liter
mg/kg/day—milligram per kilogram per day
mg U/kg/day—milligram uranium per kilogram per day
mgd—million gallons per day
mL—milliliter
mrem—millirem
mrem/yr—millirem per year
Sv—Sievert
µCi—microCurie
µCi/kg—microCurie per kilogram
µg or ug—microgram
µg/g or ug/g—microgram per gram
µg/L or ug/L—microgram per liter
µg uranium/L—microgram uranium per liter
µg uranium/kg/day—microgram uranium per kilogram per day
µR/hr—micro Roentgen per hour
µSv/cm—micro Sievert per centimeter
NTU—Nephelometric Turbidity Unit
pCi—picoCurie
pCi/day—picoCurie per day
pCi/g—picoCurie per gram
pCi/L—picoCurie per liter
pCi/µg—picoCurie per microgram

Other Terms

ACA—anticentromere antigen
ALP—alkaline phosphatase
AS—alpha spectrometry
BAT—best available treatment
BEIR—biological effects of ionizing radiation
BMG—β_2-microglobulin
CWS—community water systems
DL—detection limit
EDE—effective dose equivalent
FSH—follicle stimulating hormone
GGT—gamma glutamyl transferase
GI—gastrointestinal
IE—ion exchange
LDH—lactate dehydrogenase
LET—low energy transfer
LOAEL—lowest observed adverse effect level
LP—Laser phosphorimetry
MCL—maximum contaminant levels
MCLG—maximum contaminant level goals
MDL—method detection limit
n—number
NAG—N-acetyl-β-D-glucosaminidas
NTNC—non-transient, non-community
NTNCWS—non-transient, non-community water systems
PBMS—performance based measurement system
PE—performance evaluation
POE—point-of-entry
POU—point-of-use
PQL—practical quantitation level
PT—performance testing
PWS—public water systems
RF—risk coefficient
RfD—reference dose
RO—reverse osmosis
RSC—relative source contribution
SM—standard methods
SMF—standardized monitoring framework
SPAARC—Spreadsheet Program to Ascertain Residual Radionuclide Concentration
SSCTL—''Small Systems Compliance Technology List''
Stnd. Dev.—standard deviation
TR—target risk level
UIC—underground injection control

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I. Purpose and Organization of This Document

In 1976, EPA promulgated drinking water regulations for several radionuclides. In 1991 (56 FR 33050, July 18, 1991), EPA proposed revisions to the current radionuclides (i.e. beta and photon emitters, radium-226 and radium-228, and gross alpha radiation) and proposed regulations for uranium which is not currently regulated. EPA is publishing this Notice of Data Availability (NODA) to inform the public and the regulated community of new information concerning radionuclides in drinking water. EPA is evaluating these additional data to determine how they will affect the Agency's decisions relative to final regulations to control radionuclides in public water systems. The Agency is under a court agreement to publish these final regulations by November 2000. Information in today's Document includes data about the occurrence, health effects, and treatment options for radionuclides in drinking water, as well as analytical methods, and monitoring requirements. This Document also presents data concerning the costs and benefits of several regulatory options. EPA is soliciting public comment on a number of issues raised by this new information. This introduction provides an overview of the document, and some of the information available to EPA and to highlight the risk management decisions the Agency is contemplating. Subsequent sections will contain more specific information, with a focus on what is new, relative to each of the topics listed previously. Finally, to further assist the public, the Agency has compiled seven appendices, included with this NODA, with more detailed information on each of these topics in addition to the public docket of reference materials. EPA seeks comment on the data and information presented in today's NODA, particularly where regulatory options or alternatives are discussed. Commenters are asked to provide their rationale and any supporting data or information they wish to submit in support of comments offered.

Table I–1 summarizes the major elements of the 1976 rule, the 1991 proposal and the issues being considered in today's NODA.

TABLE I–1.—COMPARISON OF THE 1976 RULE, 1991 PROPOSAL, AND 2000 NODA

Provision	1976 Rule (Current Rule)	1991 Proposal	2000 NODA
Affected Systems	CWS	CWS + NTNC	CWS + several NTNC options based on the 1991 proposal.
MCLG	no MCLG	MCLG of zero	MCLG of zero.
Radium MCL	Combined Ra-226 + Ra-228 MCL of 5 pCi/L.	Ra-226 MCL of 20 pCi/L; Ra-228 MCL of 20 pCi/L.	Maintain current MCL based on corrected estimates of risk of current MCL.
Beta/Photon Emitters MCL.	4 mrem: Methodology for deriving individual concentration limits incorporated by reference; MCL = sum of the fractions of dose from one or more contaminants; risks estimated not to exceed 5.6×10^{-5}.	4 mrem ede (Effective Dose Equivalent). Derived concentration limits changed to reflect new dose limit; Current estimate of associated risks for these concentration limits are between 10^{-4} and 10^{-3} for most.	Maintain current MCL based on corrected estimates of risk of current MCL.
Gross alpha MCL	15 pCi/L excluding U and Rn, but including Ra-226.	''Adjusted'' gross alpha MCL of 15 pCi/L, excluding Ra-226, radon, and uranium.	Maintain current MCL based on unacceptable risk level of 1991 proposed MCL.
Polonium-210	Included in gross alpha	Included in gross alpha	No changes to current rule. Monitoring required under the UCMR rule. Future action may be proposed at a later date.
Lead-210	Not Regulated	Included in beta particle and photon radioactivity; concentration limit proposed at 1 pCi/L.	No changes to current rule. Monitoring required under the UCMR rule. Future action may be proposed at a later date
Uranium MCL	Not Regulated	20 μg/L or 30 pCi/L w/ option for 5–80 μg/L.	Three options being considered: 20, 40, 80 μg/L and pCi/L
Ra-224	Part of gross alpha, but sample holding time too long to capture Ra-224.	Part of gross alpha, but sample holding time too long to capture Ra-224.	Same as current rule, but Ra-224 may be addressed in a future proposal.
Radium monitoring	Ra-226 linked to Ra-228; measure Ra-228 if Ra-226>3 pCi/L and sum.	Measure Ra-226 and -228 separately.	Measure Ra-226 and -228 separately
Monitoring baseline.	4 quarterly measurements. Monitoring reduction based on results: >50% of MCL required 4 samples every 4 yrs; <50% of MCL required 1 sample every 4 yrs.	Annual samples for 3 years; Std Monitoring Framework: >50% of MCL required 1 sample every 3 years; <50% of MCL enabled system to apply for waiver to 1 sample every 9 years.	Implement Std Monitoring Framework as proposed in 1991. Four initial consecutive quarterly samples in first cycle. If initial average level >50% of MCL: 1 sample every 3 years; <50% of MCL: 1 sample every 6 years; Non-detect: 1 sample every 9 years. (beta particle and photon radioactivity has a unique schedule—see Section III, part K).
Beta monitoring	Surface water systems >100,000 population Screen at 50 pCi/L/; vulnerable systems screen at 15 pCi/L.	Ground and surface water systems within 15 miles of source screen at 30 or 50 pCi/L. Those drawing water from a contaminated source screen at 15 pCi/L.	Same as 1991 proposal with clarifications.
Gross alpha monitoring.	Analyze up to one year later	Six month holding time for gross alpha samples; Annual compositing of samples allowed.	As proposed in 1991. Recommendation to analyze within 48–72 hours to capture Ra-224.
Analytical Methods	Provide methods	Method updates proposed in 1991; Current methods were updated in 1997.	Current methods with clarifications.

II. Statutory Authority and Regulatory Background

A. Safe Drinking Water Act of 1974 and Amendments of 1986 and 1996

Regulations for radionuclides in drinking water were first promulgated in 1976 as interim regulations under the authority of the Safe Drinking Water Act (SDWA) of 1974. The standards were set for three groups of radionuclides: beta and photon emitters, radium (radium-226 and radium-228), and gross alpha radiation. These standards became effective in 1977.

The SDWA Amendments of 1986 required EPA to establish health-based regulatory targets, called Maximum Contaminant Level Goals (MCLGs), for every contaminant ''at the level at which no known or anticipated adverse effects on the health of persons occur and which allows an adequate margin of safety.'' The enforceable standard, the Maximum Contaminant Level (MCL), was required to be established ''as close to the health-based goal as feasible using the best available technology, taking costs into consideration.'' EPA proposed an MCLG of zero for the radionuclides in 1991.

In 1983 and 1986, EPA published an Advanced Notice of Proposed Rulemaking (ANPRM) requesting additional information and comments on radionuclides and numerous organic and inorganic contaminants in drinking water. The 1986 SDWA Amendments identified 83 contaminants for EPA to regulate, including the currently regulated radionuclides, which lacked an MCLG, and two additional radionuclides, uranium and radon. The Amendments also declared the 1976 interim standards to be final National Primary Drinking Water Regulations.

In 1996, Congress again amended the SDWA. These amendments included new and revised provisions that must be considered when revising drinking water regulations. Among these are the

health protection clause (section 1412(b)(9)) which requires that ''any revision of a national primary drinking water regulation (NPDWR) shall be promulgated in accordance with this section, except that each revision shall maintain, or provide for greater protection of the health of persons.''

The 1996 Amendments also provide for a cost-benefit analysis when publishing a proposal for new NPDWRs pursuant to section 1412 (b)(6). While the EPA had proposed the radionuclides rule prior to these Amendments, the Agency nevertheless conducted an analysis of the costs and associated benefits of all of the options described in today's Document. These analyses serve to update and revise the costs and benefits estimated for the 1991 proposed rule. For the uranium standard, the Agency solicits comment on the possible use of its new discretionary authority at section 1412(b)(6) of the SDWA, which allow for a proposed regulatory level to be set higher than the feasible level, after the Agency has made a determination that the benefits do not justify the costs at the feasible level. Note that section 1412(b)(6) applies to new standards (uranium), not to the revision of existing standards (combined radium-226 and -228, gross alpha, and beta particle and photon radioactivity). Where we expect to maintain current standards at their existing levels, no additional analysis was undertaken because the rule is already in effect.

B. The 1991 Proposal

In 1991, EPA proposed new regulations for uranium and radon, as well as revisions to the existing regulations. The proposal included the following features: (1) an MCLG of zero for all ionizing radiation; (2) revised MCLs for beta particle and photon radioactivity, radium-226, radium-228, and gross alpha emitters; (3) proposed MCLs for uranium and radon; and (4) revisions to the categories of systems required to monitor, the monitoring frequencies, and the appropriate screening levels. EPA received comments on the new data and regulatory options presented in the 1991 proposal. However, the proposal was never promulgated as a final rule in large part because of controversy surrounding the proposed MCL for radon. The 1996 Amendments to the SDWA directed the Agency to withdraw the proposed MCL for radon, which was subsequently done on August 6, 1997 (62 FR 42221).

Most of the comments EPA received on the proposal related to radon. Approximately 120 comments related to non-radon radionuclides were valuable and most are still germane to the Agency's rulemaking efforts. Those comments are addressed, as appropriate, in today's document.

C. Court Agreement

The SDWA (as amended in 1986) provided a statutory deadline to promulgate a revised radionuclide rule of June 1989, but EPA failed to meet this deadline. An Oregon plaintiff brought suit to require EPA to issue the regulations and EPA entered into a series of consent agreements setting schedules to issue regulations for the radionuclides. EPA issued a proposal in 1991. After the SDWA Amendments in 1996, EPA agreed to publish a final action with respect to the proposed regulation for uranium by November 21, 2000. EPA also agreed to either take final action by the same date with respect to radium, beta/photon emitters, and alpha emitters or publish a notice stating its reasons for not taking final action on the proposal. This latter scenario would leave the current rule in effect.

D. Statutory Requirements for Revisions to Regulations

Both the 1986 and the 1996 Amendments to the SDWA state that revisions be made to existing drinking water regulations periodically. Section 1412(b)(9) of the 1986 SDWA Amendments directed that ''national primary drinking water regulations be amended whenever changes in technology, treatment techniques, and other means permit greater protection of the health of persons, but in any event, such regulations shall be revised at least once every 3 years.'' The 1996 SDWA Amendments provide that EPA '' * * * not less than every 6 years review and revise, as appropriate, each national primary drinking water regulation,'' and that ''any revision shall maintain, or provide for greater, protection of the health of persons.''

The radionuclides emit ionizing radiation and, absent data indicating that there is a threshold level at which exposure does not present a risk, EPA uses a linear, non-threshold model to set a zero MCLG for radionuclides. This means that any exposure can potentially cause harm and that risk associated with the exposure increases proportionally to the concentration of the radionculide.

EPA's current estimate of the unit risks posed by many of the radionuclides covered by today's document has generally increased relative to the 1991 estimate. In fact, based on the newest science (Federal Guidance Report 13), the fatal cancer risks associated with the 1991 proposed MCL changes for combined radium, gross alpha, and beta particle and photon radioactivity generally exceed the Agency's risk range of 10^{-6} to 10^{-4}. This document discusses and requests comment on the issues EPA has addressed in determining how to best meet applicable SDWA provisions for each of the radionuclide categories covered by today's document.

III. Overview of Today's Document

Additional data since the 1991 proposal suggest a need to retain some portions of the proposal, while retaining much of the current rule. Any changes that are finalized must meet the provisions for public health protection in accordance with the 1996 Amendments. EPA has presented its approach for finalizing the non-radon portions of the 1991 radionuclides proposal at several public meetings.

In December 1997 EPA held a public forum (stakeholder meeting) to discuss the requirements and limitations of the new Amendments pertaining to revisions to the radionuclide regulation. The Agency discussed most of the concepts presented in this document and received valuable feedback from the public, the regulated community, and other Federal Agencies. In this Document, EPA is presenting the current information and options upon which the Agency will make its decisions regarding revisions to the existing standards. At the same time, the Agency is requesting additional data and comments on the approach EPA expects to take in formulating the final rule.

The most significant new information concerns the occurrence, monitoring, and health effects of radionuclides in drinking water. Recent data suggest a more widespread occurrence of certain radionuclides which may point to a need for improved monitoring for these radionuclides in certain areas of the country. Conversely, a better understanding of the occurrence patterns may also indicate the need for less frequent monitoring. The newest health effects models, which are based on improved age-dependent biokinetic and dosimetric models of the effects of ionizing radiation on the body and more recent epidemiological information, reveal that radionuclides generally present a somewhat greater risk than the estimates of previous models, including the 1991 RADRISK model. EPA's publication ''Federal Guidance Report 13'' (FGR–13, EPA 1999b) discusses the newest risk modeling. The resulting risk estimates based on of the new health effects models are largely the reason for the publication of this document. The

following are some aspects of the NODA which the Agency would like to highlight.

A. Health Risk Consistency With Chemical Carcinogens

The risks associated with exposure to chemical carcinogens are usually expressed as the risks of illness. It is EPA policy to issue standards that maintain a risk ceiling in the target risk range of 10^{-6} (one in one million) up to 10^{-4} (one in ten thousand). For consistency between the level of protection between chemical and radiological drinking water contaminants, EPA is considering utilizing whichever risk provides the greater protection for MCL changes, a 1×10^{-4} risk of cancer incidence, or a mortality risk at half the incidence, 5×10^{-5}. The risk of death at 5×10^{-5} is the more protective if the mortality rate from a particular radionuclide is more than 50%, which is true for most of the radionuclides. However, for the thyroid, the mortality rate from thyroid cancer is at 10%. Protecting at 1×10^{-4} incidence corresponds to a mortality at $1x10^{-5}$. Conversely, protecting at 5×10^{-5} mortality with only a 10% mortality rate allows an incidence, of 5×10^{-4}, a less protective number.

B. Drinking Water Consumption

EPA received comments in 1991 from the American Water Works Association (AWWA), the Colorado Water Quality Commission, the Atlantic Richfield Co., and the Rio Algom Mining Corp. suggesting that consumption of drinking water was actually 1.2 liters per day, thus EPA was being too conservative in using two liters per day.

When establishing an MCL for a carcinogen, the risk which the MCL would represent is considered as well as treatability and costs. Radionuclides will have an MCLG of zero, with MCLs based on standard assumptions of two liters intake per person per day (2 L/day), an average individual weight of 70 kg, and a 70 year life span. EPA now has data to indicate that the average consumption of tap water is 1.1 liters per day per person and that a consumption rate of 2.2 L/day represents the 90th percentile consumption level.[1] Basing the MCL on a consumption rate higher than the average value is justified since MCLs are intended to be protective of the persons that comprise the population and not just ''typical individuals''. Since a consumption value of 2 L/day is less than the 90th percentile consumption rate, EPA believes that its assumption of 2 L/day for MCL determinations is not overly conservative and is justifiable.

When computing the national benefits of a regulation and the estimate of cancer mortality risks or risk reductions, EPA is now using 1.1 liters per person per day (L/day) of water as the estimate of the average daily consumption rate for individuals. In effect, this reduces population risk estimates by approximately one half and reduces the estimate of risk reductions by approximately one half. Since benefits calculations are based on risk reductions, this reduces monetized benefits by approximately one half. It should be noted that it is consistent to set health protection levels based on a subset of individuals that face the highest risks (sensitive subpopulations and/or the substantial minority of the population have higher water consumption levels), while estimating benefits based on average individuals (average consumption and sensitivity). EPA believes this approach leads to protective MCLs and realistic benefits calculations.

C. Risk Modeling and the MCL

The Agency's current radionuclides health effects model is based on Federal Guidance Report 13 (FGR–13, EPA 1999b). The Agency's new health effects model uses state-of-the-art methods, models and data that are based on the most recent scientific knowledge. Compared with the approaches used in 1976 and 1991, the revised methodology includes substantial refinements (described in appendix II, ''Health Effects''). While commenters have pointed out the MCLs in the current rule are based on ''old science'', the newest science indicates that many of the MCLs proposed in 1991 have corresponding risks that are much greater than the upper limit of the Agency's acceptable lifetime excess risk range of approximately 10^{-6} to 10^{-4} (one in one million to one in ten thousand lifetime excess risk of cancer). The risks associated with each existing and proposed MCL are described in sections that follow. The risk models are described in detail in appendix II (Health Effects) and in the Technical Support Document for the Radionuclides Notice of Data Availability (EPA 2000a).

Between 1976 and the present, different scientific models have been used to calculate risks from radiation exposure. Each model derives a different concentration of a particular nuclide for a given level of risk. For example, in 1991, the RADRISK model indicated that consuming drinking water with radium-228 at 26 pCi/L would lead to an excess lifetime cancer risk of 1×10^{-4}. However, using today's model (based on Federal Guidance Report 13), the best estimate of lifetime risk of Ra-228 at 26 pCi/L is 1×10^{-3}, a risk value ten times greater than thought in 1991.

Likewise, the 1991 proposed MCL for Ra-228 at 20 pCi/L was thought to correspond to lifetime excess cancer risk of 7.7×10^{-5}. The most current risk estimate for Ra-228 at 20 pCi/L 7.7×10^{-4}, again ten-fold greater and much higher than the Agency's target risk ceiling of 10^{-4}. For individuals consuming water with 20 pCi/L of both Ra-228 and Ra-226, the risk was thought to be 1.7×10^{-4} in 1991. However, based on the newest science, these individuals would be exposed to lifetime excess risks of 1×10^{-3} risk (one in a thousand), a risk level 10-fold higher than the Agency's target risk ceiling for drinking water MCLs. EPA requests comments on these issues.

D. Sensitive Sub-Population: Children

The age-specific, sex-specific models used by EPA for estimating risk from ionizing radiation implicitly provide for risk differentiation by gender and age. The computer program suite, DCAL (FGR–13), uses age-specific metabolic models to calculate the dose from a unit intake of a radioisotope during each year of life from birth to 120 years of age. Age-specific organ masses are used for all ages up to adult, and for adult males and adult females. Risk coefficients are given by age and sex for each year of life from birth to 120 years of age. The risk is then calculated by combining calculated doses and age-sex-specific risk coefficients with age-sex-specific intake data and age-sex-specific survival data.

A separate risk analysis for children was performed and is described in appendix II (Health Effects), part C. Risks to children are explicitly considered when setting MCLs for radionuclides. In the case of the regulated water systems (currently, community water systems), children are fully protected. In the case of the unregulated systems of potential concern (non-transient non-community water systems, NTNCWSs), the analysis is more complicated. Risks to children served by NTNCWSs are discussed in appendix II, part C, number 3.

[1] If one ranked, from lowest to highest, the average daily water consumption levels for every CWS customer in the U.S., the ''90th percentile'' value of 2.2 L/day is the best estimate of the value for which 90 percent of the population would drink that much or less on an typical day.

E. MCL for Beta Particle and Photon Radioactivity

1. EPA's Plans for Finalizing the 1991 Proposed MCL for Beta and Photon Radioactivity

This section presents the important considerations that have led EPA to consider retaining the current MCL for beta particle and photon radioactivity when the 1991 proposal is finalized in November of 2000. EPA is, however, also considering finalizing the 1991 proposed changes to the monitoring requirements for beta particle and photon radioactivity, as described later in this section. The current MCL is (40 CFR 141.16):

(a) The average annual concentration of beta particle and photon radioactivity from man-made radionuclides in drinking water shall not produce an annual dose equivalent to the total body or any internal organ greater than 4 millirem/year.

(b) Except for the radionuclides listed in Table A, the concentration of man-made radionuclides causing 4 mrem total body or organ dose equivalents shall be calculated on the basis of a 2 liter per day drinking water intake using the 168 hour data listed in ''Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air or Water for Occupational Exposure,'' NBS Handbook 69 as amended August 1963, U.S. Department of Commerce. If two or more radionuclides are present, the sum of their annual equivalent to the total body or to any organ shall not exceed 4 millirem/year.

TABLE A.—AVERAGE ANNUAL CONCENTRATIONS ASSUMED TO PRODUCE A TOTAL BODY OR ORGAN DOSE OF 4 MREM/YEAR.

Radionuclide	Critical organ	pCi per liter
Tritium	Total body	20,000
Strontium-90	Bone marrow ..	8

Following these instructions leads to a unique list of concentration limits for 168 other man-made radionuclides. This list is included in today's document in appendix II, ''Health Effects.''

The 1991 proposed MCL for beta emitter and photon radioactivity was 4 mrem-ede (effective dose equivalents), with the footnote:

''NOTE. —The unit mrem-ede/yr refers to the dose committed over a period of 50 years to reference man (ICRP 1975) from an annual intake at the rate of 2 liters of drinking water per day.''

Following these instructions leads to a unique list of concentration limits for 230 radionuclides. EPA has determined that there is no way to update the 4 mrem dose basis (1976) for the beta particle and photon radioactivity MCL without the extensive process of a new proposal. While some stakeholders have suggested that reverting to the existing rule for beta particle and photon radioactivity (''beta emitters'') is relying on ''old science,'' it should be pointed out the newest risk estimates, based on the peer-reviewed Federal Guidance Report 13, indicates that the risks associated with the 1991 proposed MCL of 4 mrem-ede (effective dose equivalents) are above the 10^{-4} risk level (10^{-3} to 10^{-4}) for many of the beta emitters. Figure 1 shows the most current risk estimates for the beta emitter concentration limits derived under both the current and proposed MCLs. As the figure shows, the current MCL results in concentration limits with risks that fall within the Agency's risk range goal of 10^{-6} to 10^{-4} (while some are slightly above and some slightly below, all round to values within these orders of magnitude).

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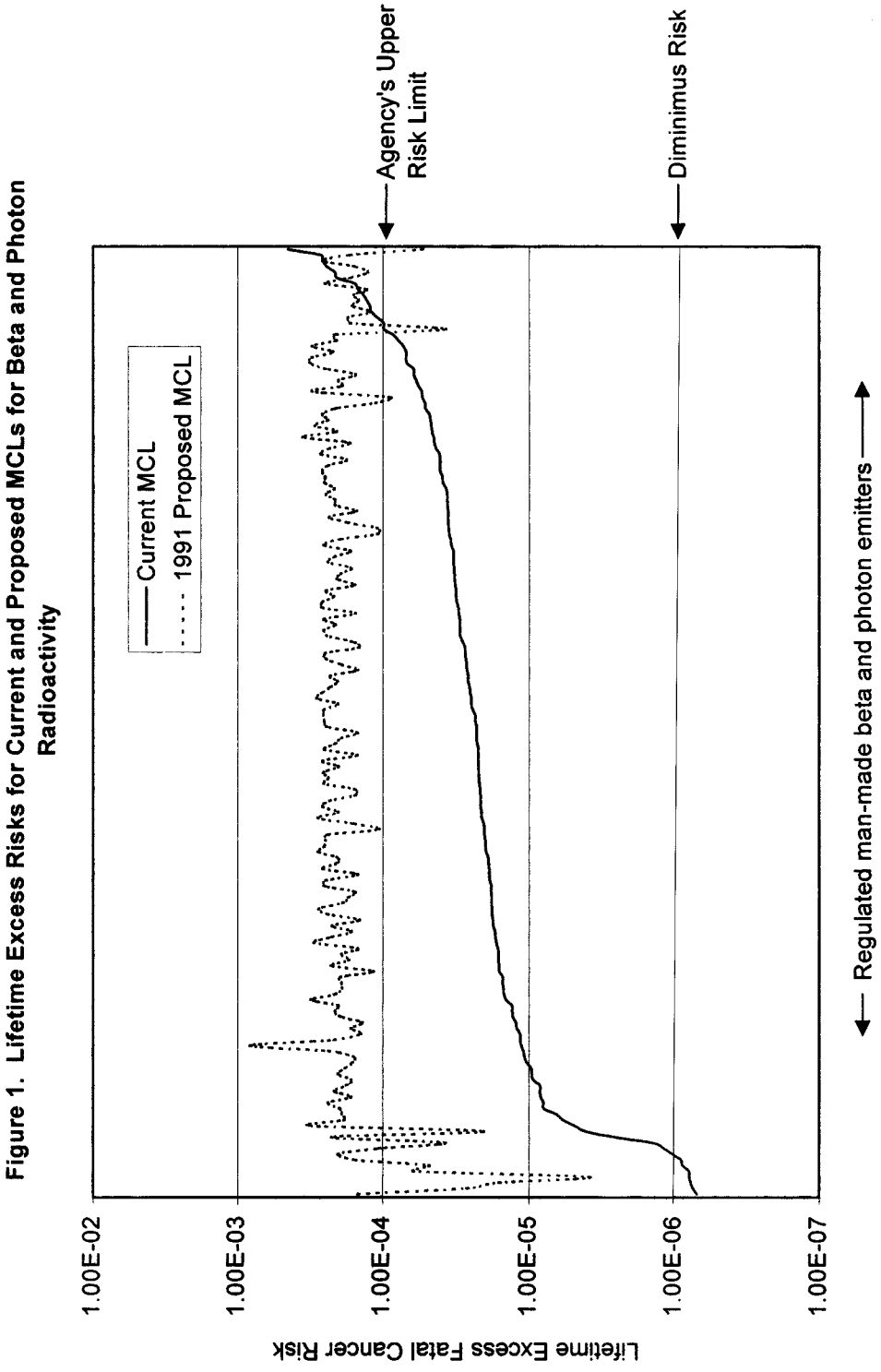

Figure 1. Lifetime Excess Risks for Current and Proposed MCLs for Beta and Photon Radioactivity

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In summary, the Agency fully recognizes that the dose-based MCL of 4 mrem/year is based on older scientific models. However, the Agency has decided to retain the current MCL given that:

- Federal Guidance Report 13 (FGR–13, EPA 1999b) demonstrates that the 1991 proposed MCL of 4 mrem-ede/year results in concentration limits that are outside the 10^{-6} to 10^{-4} range;
- FGR–13 demonstrates that the current MCL of 4 mrem/year results in concentration limits that are within the 10^{-6} to 10^{-4} range;
- the fact that there is no evidence of appreciable occurrence of man-made beta emitters in drinking water;
- the 1996 Safe Drinking Water Act requires EPA to evaluate all NPDWRs every six years (''Six Year Review'').

EPA believes that Six Year Review is the appropriate vehicle for updating the beta particle and photon radioactivity MCL.

2. Beta Particle and Photon Radioactivity Monitoring

Currently, surface water systems serving more than 100,000 persons are required to monitor for beta particle and photon radioactivity using a screening level of 50 pCi/L, while systems that are determined to be vulnerable by the State are required to monitor using a screening level of 15 pCi/L. In 1991, EPA proposed that all ground water and surface water systems within 15 miles of a potential source, as determined by the State, be required to monitor using a screening level of 30 or 50 pCi/L. EPA is considering retaining the current monitoring requirement of a 15 pCi/L screen for water systems drawing water from contaminated sources. EPA solicits comment on these issues. EPA is taking comment on screening levels of 30 or 50 pCi/L for systems within 15 miles of a potential source.

3. Lead-210 and Radium-228

The 1991 proposal included lead-210 (Pb-210) and radium-228 (Ra-228) in the list of regulated beta and photon emitters, both of which are naturally occurring. An 1991 the Agency was considering raising the Ra-228 MCL to 20 pCi/L, which is high enough to significantly contribute to gross beta levels. However, since the Agency is retaining the current combined Ra-226 and Ra-228 standard of 5 pCi/L, Ra-228 will no longer be a significant contributor to gross beta. For the reason, the Agency sees no value in including Ra-228 in the list of beta/photon emitters.

New risk analyses indicate that Pb-210 is of concern well below the current and proposed screening levels for beta and photon emitters. In order to assess the occurrence of Pb-210 to determine if it is present at levels high enough to warrant separate monitoring, EPA has included it on the list published in the Unregulated Contaminant Monitoring Rule (UCMR) (64 FR 50556, Friday, September 14, 1999). USGS also monitored for Pb-210 in its study with EPA of 100 locations. The reader is referred to appendix I and the Technical Support Document (EPA 2000a) for further information regarding this study. Since Pb-210 specific monitoring was not proposed in 1991, EPA cannot address this concern without a new proposal. After occurrence data has been reviewed from the UCMR, EPA may propose appropriate actions.

F. Combined Ra-226 and Ra-228

1. MCL Considerations

The combined radium-226 and -228 NPDWR has long been a contentious issue. A number of water systems believe the current MCL is too stringent and have not installed treatment or taken other measures to comply. EPA first proposed the possibility of increasing the current 5 pCi/L limit for combined radium-226 and -228 in 1991. The proposal suggested a new level of 20 pCi/L for Ra-226 and Ra-228 separately along with a proposed limit of 300 pCi/L for radon-222 . This combination was proposed in part due to the disproportionate costs of removing radium compared to radon. The proposal was met with opposition, largely due to the controversy surrounding the radon component. In the ensuing deliberations, debates regarding the radon component of the proposal interfered with promulgation of the proposal. In the 1996 Amendments to the SDWA, Congress directed EPA to remove the radon component from the proposal. Consequently, the Agency has once again considered the issues surrounding the allowable concentration of radium-226 plus radium-228 in drinking water.

EPA is considering retaining the current MCL for combined radium-226 and -228 at 5 pCi/L for the following reasons. First, the unit risks for Ra-226 and Ra-228 are believed to be much greater than estimated in 1991, such that raising the combined Ra-226 and Ra-228 MCL up to 20 pCi/L for each radionuclide would result in a lifetime excess cancer risks that are ten-fold higher than the Agency's acceptable risk range of 10^{-6} to 10^{-4}. And second, EPA is required to consider the MCL for Ra-226 and Ra-228 apart from any NPDWR for radon, both by the 1996 SDWA Amendments and the later court stipulated agreement. Both points are discussed further here.

First, in 1976 the estimate of risk from either Ra-226 or Ra-228 at 5 pCi/L was between 5×10^{-5} and 2×10^{-4}, averaging 1×10^{-4}. In 1991 the RADRISK model calculated that a 1×10^{-4} risk corresponded to Ra-228 at 26 pCi/L and Ra-226 at 22 pCi/L.

Table III–1 shows the change in estimated risks from 1976 until the present. ''Current Risk Estimates'' are calculated using the 1999 model, FGR–13 (EPA 1999b). The table allows a comparison between the calculated risk during each phase of the evolution of the radionuclides NPDWRs, including the current best estimate of risk based upon FGR–13 (EPA 1999b). Details of why the models have changed and the additional data taken into consideration are found in the appendix II and the Technical Support Document (EPA 2000a).

TABLE III–1.—CHANGES IN ESTIMATED RISKS FOR VARIOUS RA-226 AND RA-228 LEVELS

Year model used	Radium-228			Radium-226		
	Concentration pCi/L	Previous risk estimate	Current risk estimate	Concentration pCi/L	Previous risk estimate	Current risk estimate
2000 FGR–13	5	2×10^{-4}	2×10^{-4}	5	7.3×10^{-5}	7.3×10^{-5}
2000 FGR–13	2.5	1×10^{-4}	1×10^{-4}	6.85	1×10^{-4}	1×10^{-4}
1994 FGR–11	11	1×10^{-4}	4.5×10^{-4}	10	1×10^{-4}	1.5×10^{-4}
1991 RADRISK	26	1×10^{-4}	1×10^{-3}	22	1×10^{-4}	3.3×10^{-4}
1991 RADRISK proposed MCL	20	7.7×10^{-5}	7.7×10^{-4}	20	9.1×10^{-5}	2.9×10^{-4}
1991 RADRISK	5	1.9×10^{-5}	2×10^{-4}	5	2.3×10^{-5}	7.3×10^{-5}

TABLE III–1.—CHANGES IN ESTIMATED RISKS FOR VARIOUS RA-226 AND RA-228 LEVELS—Continued

Year model used	Radium-228			Radium-226		
	Concentration pCi/L	Previous risk estimate	Current risk estimate	Concentration pCi/L	Previous risk estimate	Current risk estimate
1976*	5	1×10^{-4}	2×10^{-5}	5	1×10^{-4}	7.3×10^{-5}

*The risk of either radium-226 or radium-228 at 5 pCi/L was believed to be between 5×10^{-5} and 2×10^{-4} in 1976. The average would have been 1×10^{-4}.

The 1991 estimated risk corresponding to 20 pCi/l of Ra-226 in addition to 20 pCi/l of Ra-228 was thought to be 1.7×10^{-4}. However, the current risk estimate based on FGR–13 (EPA 1999b) for 20 pCi/l of Ra-226 in addition to 20 pCi/l of Ra-228 is 1×10^{-3} (one in a thousand), an order of magnitude (ten times) above the acceptable risk of 1×10^{-4}.

In contrast, maintaining the current standard would allow a maximum lifetime risk of 2×10^{-4} (within the original risk range of the 1976 regulation). This represents a one in 5,000 lifetime mortality risk and would only be present if 5 pCi/L in the drinking water were all radium-228, a relatively rare occurrence situation. If the radium present were all radium-226, the risk would be 7×10^{-5}, just below EPA's risk ceiling. Since:

- the risks associated with the current MCL of 5 pCi/L are already at the upper end of the Agency's allowable risk range of 10^{-5}; and
- the 1991 proposed MCLs for Ra-226 and Ra-228 have risks as high as 1×10^{-3}, ten-fold higher than the Agency's allowable risk, the Agency believes that maintaining the current MCL for combined Ra-226 and Ra-228 is the appropriate action.

Regarding treatment feasibility, EPA's determination that water systems can feasibility treat and quantify combined radium at 5 pCi/L is supported by case studies of systems that had combined radium levels in excess of the MCL and that later came into compliance through treatment. In addition, EPA has case studies of systems that have come into compliance through purchasing water, blending, and developing new wells (EPA 2000a).

Since risk estimates for Ra-228 are significantly higher than thought in 1991, EPA has evaluated the risk reductions, costs, and benefits of decreasing the allowable level of radium-228 to 3 pCi/L and has discussed the results in the Technical Support Document (EPA 2000a). The concern is that a system with 5 pCi/L of Ra-228 with insignificant levels of Ra-226 would be in compliance with the combined radium MCL, but would have an associated lifetime excess cancer morbidity risk of 2×10^{-4}, which exceeds the risk ceiling on 1×10^{-4}. While this is true, the occurrence data reported in appendix I suggest that this situation should be rare. Since EPA did not propose this action in the 1991 proposal, EPA cannot address this concern in the finalization of this proposal. However, EPA will consider this situation further and will later determine if a regulatory action is appropriate.

An unintended effect in the 1991 proposal was that the costs and benefits were not evenly distributed to all affected persons (individuals). In the 1991 proposal, an MCL was proposed for radon at 300 pCi/L and a revised MCL for radium from 5 pCi/L combined for both radium-226 and radium-228 to 20 pCi/L each. Benefits and costs were considered together for both radon and radium on a national basis. Compared to radium, radon is easier and cheaper to remove from water due to its air strippability. Since the risks avoided were higher and the treatment costs lower for the radon MCL, it was reasoned that the radon rule was much more cost-effective than the combined radium rule. However, since radium and radon do not tend to co-occur, individuals that would have benefitted from the radon rule were not the same individuals that would have faced higher risks under the proposed radium MCLs. EPA believes that such a trade-off is no longer appropriate. Among other considerations, the 1996 Amendments to SDWA explicitly separated the radon rule from the rule for the other radionuclides.

In summary, EPA based its proposed increase in the radium standard on the risk models that existed at that time and on a population risk trade-off with radon. The models in use in 1991 indicated that radium posed less of a risk than originally believed in 1976. However, current risk models (FGR–13, EPA 1999b) suggest that the combined radium standard of 5 pCi/L presents an even greater health risk than thought in 1976. Given the much higher current estimate of risks associated with the proposed Ra-226 and Ra-228 MCLs of 20 pCi/L and the statutorily required withdrawal of radon-222 from the proposal, the Agency believes that the MCLs for radium proposed in 1991 are no longer appropriate. EPA requests public comment on retaining the current radium standard of 5 pCi/L for combined Ra-226 and Ra-228.

2. Separate Radium Analysis

The 1991 proposal recommended decoupling the monitoring of radium-228 from radium-226. The current radionuclides rule requires analysis of Ra-228 only when Ra-226 levels are above 3 pCi/L. The rule recommends analysis of Ra-226 and/or Ra-228 when gross alpha exceeds 2 pCi/L where Ra-228 may be present, and requires analysis of Ra-226 when gross alpha exceeds 3pCi.L.

Ra-228 may be present with minor amounts of Ra-226 or in the absence of Ra-226. In general, the mobility of a parent radionuclide may be very different from that of a daughter element, depending on the geochemistry of the elements involved. However, the occurrence of a radionuclide may still be governed by the occurrence and distribution of its parent (see EPA 2000a). Since radium-226 arises from the uranium decay series and radium-228 arises from the thorium series, it is logical to expect them to occur independently of one another. Also, the parents of Ra-226 (uranium isotopes) and Ra-228 (thorium isotopes) have very different geochemical behaviors. Uranium is fairly mobile in oxidizing ground waters, while thorium is rather insoluble. In contrast, the daughter radium isotopes are more mobile in reducing waters and are relatively immobile in oxidizing waters. Since Ra-226 is part of the uranium series (relatively mobile parent) and Ra-228 is part of the thorium series (immobile parent), Ra-226 can and does mobilize in waters containing Ra-228 more frequently than the reverse situation. These observations indicate that Ra-226 and Ra-228 may be expected to significantly co-occur, but that the correlation will not be strong enough to use the occurrence of one to predict the other with acceptable certainty. Recent

studies support this conclusion (EPA 2000a).

This conclusion indicates that the current monitoring screen for Ra-228 based on Ra-226 is not reliable. Therefore as proposed in 1991, EPA is considering requiring separate monitoring and analysis of both radium-226 and radium-228 in the final rule. The Ra-228 and Ra-226 results would be summed to determine compliance with the radium MCL. This will provide a more accurate assessment of systems containing little or no radium-226, but possessing a significant enough concentration of radium-228 to exceed the standard.

G. Gross Alpha MCL

The gross alpha standard promulgated in 1976 considered natural and man-made alpha emitters as a group rather than individually. At the time, the analytical costs made it impractical to identify each alpha-emitting nuclide in a given water sample. The existing gross alpha MCL includes radium-226, but excludes radon-222 and uranium (because these latter nuclides were to be regulated at a later date). The 1991 risk estimates indicated that the inclusion of Ra-226 was not warranted. However, today's risk estimates, based on FGR–13 (EPA 1999b), suggest that the Ra-226 unit risk is large enough to warrant to include it in gross alpha, as in the current standard. In today's Document, the Agency is considering maintaining the current MCL for gross alpha, believing it to be protective. EPA will consider proposing changes to the rule in the future.

EPA believes that the term ''gross alpha'' may be confusing. ''Gross alpha'' implies counting the total alpha emissions and is the appropriate name for that particular analytical method. The standard excludes uranium and radon from the total or gross count. Just as the proposal suggested the term ''adjusted gross alpha'' with the exclusion of radium-226, EPA believes the term ''net alpha'' or ''the alpha standard'' might better describes the current standard which excludes such alpha emitters as radon, uranium. EPA requests public comment on the name change.

The gross alpha MCL was originally established at 15 pCi/L to account for the risk from radium-226 at 5 pCi/L (the radium regulatory limit) plus the risk from polonium-210, the next most radiotoxic element in the uranium decay chain. In 1976, the risk resulting from exposure to 10 pCi/L of polonium-210 was thought to be equivalent to the risk resulting from exposure to 1 pCi/L of radium-226. Looked at another way, the 1976 gross alpha standard equated to 6 pCi/L of radium-226 (5 pCi/L of radium-226, plus the10 pCi/L of polonium-210 which itself was equal to 1 pCi/L of radium-226). Since the risk associated with the combined radium standard was believed to be in the range of 5×10^{-5} to $2\times10^{-4,}$ this assumption placed the gross alpha standard reasonably within that range as well.

The gross alpha standard proposed in 1991 remained at 15 pCi/L, but excluded radium-226 (because it was proposed at 20 pCi/L). The new limit was termed ''adjusted gross alpha.'' In effect, it allowed an increase of 5 pCi/L of non-radium alpha emitters in drinking water from 10 to 15 pCi/L by occupying the 5 pCi/L originally represented by the radium. In the 1991 proposal, the allowable non-radium gross alpha contribution in that same water sample i.e. Po-210, would be 15 pCi/L. Because this latter scenario represents more risk than the scenario evaluated for the current regulation, EPA no longer supports an ''adjusted gross alpha'' limit of 15 pCi/L.

In the future, EPA may consider a proposal to exclude radium-226 from the gross alpha MCL as proposed in 1991 (because of the existence of a separate standard for radium-226), but to maintain protection, limiting the gross alpha standard to 10 pCi/L. Reducing the limit has the advantage of effectively reducing exposure to polonium-210 and radium-224. In addition, excluding radium-226 from being in both the gross alpha and radium standards may avoid confusion. EPA examined the possibility of this change in the context of the potential for added treatment costs versus the marginal benefits to be derived. However it appears that retaining the standard at 15 pCi/L is protective of public health at a reasonable cost. A picoCurie cap of 15 represents different risks for various nuclides, but this is not unlike other regulated carcinogens or the other radionuclides. The risks represented by two components, namely radium-224 and Polonium-210, are discussed next.

1. Polonium-210

Current risk estimates suggest that the risk resulting from exposure to polonium-210 is ten times greater than originally believed in 1976 compared to radium. However, existing occurrence data indicates that its presence in drinking water is relatively rare. To gain a better understanding of the public health risk posed by polonium-210 in drinking water, EPA included this radionuclide in the Agency's Unregulated Contaminants Monitoring Rule (64 FR 50556, Friday, September 17, 1999). The Agency may consider a future proposal to develop a separate limit for polonium-210 within (or separate from) a potentially revised gross alpha standard.

EPA believes that current technology can limit polonium-210 to 4 pCi/L or below, although precise quantification at this level may present a challenge. Because of its energetic alpha emissions, a gross alpha measurement may overestimate the actual concentration of polonium-210 in the sample by a factor of two. With current gross alpha measurement, if the total alpha were 15 pCi/l contributed by polonium, the actual concentration of polonium could be much less, depending on the calibration standard. At present, since there is no specific drinking water regulation for polonium-210, there is no EPA-approved method for measuring polonium to determine compliance with a drinking water standard. Should EPA decide to develop a separate limit for polonium-210, the Agency will ensure that the approved analytical method for demonstrating compliance is in place and includes a calibration standard appropriate for polonium's energetic alpha, thereby reducing the possibility of overestimating its presence. EPA requests information relative to any known occurrence of polonium and the need for a proposal of a separate limit. Recently, USGS co-operated with EPA and the American Water Works Association in monitoring for radionuclides, including Po-210 (103 wells in 27 States). The study and findings are described in EPA 2000a). USGS will publish the study in the near future. In this study, Po-210 levels were found above 1 pCi/L in less than two percent of the wells. Since the wells were targeted for high radium occurrence, this may not be typical. The reader is referred to appendix I (Occurrence) and the Technical Support Document (EPA 2000a) for further information.

2. The Occurrence of Radium-224 and its Impact on Alpha

Recently, the short lived isotope of radium has been found in some drinking water supplies. Extensive monitoring in the State of New Jersey over the past several years and follow-on survey by EPA and the USGS has demonstrated that radium-224 may be present in significant quantities in ground water, especially where its decay chain ancestor radium-228 is present. Although it is included in the (gross) alpha MCL, it was not targeted specifically for several reasons: (1) It was not believed to be a health risk, (2)

it was not known to be prevalent and (3) sampling it at a representative point within the distribution system rather than the entry point to the system allowed decay. However, newer FGR–13 risk estimates (EPA 1999b), coupled with the greater occurrence, and the 1991 proposal to sample at the entry point to the distribution system, now make radium-224 a concern.

Radium-224 is a naturally occurring radioisotope, which is part of the thorium decay chain. It emits alpha particles and has a half-life of 3.66 days. The decay of its progeny via alpha and beta decay also happens very quickly. In approximately 4.1 days, an original radium-224 atom has decayed to stable lead-208 by emission of an equivalent of 4 alpha and 2 beta particles. A gross alpha analysis will detect 3 alpha particle emissions including daughters in equilibrium with the parent Ra-224. If a sample analysis is done within 72 hours, preferably 48 hours, an appropriate back-calculation can be performed of the gross alpha count of the sample water. Otherwise the laboratory will significantly underestimate the radium-224 and other alpha emitters that may have been originally present in the sample.

Under the current rule, utilities are allowed to collect quarterly samples, composite and analyze at the end of the year. In 1991, EPA proposed a holding time of 6 months for gross alpha. However, neither the annual composite under the current rule or the proposed holding time of 6 months can appropriately capture the presence of alpha-emitting radium-224, or its progeny in a gross alpha analysis. The Agency intends therefore, to issue a separate proposal to change the holding time for gross alpha analysis to account for the presence of radium-224 in the sample.

At this point in time, the Agency strongly recommends to States and utilities that an alpha analysis be performed within 48 to 72 hour after sample collection to capture the contribution of the alpha particles arising from radium-224. In this NODA, the Agency is reiterating and underscoring its recommendation to that effect as outlined in a memorandum of January 27, 1999 from Cynthia Dougherty, Director of the Office of Ground Water and Drinking Water (EPA 1999a). For systems to whom a rapid analysis might be a burden, a reasonable screening tool for the presence of Ra-224 under many geochemical circumstances is the presence of its radiological ancestor, Ra-228. Since systems will monitor for Ra-228, the result can serve as a general proxy for the presence or Ra-224 for the purposes of prioritization. It is not definitive and would not be an acceptable substitute for a rapid analysis of gross alpha or Ra-224. In the absence of Ra-228, a system may not need to place as high a priority on rapid gross alpha or specific Ra-224 analysis. Since, as explained earlier, each Ra-224 atom contributes approximately three daughter alpha particles to the gross alpha count, a simple first approximation of Ra-224's contribution to gross alpha would be three times the Ra-228 concentration in pCi/L. For the purposes of prioritizing monitoring for Ra-224, grandfathered gross alpha data added to three times the result of the Ra-228 measurement would be a reasonable first approximation of the gross alpha including Ra-224 and its daughters available from a rapid gross alpha test. However, EPA reiterates that this approximation is not a substitute for rapid analysis of gross alpha or Ra-224.

EPA is not considering requiring a separate MCL or analysis for radium-224 when the rule is finalized in November of 2000. The definition of gross alpha will continue to include Ra-224. EPA is willing to consider comments on the need to apply sub-limits to Po-210 or Ra-224 within the MCL of 15 or as separate standards. Proposing a separate limit for radium-224 at 10 pCi/L within the alpha MCL of 15 pCi/L is a future possibility, as is a separate MCL for radium-224. The latter would require a separate, specific, rapid analysis specifically for radium-224, rather than relying on the gross alpha test and alpha MCL. Such actions would require a new proposal or proposals.

As part of the alpha standard, the Agency does not consider Ra-224 a significant risk. The lifetime mortality risk associated with exposure to 10 pCi/L of radium-224 is approximately 5×10^{-5} or one in 20,000. Because radium-224 and its progeny have very short half-lives, the total alpha count represents the radium-224 and its progeny. Consequently, there are effectively three alpha particle counts for every atom of radium-224 present. The health risk of radium-224 already includes the impact of these progeny in the body (the committed dose). Therefore while the gross alpha count may be at 15, the impact of the emissions is approximately related to Ra-224 at 5 pCi/L and the risk of 2.5×10^{-5} or excess mortality of one in 40,000.

H. Uranium

Uranium is not currently regulated by the 1976 radionuclides drinking water standards. The 1986 SDWA Amendments included uranium as one of the 83 contaminants listed to be regulated in drinking water. Two health effects are associated with exposure to uranium: cancer, resulting from the radioactive emissions, and kidney toxicity, resulting from the exposure to the uranium itself. The mass of the uranium is measured in micrograms (µg) while the radiation activity is measured in picoCuries. In 1991, EPA proposed a limit on uranium of 20 µg per liter (µg/L) to protect against kidney toxicity. The corresponding radioactivity limit was assumed to be 30 pCi/L. At that time, the Agency also proposed an MCLG of zero, based on absence of an identifiable dose-response threshold. EPA has reevaluated both the health impact level for kidney toxicity and the cancer risks from radiation and costs of regulation. As discussed briefly next, the best estimate of the cost per cancer case or cancer death avoided at 20 µg/L is relatively large. However, it should also be noted that this cost per case avoided excludes the reduction in kidney toxicity risk. At the present time, kidney toxicity for uranium must be treated as a non-quantifiable benefit (see appendix II, ''Health Effects'' and the Technical Support Document, EPA 2000a).

Today's NODA presents new information which supports a regulatory level of 20 µg/L, based upon protection from kidney toxicity. The derivation of this number is based on newer, more complete studies which have also resulted in a lower uncertainty factor, now 100-fold. In addition, the contribution to ingestion from drinking water relative to food or inhalation, the relative source contribution (RSC), has been recalculated. Drinking water is now considered to contribute 80 percent of a person's total daily uranium intake. This has the effect of permitting 80% of the reference dose (RfD) to be occupied by the drinking water component of diet. Both a lower uncertainty factor coupled with a lower food intake and higher proportional contribution from drinking water to total intake, might suggest the allowance of a higher regulatory limit; however, the more recent studies have offset this by revealing a lower observed effect level for kidney toxicity. The recalculated ''safe level'' for kidney toxicity remains 20 ug/L. The derivation of the uncertainty factor is based on the types of uranium health data available. EPA's policy for uncertainty factors for estimating LOAELs is summarized in 63 *FR* 43756 (August 14, 1998, ''Draft Water Quality Criteria Methodology Revisions: Human Health''). The derivation is described in appendix II.

Uranium is also classified as a carcinogen because of its radioactivity, and resulting emissions of ionizing radiation. The two most prevalent isotopes of uranium, uranium-234 and uranium-238, have very different half-lives which result in different amounts of radiation emitted per unit mass. Uranium-234 emits far more radioactivity than U–238, but is much less abundant in aquifer materials. Uranium-238 emits less radioactivity, but is far more prevalent than U–234. The average ratio of uranium activity to mass in rock is 0.68 picoCuries per µg. Issues involving the activity to mass ration follow later in this section.

Complicating the Agency's decision making about a uranium standard is the fact that the monetized benefit of kidney toxicity cannot be calculated at low concentrations because data are lacking in terms of the level at which kidney disease is actually manifested. The calculated 20 µg/L level represents an intake which would result in no effect over 70 years by drinking two liters per day. Conclusions based on the toxicity of uranium to the kidney are based primarily on observed adverse effects at the cellular level, but which have not necessarily resulted in a recognized disease. It is difficult to monetize the benefits derived in such a situation, and EPA does not currently have a methodology for estimating benefits for kidney toxicity from uranium. In the case of reducing the risk of non-fatal cancer resulting from uranium, EPA can monetize these benefits based on avoided ''cost of illness.'' This methodology is discussed in some detail in the Technical Support Document (EPA 2000a) and elsewhere (EPA 2000b).

Thus, for kidney toxicity, the benefit to society are considered as ''non-quantifiable benefits.'' Kidney toxicity avoidance benefits can be expressed in terms of ''avoidance of exposure,'' but cannot be quantified in terms of avoidance of a specified number of cases of disease or fatalities (and the associated monetized benefits), as with cancer. In addition, it appears that excess uranium concentrations tend to be found in small water systems. This suggests that while many systems will be impacted, the affected populations will be small. In terms of cancer risk, the number of statistical cases avoided for MCLs of 20 and 40 µg/L are low (0.2 to 2 cases for 20 µg/L and 0.04 to 1.5 cases for 40 µg/L). In terms of exposure avoided for kidney toxicity, around 500 thousand to two million persons are exposed above 20 µg/L and 50 thousand to 900 thousand persons are exposed above 40 µg/L. See appendix V and the Technical Support Document (EPA 2000a) for details.

Although uranium is treatable to levels well below the 1991 proposed MCL of 20 µg/L (5 pCi/L was evaluated), EPA determined that levels below 20 pCi/l were not feasible under the SDWA, after taking the costs of treatment into consideration. Section 1412(b)(6) of the 1996 SDWA permits the Agency to evaluate whether the benefits of regulating at various MCLs justify the costs. Possible exercise of this authority is discussed in more detail later in this section.

The MCLG that was proposed for uranium in 1991 was zero because of concerns about the lack of a known threshold for the carcinogenicity of ionizing radiation. The MCL that was proposed in 1991 (20 µg/L) was based on uranium kidney toxicity, as previously described. The corresponding risk of cancer at a concentration of 20 µg/l is now estimated to be approximately 5×10^{-5}. In terms of the cost per cancer case avoided and kidney toxicity reduced, the cost of regulation is still relatively high (see Table V–2 in appendix V).

In its current benefit-cost analysis, EPA also evaluated regulatory options of uranium MCLs of 40 µg/L and 80 µg/L. EPA estimates that a level of 40 µg/L would correspond to a cancer risk of approximately a 1×10^{-4}, thus providing cancer risk protection within the Agency's traditional risk range. A level of 40 µg/L would represent a slightly higher risk of kidney toxicity. At a level of 80 µg/L, the cancer mortality risk is approximately 2×10^{-4}, which is above the Agency's acceptable risk range. At 80 µg/L, the projected total national costs decrease significantly, but the estimates of cancer cases avoided drops to values close to zero (*i.e.,* benefits diminish considerably), indicating that the cost per cancer case avoided may not be signficantly lower at an MCL of 80 µg/L than at an MCL of 40 µg/L. From a health effects perspective, the toxic health effects on the kidneys or other organs or systems in the body at exposure levels of 80 µg/L is unknown and is four times EPA's best estimate of the ''safe level'' with respect to kidney toxicity.

In terms of benefits and costs, Table V–2 (appendix V) shows the range of compliance costs and net benefits for the uranium MCL options of 20 µg/L, 40 µg/L, and 80 µg/L. While annual compliance costs drop significantly as the MCL increases from 20 up to 80, the estimate of cancer cases avoided drops considerably also. In fact, it is not clear whether the cost per case avoided increases or decreases with increasing MCL because of the uncertainties involved. The corresponding estimate of cases avoided for MCLs of 20, 40, and 80 pCi/L are 2.1, 1.5, and 1.0 cases annually. Based solely on cancer incidence, it may be appropriate for EPA to consider using an MCL higher than 20 µg/L for uranium, since it is arguable that the benefits do not justify the costs at this level. However, in terms of kidney toxicity, 20 µg/L may be justified. EPA solicits comment on this issue.

Health effects from uranium also need to be evaluated in the context of the effects of various uranium species and their activity levels. A mortality risk level of 5×10^{-5} translates to 23 pCi/L of U–238, 22 pCi/L of U–235, and 21 pCi/L of U–234 in drinking water. An ''alpha spec'' analysis of the water would determine the fractions of each present and a sum of the fractions below 100% would meet the MCL. However, this level is costly to obtain. Doubling the radioactivity limit to 46, 44 and 42 pCi/L for U–238, U–235, and U–234 respectively corresponds to a mortality risk level of 1×10^{-4}, which may be more acceptable, considering the costs. Likewise, a doubling of risk to 2×10^{-4} would again double the picoCurie limits of each isotope to 92, 88, and 84 pCi/L respectively. However, at these higher risk levels, the calculated protective limit for toxicity to the kidney may be exceeded, depending upon the uncertainty factor used.

By contrast, the relative dissolved concentration of the various isotopes of uranium will differ markedly from one locale to another. The 1991 proposal utilized a conversion factor of 1.3 picoCuries per microgram of uranium to convert a 20 µg/L proposed MCL in mass units to activity units in picoCuries (however, 1991 cost estimates were based on the more accurate conversion ratio of 0.9). Analysis of NIRS data suggest that it would have been more appropriate to use the 1.3 pCi/µg conversion factor for total uranium where concentrations are less than 3.5 pCi/L and a 0.9 conversion factor for concentrations above 3.5 pCi/L (Telofsky 1999). Converting the derived MCL option of 20 µg/L from mass to activity using a ratio of 0.9 for levels above 3.5 µg/L yields approximately 18 pCi/L . A statistical evaluation of uranium data reveals that, based on a linear regression of the data, the appropriate activity based MCL for 20 µg/L would be 17.3 pCi/L rounded to 17 pCi/L. Coupled with the knowledge that the concentration of uranium isotopes varies from place to place, the Agency is led to consider an MCL that

is protective in any location against both toxicity (μg/L) and cancer (pCi/L), whichever presents the greatest risk. This can be determined by conducting isotopic analysis to determine the relative amounts of each isotope in any one water system. Once the concentration ratio is known, a regulated entity may choose to measure mass or activity and select whichever analytical method or methods is most cost effective.

For example, if the uranium standard were 20 μg/L or pCi/L, a gross alpha measurement screen for uranium could be used in the following way (EPA 2000c and 2000d). The analysis breaks out as follows: if the result is below the detection limit for gross alpha, neither uranium measurements by mass or activity would be necessary since neither 20 pCi/L nor 20 μg/L could be exceeded. If the gross alpha test is between 3 and 5.5 pCi/L, the mass of 20 μg/L could be exceeded if all the activity were coming from uranium-238. Therefore a fluroimetric test for uranium mass concentration (μg/L) or an alpha spectrometry test for the activities (pCi/L, converted to μg/L using standard isotopic conversion factors) of the various isotopes present would be necessary to determine the uranium concentration in μg/L. Because gross alpha tests may underestimate uranium by a factor of as much as 3.62, if the gross alpha test exceeded 5.5 pCi/L (20÷3.62), it is indicative that the 20 pCi/L limit may be exceeded, and an isotopic analysis must be done. EPA solicits comment on these issues.

EPA is soliciting information and comment on the data and the appropriate course of action the Agency should pursue, given the factors of risk levels, national cost, number of cancers avoided, cost per case, cost per death, and kidney toxicity. EPA is currently evaluating three regulatory options:

- Regulate at 20 μg/L and 20 pCi/L (protective of kidney toxicity using the Agency standard 100-fold uncertainty factor for this type of LOAEL with an associated cancer risk of approximately 5×10^{-5} or five in one hundred thousand);
- Regulate at 40 μg/L and 40 pCi/L (this is twice the safe level with respect to kidney toxicity and would reduce the margin of exposure between the effect level and the proposed regulatory standard; with an associated cancer risk level of 1×10^{-4} or one in ten thousand, which is the Agency's usual upper cancer risk target);
- Regulate at 80 μg/L and 80 pCi/L (this is four times the safe level with respect to kidney toxicity and would further reduce the margin of exposure between the effect level and the proposed regulatory standard; with an associated cancer risk level of 2×10^{-4} or two in ten thousand, which is above the Agency's usual upper cancer risk target).

In summary, EPA believes that 20 μg/L is feasible and is the Agency's preferred option, but may not have benefits that justify the costs. Were a higher level to be chosen, EPA would be exercising its discretionary authority under section 1412(b)(6) to select a level above the feasible level. It should be noted, however, that there may be considerable non-quantifiable benefits of avoiding exposure to cancer and kidney toxicity. Also, as discussed previously, there is little available data or information about the effects of kidney toxicity at relatively high exposures and thus, the benefits attributable to avoided illness cannot be quantified. Thus, the costs may be justified at a more stringent level than would be suggested in light of the currently quantifiable benefits alone. In addition, the Agency generally does not establish regulatory levels outside of its target risk range and, in fact, prefers to set levels at the more protective end of that range (1×10^{-6}), wherever possible. Further, we usually follow Agency guidelines on use of uncertainty factors. For these reasons, the Agency does not favor an MCL option of 80 μg/L, but solicits comment on this and the previously-described regulatory options, together with any supporting rationale or data commenters wish to provide.

I. Inclusion of Non-Transient Non-Community Water Systems

Today's document is soliciting comment on several approaches for covering Non-Transient Non-Community (NTNC) water systems. Although current radionuclide regulations do not apply to NTNC water systems, in 1991 EPA proposed extending the radionuclides NPDWRs to include them. Several approaches representing varying degrees of control are being currently considered for finalization because, although much more has been learned about NTNC water systems and their customers since 1991, there is still very little known about the distribution of the highest levels of radionuclides in their water supplies. Based on the Agency's occurrence estimates, control of some radionuclides in NTNC water systems may not present a meaningful opportunity for health risk reduction. This issue arises as a consequence of the 1996 Amendments to SDWA which allow the Agency to consider whether the benefits of extending coverage to this category of water systems would justify the costs (section 1412(b)(6)(A)) and whether such regulation would provide a meaningful opportunity for health risk reduction (section 1412(b)(1)(A)(iii)). The Technical Support Document (EPA 2000a) presents a ''what if'' analysis for costs and benefits for NTNCWSs.

While it is feasible to control radionuclides in NTNC water systems, extending regulation to these systems needs to be considered in light of the new SDWA requirements. This analysis requires a balancing of both quantitative and non-quantitative factors. Based on the risk modeling discussed in the Technical Support Document (EPA 2000a), the ninetieth (90th) percentile lifetime risk of cancer incidence in an individual consuming water from a NTNC water system in the absence of a regulation is not expected to exceed three in 100,000 [2]. The cost per cancer case avoided to achieve reductions in these risks would considerably exceed the hundred million dollar mark if coverage of the rule were extended to NTNCs. The associated cost per case avoided ranges are well above the range of historical environmental risk management decisions.

Relative to community water systems, NTNC systems have much lower associated risk levels because most individuals served by these systems are expected to receive only a small portion of their lifetime drinking water exposure from this source [3]. This conclusion holds even using very conservative assumptions for modeling the NTNC exposure scenarios. For example, in the case of school children exposure, the Agency has conservatively assumed all impacted children would attend only schools served by NTNC water systems, have twelve years of perfect attendance, and get half of their daily water consumption at school. For the average thirteen year old, this scenario implies half of a liter (over sixteen ounces) every school day. Even under this very conservative set of assumptions, the water consumed by an individual student is estimated to represent less

[2] Throughout this discussion, exposures and risks were only considered for populations potentially addressable by regulation, i.e. systems with radionuclides present in excess of the proposed MCLs for community water systems.

[3] It is important to remember that the risk assessment for NTNC water systems does not consider exposure risk from private wells which may serve some customers at home. EPA recognizes that the radionuclide levels in some private wells may exceed the MCLs for CWSs, but this is a non-controllable factor since private wells are not regulated by the Safe Drinking Water Act.

than five percent of lifetime consumption [4].

On the other hand, much remains to be learned about the NTNC water systems. Little is known about the extent to which users of the different NTNC water systems use other water systems. It is conceivable that some areas in the country exist where individuals are subjected to exposure at a number of different non-community systems (e.g., day care center plus school plus factory, etc.). In such circumstances, individuals would be exposed to proportionately higher risks if the water systems all had elevated levels. For some individuals, the exposures could approach levels observed in corresponding community water systems.

This concern is somewhat alleviated by the fact that NTNC systems generally serve only a very small portion of the total population. For example, over ninety-five percent (95%) of all school children are served by community water systems, not NTNC systems. Only a small percentage of children are served by NTNC water systems and, of that group, less than one percent (or less than one in 2000 of the overall student population) would be expected to have individual radionuclides in their water above the proposed regulatory levels. Likewise, less than 0.1 percent of the work force population receive water from an NTNC water system. With such low portions of the total population exposed to any particular type of NTNC system, the overall likelihood of multiple exposure cases in the NTNC population should also be small.

Nevertheless, because children are more sensitive to radionuclides exposure [5], multiple water system exposure scenarios were considered in the modeling effort [6]. Tables III–2 and III–3 present individual risk estimates for average and most sensitive populations among the NTNC water systems. All of these factors contributed to the Agency's evaluation of whether or not to extend regulation to NTNC water systems and are discussed further in the appendix.

Review of Table III–3 shows that 90th percentile individual risk patterns for NTNC water system users exposed to uranium or radium-226 are relatively low. These 90th percentile figures represent risks estimated using the previously described conservative exposure scenarios, maximum water consumption patterns, and what are effectively 99.9th percentile occurrence estimates [7] from the NIRS data. Even with these conservative factors, lifetime cancer risks do not exceed the one in 10,000 level which has traditionally formed the upper bound of allowable risk in Agency decision-making.

TABLE III–2.—SELECTED SECTOR AND OVERALL NTNC, INDIVIDUAL RISK PATTERNS

[Lifetime cancer risk for individuals using average consumption levels]

Sector	Alpha	Radium 226	Radium 228	Uranium
School Students	2×10^{-5}	$0.9–1.1\times10^{-5}$	$2–3\times10^{-5}$	$0.7–0.9\times10^{-5}$
Day Care Children	$2–3\times10^{-5}$	$0.6–0.7\times10^{-5}$	$2–3\times10^{-5}$	$0.8–1x10^{-5}$
Factory Worker	$1–2\times10^{-5}$	1×10^{-5}	$2–3\times10^{-5}$	1×10^{-5}
All NTNC Water Systems	$0.3–0.4\times10^{-5}$	$0.2–0.3\times10^{-5}$	$0.5–0.7\times10^{-5}$	0.2×10^{-5}

Note that Radium 224 is being used as a surrogate for alpha emitters.

TABLE III–3.—SELECTED SECTOR AND OVERALL NTNC, INDIVIDUAL RISK PATTERNS

[Lifetime cancer risk for individuals using 90th percentile consumption levels]

Sector	Alpha	Radium 226	Radium 228	Uranium
School Students	$0.5–0.6\times10^{-4}$	0.3×10^{-4}	$0.6–0.7\times10^{-4}$	0.3×10^{-4}
Day Care Children	$0.7–0.8\times10^{-4}$	0.2×10^{-4}	0.6×10^{-4}	$0.3–0.4\times10^{-4}$
Factory Worker	$0.5–0.6\times10^{-4}$	$0.3–0.4\times10^{-4}$	$0.7–0.8\times10^{-4}$	$0.5–0.6\times10^{-4}$
All NTNC Water Systems	0.2×10^{-4}	0.1×10^{-4}	$0.2–0.3\times10^{-4}$	$0.1–0.2\times10^{-4}$

Radium-228 and gross alpha pose approximately twice the threat of the other two radionuclides. While sensitive individual estimates still fall below the one in ten thousand range, they may not in a scenario in which other drinking water sources are similarly high. However, as stated previously, the Agency views it as somewhat improbable that this system overlap occurs to a significant extent. Nevertheless, it could be an issue in some rural communities. While such infrequent and highly site-specific conditions are very difficult to address efficiently in a National-level regulation, the Agency believes that exempting NTNC water systems from the radionuclide NPDWRs, given the degree uncertainty about the occurrence levels and extent of system customer overlap, may be inappropriate. For these reasons, the Agency believes it may be appropriate to take a somewhat different approach with respect to NTNC water systems than previously practiced.

EPA is considering extending partial coverage of the radionuclide NPDWRs to NTNC water systems under several possible scenarios. Under the first three options, NTNC systems would be subject to targeted radionuclide monitoring requirements, in which selected NTNC systems would follow the radionuclides monitoring requirements for community water systems. The targeting strategy would be based on small community water system occurrence for the same radionuclides.

[4] Day care exposure is similarly conservatively estimated by assuming five years of perfect attendance, fifty weeks per year and five days per week. Factory workers are assumed to perfectly attend and work at the same facility for forty-five years. All of these assumptions are under continuing investigation and will likely be revised downward in the future as the Agency is able to gather further information.

[5] As an example, the lifetime risk per pCi/L of Ra–228 to a child whose exposure begins under the age of five is more than ten times greater than the lifetime risk of an individual whose exposure begins between the ages of 25 and 30.

[6] For example, the possibility that a child spent five years in a day care center, then twelve years in schools, and then forty-five years working in a factory served only by NTNC water systems with high radionuclide levels.

[7] In other words, the expected number of NTNC systems nationwide would be less than twenty. It is because these levels are so rare that the level is fairly speculative. As discussed in the appendix, the Agency believes its estimates of occurrence are reasonable, based on levels observed in small ground water community water systems.

The States (or primacy agency) would determine which NTNC systems are likely to be using contaminated water systems, based on CWS monitoring results. These systems may then be required to monitor and meet CWS MCLs for gross alpha and combined radium and other relevant radionuclides. EPA is considering:

- Requiring targeted NTNC systems to monitor and meet the CWS MCLs for all or selected radionuclides, where targeting is determined by the State based on whether the NTNC system is using source water for which CWSs have reported MCL violations for radionuclide in question;
- Requiring targeted NTNC systems to monitor and post notice if the system exceeds the CWS MCL, using the same definition of targeting as in the first option;
- Issuing guidance that recommends that targeted NTNC systems monitor and meet the CWS MCLs, using the same definition of targeting as in the first option.

The Agency requests comments on these options and any supporting rationale for such a decision. The Agency is also interested in receiving comments on other options such as extending full coverage of the rule to NTNCs and not extending any aspect of the radionuclides NPDWRs to NTNC systems. The Agency will decide, as part of the upcoming finalization of the 1991 proposal, to incorporate what it considers to be the most appropriate option in view of available the data and information.

J. Analytical Methods

Today's NODA provides a brief update of the methods-related items which have occurred since the 1991 proposed rule. For a more thorough discussion of the analytical methods updates, the public is referred to appendix III of this NODA and to the Analytical Methods section of the Technical Support Document for the Radionuclides Notice of Data Availability (EPA 2000a).

1. Radionuclides Methods Updates

On July 18, 1991 (56 FR 33050; EPA 1991), the Agency proposed to approve fifty-six methods for the measurement of radionuclides in drinking water (excluding radon). Fifty-four of the fifty-six were actually approved in the March 5, 1997 final methods rule (62 FR 10168; EPA 1997a). In addition to these fifty-four, EPA also approved 12 radiochemical methods, which were submitted by commenters after the 1991 proposed rule. Currently, an overall total of 89 radiochemical methods are approved for compliance monitoring of radionuclides in drinking water. These methods are currently listed in 40 CFR 141.25.

The March 5, 1997 **Federal Register** also approved suitable calibration standards for the analysis of gross alpha-emitting particles and gross beta-emitting particles. These specific methods-related items are addressed in some detail in the Technical Support Document for the Radionuclides Notice of Data Availability (EPA 2000a) and in even greater detail in the 1997 final methods rule (62 FR 10168, EPA 1997a) and the 1991 proposed rule (56 FR 33050; EPA 1991).

This NODA also notifies the public about the use of the gross beta method for the screening of radium-228. In the 1991 proposed rule (56 FR 33050; EPA 1991), the Agency would have allowed the use of the gross beta-particle activity method to screen for the presence of radium-228 at the proposed radium-228 MCL of 20 pCi/L. For the combined radium-226 and 228 standard of 5 pCi/L (the current standard), the Agency can not recommend the use of the gross beta-particle activity method for screening of radium-228. Instead, a specific analysis for radium-228 would be necessary. Although several methods are currently approved for the analysis of radium-228 in drinking water, the Agency requests comments from the public and supporting documentation regarding other radium-228 methods or method variations which may be able to reach greater sensitivity at the 2 pCi/L level.

2. The Updated 1997 Laboratory Certification Manual

In the 1991 proposed rule (56 FR 33050; EPA 1991), EPA cited the 1990 laboratory certification manual's guidance for sample handling, preservation, holding time and instrumentation. In response to the 1991 proposed rule, a commenter questioned why the holding time for radioactive iodine was six months, when the half-life of iodine-131 is eight days. The Agency recognized this typographical error and changed the holding time to eight days in the updated 1997 certification manual (EPA 815–B–97–001; EPA 1997d). Table III–2 in the appendix shows the updated guidance for sample handling, preservation, holding times, and instrumentation that appeared in this manual. Table III–2 in the appendix also includes additional recommendations for radiochemical instrumentation (footnoted by the number 6). The Agency is seeking comment about the additional recommendations found in Table III–2.

3. Recommendations for Determining the Presence of Radium-224

To determine the presence of the short-lived radium-224 isotope (half life ~3.66 days), the Agency recommends using one of the several options discussed in the appendix III. Although these measurement options are only recommendations, the Agency strongly urges water systems to check for the presence of radium-224 in their drinking water supplies. Comments are solicited from the public about the options listed in appendix III or any other appropriate methods of detection.

4. Cost for Radiochemical Analysis

Revised Cost Estimates for Radiochemical Analysis.

In the 1991 proposed rule (56 FR 33050; EPA 1991), EPA cited cost estimates for radiochemical analyses. The Agency updated these costs estimates by surveying a small number of radiochemical laboratories (no more than 9 laboratories) (EPA 2000a). The revised cost estimates are shown in Table III–3 (appendix III). Because this information is based on a limited number of laboratories, the slight increase in costs from 1991 to 1999 may be due to either statistical uncertainty or possibly others factors such as inflation.

After the 1991 proposed rule, there were several comments regarding analytical costs. One commenter stated the costs of analysis for radium-226, radium-228, radioactive strontium and total strontium were unrealistically low. The Agency can neither agree nor disagree. As noted earlier, EPA revised the cost estimates for radiochemical analysis. Both the 1991 costs estimates and the revised cost estimates were from small surveys and may not be truly representative of the actual costs for some radiochemical analyses. Comparison of the estimated costs from 1991 with the revised cost estimates indicate the costs for some analyses to similar, while for other analyses, cost do appear to be higher. The Agency solicits comments and factual data that would clarify this matter.

Several commenters stated that small systems, which are likely to need only a few analyses, cannot take advantage of rates for volume sample analyses. The Agency agrees that individual small systems may not be able to take advantage of lower bulk analysis costs. To alleviate cost burdens, small systems may want to consider pooling their analytical needs with other small systems to negotiate for bulk rates.

5. Externalization of the Performance Evaluation Program

Due to resource limitations, on July 18, 1996 (61 FR 37464; EPA 1996b), EPA proposed options for the externalization of the PE studies program (now referred to as the Proficiency Testing or PT program). After evaluating public comment, in the June 12, 1997 final notice EPA (62 FR 32112; EPA 1997b):

> decided on a program where EPA would issue standards for the operation of the program, the National Institute of Standards and Technology (NIST) would develop standards for private sector PE (PT) suppliers and would evaluate and accredit PE suppliers, and the private sector would develop and manufacture PE (PT) materials and conduct PE (PT) studies. In addition, as part of the program, the PE (PT) providers would report the results of the studies to the study participants and to those organizations that have responsibility for administering programs supported by the studies.

EPA has addressed this topic in public stakeholders meetings and in some recent publications. For more information, readers are referred to the aforementioned Federal Register notices. More information about laboratory certification and PT (PE) externalization can be accessed at the OGWDW laboratory certification website under the drinking water standards heading (www.epa.gov/safewater). At this time, it is difficult to ascertain how and if externalization of the PT program will affect radiochemical laboratory capacity and the cost of radiochemical analyses. In the absence of definitive cost estimates, the Agency solicits public comments on this subject.

6. The Detection Limits as the Required Measures of Sensitivity

In 1976, the National Primary Drinking Water Regulations defined the detection limit (DL) as ''the concentration which can be counted with a precision of plus or minus 100 percent at the 95 percent confidence level (1.96 σ, where σ is the standard deviation of the net counting rate of the sample).'' Table III–4 in the appendix cites the detection limits or the required sensitivity for the specific radioanalyses that were listed in the 1976 rule and are also cited in 40 CFR 141.25. In the 1991 proposal (56 FR 33050; EPA 1991), EPA proposed using the method detection limit (MDL) and the practical quantitation level (PQL) as measures of performance for specific radioanalytical methods. Acceptance limits based on the PQLs, which were derived from performance evaluation studies, were also proposed in the 1991 rule. Some commenters found the use of acceptance limits confusing and the relationship to the actual method performance was not clear. With perhaps the exception of uranium, the Agency will not go forward with the proposed acceptance limits, PQL, or MDL. Because uranium has never been regulated, it did not have a detection limit in the CFR and one has never been proposed. In 1991, EPA did propose a PQL of 5 pCi/L with an acceptance limit of +/− 30%. Although it is believed that a detection limit for uranium would be very similar to the PQL, because a detection limit has never been proposed, the Agency may have to adopt the PQL for uranium until a detection limit is proposed. For the other radionuclides, which are regulated, the Agency believes the current 1976 detection limit requirements are most appropriate. The existing definition of the detection limit takes into account the influence of various factors (efficiency, volume, recovery yield, background, counting time) that typically vary from sample to sample. Furthermore, the detection limit is computed for each individual sample and does not represent an idealized set of measurement parameters. Therefore, the detection limit reflects the expected random uncertainty for a given sample analysis.

7. Performance Based Measurement System

On October 6, 1997, EPA published a Notice of the Agency's intent to implement a Performance Based Measurement System (PBMS) in all of its programs to the extent feasible (62 FR 52098; EPA 1997c). EPA is currently determining how to adopt PBMS into its drinking water program, but has not yet made final decisions. When PBMS is adopted into the drinking water program, its intended purpose will be to increase flexibility in laboratories in selecting suitable analytical methods for compliance monitoring, significantly reducing the need for prior EPA approval of drinking water analytical methods. Under PBMS, EPA will modify the regulations that require exclusive use of Agency-approved methods for compliance monitoring of regulated contaminants in drinking water regulatory programs. EPA will probably specify ''performance standards'' for methods, which the Agency would derive from the existing approved methods and supporting documentation. A laboratory would be free to use any method or method variant for compliance monitoring that performed acceptably according to these criteria. EPA is currently evaluating which relevant performance characteristics under PBMS should be specified to ensure adequate data quality for drinking water compliance purposes. After PBMS is implemented, EPA may continue to approve and publish compliance methods for laboratories that choose not to use PBMS. After EPA makes final determinations about the implementation of PBMS in programs under the Safe Drinking Water Act, the Agency would then provide specific instruction on the specified performance criteria and how these criteria would be used by laboratories for compliance monitoring of SDWA analytes.

K. Monitoring

1. Features of Today's NODAA

EPA's 1976 regulations for radionuclides in drinking water contained separate monitoring requirements for radiums, alpha emitters, and man-made beta and photon emitters. In 1991, EPA proposed to make modifications to the 1976 regulations to expand the scope of coverage to include non-transient non-community water systems, to change the monitoring location and monitoring frequencies, and to incorporate monitoring requirements for radon and uranium. A summary of the 1976 requirements and proposed changes in 1991 are presented in this section.

In today's document EPA is suggesting merging the current requirements and the 1991 proposed requirements into a unified system which is consistent with the Standardized Monitoring Framework (SMF), the current rule, and the proposed changes which are still germane. EPA is soliciting comment on monitoring at the entry points to the distribution system, as proposed in 1991, to ensure equal protection for all customers, under the sampling schedule of the SMF. EPA believes that this will increase consistency between monitoring requirements for radionuclides and the other regulated contaminants. As described in section III, part I (''Inclusion of Non-Transient Non-Community Water Systems''), EPA is considering several options for NTNC water systems, some of which would require monitoring. Because some monitoring provisions of the 1991 proposal were based on the proposed MCLs and not the current MCLs, their application to the current levels may entail a slightly different construct than in 1991. To the extent comments reveal aspects of the framework which need to be addressed separately from the 1976 rule or 1991 proposal, EPA will return

to the current rule's framework and propose to correct deficiencies via a proposal which will address analytical method issues as well, such as methods for Ra-224, Po-210 and Pb-210.

2. Standardized Monitoring Framework

Per the current rule, once the contaminant concentration in the water is established by the average results for four consecutive quarterly samples or by suitable grandfathered data, a system would be categorized as to whether it was above or below 50% of the MCL for that contaminant. In accordance with the SMF, as proposed in 1991, EPA is suggesting a tiered frequency for alpha emitters, combined radium, and uranium. This would entail one sample every three years for compliant systems with annual average contaminant levels above 50% of the MCL. For compliant systems with annual average levels below 50% of the MCL for these contaminants, one sample would be required every 6 years; non-detects, one sample every 9 years. EPA believes this system would align with the standardized monitoring framework, and would provide regulatory relief for systems with low to very low levels (without needing a waiver as called for in 1991). It would also provide more careful screening for systems with multiple sources of water entering the distribution system, by requiring a sample at each of these points to be protective of all of the customers within each water system. For beta particle and photon radioactivity, EPA is considering requiring four consecutive quarters every four years, the requirement under the current rule, for vulnerable systems because of their proximity to contamination sources.

EPA believes this monitoring scheme is less burdensome on systems in the long term than either the existing or proposed regulations. It provides slightly more protection than the current rules by more frequent monitoring for contaminants above half the MCL, and less frequent monitoring for the vast majority of systems below half the MCL. EPA believes this is more realistic and less burdensome, while recognizing the potential for variability of naturally occurring radionuclide levels in ground water over time. Such variability (*e.g.,* a change in pH by nitrogen fertilizer application leading to a higher solubility of radium) was seen in New Jersey and is further discussed in appendix I.

Small ground water systems comprise the vast majority of systems with radionuclide contamination problems. Since most small systems have only one entry point, an entry point monitoring requirement will not have an impact. For systems with radium above 50% of the MCL, with three or fewer entry points to the distribution system, monitoring at each entry point once every three years would have an equal or smaller impact (in terms of the number of samples analyzed) than the 1976 requirement of monitoring four times every four years.

3. Entry Point Monitoring

EPA recognizes that sampling conducted at the monitoring location specified in the current rule may under-represent the risk to some consumers. Results can vary depending on the usage of each water source and changes in the monitoring location within the distribution systems. For systems with more than one water source, monitoring within the distribution system may yield different results. In the current rule, sampling is conducted ''at a free flowing tap'' within the distribution system. The current rule also recognizes the potential problems by providing that systems with two or more sources of water with different concentrations of radionuclides monitor the source water, as well as water from a free flowing tap, when ordered by the State. Entry point monitoring, a feature of more recent NPDWRs, provides a better measure of water quality for residents near the start of the distribution system than monitoring within the distribution system (e.g., the middle of the system) where water is subject to blending if there are other sources. Therefore, EPA proposed in 1991 to change the location for compliance monitoring to the entry points to the distribution system, consistent with other NPDWRs.

4. Grandfathering Data

In the implementation guidance, which will be available on OGWDW's home page (http://www.epa.gov/ogwdw), EPA is suggesting that samples within the latest compliance period, beginning June, 1996, be eligible for use in determining the baseline for monitoring frequency. While EPA prefers this approach, others may be possible. Please provide data and supporting rationale if you comment on this issue. The application of this provision would extend to all classes of radionuclides for which data are available.

The Agency solicits comment on two different approaches for the beta monitoring requirements. The first option is to not allow any reduced monitoring and the second would be to allow reduced monitoring similar to the alpha emitters. If systems must collect samples on a quarterly basis (no reduced monitoring) then grandfathering of data is not necessary. If the Agency decides to allow reduced monitoring, the Agency believes that States may use historical data to supplement their vulnerability assessments but should not use grandfathered data to satisfy the initial monitoring requirements because a sufficient baseline needs to be established in those systems considered vulnerable to man-made radioactivity.

Grandfathered data would be used to comply with the initial monitoring requirements for gross alpha, radium-226/228, and uranium, under some circumstances. Data collected after June 1996, during the most recent compliance period, would be considered for grandfathering. It would be the State's responsibility to determine if grandfathered data is sufficient to satisfy the initial monitoring requirements established by this rule. At the State's discretion, systems with one entry point to the distribution system (EPTDS) could use grandfathered data to satisfy the initial monitoring requirements. Systems that have multiple entry points to the distribution system could use grandfathered data collected after June 1996 to satisfy the initial monitoring requirements, provided that the data were collected at the EPTDS.

EPA is also considering that, at the State's discretion, systems with up to three entry points to the distribution system could also use grandfathered data to satisfy initial monitoring requirements, even if not collected from EPTDS, if the State makes a written finding that the circumstances of the system and their review of historic data justify such action. While the Agency cannot prescribe every possible scenario that a State may encounter, an example of circumstances that might support such a finding could be: a system that has three wells (and EPTDS), that are simply from different parts of a well-field, using the same aquifer, with good historical data showing uniform, low to no radionuclide occurrence from all wells, perhaps from the raw water as well as distribution system samples.

5. Sample Compositing

In general, compositing of samples is an effective means of decreasing analytical costs to systems. Compositing is permitted for alpha emitters and beta and photon emitters in the current rule. It is also allowed for radium-226 and -228 to the extent gross alpha was used as a screen for Ra-226 and, in turn, Ra-228. In the 1991 proposal, gross beta compositing was prohibited. Compositing for other nuclides was

allowed for up to five sampling points within one system; if the result for the composite was more than 3 pCi/l for any nuclide, individual non-composited samples were to be analyzed. This provision stemmed from the lowest MCL in the 1991 proposal, adjusted gross alpha at 15 pCi/l. Because of the possibility that one of the five samples taken might be at 15 pCi/L even if the other four were at zero, the rule envisioned one fifth (3 pCi/L) of the MCL as the maximum allowed result to assure no single well could exceed the MCL. The principle of limiting the result of five composited samples from separate entry points to one fifth of the MCL (or four composites to one fourth the MCL etc.) is still valid as a general matter, and should be followed whenever compositing is done.

A 3 picoCurie limit in the proposal would have been conservatively protective for a five sample composited for the proposed separate MCLs radium-226 and radium-228 at 20 pCi/L each, since ⅕ of each MCL is greater than 3 pCi/L. However, because EPA is considering retaining the current radium standard at 5 pCi/L combined, adding the results of five composited entry points samples for Ra-228 to the results of 5 composited entry point samples of Ra-226 must yield a result of one tenth (1/10) of the MCL to be assured that the combined Ra-226 and Ra-228 concentration could not exceed the MCL at any one entry point. Because one tenth of the MCL (0.5 pCi/L) is below the detection limit for Ra-226 and Ra-228, compositing of separate entry points cannot apply in case of Ra-226 or Ra228. However, annual compositing of samples from the same entry point may apply.

EPA requests comment on the feasibility and practical utility of compositing separate entry points (spatial compositing) versus compositing samples over time from the same entry point (temporal compositing). EPA believes that the use of one or the other (but never both simultaneously) may be appropriate under some circumstances. Greater certainty in the analytical result is obtained by taking the average of four separate (non-composited) results from one sampling location than by using a single result of composited samples. However, where an MCL is sufficiently above the detection limit such that analytical results are not subject to significant error near the MCL, compositing may be a cost saving measure. Additionally, when historical data indicate that contaminant levels are negligible (e.g., non-detects) for a water system, compositing among wells in a system or between systems having one point of entry may be advisable at State discretion. However, because of the costs of re-sampling and re-analysis of all points to confirm an MCL violation, or to qualify for decreased monitoring, it may not be in the systems best interest to initially composite in the absence of historical data.

6. Increased and Decreased Monitoring

Additionally, the Agency is considering having the final rule allow systems that are currently on a reduced monitoring schedule to remain on that reduced schedule as long as the system qualifies for reduced monitoring based on the most current analytical result. Systems for which the most current analytical result indicates a higher level than allowed for that monitoring schedule would resume monitoring at a frequency consistent with the most recent result. For example, a system with an annual average below half of the MCL could reduce monitoring to one sample every 6 years. If, while on this reduced frequency, the system collects a sample with an analytical result above half the MCL, the system would have to increase monitoring again to once every 3 years. It could revert to its previous reduced frequency of once every six years if the subsequent analytical result (of the sample taken three years later) was less than half the MCL. EPA also believes it is prudent to require quarterly samples to be collected at least 60 days apart, to capture seasonal variations. EPA solicits comment on this and other monitoring provisions.

7. Compliance Determinations

Compliance would be determined based on the annual average of quarterly samples collected at each entry point for all classes of radionuclides. If the annual average of any entry point exceeds an MCL, the CWS would be in violation. If NTNC systems are subject to MCLs, the same situation would apply to them. An immediate violation would occur for any sample analytical result or combination of sample analytical results that would place the system in violation before four quarters of data are collected (e.g., the first sample is greater than 4 times the MCL or the average of the first two samples is greater than twice the MCL). If a system has a sample that exceeds the MCL while on reduced monitoring, it would need to begin quarterly monitoring the following quarter. Compliance would be based on the average of the four consecutive quarters of data beginning with the initial result that exceeded the MCL. If a system fails to collect all samples required during any year, compliance would be calculated based on available data. Under the current rule, quarterly monitoring is continued until the annual average concentration no longer exceeds the MCL or until a monitoring schedule as a condition to a variance, exemption, or enforcement action becomes effective.

The following is a summary of certain features of the monitoring requirements for each regulated radionuclide or radionuclide group.

8. Combined Radium-226 and -228

Standardized monitoring: EPA contemplates application of the standardized 3, 6, 9 year cycles to the combined radium standard depending on whether analytical results for compliant systems are greater than (3) or less than (6) half the MCL or are a non-detect (9), as previously discussed. Decreased and increased monitoring would be based on the result of the analysis of the most recent required sample(s).

Entry point monitoring: Monitoring at entry points to the distribution system would be a requirement per the 1991 proposal unless EPA receives comments with compelling reasons for not doing so.

Sample Compositing: To decrease the burden of monitoring at distribution entry points, EPA is contemplating allowance of sample compositing for radium-226 or radium-228, but only when results will be indicative of the true level at a single entry point (temporal compositing). According to the proposal, systems would be required to analyze for Ra-228 separately from gross alpha or Ra-226. The Agency sees no reason why four separate samples from a single entry point (collected 60 days apart) could not be either analyzed and averaged or composited in the laboratory and analyzed, to determine future monitoring frequency. Therefore, EPA is suggesting for public comment that systems take the average analytical results from four individual samples, or the composite of four samples from each entry point, in order to determine future frequency.

As discussed previously, EPA does not contemplate allowing compositing of multiple entry points for derivation of combined radium results. EPA requests comment on any element of the foregoing discussion.

9. Alpha Emitters

Standardized monitoring: Same as for combined radium (see previous discussion).

Decreased and increased monitoring: Same as for combined radium (see previous discussion).

Entry point monitoring: Same as for combined radium (see previous discussion).

Sample Compositing: The current rule allows compositing of four samples in a laboratory or the averaging of four separate analyses. Under the 1991 proposal and the current rule, systems would be allowed to composite annually for samples taken from single entry points (temporal compositing) and, under the 1991 proposal, to composite samples representing up to five entry points with a six month holding time (spatial compositing).

10. Uranium

Standardized monitoring, monitoring frequency, and entry point monitoring: Same as for combined radium (see previous discussion).

Sample Compositing: For systems with gross alpha levels that are high enough to warrant uranium monitoring, annual composites for a single entry point would be allowed. Compositing of five samples representing five entry points would be permitted. If the result was greater than one fifth of the MCL, the individual samples would have to be analyzed or re-sampling and analysis of the new individual samples would have to occur.

11. Beta and Photon Emitters

Standardized monitoring framework, decreased monitoring: Monitoring for beta and photon emitters would follow the same schedule as in the current rule. Decreased monitoring is not envisioned for beta and photon emitters since only vulnerable systems would monitor, although EPA is taking comment on the possibility of decreased monitoring according to the standardized monitoring framework as outlined previously.

Screening levels: EPA recognizes certain problems with the current and proposed system. The proposed requirement of a 30 pCi/L screen for gross beta and photon emitters had the effect of no longer requiring Sr-90 monitoring because the proposed limit was above the screen of 30 pCi/L. Under the current MCL, there is only one contaminant that has a concentration limit near the 50 pCi/L screening level (Ni-63). There are five contaminants with concentration limits at or near 30 pCi/L and seven with limits below thirty. A screen level of 50 pCi/L would potentially miss the 12 contaminants with concentration limits below 50 pCi/L and a screening level of 30 pCi/L would potentially miss the 7 contaminants with concentration limits below 30 pCi/L. Systems that are drawing water from sources with known beta particle and photon radioactivity are required to use a screening level of 15 pCi/L under the current rule. The 1991 proposal retained this feature.

EPA thinks it is advisable to retain the proposed monitoring for sites within 15 miles of a source of beta photon emitters. The screening level in the original rule only affected surface water systems serving over 100,000, or other systems at State discretion, and the screening level for gross beta reflected this limited regulation. However, a known source of particular beta and photon emitters should be monitored for the specific radionuclides present at that source which may be a health concern below the screen, but would not be triggered by the screen. EPA would give States discretion on requiring specific monitoring for contaminants from specific sources.

In addition, a 15 pCi/l screening level is currently required for systems using water contaminated by effluents from nuclear facilities. These systems may also be required by the State to monitor for individual nuclides on a case by case basis. Since both screens may miss radionuclides of concern, EPA believes this issue is important and may need to be addressed in a future proposal. In addition, since many beta particle and photon emitters have half-lives that are too short to be detected under the current holding time, the issue of sample holding time may have to be re-visited in a future proposal.

Holding time: Another issue has a bearing on the screening level for which EPA is requesting comment. There are a significant number of beta and photon emitting radionuclides with short half lives, including those 13 nuclides of concern below the screening levels being considered. Because annual sample compositing is allowed under the current rule for beta and photon emitters, a screen above 30 pCi/L would detect a greater number of nuclides which (due to decay) may have been above a screen of 50 at the time of sampling, but are now between 30 and 50 pCi/L by the time of analysis. A screen level at 30 pCi/L would be more sensitive a screen for beta particle and photon radioactivity. The Agency requests comment on the selection of screening levels.

Sample Compositing: Annual compositing is permitted for beta and photon emitters in the current rule. In addition, for systems utilizing water contaminated by effluents from nuclear facilities, a quarterly compositing of five consecutive daily samples was to be analyzed for iodine-131, with more frequent monitoring at State discretion if it was detected in the finished water. EPA believes this compositing for single nuclide determinations is still valid. However, the 1991 proposed rule excluded compositing for beta and photon emitter samples. It also limited holding times to 6 months for single samples or 12 months for composites per the lab cert manual. A screen above 50 pCi/L , but with a sample holding time of 6 months without compositing may be a reasonable approach, considering screening options, holding times, and compositing issues. EPA solicits comment on these beta and photon emitter monitoring issues.

Entry point monitoring: EPA solicits opinion on requiring beta photon monitoring at entry points to the distribution system for vulnerable systems. EPA believes this is appropriate as it is for other nuclides, especially as an early warning of contamination from a localized source of man-made beta photon emitters.

12. Monitoring for Non-Transient Non-Community (NTNC) Systems

If EPA finalizes an option that requires monitoring for some or all NTNC systems, EPA wishes to make the monitoring requirements consistent between CWSs and those NTNC systems required to monitor. See the previous discussion for CWS monitoring for details. As with CWSs, monitoring under the SMF would be required at entry points to the distribution system, based on a nine-year cycle, consisting of three, 3-year monitoring periods, with provisions for reduced monitoring as appropriate. If the radionuclides NPDWRs for CWSs are fully extended to NTNCWSs, the monitoring frameworks would be the same.

Table III–4 summarizes the monitoring frequencies for CWSs and NTNC systems, under the options that require monitoring:

TABLE III–4. COMPARISON OF THE MONITORING FRAMEWORKS: THE EXISTING RULE, THE 1991 PROPOSAL, AND THE APPROACH DESCRIBED IN THE NODA

Current rule (1976)	1991 proposal	2000 NODA
Radium Alpha Emitters and Uranium		
Initial baseline: 4 consecutive quarterly samples	Initial baseline: one sample per year for 3 years.	Initial baseline: 4 consecutive quarterly samples taken within 3 years from effective date or grandfathered data in previous compliance period.
If average > MCL=treat, etc	Same as 1976	Same as 1976.
If one or more samples >MCL, do quarterly sampling until average < MCL.	Same as 1976	Same as 1976.
If >50% of MCL, 4 Quarters every 4 years	If >50% of MCL, one sample every 3 yrs or waiver to every 9 yrs.	Same as 1991 with no waiver.
If < 50% of MCL, 1 sample every 4 years	If <50% of MCL, one sample every 3 yrs or waiver to every 9 years.	If < 50% of MCL, one sample every 6 years.
If no detect, 1 sample every 4 years	If no detect, one sample every 3 yrs or waiver to every 9 yrs.	If no detect, one sample every 9 years.
Beta and Photon Emitters		
Quarterly gross beta monitoring. Vulnerable systems and surface water systems > 100,000 pop. Screen of 50; screen of 15 for contaminated water I–131 quarterly, Sr–90 and H–3 annual Sr–89 and Cs134 if above 15.	Vulnerable systems (surface and ground water) within 15 miles of source of man made emitters do gross beta screen proposed at 30.	Same as 1991:Vulnerable systems within 15 miles of source of man made emitters will monitor with screen of 50 or 30. Same as 1976: Screen of 15pCi/L for systems using contaminated waters. Same contaminants as 1976 with corrections per NBS HB–69.

13. Polonium-210 and Lead-210

Risk estimates based on Federal Guidance Report No. 13 indicate that current screening levels for gross alpha and gross beta may not be adequate to capture all contaminants of concern. Specifically, based on the new health-effects information contained in FGR–13 (EPA 1999b), EPA believes it may be appropriate to require systems to perform isotopic analyses for additional radionuclides that may present a significant threat to human health. As a result of this information, EPA is requiring some systems to do analyses for polonium-210 (a naturally occurring alpha emitter) and lead-210 (a naturally occurring beta emitter) under the Revisions to the Unregulated Contaminant Monitoring Regulation (UCMR) (64 FR 50556, Friday, September 17, 1999), to be implemented after analytical methods for these contaminants have been approved.

14. Reporting Requirements

On May 13, 1999, EPA proposed subpart Q (64 FR 25964) to revise the minimum requirements public water systems must meet for public notification of violations of NPDWRs and other situations that pose a risk to public health from the drinking water. EPA anticipates the final Public Notification Rule (PNR), under part 141, subpart Q to be published in early 2000. After the final PNR is published, subsequent EPA drinking water regulations that affect public notification requirements will amend the PNR as part of each individual rulemaking.

The proposed PNR divides the public notice requirements into three (3) tiers, based on the type of violation. ''Tier 1'' applies to violations and situations with significant potential to have serious adverse effects on human health as a result of short-term exposure. Notice is required within 24 hours of the violation. ''Tier 2'' applies to other violations and situations with potential to have serious adverse effects on human health. Notice is required within 30 days, with extensions up to three months at the discretion of the State or primacy agency. ''Tier 3'' applies to all other violations and situations requiring a public notice not included in Tier 1 and Tier 2. Notice is required within 12 months of the violation, and may be included in the consumer confidence report at the option of the water system.

Today's NODA requests comment on whether community water systems (CWS) should provide a Tier 2 public notice for MCL violations under the radionuclide NPDWRs and to provide a tier 3 public notice for violations of the monitoring and testing procedure requirements. If NTNC water systems are required to monitor and notify, then they would be required to provide a Tier 2 notice if the systems exceed the MCLs. EPA requests comment on the implementation of public notification requirements by the effective date of the MCL and on the Tier 2 public notice requirement for quarterly repeat notices for NTNC systems that continue to exceed the CWS MCL(s) under the ''monitoring and notification-only'' option. EPA believes States will phase in monitoring of NTNC systems based on results of CWS systems in the same proximity. The agency requests comment on whether or not the same increase or decreased monitoring requirements which pertain to CWSs should apply to NTNC water systems i.e. the 3, 6 and 9 year monitoring based on being above 50% of the MCL, below 50%, or non-detect.

As in the current rules, an analytical result that exceeds the MCL would trigger additional confirmation samples, which in turn could trigger quarterly monitoring. For man-made beta and photon emitters, EPA is suggesting to finalize the proposal regarding a screening level of 30 or 50 pCi/L for ''vulnerable systems,'' which are defined as being within a 15 mile radius of a source of this class of radionuclides. For Pb-210, EPA will be collecting data to make a future determination regarding additional monitoring for this natural beta emitter.

Tables III–5 and III–6 summarize the current and proposed monitoring requirements and those suggested by today's document.

TABLE III–5.—INITIAL (ROUTINE) MONITORING REQUIREMENTS

1976	1991 proposal	2000 NODA
GROSS ALPHA		
CWSs: Four consecutive quarters at representative point(s) within the distribution system every four years.	CWSs and NTNCWSs: Annual monitoring at each entry point for first three years.	CWSs and NTNCWSs [1]: Four consecutive quarters of monitoring at each entry point, anytime during first 3 years.
RADIUM		
CWSs: Four consecutive quarters at representative point(s) within the distribution system every four years. Initial monitoring is for radium-226. If radium-226 exceeds 3 pCi/L, analysis for radium-228 is required. A gross alpha measurement can be substituted for radium 226 and/or uranium monitoring if the gross alpha measurement is below the applicable MCL(s).	CWSs and NTNCWSs: Annual monitoring for each radium isotope (radium-226 and radium-228) at each entry point, for three years.	CWSs and NTNCWSs: Four consecutive quarters of monitoring for each radium isotope (radium-226 and radium-228) at each entry point, any time during first 3 years.[2]
URANIUM		
None	CWSs and NTNCWSs: Annual monitoring at each entry point for three years.	CWSs and NTNCWSs: Four consecutive quarters of monitoring for uranium to determine compliance with both mass and activity either by gross alpha or specific mass or activity analysis at each entry point, every three years.[2]
BETA AND PHOTON EMITTERS		
CWSs serving > 100,000 persons and using surface water (and other systems designated by the State): Four consecutive quarters for gross beta, tritium and strontium-90 at representative point(s) within the distribution system. Determine major constituents if exceed screen of 50pCi/L Systems using water contaminated with effluent from nuclear facilities: Quarterly monitoring [1] for gross beta and iodine-131, strontium-90 and tritium. If gross beta level is above 15 pCi/L, the same or equivalent samples must be analyzed for strontium-89 and cesium-134.	Vulnerable systems only CWSs and NTNCWSs: (as designated by State): Two gross beta screening levels were discussed in the 1991 Proposal. Using a screen of 30 pCi/L, quarterly monitoring for gross beta is required, along with annual tritium monitoring. Using a screen of 50 pCi/L, quarterly monitoring for gross beta is required, along with annual tritium and strontium-90 monitoring.	Vulnerable systems only CWSs and NTNCWSs: (as designated by the State): Two gross beta [14] screening levels are being considered. Using a screen of 50 or 30 pCi/L, quarterly monitoring for gross beta is required, along with annual monitoring for tritium and strontium-90 as in 1976. Vulnerability based on proximity (15 miles) to source per 1991. Screen of 15 for contaminated waters as in 1976.[3]

NOTE: [1] This assumes that monitoring will be required at NTNC systems. If this is not the case, these requirements would not apply to NTNC systems.

[2] A gross alpha measurement can be substituted for radium-226 and/or uranium monitoring if the gross alpha measurement is below the applicable MCL(s).

[3] Quarterly monitoring for gross beta would be based on the analysis of monthly samples or the analysis of a composite of three monthly samples. For iodine 131, a composite of five consecutive daily samples shall be analyzed once per quarter. Additional monitoring may be required to identify specific isotopes if gross beta measurement exceeds the screening level.

TABLE III–6.—REDUCED MONITORING REQUIREMENTS

1976	1991 proposal	2000 NODA
GROSS ALPHA		
CWSs: One sample every four years if annual average from previous results (four consecutive quarterly samples) is less than ½ MCL.	CWSs and NTNCWSs: One sample every three years, if previous monitoring results (from three years of annual monitoring) are below MCL. If system is reliably and consistently below MCL, the system could receive a waiver, and monitor once every nine years.	CWSs and NTNCWSs: One sample every three years if previous monitoring results (''previous results'') are reliably and consistently at or below MCL; one sample every six years if previous results are reliably and consistently at or below ½ MCL; or one sample every nine years if previous results are reliably and consistently at or below the MDL.

TABLE III–6.—REDUCED MONITORING REQUIREMENTS—Continued

1976	1991 proposal	2000 NODA
	RADIUM	
CWSs: One sample every four years if annual average from previous results (four consecutive quarterly samples) is less than ½ MCL.	CWSs and NTNCWSs using ground water: One sample every three years, if previous monitoring results (from three years of annual monitoring) are below MCL. If system is reliably and consistently below MCL, the system could receive a waiver, and monitor once every nine years.	CWSs and NTNCWSs: One sample every three years if previous results are reliably and consistently at or below MCL; one sample every six years if previous results are reliably and consistently at or below ½ MCL; or one sample every nine years if previous results are reliably and consistently at or below the MDL.
	URANIUM	
None	CWSs and NTNCWSs: One sample every three years, if previous monitoring results (from three years of annual monitoring) are below MCL. If system is reliably and consistently below MCL, the system could receive a waiver, and monitor once every nine years.	CWSs and NTNCWSs: One sample every three years if previous results average below MCL; one sample every six years if previous results average at or below ½ MCL; or one sample every nine years if previous results average below the MDL.
	BETA AND PHOTON EMITTERS	
CWSs serving > 100,000 persons and using surface water (and other systems designated by the State): Every four years, systems must collect samples from four consecutive quarters for gross beta at representative point(s) within the distribution system. Systems using water contaminated with effluent from nuclear facilities: No reduced monitoring is allowed.	Vulnerable systems only (as designated by State): Since only vulnerable systems are required to monitor, no reduced monitoring is allowed.	Vulnerable systems only (as designated by the State): Since only vulnerable systems are required to monitor, no reduced monitoring is allowed.

15. Laboratory Capacity Issue '' Possible Extension of Initial Monitoring Period

As discussed earlier in the analytical methods section (III.J), the Performance Evaluation Program (now known as the Proficiency Testing Program) has been externalized. Although the Agency is unsure at this time how externalization may affect laboratory capacity, EPA recognizes that it may be an implementation issue for at least three reasons:

- The recent externalization of the radionuclides Performance Evaluation (PE) studies program may cause short-term disruption in laboratory accreditation;
- Requiring NTNCWSs to monitor under the Standard Monitoring Framework will add approximately 20,000 systems to the universe of systems that are already required to monitor;
- And the radon rule will be implemented simultaneously with the radionuclides rule.

NIST is in the process of approving a provider for PT samples for radionuclides. States also have the option of approving their own PT sample providers. Should laboratory capacity issues related to externalization present implementation problems for the initial monitoring period (three years), EPA will consider allowing an additional year (four years total) for the initial monitoring period. During the specified time period, systems would be required to analyze four consecutive quarterly samples to determine compliance. If the final rule is promulgated in November of 2000, the new monitoring requirements would begin to be enforced in November of 2003. If EPA implements a one year extension, water systems would have until December 31 of 2007 to complete the required initial monitoring. This scenario would allow the ''one third of systems per year'' strategy inherent in the Standard Monitoring Framework to be applied, while allowing one additional year, if necessary, to address any laboratory capacity issues. EPA solicits public comment on this matter.

L. Effective Dates

Much of the rule that will be finalized in November will involve retaining current elements of the radionuclides NPDWR. Those portions of the final rule that are unaffected by the upcoming regulatory changes are already in effect. MCLs for gross alpha, beta particle and photon radioactivity, and combined radium-226 and -228 will be unchanged and are already in effect. Regarding water systems that are currently out of compliance with the existing NPDWRs for gross alpha, combined radium-226 and -228, and/or beta particle and photon radioactivity, States with primacy and EPA will renegotiate enforcement actions that put systems on compliance schedules as expeditiously as possible.

Under the Safe Drinking Water Act, final rules become effective three years after promulgation (November of 2003, assuming that the rule becomes final in November of 2000). The following discussion assumes a promulgation date of November 2000. For reasons described in the monitoring section of the NODA (section III, part K) and the Appendices (appendix V), initial monitoring will be required to completed by December 31, 2007. Under the Standard Monitoring Framework, systems have three years to complete the initial monitoring cycle of four consecutive quarterly samples. However, for reasons described in the monitoring section of the NODA (section III, part K) , systems will have an additional year to complete the initial monitoring cycle, which will correspond to an end date of December

31, 2007. This includes initial monitoring for uranium, the new monitoring requirements for radium-228, and new initial monitoring under the requirements for entry points. Compliance determinations and future monitoring cycle schedules are also discussed in the monitoring sections cited. MCL violations resulting from the new requirement for separate Ra-228 monitoring will be treated as ''new violations'' and will be on the same schedule as other new violations (e.g. uranium).

M. Costs and Benefits

The Safe Drinking Water Act provides for EPA to consider both public health and the feasibility (taking costs into consideration) in establishing drinking water MCLs. In addition the new Amendments require EPA to evaluate the costs and benefits of potential revisions to the current standards. As noted earlier, the Agency conducted an analysis of the costs and associated benefits of each of the options described in today's document. These analyses were performed consistent with the requirements for a Health Risk Reduction and Cost Analysis set forth in the 1996 Amendments to the SDWA (section 1412(b)(3)(C)).

First, all public water systems that are currently treating and are in compliance with the 1976 standards will have no additional cost if the rule remains the same as it is now. At the same time, EPA recognizes that it may be costly to systems which have delayed compliance. However, to the extent the rule remains the same, costs necessary to comply with the existing rule, as well as public health benefits associated with it, have accrued to that 1976 rule. If EPA changes nothing, the existing 1976 requirements must be met. EPA considers only those costs associated with accommodating revisions to the current regulations to be new costs. Costs incurred, or those that should have been incurred to comply with a previous regulation, are not factored into current considerations.

Second, EPA has reexamined the costs of the 1991 proposal regarding monitoring for any changes which may be warranted based on new data. EPA is contemplating several changes which were part of the 1991 proposed regulation and which may increase costs. These include: (1) Promulgating an NPDWR for uranium; (2) applying the radionuclide NPDWRs to non-transient, non-community (NTNC) systems; (3) requiring monitoring at the point of entry to distribution systems, and ; (4) requiring separate monitoring for radium-226 and radium-228.

EPA is also recommending rapid sample analysis for alpha emitters to detect the presence of short lived radionuclides such as radium-224, but is not contemplating requiring it as part of the revision to the radionuclides rule. The Agency will pursue the issue of a timely analysis of gross alpha to reflect short half lived Ra-224 in a separate proposal.

Costs and benefits for the various options are presented in appendix V of today's document, in the Technical Support Document (EPA 2000a), and in the draft Health Risk Reduction and Cost Analysis (EPA 2000b). Today's NODA solicits comment on whether the incremental risk reduction may justify the costs for certain of the revisions described in the NODA. EPA requests public comment on such questions and on the extent to which its discretionary authority provided by section 1412(b)(6) of the SDWA should be used. This NODA also requests public input regarding the need for further adjustments to the limits based on the cost and risk data presented in today's NODA.

IV. References

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Appendix I—Occurrence

In order to estimate the total national costs and benefits of revising the MCLs it is necessary to develop updated national estimates of the occurrence and exposure to these radionuclide contaminants in drinking water. Occurrence data and associated analyses provide indications of the number of public water supply systems with concentration of radionuclides above the revised MCL as well as the population served by these systems. Monitoring and treatment costs can be estimated from the occurrence data.

A. Background

EPA conducted a nationwide occurrence study of naturally occurring radionuclides in

public water supplies called the National Inorganic and Radionuclides Survey (NIRS) (see EPA 1991, proposed rule). The objective of NIRS was to characterize the occurrence of a variety of constituents, including radium-226, radium-228, uranium (mass analysis), gross alpha-particle activity, and gross beta-particle activity, present in community ground-water supplies (finished water) in the United States, and its territories. The survey included a random sample from 990 collection sites. The public water supplies were stratified into four size categories, and the samples were chosen to best represent the same stratification present in the total population of community water supply in existence at the time, as shown in ———Table I–1.

TABLE I–1.—COMPARISON OF NIRS TARGET SAMPLE WITH FEDERAL REPORTING DATA SYSTEM (FRDS) INVENTORY

Population category (population range)	Number of FRDS sites*	Percentage of FRDS sites	Number of NIRS sites	Percentage of NIRS sites
Very small (25–500)	34,040	71.4	716	71.6
Small (501–3,300)	10,155	21.3	211	21.1
Medium (3,301–10,000)	2,278	4.8	47	4.7
Large and very large (10,001–>100,000)	1,227	2.6	26	2.5
Total	47,700	100.1	1,000	100.0

*Based in FRDS inventory for fiscal year 1985 from Longtin, 1988.

Results of NIRS were used to develop the proposed radionuclide rule in 1991 (56 FR 33050; EPA 1991). There has not been a comparable national survey for radionuclides since. Since the publication of the proposed 1991 revision to the MCLs, the United States Geological Survey has collected additional data on various radionuclides in groundwater to augment the data of the NIRS. These studies are summarized subsequently, and in greater detail in the Technical Support Document (EPA 2000a).

Szabo and Zapecza (1991) detail the differences in the occurrence of uranium and radium-226 in oxygen-rich and oxygen-poor areas of aquifers. Because the chemical behavior of uranium and radium are vastly different, the degree of mobilization of the parent and product are different in most chemical environments.

Recently, high concentrations of radium were found to be associated with ground water that was geochemically affected by agricultural practices in the recharge areas by strongly enriching the water with competing ions such as hydrogen, calcium, and magnesium (Szabo and dePaul, 1998). Radium-228 was detected in about equivalent concentrations as radium-226 in the aquifer study in New Jersey (Szabo and dePaul, 1998).

B. USGS Radium Survey

A 1998 USGS survey (see EPA 2000a) was designed to target areas of known, or suspected, high concentrations of radium-224 as inferred by associated radium occurrence data, geologic maps, and other geochemical considerations. Thus, the survey is likely biased toward the extreme high end of the occurrence distribution for radium-224 and co-occurring contaminants such as radium-228. Approximately half of the samples were below the minimum detectable concentration of radium-226 and radium-228 in spite of the fact that public water systems were targeted in areas where high concentrations of radium were expected. Table I–2 shows that, of the 104 samples, 21 exceeded the MCL for combined radium, and about 5 percent exceeded 10 pCi/L of radium-224, though several of these samples with pH less than 4.0 also contained detectable concentrations of thorium isotopes as well. Concentrations exceeded 1 pCi/L in about 10 percent of the samples analyzed for lead-210 and 3 percent for polonium-210.

TABLE I–2.—PERCENT OF SAMPLES EXCEEDING SPECIFIED CONCENTRATION

Radionuclide	Total number of samples	Percent of samples exceeding given concentration (pCi/L)					
		1	2	3	5	7	10
Ra-224	104	30	26	20	15	9	5
Ra-226	104	33	22	17	10	5	2
Po-210	95	3	1	1	1	0	0
Pb-210	96	10	3	1	1	0	0

Radium-224 occurs in many of the wells sampled at concentrations that highlight the limitations of the present monitoring scheme for the gross alpha-particle standard. In addition, the contribution of radium-224 and its short-lived daughter products to gross alpha emissions was estimated with data from a concurrent study of ground-water supplies by the USGS in cooperation with the state of New Jersey (Szabo et al., 1998). In that study, gross alpha emissions were measured before the decay of radium-224 and after sufficient time had elapsed for radium-224 decay (about 18–22 days). In this way, the difference between the initial gross-alpha measurement and the final measurement is indicative of the contribution of radium-224 and all other alpha emitting isotopes that would decay within this time frame. The results indicate that the contribution of radium-224 and its short-lived daughter products is approximately three times the concentration of radium-224. While this analysis was developed with a small data set in a restricted geographic range, it is based on a physical process and has important implications for such things as projections of radium-224 occurrence in association with gross-alpha concentrations. These results are also important in light of both the costliness and difficulty of the radium-224 analysis.

Concentrations of radium-228 were highly correlated with radium-224. Although this correlation was based on a limited number of data points, there is a physical basis to the correlation since both nuclides originate from the same decay chain. Therefore, there is potential for using radium-228 as a proxy indicator for the much shorter lived and infrequently sampled radium-224. In addition, the isotopic ratios of radium-226 to radium-228 were below 3:2 in many samples indicating that the gross alpha-particle screen that is currently used for combined radium (radium-226 + radium-228) compliance would be inadequate in many situations.

Polonium-210 and lead-210 are derived from the uranium-238 decay series; the decay series that produces radium-226. However, the survey was designed to assess radium-224; therefore results are possibly biased to areas that would more likely have isotopes in the thorium-232 decay series. In addition, the correlations of radium-226 with radium-224 and radium-228 are only 0.51 and 0.61 respectively; consequently, the wells that were sampled may not be located in areas expected to have polonium-210 or lead-210. Within these constraints, the new data help to fill the gap in occurrence information that existed for these isotopes. Polonium-210 was found in concentrations exceeding 1 pCi/L in only two wells. At this time, these

observations could not be associated with unique geochemical controls (as has been accomplished in a previous study in Florida; Harada et al., 1989) and further investigations would be necessary to infer anything more about the national distribution and occurrence of polonium-210.

Approximately 12 percent of the samples exceeded a lead-210 concentration of 1 pCi/L; however only one sample was greater than 3 pCi/L. The greatest frequency of detection was in the Appalachian Physiographic Province of the northeastern United States, especially in of Connecticut and Pennsylvania. The geochemical mechanism that controls lead-210 dissolution is also not well established and needs further study, though lead is less soluble than radium. In addition, lead-210, like polonium-210, is derived from a different decay chain than radium-224 and it was therefore not considered in designing the study. One possible explanation for the frequent detection of lead-210 in concentrations greater than 1 pCi/L in the Appalachian region may be the high concentrations of radon-222 in ground water in this region (Zapecza and Szabo, 1986). As the radon in solution decays through a series of very short half-lived products to Lead-210, a small fraction of the lead-210 may not be sorbed onto the aquifer matrix; thus, the higher the initial radon-222 concentration, the more likely measurable amounts of lead-210 would be found in the ground water. This hypothesis could not be tested however because radon-222 was not analyzed in this study.

C. USGS Beta/Photon Data Collection Effort

The major source of data for man-made radionuclides is the Environmental Radiation Ambient Monitoring System (ERAMS) which is published quarterly in the Environmental Radiation Data (ERD) reports. The ERD reports provide concentration data on gross beta-particle activity, tritium, strontium-90, and iodine-131 for 78 surface-water sites that are either near major population centers or near selected nuclear facility environs.

An additional data collection effort was completed by the U.S. Geological Survey in the summer of 1999 (see EPA 2000a) to analyze targeted beta-particle emitting radionuclides from a small number of public water systems that had shown relatively high levels of beta/photon emitters during the original NIRS survey. Of the 26 public water systems contacted for this effort none could ascertain which wells in their systems were originally sampled as part of NIRS. Consequently, although all efforts were made to include as many of the original systems as possible, it is presently unknown if the wells sampled match those in NIRS. The radionuclide analyses for this data collection effort included; short-term (48 hour) gross beta-particle and gross alpha-particle activities, long-term (30 days) gross beta-particle and gross alpha-particle activities, tritium, strontium-89, strontium-90, cesium-134, cesium-137, iodine-131, uranium-234, uranium-235, uranium-238, radium-228, radium-226, lead-210, and cobalt-60.

Gross beta-particle activities were all below 50 pCi/L in water collected from public water systems that were sampled previously during the National Inorganics and Radionuclide Survey (NIRS) and had been found to contain gross beta-particle activity in excess of 20 pCi/L. To the extent possible, all samples were collected from the original public water systems surveyed for NIRS where gross beta-particle activities were 20 pCi/L or greater. However due to the amount of time that had elapsed since the NIRS samples were collected, correlation with the original sampling point could not be verified for every water supply sampled.

Though the number of samples was limited (26 samples), a few conclusions can be reached. Concentrations of gross beta-particle activities will rarely exceed 50 pCi/L in water collected from public water systems (and did not do so in this study). A significant percentage (15% or 4 samples) of the 26 samples analyzed, however, contained gross alpha-particle activities at or in excess of the 15 pCi/L MCL indicating that concern over the presence of elevated concentration of gross alpha-particle activity in ground water is justified. Long-term (30-day) gross beta-particle activity analyses did not indicate significant ingrowth of beta-particles in any of the samples, though this result is qualified by the absence of significant quantities of uranium-238 in any of the samples collected. Naturally occurring potassium-40 and radium-228 are a significant source of gross beta-particle activity to many of the samples in agreement with results of Welch et al., 1995., Minor concentrations of naturally-occurring lead-210 are also detected occasionally. No manmade radionuclide was detected in concentration above the maximum detectible concentration (MDC) in any of the samples. The presence of naturally occurring beta-particle emitting radionuclides must be taken into account when evaluating the source of high gross beta-particle activity in ground water as first suggested by Welch et al., 1995.

D. References

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Appendix II—Health Effects

The following information summarizes the salient changes in risk assessment information and risk characterization methodology during the past two decades. The Technical Support Document (EPA 2000a) also provides additional information.

A. Use of Linear Non-Threshold Assumption

In estimating the health effects from radionuclides in drinking water, EPA subscribes to the linear, non-threshold model which assumes that any exposure to ionizing radiation has a potential to produce deleterious effects on human health, and that the magnitude of the effects are directly proportional to the exposure level. The Agency further believes that the extent of such harm can be estimated by extrapolating effects on human health that have been observed at higher doses and dose rates to those likely to be encountered from environmental sources of radiation. The risks associated with radiation exposure are extrapolated from a large base of human data. EPA recognizes the inherent uncertainties that exist in estimating health impact at the low levels of exposure and exposure rates expected to be present in the environment. EPA also recognizes that, at these levels, the actual health impact from ingested radionuclides will be difficult, if not impossible, to distinguish from natural disease incidences, even using very large epidemiological studies employing sophisticated statistical analyses. However, in the absence of other data, the Agency continues to support the use of the linear, non-threshold model in assessing risks associated with all carcinogens.

B. Continuous Improvements in Models, Data Base

As various scientific institutions have continued to collect data on the observed effects of radiation from the cohort of bomb survivors, patients with medical exposure, and workers with occupational exposure; continuous improvements have been possible in models to extrapolate effects and to estimate the risks of small exposures to radiation from the natural environment or man-made sources. The data have led to

changes in risk estimates as summarized here.

1. Basis of 1976 Estimates of Risk

- Risk of bone cancer from radium dial painters.
- Autopsy radioassay (see EPA 2000a). Body burden from natural intake or radium, about 1 pCi/day.
- Estimate annual dose rate in several organs from natural radium in rad/year.
- BEIR I risk numbers for radium dial painters yields risk/year per rad/year.
- Calculate risk over lifetime.

a. 1976 Estimates of the Risks from Radium-226 and Radium-228. In general, EPA followed the Federal Radiation Council (FRC) recommendation that radium ingestion limits for the general population should be based on environmental studies and not the models used to establish occupational dose limits (see EPA 2000a). In setting the MCL, EPA considered bone cancer and other soft tissue cancers to be the principal health effects associated with radium ingestion. To calculate body burdens, doses, and risks from ingestion of radium-226 and radium-228, in 1976, EPA relied on data from the 1972 report of the United Nations Scientific Committee on the Effects of Atomic Radiation (see EPA 2000a) and the 1972 the National Academy of Sciences (NAS) Committee on the Biological Effects of Ionizing Radiation, BEIR I Report (see EPA 1991, proposed rule). Additional information and support were found in the International Commission on Radiological Protection, Publication 20 (see EPA 2000a). The literature suggests that radium-228 was as toxic as radium-226, and possibly twice as toxic for bone cancers in dogs. Given this, EPA believed that it was prudent to assume that the adverse health effects due to chronically ingested radium-228 were at least as great as those from radium-226.

Assuming equal toxicity with radium-226, EPA reasoned that lifetime ingestion of only radium-228 at 5 pCi/L would yield lifetime total cancer risks equal to those for a lifetime ingestion of only radium-226 at the same concentration, i.e., between 0.5 to 2×10^{-4}. By setting the MCL at 5 pCi/L for radium-226 and radium-228 combined, rather than individually, EPA sought to limit the lifetime total cancer risk from the ingestion of both isotopes in drinking water to 2×10^{-4} or less.

b. Basis for the 1976 MCL for Gross Alpha Particle Activity. One of the main intentions of the 15 pCi/L MCL for gross alpha particle activity, which includes radium-226 but excludes uranium and radon, was to limit the concentration of other naturally-occurring and man-made alpha emitters relative to radium-226. Specifically, this limit was based on the fact that EPA estimated that continuous consumption of drinking water containing polonium-210, the next most radiotoxic alpha particle emitter in the radium-226 decay chain, at a concentration of 10 pCi/L might cause the total dose to bone to be equivalent to less than 6 pCi/L of radium-226.

The 15 pCi/L limit, which includes radium-226 but excludes uranium and radon, was based on the conservative assumption that if the radium concentration is limited to 5 pCi/L and the balance of the alpha particle activity (i.e., 10 pCi/L) is due to polonium-210, the total dose to bone would be less than that dose associated with an intake of 6 pCi/L of radium-226.

c. Basis for the 1976 MCL for Beta Particle and Photon Radioactivity. In 1976, EPA estimated that continuous consumption of drinking water containing beta and photon emitting radioactivity yielding a 4 mrem/yr total body dose may cause an individual fatal cancer risk of 0.8×10^{-6} per year, or a lifetime cancer risk of 5.6×10^{-5}, assuming a 70-year lifetime. In setting the MCL for man-made beta and photon emitters, EPA used cancer risk estimates from the BEIR I report for the U.S. population in the year 1967 (see EPA 1991, proposed rule). For an exposed group having the same age distribution as the U.S. 1967 population, the BEIR I report indicated that the individual risk of a fatal cancer from a lifetime total body dose rate of 4 mrem per year ranged from about 0.4 to 2×10^{-6} per year depending on whether an absolute or relative risk model was used. Using best estimates from both models for fatal cancer, EPA believed that an individual risk of 0.8×10^{-6} per year resulting from a 4 mrem annual total body dose was a reasonable estimate of the annual risk from a lifetime ingestion of drinking water. Over a 70-year period, the corresponding lifetime fatal cancer risk would be 5.6×10^{-5}, with the risk from the ingestion of water containing less amounts of radioactivity being proportionately smaller.

Based on 1967 U.S. Vital Statistics (see EPA 1991 and EPA 2000a), the probability that an individual would die of cancer was about 0.19, and was thought to be increased by 0.1 percent from a lifetime dose equivalent rate of 15 mrem per year. Therefore, EPA calculated that the 4 mrem/yr MCL for man-made beta and photon emitters corresponded to a lifetime risk increase of 0.025 percent to exposed groups.

EPA knew that partial body irradiation was common for ingested radionuclides since they are, like radium, largely deposited in a particular organ, or in a few organs. In such cases, EPA acknowledged that the risk per millirem varies depending on the radiosensitivity of the organs at risk. For example, EPA estimated that cancers due to the thyroid gland receiving 4 mrem per year continuously ranged from about 0.2 to 0.5 per year per million exposed persons (averaged over all age groups). Considering the sum of the deposited fallout radioactivity and the additional amounts due to releases from other sources existing at that time, EPA believed that the total dose equivalent from man-made radioactivity was not likely to result in a total body or organ dose to any individual that exceeded 4 mrem/yr. Consequently, EPA did not believe that the 4 mrem/yr standard would affect many public water systems, if any. At the same time, the Agency believed that an MCL set at this level would provide adequate public health protection.

2. 1991 Proposal: Basis of Health Risk Estimates

During the years since the publication of the 1976 regulations, the Agency obtained a great deal of additional data and a better understanding of the risks posed to human health by ingested radionuclides. Many of these new studies were presented and discussed in the Advance Notice of Proposed Rulemaking announcing EPA's intent to revise the MCLs (51 FR 34836, Sept. 20, 1986) and the supporting health criteria documents (see EPA 2000a and EPA 1991, the proposed rule).

Among the most important changes made by EPA in developing the 1991 revisions was the adoption of a common calculational framework, the RADRISK computer code (see EPA 1991, proposed rule), to estimate the risks posed by ingestion of radionuclides in drinking water. The RADRISK code consisted of intake, metabolic, dosimetric, and risk models that integrated the results of a large number of studies on a variety of radioactive compounds and radiation exposure situations into an overall model to estimate risks for many different radionuclides. Radionuclide-specific parameters were based on the results of individual scientific studies of a specific radionuclide, such as radium; human epidemiological studies; or experimental animal studies of groups of chemically-similar radionuclides. To summarize, the following are some of the salient changes.

- Used RADRISK metabolic model instead of natural uptake equilibrium model. Based on known intakes.
- Used ICRP report 20 (see EPA 2000a) on alkaline earth elements with Oak Ridge modeled exponential fit to that model.
- BEIR IV risks for alpha emitters.
- Ra–224 data from ankylosing spondylitis, tuberculosis.
- Change in results from Ra–228 calculations (Oak Ridge model of '84) and ICRP 30 (see EPA 2000a) yielded different results based on retention and distribution of each member of decay chain.

a. Basis for the 1991 MCL for Radium-226 and Radium-228. In 1991, EPA proposed revised MCLs for radium-226 and radium-228 individually at 20 pCi/L each. The Agency thought at that time that the limit for each of these radium isotopes was within the Agency's acceptable risk range of 10^{-6} to 10^{-4}. The Agency no longer believes the MCLs proposed in 1991 for radium-226 and radium-228 are within the Agency's acceptable risk range.

i. Human and Animal Health Effects Data Considered. In 1991, EPA based its risk estimates for radium using information from two epidemiological study groups. The first group consisted of radium dial painters who had ingested considerable amounts of radium paint (containing various proportions of radium-226 and radium-228) by sharpening the point of their paint brush with the lips. The second group consisted of patients in Europe injected with a short-lived isotope of radium, radium-224, for treatment of spinal arthritis and tuberculous infection of the bone (see EPA 2000a). The results of these studies are described briefly next.

At high levels of exposure to radium, several non-cancer health effects were observed in radium dial painters, such as benign bone growths, osteoporosis, severe growth retardation, tooth breakage, kidney disease, liver disease, tissue necrosis, cataracts, anemia, immunological suppression and death (see EPA 2000a).

Exposed radium dial painters also exhibited significantly elevated rates of two rare types of cancer, bone sarcomas (osteosarcomas, fibrosarcomas and chondrosarcomas) and carcinomas of head sinuses and mastoids (see EPA 2000a and EPA 1991, the proposed rule). The incidence of head carcinomas was associated with exposure to radium-226, but not radium-228 (see EPA 2000a). This is because these latter cancers were due to an accumulation of radon gas (radon-222) in the mastoid air cells and paranasal sinuses caused by the escape of radon-222 into the air spaces.

ii. Body Burden, Dose, and Risk Calculations. Risk calculations for ingested radium were made using RADRISK (see EPA 1991, proposed rule) based on annual dose rates. For this purpose, EPA computed dose rates for specific organs and tissues at specific ages for an annual unit intake of each radium isotope (see EPA 2000a). Calculation of body burdens was based on metabolic models derived from the radium dial painter studies. Calculations of absorbed doses in specific organs or tissues included cross irradiation from radium in all other organs. RADRISK included lifetime cancer risk estimates for high- and low-LET (linear energy transfer) radiation separately for leukemia, osteosarcomas, sinus tumors, and other solid tumors. These estimates were taken from the BEIR III and BEIR IV (see EPA 1991, proposed rule) reports.

Table II–1 compares the methods used by EPA in 1976 and 1991 to calculate organ burdens, doses, and risks from radium ingestion. Bone doses calculated for radium-226 in 1991 were about 33 percent lower than those assumed in 1976, and the soft tissue doses were about 40 percent lower. Risk estimates for bone per unit dose were about 65 percent lower in 1991 than in 1976, and the soft tissue risk estimates were about 9 percent lower.

TABLE II–1.—COMPARISON OF DERIVATION OF 1976 AND 1991 MCLS FOR RADIUM

Model	1976	1991
Organ and Tissue Burdens	Calculation of body burdens based on environmental studies and ratio of intakes.	Calculation of body burdens based on toxicokinetic models derived from studies of patients injected with radium.
Dosimetry	Calculation of absorbed dose based on organ and tissue burden.	Calculation of absorbed dose based on organ or tissue burden and cross irradiation terms from all other organs.
Risk Coefficients	Risk estimated using the geometric mean of the absolute and relative risk coefficients from the 1972 BEIR I report.	Risk estimated using the absolute risk coefficient from the 1980 BEIR III report.

b. Basis for the 1991 MCL for Gross Alpha Particle Activity. In 1991, EPA proposed to retain the 15 pCi/L MCL for gross alpha particle activity, but modify it by excluding radium-226, as well as uranium and radon. The exclusion of uranium and radon was based on the fact that the Agency anticipated setting separate NPDWRs for these contaminants with the finalization of the 1991 proposal. The proposed exclusion of Ra–226 was based on the 1991 risk estimate which suggested that its unit risk was small enough not to warrant regulation within gross alpha. The 1991 limit was intended to limit the lifetime cancer risk due to ingestion of naturally-occurring and man-made alpha particle emitters in drinking water to between 10^{-6} and 10^{-4}, the Agency's target risk range for carcinogens. Specifically, this limit was based on the following considerations:

Using RADRISK modeling, EPA estimated that continuous consumption of 15 pCi/L of most alpha particle emitters in drinking water at 2 L/day would pose a lifetime cancer risk between 10^{-6} and 10^{-4}.

EPA performed the risk assessment for the alpha emitters using RADRISK (EPA 1991, proposed rule). The model was used to estimate radiation dose to organs, the dose was used to calculate risk to organs, and the risks to organs were summed to estimate overall risk. EPA used RADRISK to calculate concentrations of alpha emitters corresponding to lifetime mortality and incidence risks of 10^{-4}, assuming ingestion of two liters of drinking water daily, and presented those values in appendix C of the 1991 proposed rule.

In determining the risks from ingestion of alpha emitters in drinking water, EPA was particularly interested in polonium-210 and isotopes of thorium and plutonium, because these radionuclides had been observed in water and may cause health effects at relatively low concentrations.

However, the BEIR IV report concluded that there was no direct measure of risk for most polonium isotopes based on the human data, and suggested several possible means of estimating risk. EPA, as discussed, relied on RADRISK in assessing polonium risk. The model estimated that continuous ingestion of two liters per day of drinking water containing 14 pCi/L would pose a lifetime fatal cancer risk of 1×10^{-4}.

EPA also consulted the BEIR IV report for available information on the adverse effects of thorium. Epidemiological studies of patients injected with Thorotrast, a contrast agent consisting of ThO_2 and used in medical radiology from the 1920s to 1955, showed clear increases in liver cancer, as well as possible increases in leukemia and other cancers. However, the BEIR IV report discussed the limitations of these data for assessing the risk due to other forms of thorium that might have different metabolic behaviors and effects. Using RADRISK, EPA estimated that, at a lifetime fatal cancer risk level of 1×10^{-4}, derived drinking water concentrations for thorium isotopes ranged from 50 to 125 pCi/L, and noted that thorium concentrations in drinking water were generally near one pCi/L (EPA, 1991f).

EPA relied on the BEIR IV report for information on the health effects of plutonium isotopes and other transuranic radionuclides that were widely distributed in the environment in very low concentrations due to atmospheric testing of nuclear weapons from 1945 to 1963. The BEIR IV report concluded that plutonium exposures caused clear increases in cancers of the bone, liver, and lungs in animals, but not in humans. At that time, the limited available epidemiological studies had not demonstrated a clear association between plutonium exposure and the development of cancer in human exposure cases. The report recommended that assessing the risks of plutonium exposure should be based on analogy with other radionuclides and high-LET radiation exposure risks. Using RADRISK, EPA estimated that, at a lifetime fatal cancer risk level of 1×10^{-4}, derived drinking water concentrations for plutonium isotopes ranged from about 7 to 68 pCi/L, and noted that plutonium concentrations in drinking water were generally less than 0.1 pCi/L (EPA, 1991f).

c. Basis for the 1991 MCL for Beta Particle and Photon Radioactivity. In 1991, EPA proposed to alter the 4 mrem/yr MCL for beta particle and photon radioactivity. The Agency modified the standard by basing the limit on the committed effective dose equivalent (EDE). (An effective dose equivalent approach adjusts the dose that an individual organ may receive based on its radiosensitivity. The less radiosensitive an organ is, the greater the allowable radiation dose.) The MCL was also modified to include naturally-occurring beta/photon emitters. The 1991 proposed standard was intended to limit the lifetime cancer risk due to ingestion of naturally-occurring and man-made beta particle and photon emitters in drinking water to between 10^{-6} and 10^{-4}, the Agency's target risk range for carcinogens.

Using RADRISK modeling, EPA estimated that continuous consumption of two liters per day of drinking water containing a concentration of beta particle or photon emitting radiation corresponding to 4 mrem EDE/yr would pose a lifetime cancer risk of about 10^{-4}.

Comparison of the 1976 Regulation and 1991 Proposed Regulation. In 1976, EPA based the MCL for beta particle and photon emitters on a target dose rate of 4 mrem/yr. The annual average activity concentration of

individual radionuclides and mixtures of radionuclides resulting in a 4 mrem/yr dose to the total body or any internal organ was then calculated. This ''critical organ dose'' radiation protection philosophy was based on the recommendations of ICRP Publication 2 (see EPA 2000a).

The Agency was aware that in 1976, when exposed to equal doses of radiation, different organs and tissues in the human will exhibit different cancer induction rates. Consequently, EPA knew that the lifetime cancer risks for individual radionuclides would vary widely (from near 10^{-7} to 5.6×10^{-5} because the same dose equivalent would be applied to different critical organs, resulting in different cancer risks. However, at that time, EPA did not have an accepted method for equalizing risks. In addition, since no dose could be greater than 4 mrem to every organ, the associated risk was the ceiling for the risk of beta/photon emitters in drinking water.

This was addressed in 1991 when EPA proposed to adopt the effective dose equivalent, or EDE, radiation protection philosophy recommended by ICRP (1977) (see EPA 1991, proposed rule). The effective dose equivalent normalizes radiation doses and effects on a whole body basis for regulation of occupational exposures. The EDE is computed as the sum of the weighted organ-specific dose equivalent values, using weighting factors specified by the ICRP (1977, 1979; see EPA 1991, proposed rule). By changing to a limit of 4 mrem EDE/yr, EPA was able to derive activity concentrations for individual beta/photon emitters that corresponded to a more uniform level of risk. Using 4 mrem EDE and the metabolically-based dose calculations, the derived concentrations for most beta particle and photon emitters increased in 1991 as compared to the values calculated in 1976 (shown in Table II–3). As a result of derived concentrations increasing in 1991, the corresponding risks increased as well. EPA estimated that, for most of these radionuclides, the corresponding lifetime fatal cancer risk would be 1×10^{-4}, about twice as high as the risk level estimated in 1976.

d. Basis for the 1991 Proposed MCL for Uranium. In 1991, EPA proposed an MCL of 20 μg/L for uranium based on kidney toxicity and a corresponding limit of 30 pCi/L based on cancer risk. The MCLG was proposed at zero because of the carcinogenicity of uranium, and the MCL was proposed at the most sensitive endpoint, kidney toxicity. The MCL was based on kidney effects seen in the 30 day study in rats (see EPA 1991, proposed rule).

Using RADRISK modeling, EPA estimated that uranium in water posed a cancer risk of 5.9×10^{-7} per picoCurie per liter, assuming continuous intake of water of two liters per day. Concentrations in water of 1.7 pCi/L, 17 pCi/L and 170 pCi/L corresponded to lifetime mortality risks of approximately 1×10^{-6}, 1×10^{-5} and 1×10^{-4}, respectively. A concentration of 30 pCi/L of uranium-238 was thought to be equivalent to about 20 micrograms/L, the level considered to be protective against kidney toxicity (the corresponding mortality was 5×10^{-5}.

In determining the MCL for uranium in 1991, EPA proposed to regulate uranium at a level that would be protective of both kidney toxicity, resulting from the element's chemical properties, and carcinogenic potential due to radioactivity. The carcinogenic effects of uranium were based on the effects of ionizing radiation generally, the similarity of uranium to isotopes of radium, and on the effects of high activity uranium.

C. Today's Methodology for Assessing Risks From Radionuclides in Drinking Water

1. Background

Since 1991, EPA has refined the way in which it estimates potential adverse health effects associated with ingestion of radionuclides in drinking water. The Agency's new approach uses state-of-the-art methods, models and data that are based on more recent scientific knowledge. Compared with the approaches used in 1976 and 1991, the revised methodology includes several substantial refinements. Specifically, the new risk-assessment methodology:

- Accounts for age- and gender-specific water-consumption rates and radionuclide intakes, and for physiological and anatomical changes with age in quantifying costs and benefits;
- Uses Blue Book (see EPA 2000a) for estimating radiogenic risk: ICRP dosimetry model, 1990 vital statistics instead of 1980;
- Uses the most recent age-dependent biokinetic and dosimetric models recommended by the ICRP; Federal Guidance Report-13 dynamic input-output metabolic model;
- Incorporates the latest information on radiogenic human health effects summarized by the National Academy of Sciences and other national and international radiation-protection advisory committees;
- Includes updated life tables based on data from the National Center for Health Statistics that are used to adjust radionuclide risk estimates for competing causes of death; and
- Uses an improved computer program to handle the complex calculations of radiation doses and risks.

Overall, EPA believes that these refinements significantly strengthen the scientific and technical bases for estimating risks, and consequently, for deriving MCLs for radionuclides. A brief overview of this new methodology is summarized later in this section. Interested individuals are referred to two EPA publications Estimating Radiogenic Cancer Risks (EPA, 1994) and Federal Guidance Report No. 13 (EPA, 1999) for detailed discussions on the revised risk assessment methodology for radionuclides. Electronic copies of both documents are available for downloading at EPA's web site (http://www.epa.gov/radiation/rpdpubs.htm).

Federal Guidance Report No. 13: (EPA, 1999) presents the current methods, models, and calculational framework EPA uses to estimate the lifetime excess risk of cancer induction following intake or external exposure to radionuclides in environmental media. The report presents compilations of risk coefficients that may be used to estimate excess cancer morbidity (cancer incidence) and mortality (fatal cancer) risks resulting from exposure to radionuclides through various pathways.

The risk coefficients for internal exposure represent the incremental probability of radiogenic cancer morbidity or mortality occurring per unit of radioactivity inhaled or ingested. For most radionuclides, Federal Guidance Report No. 13 presents risk coefficients for seven exposure pathways: inhalation, ingestion of food, ingestion of tap water, ingestion of milk, external exposure from submersion in air, external exposure from the ground surface, and external exposure from soil contaminated to an infinite depth. For some radionuclides, however, only external exposure pathways are considered; these include noble gases and the short-lived decay products of radionuclides addressed in the internal exposure scenarios.

a. Radium. EPA set the current MCL of 5 pCi/L for radium-226 and radium-228, combined, based on limiting the lifetime excess total cancer risk to between 5×10^{-5} and 2×10^{-4}. In 1991, EPA proposed separate, and revised, MCLs for radium-226 and radium-228 of 20 pCi/L for each. At that time, EPA believed that the revised MCLs corresponded to lifetime excess fatal cancer risks of 1×10^{-4} each, or 2×10^{-4} combined, assuming lifetime ingestion. The more sophisticated model used today calculates a risk for Ra-228 at 5 pCi/l to be 2×10^{-4}, and the risk for 5 pCi/l of Ra-226 to be about 7.3×10^{-5}. Retaining a combined MCL at 5 pCi/L would produce the following risks shown in Table II–2.

TABLE II–2.—MORTALITY RISK OF RADIUMS FOR CONCENTRATION COMBINATIONS AT THE MCL

Radium-226		Radium-228		Ra-226 + Ra-228	
pCi/L	Risk	pCi/L	Risk	pCi/L	Risk at 5 pCi/L
0	0	5	2.0×10^{-4}	5	2.0×10^{-4}
1	1.5×10^{-5}	4	1.6×10^{-4}	5	1.8×10^{-4}
2	2.9×10^{-5}	3	1.2×10^{-4}	5	1.5×10^{-4}
3	4.4×10^{-5}	2	8.1×10^{-5}	5	1.3×10^{-4}
4	5.8×10^{-5}	1	4.1×10^{-5}	5	9.9×10^{-5}

TABLE II–2.—MORTALITY RISK OF RADIUMS FOR CONCENTRATION COMBINATIONS AT THE MCL—Continued

Radium-226		Radium-228		Ra-226 + Ra-228	
pCi/L	Risk	pCi/L	Risk	pCi/L	Risk at 5 pCi/L
5	7.3×10^{-5}	0	0	5	7.3×10^{-5}

b. Alpha Emitters. Both the current and 1991 proposed MCLs for alpha-emitting radionuclides permit up to 15 pCi/L of alpha particle radioactivity in drinking water from individual and multiple alpha emitters. EPA established the current gross alpha MCL of 15 pCi/L (including radium-226 and excluding radon and uranium) to account for the risk from radium-226 at 5 pCi/L (the radium regulatory limit) plus the risk from polonium-210, which the Agency believed was the next most radiotoxic element in the uranium decay chain. The current risk estimated (FGR–13) indicates that the unit risk for Ra-226 is large enough to warrant its inclusion in gross alpha, as thought in 1976.

In 1991, EPA thought that exposure to 10 pCi/L of polonium-210 posed a lifetime fatal cancer risk comparable to that from continuous lifetime ingestion of about 1 pCi/L of radium-226, that is, between 0.5 and 2×10^{-4}. In 1991, EPA based the revised, adjusted gross alpha MCL on revised dose and risk calculations which indicated that the 15 pCi/L limit posed a lifetime cancer risk for most alpha emitters that fell within EPA's acceptable risk range of between 10^{-6} and 10^{-4}.

The current estimate of risk from polonium-210 at 7.0 pCi/L is 1×10^{-4}. The risk for radium-226 at 6.8 p/L is also 1×10^{-4}. When the current rule was written, 10 pCi/L of polonium-210 was believed to be equivalent to 1 pCi/L of radium-226; however, the risks are now equivalent. Thus polonium is ten times the risk it was thought to be relative to radium-226. Retaining a 15 pCi/L standard including radium-226 ensures that the risk of 15 pCi/L will not increase by allowing greater polonium (up to 15 pCi/L) in addition to the radium-226 in the radium standard. As expected, a uniform picoCurie limit results in widely differing risks (EPA 2000a).

c. Beta/Photon Emitters. As discussed elsewhere in this document, EPA is able to calculate the risks from individual beta/photon emitters using the FGR–13 methodology. It is now possible to calculate a risk equivalent to the current picoCurie limit for each beta/photon emitter. Appropriate adjustments are then possible in keeping with the original risk maximum of 5.6×10^{-5}. The derived concentration values for the beta particle and photon emitters from 1976 rule and 1991 proposal in comparison to today's newest risk model using 5.6×10^{-5} mortality are found in Table II–3.

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Table II-3. Comparison of derived values of Beta and Photon Emitters from 1976 and 1991

Nuclide (*half-life of 24 hours or less)	1976 limits based on critical organ at 4 mrem/yr	1976 Risks	1991 proposed limits at 4 ede mrem/yr	1991 risks	Comments (HB69 means National Bureauof Standards Handbook-69)	Corrected limits based on 4 mrem/yr critical organ dose limit	Risk at corrected limits
H-3 (HTO)	20,000	3.57e-05	60,900	1.09e-04			
Be-7	6,000	1.60e-05	43,500	1.16e-04			
C-11	NC		99,200	1.75e-04			
N-13			152,000				
C-14	2,000	1.09e-04	3,200	1.75e-04			
C-15			6,690,000				
O-15			495,000				
F-18 *	2,000	8.32e-06	39,500	1.64e-04			
Na-22	400	1.36e-04	466	1.59e-04			
Na-24			3,350	1.60e-04	Not in 1976, but in HB69	60	2.87e-06
Si-31 *	3,000	5.96e-05	10,200	2.02e-04			
P-33			1,870				
P-32	30	9.53e-06	641	2.04e-04			
S-35 (Inorg)	500	8.39e-06	12,900	2.16e-04			
Cl-36	700	7.86e-05	1,850	2.08e-04			
Cl-38 *	1,000	8.41e-06	21,200	1.78e-04			
K-42 *	900	4.08e-05	3,900	1.77e-04			
Ca-45	10	8.96e-07	1,730	1.55e-04			
Ca-47	80	1.80e-05	846	1.90e-04			
Sc-46	1,000	1.95e-05	863	1.68e-04	Error in 1976 Calculation	100	1.95e-05
Sc-47	300	2.97e-05	2,440	2.42e-04			
Sc-48	80	1.71e-05	766	1.64e-04			
V-48	90	2.16e-05	644	1.55e-04			
Cr-51	6,000	3.26e-05	38,000	2.06e-04			

Nuclide (*half-life of 24 hours or less)	1976 limits based on critical organ at 4 mrem/yr	1976 Risks	1991 proposed limits at 4 ede mrem/yr	1991 risks	Comments (HB69 means National Bureauof Standards Handbook-69)	Corrected limits based on 4 mrem/yr critical organ dose limit	Risk at corrected limits
Mn-52	90	1.77e-05	733	1.44e-04			
Mn-54	300	2.23e-05	2,010	1.50e-04			
Mn-56 *	300	9.64e-06	5,640	1.81e-04			
Fe-55	2,000	6.84e-05	9,250	3.17e-04			
Fe-59	200	5.14e-05	844	2.17e-04			
Co-57	1,000	3.21e-05	4,870	1.57e-04			
Co-58	9,000	8.80e-04	1,590	1.57e-04	MCL switched with Co-58m	300	2.96e-05
Co-58m	300	1.18e-06	64,900	2.56e-04	MCL switched with Co-58	9000	3.55e-05
Co-60	100	5.20e-05	218	1.13e-04			
Ni-59	300	2.52e-06	27,000	2.27e-04			
Ni-63	50	1.02e-06	9,910	2.02e-04			
Ni-65 *	300	6.52e-06	8,810	1.92e-04			
Cu-64 *	900	1.70e-05	11,900	2.25e-04			
Zn-65	300	1.23e-04	396	1.62e-04			
Zn-69 *	6,000	1.62e-05	63,100	1.71e-04			
Zn-69m *	200	1.09e-05	4,220	2.30e-04			
Ga-67	NC		7,020	2.10e-04			
Ga-72 *	100	1.62e-05	1,190	1.93e-04			
Ge-71	6,000	1.13e-05	436,000	8.19e-04			
As-73	1,000	4.52e-05	7,850	3.55e-04			
As-74	100	1.97e-05	1,410	2.77e-04			
As-76	60	1.67e-05	1,060	2.95e-04			
As-77	200	1.44e-05	4,330	3.11e-04			
Se-75	900	2.65e-04	574	1.69e-04			
Br-82	100	5.86e-06	3,150	1.85e-04			
Rb-82			436,000				

Nuclide (*half-life of 24 hours or less)	1976 limits based on critical organ at 4 mrem/yr	1976 Risks	1991 proposed limits at 4 ede mrem/yr	1991 risks	Comments (HB69 means National Bureauof Standards Handbook-69)	Corrected limits based on 4 mrem/yr critical organ dose limit	Risk at corrected limits
Rb-86	600	2.06e-04	485	1.67e-04			
Rb-87	300	5.41e-05	501	9.04e-05			
Rb-88	NC		29,100	1.83e-04			
Rb-89	NC		52,700	1.81e-04			
Sr-82	NC		241	2.29e-04			
Sr-85	21,000	1.75e-03	2,830	2.36e-04	Wrong critical organ selected	900	7.49e-05
Sr-85m	900	5.66e-07	237,000	1.49e-04	Wrong critical organ selected	21000	1.32e-05
Sr-89	20	1.66e-06	599	2.38e-04			
Sr-90	8	2.03e-05	42	1.06e-04			
Sr-91 *	200	1.90e-05	2,160	2.05e-04			
Sr-92	200	1.31e-05	3,100	2.03e-04			
Y-90	60	3.06e-05	510	2.60e-04			
Y-91	90	4.07e-05	576	2.60e-04			
Y-91m *	9,000	1.07e-05	132,000	1.57e-04			
Y-92 *	200	1.48e-05	2,870	2.13e-04			
Y-93	90	1.85e-05	1,200	2.47e-04			
Zr-93	2,000	8.55e-05	5,090	2.17e-04			
Zr-95	200	2.68e-05	1,460	1.96e-04			
Zr-97 *	60	2.14e-05	650	2.32e-04			
Nb-93m	1,000	2.29e-05	10,500	2.40e-04			
Nb-94	NC		707	1.63e-04			
Nb-95	300	2.16e-05	2,150	1.55e-04			
Nb-95m	NC		2,390	2.48e-04			
Nb-97 *	3,000	2.04e-05	23,500	1.60e-04			
Nb-97m			1,370,000				
Mo-99	600	3.54e-05	1,830	1.08e-04			

Nuclide (*half-life of 24 hours or less)	1976 limits based on critical organ at 4 mrem/yr	1976 Risks	1991 proposed limits at 4 ede mrem/yr	1991 risks	Comments (HB69 means National Bureauof Standards Handbook-69)	Corrected limits based on 4 mrem/yr critical organ dose limit	Risk at corrected limits
Tc-95	NC		69,700	1.22e-03			
Tc-95m	NC		3,120	1.75e-04			
Tc-96	300	3.17e-05	2,050	2.17e-04			
Tc-96m *	30,000	3.44e-05	176,000	2.02e-04			
Tc-97	6,000	4.82e-05	32,500	2.61e-04			
Tc-97m	1,000	6.94e-05	4,450	3.09e-04			
Tc-99	900	7.28e-05	3,790	3.07e-04			
Tc-99m	20,000	4.61e-05	89,600	2.07e-04			
Ru-97	1,000	1.86e-05	7,960	1.48e-04			
Ru-103	200	2.22e-05	1,810	2.01e-04			
Ru-105 *	NC		4,990	2.13e-04	Error in 1976, listed as Rh-105	300	1.28e-05
Rh-105m			5,551,000				
Ru-106	30	3.66e-05	203	2.48e-04			
Rh-103m *	30,000	1.03e-05	471,000	1.62e-04			
Rh-105 *	300	2.00e-05	3,720	2.48e-04	Error: should be listed as Ru-105		
Rh-106	NC		1,240,000	1.97e-04			
Pd-100	NC		1,300	1.53e-04			
Pd-101	NC		13,400	1.67e-04			
Pd-103	900	3.18e-05	6,940	2.45e-04			
Pd-107	NC		36,600	2.59e-04			
Pd-109	300	2.99e-05	2,120	2.12e-04			
Ag-105	300	1.63e-05	2,700	1.47e-04			
Ag-108			626,000				
Ag-108m	NC		723	1.94e-04			
Ag-109m			16,700,000				
Ag-110			1,840,000				

Nuclide (*half-life of 24 hours or less)	1976 limits based on critical organ at 4 mrem/yr	1976 Risks	1991 proposed limits at 4 ede mrem/yr	1991 risks	Comments (HB69 means National Bureauof Standards Handbook-69)	Corrected limits based on 4 mrem/yr critical organ dose limit	Risk at corrected limits
Ag-110m	90	2.86e-05	512	1.63e-04			
Ag-111	100	2.34e-05	1,080	2.53e-04			
Cd-109	600	9.81e-05	227	3.71e-05			
Cd-115	90	2.21e-05	958	2.35e-04			
Cd-115m	90	4.46e-05	339	1.68e-04			
In-113m *	3,000	9.36e-06	52,400	1.63e-04			
In-114			976,000				
In-114m *	60	4.37e-05	323	2.35e-04			
In-115	300	4.46e-04	35	5.22e-05			
In-115m *	1,000	1.30e-05	16,400	2.14e-04			
Sn-113	300	3.72e-05	1,740	2.16e-04			
Sn-121	NC		6,060	2.58e-04			
Sn-121m	NC		2,260	1.53e-04			
Sn-125	60	3.41e-05	446	2.54e-04			
Sn-126	NC		293	2.19e-04			
Sb-122	90	2.72e-05	810	2.45e-04			
Sb-124	60	2.27e-05	563	2.13e-04			
Sb-125	300	4.12e-05	1,940	2.67e-04			
Sb-126	NC		544	1.77e-04			
Sb-126m	NC		58,500	1.61e-04			
Sb-127	NC		818	2.35e-04			
Sb-129	NC		3,090	1.99e-04			
Te-125m	600	6.15e-05	1,490	1.53e-04			
Te-127	900	2.62e-05	7,920	2.31e-04			
Te-127m	200	5.71e-05	663	1.89e-04			
Te-129	2,000	1.21e-05	27,200	1.65e-04			

Nuclide (*half-life of 24 hours or less)	1976 limits based on critical organ at 4 mrem/yr	1976 Risks	1991 proposed limits at 4 ede mrem/yr	1991 risks	Comments (HB69 means National Bureauof Standards Handbook-69)	Corrected limits based on 4 mrem/yr critical organ dose limit	Risk at corrected limits
Te-129m	90	4.07e-05	524	2.37e-04			
Te-131m	NC		26,800	4.58e-03			
Te-131	200	7.87e-07	971	3.82e-06			
Te-132	90	3.30e-05	580	2.13e-04			
I-122			211,000				
I-123	NC		10,700	2.13e-04			
I-125			151	1.10e-04	Not in 1976 list,but in HB69		
I-126	3	7.50e-06	81	2.02e-04			
I-129	1	4.22e-06	21	8.87e-05			
I-130	NC		1,190	2.17e-04			
I-131	3	3.91e-06	108	1.41e-04			
I-132 *	90	2.17e-06	8,190	1.98e-04			
I-133 *	10	4.13e-06	549	2.27e-04			
I-134 *	100	7.16e-07	21,400	1.53e-04			
I-135 *	30	2.62e-06	2,340	2.04e-04			
Cs-131	20,000	1.29e-04	22,800	1.47e-04			
Cs-134	20,000	3.22e-02	81	1.22e-04	Wrong critical organ selected	80	1.29e-04
Cs-134m *	80	1.41e-07	101,000	1.78e-04	Wrong critical organ selected	20,000	3.52e-05
Cs-135	900	1.48e-04	794	1.31e-04			
Cs-136	800	2.42e-04	518	1.57e-04			
Cs-137	200	2.14e-04	119	1.27e-04			
Cs-138	NC		25,600	1.75e-04			
Ba-131	600	3.57e-05	2,950	1.76e-04			
Ba-133			1,520				
Ba-133m			2,620				
Ba-137m			2,150,000				

Nuclide (*half-life of 24 hours or less)	1976 limits based on critical organ at 4 mrem/yr	1976 Risks	1991 proposed limits at 4 ede mrem/yr	1991 risks	Comments (HB69 means National Bureauof Standards Handbook-69)	Corrected limits based on 4 mrem/yr critical organ dose limit	Risk at corrected limits
Ba-139	NC		13,800	1.74e-04			
Ba-140	90	3.91e-05	582	2.53e-04			
La-140	60	1.89e-05	652	2.06e-04			
Ce-141	300	3.93e-05	1,890	2.48e-04			
Ce-143	100	2.02e-05	1,210	2.45e-04			
Ce-144	NC		261	2.60e-04	Not in 1976 list, but in HB69	30	3.22e-05
Pr-142 *	90	2.20e-05	1,040	2.54e-04			
Pr-143	100	2.23e-05	1,170	2.61e-04			
Pr-144	NC		47,000	1.67e-04			
Pr-144m			112,000				
Nd-147 *	NC		1,250	2.64e-04	Not in 1976 list	200	4.23e-05
Nd-149 *	900	1.51e-05	11,700	1.97e-04			
Pm-147	NC		5,240	2.71e-04	Not in 1976 list, but in HB69		
Pm-148	NC		605	2.95e-04			
Pm-148m	NC		575	1.34e-04			
Pm-149	100	1.88e-05	1,380	2.60e-04			
Sm-151	1,000	1.60e-05	14,100	2.26e-04			
Sm-153	200	2.74e-05	1,830	2.51e-04			
Eu-152 *	60	1.16e-05	841	1.62e-04	Reclassified as Eu-154m	200	1.84e-05
Eu-154	200	6.46e-05	573	1.85e-04	MCL switched with Eu-152	60	1.94e-05
Eu-155	600	3.27e-05	3,590	1.95e-04			
Eu-156	NC		600	2.17e-04			
Gd-153	600	2.62e-05	4,680	2.04e-04			
Gd-159 *	200	1.82e-05	2,760	2.50e-04			
Tb-158	NC		1,250	1.81e-04			
Tb-160	100	2.50e-05	815	2.03e-04			

Nuclide (*half-life of 24 hours or less)	1976 limits based on critical organ at 4 mrem/yr	1976 Risks	1991 proposed limits at 4 ede mrem/yr	1991 risks	Comments (HB69 means National Bureauof Standards Handbook-69)	Corrected limits based on 4 mrem/yr critical organ dose limit	Risk at corrected limits
Dy-165 *	1,000	1.29e-05	15,100	1.95e-04			
Dy-166	100	3.14e-05	830	2.61e-04			
Ho-166	90	2.35e-05	981	2.56e-04			
Er-169	300	2.14e-05	3,640	2.60e-04			
Er-171 *	300	1.76e-05	3,800	2.23e-04			
Tm-170	100	2.53e-05	1,030	2.61e-04			
Tm-171	1,000	1.99e-05	12,700	2.52e-04			
Yb-169	NC		1,830	2.09e-04			
Yb-175	300	2.44e-05	3,110	2.53e-04			
Lu-177	300	2.99e-05	2,550	2.54e-04			
Hf-181	200	3.64e-05	1,170	2.13e-04			
Ta-182	100	2.29e-05	842	1.93e-04			
W-181	1,000	1.15e-05	19,000	2.18e-04			
W-185	300	2.50e-05	3,440	2.86e-04			
W-187 *	200	2.11e-05	2,660	2.80e-04			
Re-183	2,000		5,400	Unknown risk			
Re-186	300	4.69e-05	1,880	2.94e-04			
Re-187	9,000	4.83e-06	582,000	3.13e-04			
Re-188 *	200	2.56e-05	1,790	2.29e-04			
Os-185	200	1.15e-05	2,460	1.42e-04			
Os-191	600	6.19e-05	2,380	2.46e-04			
Os-191m *	9,000	1.57e-04	14,300	2.49e-04			
Os-193	200	3.00e-05	1,690	2.54e-04			
Ir-190	600	9.88e-05	1,010	1.66e-04			
Ir-192	100	2.12e-05	957	2.03e-04			
Ir-194 *	90	2.21e-05	1,040	2.56e-04			

Nuclide (*half-life of 24 hours or less)	1976 limits based on critical organ at 4 mrem/yr	1976 Risks	1991 proposed limits at 4 ede mrem/yr	1991 risks	Comments (HB69 means National Bureauof Standards Handbook-69)	Corrected limits based on 4 mrem/yr critical organ dose limit	Risk at corrected limits
Pt-191	300	1.51e-05	3,810	1.92e-04			
Pt-193	3,000	1.79e-05	46,100	2.75e-04			
Pt-193m	3,000	2.58e-04	3,020	2.59e-04			
Pt-197	300	2.23e-05	3,400	2.53e-04			
Pt-197m *	3,000	3.63e-05	17,500	2.12e-04			
Au-196	600		3,660		Unknown risk		
Au-198	100	1.79e-05	1,310	2.35e-04			
Au-199	NC				Not in 1976 list, but in HB69	600	5.10e-05
Hg-197	NC		5,760	2.52e-04	Not in 1976 list, but in HB69	880	3.85e-05
Hg-197m	NC					600	5.51e-05
Hg-198							
Hg-203	NC		2,390	2.27e-03	Not in 1976 list, but in HB69	60	5.7e-04
Tl-200	NC				Not in 1976 list, but in HB69	1200	2.7e+00
Tl-201	NC				Not in 1976 list, but in HB69	880	1.11e-05
Tl-202	300	1.50e-05	3,840	1.92e-04			
Tl-204	300	5.43e-05	1,680	3.04e-04			
Tl-207			400,000				
Tl-208			283,000				
Tl-209			358,000				
Pb-203	1,000	3.04e-05	5,060	1.54e-04			
Pb-209	NC		25,300	1.88e-04			
Pb-210	NC		1	3.34e-05			
Pb-211	NC		12,800	2.03e-04			
Pb-212	NC		123	9.81e-05			
Pb-214	NC		11,800	1.52e-04			
Bi-206	100	2.29e-05	656	1.50e-04			

Nuclide (*half-life of 24 hours or less)	1976 limits based on critical organ at 4 mrem/yr	1976 Risks	1991 proposed limits at 4 ede mrem/yr	1991 risks	Comments (HB69 means National Bureauof Standards Handbook-69)	Corrected limits based on 4 mrem/yr critical organ dose limit	Risk at corrected limits
Bi-207	200	3.31e-05	1,010	1.67e-04			
Bi-212			5,200				
Bi-213	NC		15,000	2.79e-04			
Bi-214	NC		18,900	1.55e-04			
Fr-223	NC		3,410	8.51e-04			
Ra-225	NC		9	3.80e-05			
Ra-228			7.85				
Ac-227	NC		1	1.06e-05			
Ac-228	NC		3,270	1.92e-04			
Th-231	NC		4,070	2.55e-04			
Th-234	NC		401	2.62e-04			
Pa-233	300	4.73e-05	1,510	2.38e-04			
Pa-234	NC		2,560	1.94e-04			
Pa-234m			930,000				
U-237	NC		1,780	2.46e-04			
U-240	NC		1,540	3.09e-04			
Np-236			5,960				
Np-238	NC		1,390	2.14e-04			
Np-239	NC		1,680	2.45e-04			
Np-240	NC		23,100	1.83e-04			
Np-240m			174,000				
Pu-241	NC		63	4.66e-06			
Pu-243	NC		16,400	2.27e-04			
Am-242m	NC		1	3.53e-06			
Bk-249					Not in 1976 list, but in HB69	1800	6.67e-05

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d. Uranium. Since the 1991 proposal, a number of new studies have been published in peer-reviewed journals. A literature search was conducted and covered the time period between January 1991 to July, 1998. Databases searched were TOXLINE, MEDLINE, EMBASE, BIOSIS, TSCATS and Current Contents (see EPA 2000a). The results of the literature search were reviewed and articles were identified, retrieved and reviewed and analyzed. Subsequently, the Toxicological Profile for URANIUM (Update) was published extending the database to September 1999 (see EPA 2000a).

i. Health Effects in Animals. The potential toxic effects of uranium following oral exposures have been evaluated in recent animal studies (see EPA 2000a). In a 28-day range-finding study, male and female Sprague-Dawley rats (15/sex/group) were administered concentrations of 0, 0.96, 4.8, 24, 124, or 600 mg uranyl nitrate/L (UN/L) in drinking water for a period of 28 days. Results of the study showed no significant dose-related effects on body weight gain, food intake, fluid consumption, clinical signs, or hematological parameters of treated animals when compared with control animals. Histologic examinations indicated no statistically significant differences in the incidence of a particular lesion in animals in the 600 mg UN/L treatment group when compared with animals in the control group. However, a slight increase in the number of affected animals in the 600 mg UN/L group was observed, when compared with the control group.

As discussed in the Technical Support Document (EPA 2000a), the long-term effects of exposure to low-levels of uranium in drinking water has been demonstrated. Female rabbits and male albino rats were exposed to 0, 0.02, 0.2, and 1 mg/kg uranyl nitrate for 12 months or 0.05, 0.6, 6, and 60 mg/L uranyl nitrate for 11 months, respectively. Results of the study indicated a decrease in acid phosphatase activity in the spleens of rabbits in the 1 mg/kg group, but not in rats, when compared to controls. A statistically-significant ($p<0.05$) increase in serum alkaline phosphatase activity was observed by the eleventh month of exposure in rats in the 6 and 60 mg/L groups, when compared with controls. A statistically-significant decrease in the content of nucleic acids in the renal and hepatic tissues was observed in rats in the 60 mg/L group and in rabbits in the 1 mg/kg group, when compared with controls.

ii. Health Effects in Humans. Recent epidemiological studies have evaluated the effects observed in humans exposed to uranium in the drinking water (see EPA 2000a). These studies demonstrate the relationship between uranium levels in the drinking water and urine albumin, an indicator of renal dysfunction, was evaluated. Three sites were selected for the controls (site 1) and the exposed groups (sites 2 and 3), with mean uranium water levels of 0.71, 19.6 and 14.7 µg/L reported for sites 1, 2 and 3, respectively. An index of uranium exposure was estimated for each study participant by multiplying the uranium concentration in the water supply by the average number of cups consumed at each residence and the total number of years at that residence. Based on the results of a linear regression analysis, which included terms for age, diabetes, sex, smoking, and the use of water filters and softeners, a statistically-significant association was reported for cumulative exposure to uranium and urine albumin levels. However, the authors noted that for most of the study participants, the urine albumin levels were within the range of normal values.

A recent study of a village in Nova Scotia (see EPA 2000a) demonstrated the renal effects following chronic exposure to uranium in the drinking water. Two groups were evaluated, a low exposure group (uranium levels < 1/L) and a high exposure group (uranium levels > 1µg/L). Twenty-four hour and 8-hour urine samples were collected and evaluated for uranium, creatinine, glucose, protein, b_2-microglobulin (BMG), alkaline phosphatase (ALP), gamma glutamyl transferase (GGT), lactate dehydrogenase (LDH), and N-acetyl-b-D-glucosaminidase (NAG). Statistically significant positive correlations were reported with uranium intake for glucose (males, females and pooled data), ALP (pooled data) and BMG (pooled data). No other statistically significant differences were reported. Based on these results, the authors concluded that the proximal tubule was the site of uranium nephrotoxicity.

In June 1998, a workshop was held by the USEPA to discuss issues associated with assessing the risk associated with uranium exposure and updating the RfD and MCLG for uranium. The numerous technical issues associated with the development of a risk assessment for uranium in drinking water were discussed. Based on these discussions, it was apparent that there is a range of values for each factor used in the development of the RfD and MCL for uranium. However, based upon the input received at the workshop and the most current information, EPA believes that the LOAEL for renal effects in male rats of 0.06 mg U/kg/day reported could be used for the development of an RfD for uranium (see EPA 2000a). The relative source contribution (RSC) was revised to 80 percent (0.8). The total uncertainty factor was determined to be about 100 (about 3 for animal to human extrapolation, about 10 for intraspecies differences, about 1 for a less than lifetime study, and about 3 for the use of a LOAEL), with the body weight of 70 kilograms (kg) and daily water consumption of two liters used in the calculation. These assumptions are consistent with the data presented at the workshop and appear to be reasonable and justifiable. EPA believes these factors allow for the calculation of a safe level of uranium in drinking water (in terms of chemical toxicity).

The application of the total uncertainty factor of 100 to the LOAEL of 0.06 mg/kg/day results in an RfD of 0.6 ug uranium/kg/day. The RfD can be used to determine the MCL by multiplying the RfD by body weight (70 kg) and RSC (0.8) and dividing by water consumption (2 L), resulting in a value of 17 ug uranium/L, which can be rounded off to 20 /L.

2. Consideration of Sensitive Sub-populations: Children's Environmental Health

In compliance with Executive Order 13045 ''Protection of Children from Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997), risks to children from radionuclides have been considered. There is evidence that children are more sensitive to radiation than adults, the risk per unit exposure in children being greater than in adults.

Risk coefficients used by the Agency for radiation risk assessment explicitly account for these factors. The age-specific, organ-specific risk per unit dose coefficients used in the lifetime risk model apply the appropriate age-specific sensitivities throughout the model. The model also includes age-specific changes in organ mass and metabolism. The risk estimate at any age is the best estimate for that age. In developing the lifetime risks, the model uses the life table for a stationary population. Use of the life table allows the model to account for competing causes of death and age-specific survival. These adjustments make the lifetime risk estimate more realistic.

At the same time, consumption rates of food, water and air are different between adults and children. The lifetime risk estimates for radionuclides in water use age-specific water intake rates derived from average national consumption rates when calculating the risk per unit intake. Since the intake by children is usually less than the intake by adults, it tends to partially mitigate the greater risk in children compared to adults when evaluating lifetime risk.

D. References

EPA, 1999. Cancer Risk Coefficients for Environmental Exposure to Radionuclides, Federal Guidance Report No. 13. US Environmental Protection Agency, Washington, DC, 1999. Uranium Issues Workshop—Sponsored by United States Environmental Protection Agency, Washington, DC ; June 23–24, 1998.

USEPA. ''Technical Support Document for the Radionuclides Notice of Data Availability.'' Draft. March, 2000. (EPA 2000a)

Appendix III—Analytical Methods

Table III–1 briefly summarizes the regulatory events associated with:

- The testing procedures for regulated radionuclides approved in 1976;
- Major analytical additions or changes proposed or discussed in the 1991 radionuclides rule;
- Testing procedures and protocols approved in the March 5, 1997—radionuclides methods rule (62 FR 10168, cited in 40 CFR 141.25); and
- Items discussed in today's NODA.

TABLE III–1.—BRIEF SUMMARY OF THE REGULATORY EVENTS ASSOCIATED WITH RADIOCHEMICAL METHODS

1976 National primary drinking water regulations	July 18, 1991—Radionuclides proposed rule	March 5, 1997-Radionuclide methods final rule	Today's notice of data availability
The 1976 NPDWR approved: * Radiochemical methods to analyze for gross alpha-particle activity, radium-226, total radium, gross beta-particle activity, strontium-89 and -90, cesium-134 and uranium * Defined the detection limit (DL) as the required measure of sensitivity and listed the required DL for each regulated radionuclide	The July 18, 1991—radionuclides rule proposed: * Fifty-six additional methods for compliance monitoring of radionuclides * Guidance for the sample handling, preservation and holding times that were cited in the 1990 U.S.EPA ''Manual for the Certification of Laboratories Analyzing Drinking Water'' * The use of practical quantitation limits (PQLs) and acceptance limits as the measures of sensitivity for radiochemical analysis	The March 5, 1997 final rule for radionuclide methods: * Approved 66 additional radionuclide techniques for gross alpha-particle activity, radium-226, radium-228, uranium, cesium-134, iodine-131, and strontium-90 Responded to comments regarding the analytical methods (excluding radon) received from the July 18, 1991 proposed radionuclides rule	Updates the public on changes that have occurred regarding radiochemical methods of analysis since the 1991 proposed rule. The updates discussed in today's NODA include: * A brief discussion of the analytical methods updates which were promulgated by the Agency on July 18, 1997 final rule. * Guidance for the sample handling, preservation and holding times listed in the 1997 U.S.EPA ''Manual for the Certification of Laboratories Analyzing Drinking Water.'' * Recommendations for the analysis of short-lived, alpha-emitting radioisotopes (i.e., radium-224). * Revised cost estimates for radiochemical analysis. * The Agency's intent to continue to use the detection limits defined in the 1976 rule as the required measures of sensitivity. * Response to some of the comments on the 1991 proposed radionuclides. * The externalization of the Performance Evaluation Program. The Agency's plans to implement a Performance Based Measurement System.

A. The Updated 1997 Laboratory Certification Manual

A revised version of the certification manual was published in 1997 (EPA 815–B–97–001, EPA 1997b). Table III–2 lists the guidance for sample handling, preservation, holding times, and instrumentation which appeared in this manual. Table III–2 also includes additional recommendations for radiochemical instrumentation (footnoted by the number 6), which the Agency is requesting comment on.

TABLE III–2.—SAMPLE HANDLING, PRESERVATION, HOLDING TIMES AND INSTRUMENTATION

Parameter	Preservative [1]	Container [2]	Maximum holding time [3]	Instrumentation [4]
Gross Alpha	Concentrated HCl or HNO_3 to pH <2[5]	P or G	6 months	A, B or G
Gross Beta	Concentrated HCl or HNO_3 to pH <2[5]	P or G	6 months	A or G
Radium-226	Concentrated HCl or HNO_3 to pH <2 ..	P or G	6 months	A, B, C[6], D or G
Radium-228	Concentrated HCl or HNO_3 to pH <2 ..	P or G	6 months	A, B[6], C[6] or G
Uranium natural	Concentrated HCl or HNO_3 to pH <2 ..	P or G	6 months	A[6], F, G[6], or O
Cesium-134	Concentrated HCl to pH <2	P or G	6 months	A, C or G
Strontium-89 and -90	Concentrated HCl or HNO_3 to pH <2 ..	P or G	6 months	A or G
Radioactive Iodine-131	None	P or G	8 days	A, C or G
Tritium	None	G	6 months	E
Gamma/Photon Emitters	Concentrated HCl or HNO_3 to pH <2 ..	P or G	6 months	C

[1] It is recommended that the preservative be added to the sample at the time of collection. It is recommended that samples be filtered if suspended or settleable solids are present at any level observable to the eye prior to adding preservative. This should be done at the time of collection. If the sample has to be shipped to a laboratory or storage area, however, acidification of the sample (in its original container) may be delayed for a period not to exceed 5 days. A minimum of 16 hours must elapse between acidification and start of analysis.

[2] P = Plastic, hard or soft; G = Glass, hard or soft.

[3] Holding time is defined as the period from time of sampling to time of analysis. In all cases, samples should be analyzed as soon after collection as possible. If a composite sample is prepared, a holding time cannot exceed 12 months.

[4] A = Low background proportional system; B = Alpha and beta scintillation system; C = Gamma spectrometer [Ge(Hp) or Ge (Li)]; D = Scintillation cell system; E = Liquid scintillation system; F = Fluorometer; G = Low background alpha and beta counting system other than gas-flow proportional; O = Other approved methods (e.g., laser phosphorimetry and alpha spectrometry for uranium).

[5] If HCl is used to acidify samples which are to be analyzed for gross alpha or gross beta activities, the acid salts must be converted to nitrate salts before transfer of the samples to planchets.

[6] Additional instrumentation that was not listed in the USEPA 1997 ''Manual for the Certification of Laboratories Analyzing Drinking Water.''

B. Recommendations for Determining the Presence of Radium-224

To determine the presence of the short-lived radium-224 isotope (half life ~3.66 days), the Agency recommends using one of the following several options.

1. Radium-224 by Gamma Spectrometry and Alpha Spectrometry

(a) Gamma Spectrometry. Radium-224 can be specifically determined by gamma spectrometry using a suitably prepared sample. In this method a precipitate in which the radium isotopes are concentrated is gamma counted. The primary advantage of this technique is specificity for radium gamma rays, radium-224 included. Other advantages of this method include:

• a simple sample preparation were radium isotopes are concentrated from samples 1 liter or larger;
• specificity for the radium-224 isotope based on a unique gamma energy;
• optimal accuracy and precision if the sample is counted within 72 hours of collection (40 hours is recommended);
• and is cost competitive with the gross methods because a single count rather that three counts (see the gross alpha methods discussion) is necessary to measure the radium-224 in a routine sample.

A gamma spectrometry method by Standard Methods is currently pending but for now the reader is referred to the method used by Parsa. (Parsa, 1998).

(b) Alpha Spectrometry. The alpha spectrometry method measures alphas emitted by radium-224 and its alpha emitting daughters. The alpha spectrometry method, used for the USGS occurrence survey (see appendix I and EPA 2000a), was a slight modification of an existing method (see EPA 2000a). Using an appropriate tracer (e.g. Ba-133), barium and radium isotopes are separated from other radionuclides and interferences using cation ion exchange chromatography. A prepared sample, counted for approximately 100 minutes using alpha spectrometry, can be used to measure the radium-224 in the sample and is capable of good accuracy and precision. Other alpha spectrometry techniques, similar to the modified method used for the USGS occurrence survey, should be sufficient for the detection of radium-224. It is cost competitive with the gross methods (discussed next) because a single count rather than three (for gross methods) is sufficient to for measurement of radium-224.

2. Gross Radium Alpha (Co-precipitation) Within 72 Hours

The presence of radium-224 can be determined indirectly using the radium-224 half-life decay and the gross radium alpha technique. Gross radium co-precipitation methods, like EPA 903.0, concentrate radium isotopes by co-precipitation, separating radium and radium-like isotopes from potential interferences. Relative to evaporative methods, the co-precipitation technique can be used for larger (> 1 L) sample sizes with a resulting increase in the method sensitivity. Initial analysis within 72 hours after sample collection (40 hours recommended for optimal data quality) using the co-precipitation methods yield results, reflecting both alpha-emitting radium isotopes (radium-224 and radium-226). For these to produce unambiguous results, radium-224 must be the dominant isotope present, i. e. the ratio of radium-224 to radium-226 must be three or greater. If this is the prevailing composition, the estimated contribution of radium-224 to the overall value can be ascertained by recounting the sample at 4 or 8 days intervals and calculating the change in the measured activity. The noted change will show a decrease with a 4 day half-life indicative of Ra-224. Formulas are available to calculate the initial radium-224 concentration present in the sample when collected. The advantages of this technique include:
• enhanced sensitivity (≥1 L samples);
• it does not require additional analyst training;
• it is specific for radium isotopes; and
• the resulting precipitate can be measured by a number of techniques, including proportional counting, alpha scintillation counting, or gamma counting.

3. Evaporative Gross Alpha-Particle Analysis Within 72 Hours

The radium-224 isotope, when in equilibrium with its decay progeny, emits four alpha particles. Three of these alpha particles equilibrate almost immediately (within 5 minutes) after sample preparation and add to or amplify the sample count rate. This count rate amplification can be exploited for the measurement of radium-224 in a sample at low concentration (<15 pCi/L). The presence of the radium-224 radioisotope in drinking water may be ascertained by performing an initial evaporative gross alpha-particle analysis within 72 hours (40 hours recommended) after sample collection. In the absence of any other alpha-emitting nuclide (e.g., uranium or radium-226) and if the gross alpha-particle value is above the MCL, the sample may be re-counted at 4- and 8-day intervals to determine if the observed decrease in activity follows the 3.66 day half-life of radium-224. A decrease in the gross alpha value with a 4-day decay rate indicates the likely presence of radium-224. Formulas are available to calculate the concentration of radium-224 in the initial sample. The advantages of this option include:
• the method is similar to the general method for evaporative gross alpha;
• it requires no special training of the analyst; and
• it can be a definitive test if other alpha-emitting nuclides are known to be absent.

The Agency recognizes that analysis within the 72-hour time frame creates difficulties in shipping and handling and may increase the price of the analysis.

C. Revised Cost Estimates for Radiochemical Analysis

The cost estimates for radiochemical analysis from the 1991 proposed rule and the revised cost estimates are shown in Table III–3.

TABLE III–3.—THE 1991 AND 1999 ESTIMATED COSTS OF ANALYSES FOR RADIONUCLIDES

Radionuclides	Approximate cost $ (1991)[1]	Approximate cost $ (1999)[2]
Gross Alpha and beta	35	45
Gross alpha—coprecip.	35	45
Radium-226	85	90
Radium-228	100	110
Uranium (total)	45	48 (LP)
Uranium (isotopic)	125	128 (AS)
Radioactive Cesium (-134)	100	125
Radioactive Strontium	105	144
Total Strontium (-89 and -90)	.....	153
Radioactive Iodine -131	100	131
Tritium	50	60
Gamma/Photon Emitters	110	142

Source:
[1] 56 FR 33050; July 18, 1991.
[2] USEPA, 2000a.
Abbreviations: LP = laser phosphorimetry; AS = alpha spectrometry.
Note: Estimated costs are on a per-sample basis; analysis of multiple samples may have a lower cost.

D. The Detection Limits as the Required Measures of Sensitivity

Table III–4 cites the detection limits or the required sensitivity for the specific radioanalyses that were listed in the 1976 rule and are also cited in 40 CFR 141.25.

TABLE III–4.—REQUIRED REGULATORY DETECTION LIMITS FOR THE VARIOUS RADIOCHEMICAL CONTAMINANTS (40 CFR 141.25)

Contaminant	Detection limit (pCi/L)
Gross Alpha	3
Gross Beta	4
Radium-226	1
Radium-228	1
Cesium-134	10
Strontium-89	10
Strontium-90	2
Iodine-131	1
Tritium	1,000
Other Radionuclides and Photon/ Gamma Emitters.	1/10th of the rule NIPDWR 1976 table IV–2A and 2B

E. References

Parsa, B., 1998. Contribution of Short-lived Radionuclides to Alpha-Particle Radioactivity in Drinking Water and Their Impact on the Safe Drinking Water Act Regulations, Radioactivity and Radiochemistry, Vol. 9, No. 4, pp. 41–50, 1998. USEPA, 1991. National Primary Drinking Water Regulations; Radionuclides; Proposed Rule. **Federal Register**. Vol. 56, No. 138, p. 33050. July 18, 1991.

USEPA, 1997a. National Primary Drinking Water Regulations; Analytical Methods for Radionuclides; Final Rule and Proposed Rule. Vol. 62, No. 43, p. 10168. March 5, 1997.

USEPA, 1997b. ''Manual for the Certification of Laboratories Analyzing Drinking Water.'' EPA 815–B–97–001. 1997.

USEPA, 2000a. ''Technical Support Document for the Radionuclides Notice of Data Availability.'' 2000.

Appendix IV—Treatment Technologies and Costs

A. Introduction

This section describes updates to EPA's previous evaluations of the feasibility and costs of treatment technologies for the removal of radionuclides from drinking water. Prior to this update, the latest evaluation was the 1992 ''Technologies and Costs document'' for radionuclides in drinking water (EPA 1992). The updates to the 1992 radionuclides Technologies and Costs document comprise an updated Technologies and Costs Document (EPA 1999a) and a radium compliance cost study (EPA 1998a), which are described later in this section. This section also describes other relevant documents, including the1998 **Federal Register** notice of the ''Small Systems Compliance Technology List'' (SSCTLs) for the currently regulated radionuclides (63 FR 42032) and its supporting guidance document (EPA 1998b). Both of the documents supporting the SSCTs can be obtained on-line at ''http://www.epa.gov/OGWDW/standard/tretech.html''.

The SSCTLs for the meeting the MCLs for combined radium-226 and radium-228, gross alpha emitters, and combined beta and photon emitters are included in ''Announcement of Small System Compliance Technology Lists for Existing National Primary Drinking Water Regulations and Findings Concerning Variance Technologies,'' published in the **Federal Register** on August 6, 1998 (63 FR 42032). The supporting guidance document cited previously includes information regarding small systems treatment and waste disposal concerns relevant to radionuclide contaminants and was made publicly available on September 15, 1998. Further evaluations of small systems treatment technology applicability and affordability have been done since the SSCTLs for radionuclides were published, including an analysis of SSCTs for uranium (EPA 1999b). These evaluations are summarized later in this section.

B. Treatment Technologies Update

1. Updates on Performance of Technologies for Removal of Regulated Radionuclides and Uranium

One of the purposes of the update to the radionuclides Technologies and Costs (T&C) document (EPA 1999a) was to update the treatment technology performance sections of the 1992 radionuclides T&C document. The peer-reviewed literature revealed no new significant sources of information regarding performance for the previously described technologies, nor did it reveal literature regarding any new treatment technologies for radionuclides in drinking water. Both the 1992 and 1999 radionuclides T&C documents include performance evaluations of the BATs proposed in 1991 for the regulated radionuclides and uranium (56 FR 33050, Jul. 18, 1991) and additional technologies that were reviewed as potential BATs for the 1991 proposed rule, but that were not proposed as BAT for various reasons.

Although the 1999 T&C document concludes that the peer-reviewed literature describes no new technologies since the 1992 T&C document was completed, there have been some developments that are significant. In particular, both package plant [1] technologies, including those equipped with remote control/communication capabilities, and point-of-entry (POE)/point-of-use (POU) versions [2] of existing technologies have become more widely applicable for use for compliance. This is true both because of improvements in these technologies themselves (NRC 1997) and since the 1996 SDWA explicitly allows package plants and POE/POU devices to be used as compliance technologies for small systems (section 1412.b.4.E). Package plant technologies and POE/U technologies are discussed in more detail in the Technical Support Document (EPA 2000a).

2. Treatment Technologies Evaluated as Compliance Technologies for Radionuclides

The following technologies are reviewed in the 1999 radionuclides T&C document: (1) for radium, the 1991 proposed Best Available Technologies (BATs), which are lime softening, ion exchange, and reverse osmosis; and two other applicable technologies with significant radium removal data, electrodialysis reversal and greensand filtration; (2) for uranium, the 1991 proposed BATs, which are coagulation/filtration, ion exchange, lime softening, and reverse osmosis; and two other applicable technologies, electrodialysis reversal and activated alumina; (3) for gross alpha particle activity, the 1991 proposed BAT, which is reverse osmosis; and one other applicable technology, ion exchange; and (4) for beta particle activity and photon radioactivity, the 1991 proposed BATs, which are ion exchange and reverse osmosis. No other technology studies pertinent to total beta and photon activity were found, but this is largely due to the fact that treatment applicability depends on what specific beta and photon emitters are present and so should be evaluated on a case-by-case basis. This consideration also applies to gross alpha activity. It is likely that reverse osmosis, being applicable to a broad range of inorganic contaminants, including radionuclide contaminants, is the best alternative for situations where multiple radionuclides occur.

3. Data on Additional Treatment Technologies

The 1999 radionuclides T&C document does not identify any new treatment technologies for radionuclides, but does provide information on two additional variants of coagulation/filtration for uranium removal: direct filtration and in-line filtration.

4. Small Systems Compliance Technology List and Guidance Manual for the Regulated Radionuclides and Uranium

The 1996 SDWA identifies three categories of small drinking water systems, those serving populations between 25 and 500, 501 and 3,300, and 3,301 and 10,000. In addition to BAT determinations, the SDWA directs EPA to make technology assessments for each of the three small system size categories in all future regulations establishing an MCL or

[1] Package plants are skid mounted factory assembled centralized treatment units that arrive on site ''virtually ready to use''. Package plants offer several advantages. First, since they combine elements of the treatment process into a compact assembly (such as chemical feeders, mixers, flocculators, basins, and filters), they tend to require lesser construction and engineering costs. Another advantage is that many package plant technologies are becoming more automated and thus can be less demanding of operators than their fully engineered counter-parts (EPA 1998b).

[2] Point-of-entry (POE) treatment units treat all of the water entering a household or other building, with the result being treated water from any tap. Point-of-use (POU) treatment units treat only the water at a particular tap or faucet, with the result being treated water that one tap, with the other taps serving untreated water. POE and POU treatment units often use the same technological concepts employed in the analogous central treatment processes, the main difference being the much smaller scale of the device itself and the flows being treated (EPA 1998b).

treatment technique. Two classes of small systems technologies are identified for future National Primary Drinking Water Regulations (NPDWRs): compliance technologies and variance technologies.

Compliance technologies may be listed for NPDWRs that promulgate MCLs or treatment techniques. In the case of an MCL, ''compliance technology'' refers to a technology or other means that is affordable (if applicable) and that achieves compliance. Possible compliance technologies include packaged or modular systems and point-of-entry (POE) or point-of-use (POU) treatment units, as described previously.

Variance technologies are only specified for those system size/source water quality combinations for which no technology meets all of the criteria for listing as a compliance technology (section 1412(b)(15)(A)). Thus, the listing of a compliance technology for a size category/source water combination prohibits the listing of variance technologies for that combination. While variance technologies may not achieve compliance with the MCL or treatment technique requirement, they must achieve the maximum reduction that is affordable considering the size of the system and the quality of the source water. Variance technologies must also achieve a level of contaminant reduction that is ''protective of public health'' (section 1412(b)(15)(B)).

In the case of the currently regulated radionuclides, *i.e.,* combined radium-226 and -228, gross alpha activity, and total beta and photon activity, there are no variance technologies allowable since the SDWA (section 1415(e)(6)(A)) specifically prohibits small system variances for any MCL or treatment technique which was promulgated prior to January 1, 1986. The Variance and Exemption Rule describes EPA's interpretation of this section in more detail (see 63 FR 19442; April 20, 1998).

Small systems compliance technologies for the currently regulated radionuclides, combined radium-226 and -228, gross alpha emitters, and total beta and photon activity, were listed and described in the **Federal Register** on August 6, 1998 (EPA 1998a) and in an accompanying guidance manual (EPA 1998b). Small systems compliance technologies for uranium were also evaluated (EPA 1999a). Small systems compliance technologies (SSCTs) for uranium were evaluated in terms of each technology's removal capabilities, contaminant concentration applicability ranges, other water quality concerns, treatment costs, and operational/maintenance requirements. The SSCT list for uranium is technology specific, but not product (manufacturer) specific. Product specific lists were determined to be inappropriate due to the potential resource intensiveness involved. Information on specific products will be available through another mechanism. EPA's Office of Research and Development has a pilot project under the Environmental Technology Verification (ETV) Program to provide treatment system purchasers with performance data from independent third parties.

Tables IV–1 and IV–2 summarize the small systems compliance technologies listed in the 1998 SSCTL for combined radium-226, and -228, gross alpha emitters, total beta and photon activity. Table IV–1 is shown as it will be updated when uranium is regulated. Table IV–1 describes limitations for each of the listed technologies and Table IV–2 lists SSCTs for each contaminant.

TABLE IV–1.—LIST OF SMALL SYSTEMS COMPLIANCE TECHNOLOGIES FOR RADIONUCLIDES AND LIMITATIONS TO USE

Unit technologies	Limitations (see footnotes)	Operator skill level required[1]	Raw water quality range and considerations[1]
1. Ion Exchange (IE)	([a])	Intermediate	All ground waters.
2. Point of Use (POU) IE	([b])	Basic	All ground waters
3. Reverse Osmosis (RO)	([c])	Advanced	Surface waters usually require pre-filtration.
4. POU RO	([b])	Basic	Surface waters usually require pre-filtration.
5. Lime Softening	([d])	Advanced	All waters.
6. Green Sand Filtration	([e])	Basic	
7. Co-precipitation with Barium Sulfate	([f])	Intermediate to Advanced	Ground waters with suitable water quality.
8. Electrodialysis/Electrodialysis Reversal		Basic to Intermediate	All ground waters.
9. Pre-formed Hydrous Manganese Oxide Filtration.	([g])	Intermediate	All ground waters.
10. Activated alumina	([a]), ([h])	Advanced	All ground waters; competing anion concentrations may affect regeneration frequency.
11. Enhanced coagulation/filtration	([i])	Advanced	Can treat a wide range of water qualities.

[1] National Research Council (NRC). Safe Water from Every Tap: Improving Water Service to Small Communities. National Academy Press. Washington, D.C. 1997.

Limitations Footnotes to Table IV–2: Technologies for Radionuclides:

[a] The regeneration solution contains high concentrations of the contaminant ions. Disposal options should be carefully considered before choosing this technology.

[b] When POU devices are used for compliance, programs for long-term operation, maintenance, and monitoring must be provided by water utility to ensure proper performance).

[c] Reject water disposal options should be carefully considered before choosing this technology. See other RO limitations described in the SWTR Compliance Technologies Table.

[d] The combination of variable source water quality and the complexity of the water chemistry involved may make this technology too complex for small surface water systems.

[e] Removal efficiencies can vary depending on water quality.

[f] This technology may be very limited in application to small systems. Since the process requires static mixing, detention basins, and filtration, it is most applicable to systems with sufficiently high sulfate levels that already have a suitable filtration treatment train in place.

[g] This technology is most applicable to small systems that already have filtration in place.

[h] Handling of chemicals required during regeneration and pH adjustment may be too difficult for small systems without an adequately trained operator.

[i] Assumes modification to a coagulation/filtration process already in place.

Table IV–2 lists the Small Systems Compliance Technologies for the currently regulated radionuclides. Technology numbers refer to the technologies listed in Table IV–1.

TABLE IV–2.—COMPLIANCE TECHNOLOGIES BY SYSTEM SIZE CATEGORY FOR RADIONUCLIDE NPDWRS (AFFORDABILITY NOT CONSIDERED, EXCEPT FOR URANIUM, DUE TO STATUTORY LIMITATIONS)

Contaminant	Compliance technologies[1] for system size categories (population served)		
	25–500	501–3,300	3,300–10,000
Combined radium-226 and radium-228	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5, 6, 7, 8, 9
Gross alpha particle activity	3, 4	3, 4	3, 4
Total beta particle activity and photon activity, average annual concentration	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4
Uranium	1, 2, 4, 10, 11	1, 2, 3, 4, 5, 10, 11	1, 2, 3, 4, 5, 10, 11

Note: [1] Numbers correspond to those assigned to technologies found in the table ''List of Small Systems Compliance Technologies for the Currently Regulated Radionuclides.''

C. Waste Treatment, Handling and Disposal Guidance

In the proposed radionuclides rule of July 1991, EPA referenced a 1990 EPA draft report entitled ''Suggested Guidelines for Disposal of Drinking Water Treatment Wastes Containing Naturally-Occurring Radionuclides'' (EPA 1990). That 1990 report offered guidance to system managers, engineers, and State agencies responsible for the safe handling and disposal of treatment wastes that, in many cases, were not specifically addressed by any statute. That guidance report was later updated in 1994 (EPA 1994).

The guidance provided information on the following: (1) Background on water treatment processes and characteristics of wastes generated; (2) rationale for radiation protection, including citation of programs and regulations affecting other sources of such waste; (3) guidelines for several methods of disposal of solid and liquid type wastes containing the subject radionuclides; and, (4) the specification of practical guidance to protect workers and others who may handle or be exposed to water-treatment wastes containing radiation above background levels.

The Technical Support Document (EPA 2000a) discusses disposal methods and issues, including comments received in reference to the 1990 ''Suggested Guidelines for Disposal of Drinking Water Treatment Wastes Containing Naturally-Occurring Radionuclides,'' and the 1994 update to this report.

D. Unit Treatment Cost Updates

Treatment costs for coagulation/filtration (including direct filtration and in-line filtration), lime softening, ion exchange, reverse osmosis, electrodialysis reversal, greensand filtration, point-of-use (POU) reverse osmosis, POU ion exchange, and point-of-entry cation exchange were updated in the appendix to the 1999 radionuclides T&C document. This update includes land-cost considerations and waste-disposal cost estimates. Cost estimates were made using standard EPA treatment technology costing models. Outputs were updated to current dollars using standard engineering costing indices, e.g., the Bureau of Labor's Chemical and Allied Products Index. Costs for individual technologies were analyzed in terms of water usage, removal efficiency, interest rate, and other variables.

In addition to cost model updates, EPA has performed a study of the actual costs of treatment and other compliance measures for the radium standard (EPA 1998c), which provided a ''snapshot'' of the costs incurred by water systems in complying with the existing combined radium-226 and radium-228 MCL. Studies of this nature allow EPA to compare modeled costs used in regulatory impact assessments with real-world data for the purposes of model validation and cost estimate amendments. They also allow EPA to check assumptions about the prevalence of use of particular water-treatment technologies.

The study comprises data compiled from contacts with water-treatment personnel, State representatives, and EPA Regional representatives within EPA Regions 5 (IL, IN, MI, MN, OH, and WI) and 8 (CO, MT, ND, SD, UT, and WY). Specifically, data were obtained regarding water systems in California, Florida, Idaho, Illinois, Indiana, Ohio, Wisconsin, and Wyoming. State Agencies and EPA Regional offices identified 136 systems as having water sources with combined radium-226 and radium-228 above the MCL of 5 pCi/L. Of these, 55 of the systems were contacted, of which 29 were either treating for radium or were in the process of selecting a treatment method. The remaining systems were either further behind in treatment selection plans or pursuing other compliance measures. All of the systems that were currently treating for radium were in compliance with the MCL. Twenty-six of these systems responded with cost data, of which 17 were small systems (design flow < 1 mgd). Thirty-five percent of the small systems reported were using reverse osmosis which, at an average total treatment cost of $3.02 per thousand gallons, was the most expensive treatment technology identified. Other treatment options used were lime softening and ion exchange. These had average total treatment costs of $2.36 and $0.73 per thousand gallons, respectively. Unit costs are discussed in more detail in the Technical Support Document (EPA 2000a).

EPA requests comments on its analysis of treatment technologies, costs, and treatment residuals disposal.

E. References

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USEPA. ''Technical Support Document for the Radionuclides Notice of Data Availability.'' Draft. March, 2000. (EPA 2000a)

Appendix V—Economics and Impacts Analysis

A. Overview of the Economic Analysis

1. Background

Analysis of the costs, benefits, and other impacts of regulations is required under the Safe Drinking Water Act Amendments of 1996, Executive Order 12866 (Regulatory Planning and Review), and EPA's internal guidance for regulatory development. These

requirements are new relative to the 1991 proposal for revisions to the existing National Primary Drinking Water Regulations (NPDWRs) for radionuclides.

The actions that are anticipated to have regulatory impacts are evaluated in this section. These actions are: (1) the correction the monitoring deficiency for combined radium-226 and radium-228; and (2) the establishment of a uranium NPDWR with an MCL of 20 μg/L; or (3) the establishment of a uranium NPDWR with an MCL of 40 μg/L; or (4) the establishment of a uranium NPDWR with an MCL of 80 μg/L. See ''Combined Ra-226 and Ra-228'' in the today's NODA (section III, part F) for a discussion of the monitoring corrections that will be finalized for the combined radium-226 and radium-228 (''combined radium'') NPDWR. See ''Uranium'' in the NODA (section III, part H) for a discussion of the options being considered for finalization for the uranium NPDWR.

2. Economic Analysis of the Regulatory Actions Being Considered for Radionuclides in Drinking Water

The economic analysis summarized here supports the finalization of the 1991 Radionuclides proposal. The more detailed economic analysis (the Health Risk Reduction and Cost Analysis, EPA 2000b) may be obtained from the Water Docket, as described in the Introduction to today's NODA (see **ADDRESSES**). It provides central-tendency estimates of national costs and benefits and presents information on the data sources and analytic approaches used, including a qualitative discussion of the analytical limitations and uncertainties involved. Further uncertainty analyses will be performed to support the analyses summarized here and will be reported in the preamble to the final rule. It should be noted that these additional uncertainty analyses are not expected to alter regulatory decisions.

The basic steps in a comprehensive economic analysis include: (1) Estimating baseline conditions in the absence of revisions to the regulations; (2) predicting actions that water systems will use to meet each regulatory option (the ''decision tree''); (3) estimating national costs resulting from compliance actions; (4) estimating national benefits resulting from compliance; and (5) assessing distributional impacts and equity concerns. In today's NODA, we present preliminary estimates of national costs and benefits for the options evaluated, focusing on monitoring and compliance costs and reductions in cancer risks. Other national costs and benefits (e.g., state administrative costs and risk reductions from incidental treatment of co-occurring contaminants) and potential distributional impacts are described qualitatively (see EPA 2000a and EPA 2000b).

The first step in the economic analysis, defining the analytical baseline, requires that water systems be apportioned into several groups based on their predicted levels of radionuclides and the current monitoring scheme. In the case of the radionuclides NPDWRs, this provides unusual challenges. This is partly due to the fact that several community water systems are not complying with the existing regulations, which is reflected in the occurrence database used for this work (the National Inorganics and Radionuclides Survey, ''NIRS'; see EPA 1991, proposed rule and EPA 2000a). Also, as discussed in the Introduction to today's NODA, there are weaknesses in the current monitoring requirements that has lead to a situation in which some water systems having combined radium levels greater than the MCL of 5 pCi/L will not have knowledge of this fact (and hence are not presently in violation of the combined radium NPDWR). Both of these influences, the existing unresolved radionuclides NPDWR violations and the monitoring deficiencies, must be accounted for in the analytical baseline.

The regulatory baseline and other analytical baselines are benchmarks to measure regulatory impacts against. Generating a national-level contaminant occurrence profile is an important part of this benchmarking process. The database used as the basis for this model, NIRS, is described in appendix I of today's NODA (Occurrence). The analysis of regulatory impacts uses this system-size stratified baseline occurrence model [1] to estimate the percentages of water systems with contaminant levels within specified values (e.g., 30 to 50% above the MCL). This information is then combined with other models to estimate the compliance costs and benefits associated with each option. Examples of models relevant to national costs estimation include ''model systems [2],'' compliance cost equations [3], and the compliance action prediction model or ''decision trees [4].'' Examples of models relevant to risk reduction and benefits estimation include the risk models described in appendix II and the risk reduction valuation models described in the Technical Support Document (EPA 2000a).

The analytical baseline for combined radium reflects full compliance with the existing regulations as written, which have been fully enforceable since the 1986 reauthorization of the SDWA. This approach assumes that, in the absence of any changes to the radionuclides NPDWRs, EPA and the States will eventually ensure that all systems fully comply with the existing regulations. This approach allows us to separate out the predicted number of systems with combined radium levels in excess of the MCL that have knowledge of the violation (''systems in violation'') from the predicted number of systems that have levels in excess of the MCL, but that would not have knowledge of this under the current monitoring requirements. Since uranium is not currently regulated, no such corrections are necessary. It was also determined that treatment installed to remove the other radionuclides should not significantly impact the uranium analytical baseline.[5]

B. Approach for Assessing Occurrence, Risks and Costs for Community Water Systems

1. Assessing Occurrence

To develop estimates of the baseline radionuclides occurrence profile for community water systems, we began by extrapolating from data obtained through EPA's National Inorganics and Radionuclides Survey (NIRS). This survey measured radionuclide concentrations at 990 community ground water systems between 1984 and 1986. For detailed information on the design of NIRS, see Longtin 1988. For detailed information on how NIRS was used in this work, see the background documents (EPA 2000a and 2000b).

We made adjustments to the NIRS data to address certain limitations, including (1) the small size of the sample of systems serving populations greater than 3,300 persons; (2) the decay of radium-224 prior to analysis of the NIRS water samples; (3) the need to convert mass measurements of uranium to activity levels; and, (4) the lack of information on surface water systems. The analyses and discussions that follow concentrate on CWSs serving retail populations of less than one million persons. Discussions of preliminary and future economic impacts analyses of Non-Transient Non-Community Water Systems (NTSC systems) and the largest CWSs follow later in this section. The two occurrence approaches we examined are described next. For a discussion of the relative strengths and weaknesses of the two approaches to estimating occurrence, see the Technical Support Document (EPA 2000a).

[1] The NIRS database is stratified into four categories: systems serving between 25–500 persons, 501—3,300 persons, 3,301–10,000 persons, and 10,001–1,000,000 persons. Because of the small sample size used to describe the larger systems, our model uses only three categories: we combine the two categories for systems serving greater than 3,301 persons into a single category.

[2] Model systems describe the universe of drinking water systems by breaking it down into discrete ''system size categories'' by population served. There are nine size categories: 25–100 persons served; 101–500; 501–1,000; 1,001–3,300; 3,301–10,000; 10,001–50,000; 50,001–100,000; 100,000–1,000,000; > 1,000,000. Within each size category, the systems are described by a single set of ''typical characteristics'' by source water type (ground versus surface water) and ownership type (public versus private ownership). These characteristics include the average and design flows and the distribution of numbers of entry points per system.

[3] Unit compliance costs models include water treatment cost models (e.g., W/W Cost and the WATER model) and models for other compliance options, like alternate water well sources and purchasing water. For a discussion of the standard EPA water treatment cost models, see EPA 1999d.

[4] Decision trees are models of the relative probabilities that water systems will choose particular compliance actions when in violation. The probabilities are estimated based on considerations of source water type, system size, water quality, required removal efficiency, unit costs, treatment issues (e.g., co-treatment and pre-/post-treatment requirements), and residuals disposal costs and issues.

[5] While the treatments installed to eliminate gross alpha and combined radium may also reduce uranium levels, we do not quantify these impacts in this analysis. We make no adjustment for three reasons. First, the NIRS data suggest that systems with elevated levels of gross alpha or combined radium rarely report uranium concentrations above levels of concern. Second, some types of treatment used to remove gross alpha or radium are less effective in removing uranium. Lastly, radium and uranium occur at higher levels under very different aquifer conditions: radium tends to occur at high levels in water with low dissolved oxygen and high total dissolved solids, while uranium occurs at higher levels in oxygen-rich waters with low total dissolved solids (see the Technical Support Document, EPA2000a).

2. ''Direct Proportions Approach'' to Estimating Occurrence

Because of uncertainties related to extrapolating from the NIRS database to national-level estimates, we applied two approaches for estimating the national-level central-tendency occurrence estimate. First, we assumed that national occurrence is directly proportional to the occurrence levels measured in NIRS. For example, if the radionuclide concentration in one percent of the samples from NIRS representing a particular water system size category are greater than the MCL, we assumed that one percent of all systems in that size class would be out of compliance at the national level (It is worth noting that using NIRS to extrapolate to the State or regional level is not valid, since NIRS was designed to be representative at the national-level, but not at these other levels). In cases where this approach predicts ''zero probability'' of non-compliance for a system size category (i.e., no samples in NIRS were above the MCL being considered), this approach is flawed, since the expectation is that this finding actually reflects a small probability, not ''zero probability.'' In other words, in situations where ''zero impact'' is predicted, it is much more likely that a very small number of water systems will be impacted compared to true ''zero impact.'' For this reason, we also used a mathematical model to simulate the occurrence distribution, in which these ''zero probabilities'' are replaced by estimated small probabilities.

3. ''Lognormal Model Approach'' to Estimating Occurrence

The second approach recognizes that ''true'' radionuclides occurrence will most likely be spread over a range wider than that observed in the survey. This approach assumes that ''probability plots'' of the NIRS data are lognormally distributed. A probability plot compares the radionuclide concentration for the various samples to the probability of a given sample having that level or less, where this probability is estimated from the actual occurrence data from NIRS. An assumption of lognormality means that a probability plot for the logarithms of the radionuclide levels would be expected to be linear (fall on a straight line).

Inspection of the NIRS data suggests that it is distributed in a roughly lognormal pattern, with most systems reporting concentration levels well below the MCLs of concern. Several other studies also suggest that the distribution of radionuclide occurrence in drinking water systems is likely to follow a lognormal distribution [6], so this assumption should be robust in most cases. If the NIRS data were perfectly lognormally distributed, both approaches would lead to similar estimates of occurrence. This is usually the case. However, it should be noted that there instances of significant deviations between the two approaches. For example, the direct proportions approach predicts that 0.4 % of the systems serving more than 500 persons will be impacted (61 systems) by an MCL of 20 pCi pCi/L for uranium, whereas the lognormal model approach predicts that 1.8% of systems will be impacted (255 systems), amounting to a difference in prediction of almost 200 impacted water systems in this size category. There are several possible explanations for this deviation, but the important point is that the use of both approaches allows the data gap to be recognized and fully considered.

A statistical software package (''Stata'') was used to estimate a lognormal distribution that best fits the data for systems in each size class. We then used the fitted log means and log standard deviations of the resulting distributions to estimate the number of systems out of compliance with each regulatory option using standard statistical equations. More detail regarding the occurrence models and the estimation of the numbers of impacted systems can be found elsewhere (EPA 2000a and 2000b).

4. Assessing Risk

After determining the number of systems out of compliance with each regulatory option under consideration, we assessed the risk reductions that would result from these systems taking actions to come into compliance. The approach for the risk analysis begins with the development of intrinsic ''risk factors'' for each group of radionuclides. These risk factors are composites that involve multiplying EPA's best estimates of unit mortality and morbidity cancer risk coefficients (risk per pCi) for each group of radionuclides by standard assumptions regarding drinking water ingestion to determine the risk factors associated with drinking water exposure (risk per pCi/L). We then applied the individual risk factors [7] to the estimates of the reduction in exposure associated with each regulatory change under consideration, taking into account the population exposed. The calculation of risk factors from risk coefficients and a discussion of exposure assumptions are detailed elsewhere (EPA 2000a). The risk factors (per pCi/L in drinking water) used in the risk reduction analyses are summarized in Table V–1.

The unit [8] risk factors applied in this analysis refer to the aggregated small changes in the probability of incurring cancer over a large population. These unit probabilities can be interpreted in two ways: as the unit lifetime excess probability of cancer induction averaged over age and gender for all individuals in a population or as the risk for a statistically ''averaged individual.'' It should be noted that no one individual is truly average, since the averaging also occurs over gender. Given a model of radionuclide occurrence, the population risks of excess cancer incidence can be estimated before and after a given regulatory option for the individuals comprising the population, with the difference being equal to the reduced risk. These reductions in individual cancer incidence probabilities may then be summed over the population to indicate the central-tendency number of ''statistical cancer cases avoided'' annually. However, it should be kept in mind that for many reasons, including the large variance associated with such risk factors, it is impossible to ''check this prediction'' in any meaningful way. In interpreting reduced risks for given options, it is arguably best to think of them in terms of reduced average ''individual excess risk,'' rather than ''cases avoided,'' for the reasons just described. For example, it is much easier to understand the idea that an individual's average lifetime risk of developing cancer due to exposure to radionuclides in drinking water has been reduced from three in ten thousand to one in ten thousand for a number of water systems under a given option then to understand that an average of 0.5 cancer cases are avoided annually at the national level for that option. The use of ''individual excess risk'' avoids much the confusion about ''statistical cases,'' which are conceptually difficult to understand.

TABLE V–1.—AVERAGE INDIVIDUAL RISK FACTORS, AVERAGE WATER CONSUMPTION (1.1 L/PERSON/DAY) (PER PCI/L)

Regulatory option	Morbidity		Mortality	
	Lifetime ingestion	Annual ingestion	Lifetime ingestion	Annual ingestion
Gross Alpha: changes in monitoring requirements (weighted average of Ra-224 and Ra–226)	5.24E–06	7.48E–08	3.26E–06	4.65E–08
Gross Alpha: changes in MCL (Ra–224 only)	4.77E–06	6.81E–08	2.90E–06	4.15E–08

[6] See the Technical Support Document (EPA 2000a) and the HRRCA (EPA 2000b).

[7] This analysis focuses on changes in cancer risks from tap water ingestion. Individuals may be exposed to radionuclides in drinking water through other pathways (e.g., inhalation while showering), and uranium may have toxic effects on the kidneys; however, we expect that any changes in these types of risks will be, while not insignificant, much smaller than the changes in cancer risks from ingestion, and hence discuss them only qualitatively in this analysis.

[8] ''Unit risk factors and ''unit risks'' refer to the risk per pCi/L in drinking water. They are not estimates of cancer incidence per se, but rather are indicators of the ''potency'' of a radionuclide. To get estimates of the risks of cancer incidence for an exposed population, the unit risk factors must be used in conjunction with a radionuclide drinking water occurrence model. These population risks refer to the estimated numbers of excess statistical cases of cancer that a population will face under a given set of exposure assumptions.

TABLE V–1.—AVERAGE INDIVIDUAL RISK FACTORS, AVERAGE WATER CONSUMPTION (1.1 L/PERSON/DAY) (PER PCI/L)—Continued

Regulatory option	Morbidity		Mortality	
	Lifetime ingestion	Annual ingestion	Lifetime ingestion	Annual ingestion
Combined Radium: changes in monitoring requirements (weighted average of Ra–226 and Ra–228)	2.30E–05	3.28E–07	1.63E–05	2.32E–07
Combined Radium: changes in MCL (Ra–228 only)	2.98E–05	4.26E–07	2.12E–05	3.03E–07
Uranium: establish MCL (simple average of U–234, U–235, and U–238)	1.95E–06	2.79E–08	1.26E–06	1.81E–08

5. Estimating Monetized Benefits

In this section, we summarize the information used in estimating monetized benefits. A description of the methodology used for these estimates is found in the Technical Support Document (EPA 2000a), which provides background information on: (1) The economic concepts that provide the foundation for benefits valuation; (2) the methods that are typically used by economists to value risk reductions, such as wage-risk, cost of illness, and contingent valuation studies; (3) the approach for valuing the reductions in fatal cancer risks and nonfatal cancer risks; (4) the use of these techniques to estimate the value of the risk reductions attributable to the regulatory options for radionuclides in drinking water; and (5) the limitations and uncertainties involved in the estimation. For more detail on the methodology employed, see the Health Risk Reduction and Cost Analysis (HRRCA, EPA 2000b).

This benefits analysis is based on two basic types of valuation: fatal cancer risk reductions and non-fatal cancer risk reductions. Fatal cancer risk reductions are valued in terms of the ''value of a statistical life'' (VSL), which does not refer to the value of an identifiable individual, but rather refers to the value of small reductions in mortality risks over a large population. For example, let us assume that a regulatory option results in a risk reduction of ''one statistical fatal cancer case.'' This refers to the summation of small risk reductions over a large number of persons such that the summation equals ''one case'' (say, one hundred thousand persons each face a risk reduction of 1/100,000). Using our methodology, the resulting benefits would be equal to ''one statistical life.'' Continuing the example, if each person were willing to pay $20 for such a risk reduction (1/100,000), the resulting VSL would be $2 million ($20 times 100,000 persons). However, since there is no direct information on what persons are willing to pay for the risks we are interested in, we must use indirect methods for estimating the VSL. The currently accepted methodology involves transferring the VSL from studies of the wage increases that persons ''demand'' in exchange for accepting jobs with slightly higher chances of accidental fatality (''wage-risk studies''). There are a number of assumptions involved in making this transfer, which are discussed in more detail in the background documentation (EPA 2000a and 2000b).

Valuing nonfatal cancer risk reductions is often done with ''cost of illness studies,'' which examine the actual direct (*e.g.,* medical expenses) and indirect (*e.g.,* lost work or leisure time) costs incurred by affected individuals. Unfortunately, this valuation does not measure the ''willingness to pay'' to avoid nonfatal cancers, but rather assumes that benefits are equal to the avoided costs. The studies used and assumptions involved are discussed elsewhere (EPA 2000a and 2000b).

Because of the uncertainties involved in valuations, we used an estimate of the range of values of reductions in fatal and non-fatal risks attributable to the radionuclides regulations using the following estimates (1998 dollars):

Fatal Risk Reduction Valuations (''Value of a Statistical Life'', VSL):

Best Estimate: Value of fatal risk reductions = Statistical lives saved * $5.9 million per statistical life.

Low End Estimate: Value of fatal risk reductions = Statistical lives saved * $1.5 million per statistical life.

High End Estimate: Value of fatal risk reductions = Statistical lives saved * $11.5 million per statistical life.

Non-Fatal Risk Reduction Valuations

Best Estimate: Value of nonfatal risk reductions (medical costs only) = Statistical cases averted * $0.10 million.

Low End Estimate: Value of nonfatal risk reductions (medical costs only) = Statistical cases averted * $0.09 million.

High End Estimate: Value of nonfatal risk reductions (medical costs only) = Statistical cases averted * $0.11 million.

6. Estimating the Costs of Compliance

The last component of the analysis involves estimating the costs of compliance for each regulatory option. The options under consideration will increase the costs of monitoring for all regulated systems, as well as require a small fraction of the systems to take action to reduce the contaminant levels in their finished water to achieve compliance. Examples of compliance actions include installing treatment, purchasing water from another system, changing the water source used (*e.g.,* installing a new well), blending the contaminated water with other source water that is below the MCL, and, in cases where the contaminated well is not essential to meet capacity, stopping production from the contaminated well. The cost analysis models both new capital costs and, and when appropriate, incremental operations and maintenance costs for this variety of compliance options. The inputs used in the cost analysis and a comparison of the modeled costs for treatment, alternate source, purchased water to case studies can be found in the Technical Support Document (EPA 2000a) and elsewhere (EPA 1998a).

C. Summary of Annual Costs and Benefits

1. Estimates of Costs and Benefits for Community Water Systems

The following results reflect the regulatory options that are currently being considered. Results for the other options that were analyzed (correction of monitoring deficiencies for gross alpha and changes to MCLs for gross alpha and Ra-228), but that EPA does not plan to adopt, are located in the Technical Support Document (EPA 2000a). In addition to EPA's preferred options, we have included all results in the Technical Support Document to allow interested stakeholders to comment on these other options, if desired.

Table V–2 shows the summarized results for EPA's analysis of risk reductions, benefits valuations, and costs of compliance (see EPA 2000b for a break-down of the summary by water system size). The risk reductions and cost estimates are based on the estimated range of numbers of community water systems predicted to be out of compliance with each of the regulatory options assessed. The ranges shown reflect the two occurrence model methodologies previously described, the ''direct proportions'' and ''lognormal model'' approaches. The ranges in occurrence predictions necessarily result in ranges of estimates for risk reductions, benefits valuations, and compliance costs. There are two ranges shown for values of cancer cases avoided, the ''best-estimate range,'' based on the best-estimate of risk reduction valuations, and the ''low/high-estimate range,'' which reflects the use of the two occurrence models and the uncertainty in the risk reduction valuations (''low-end'' versus ''high-end'' estimates). These ranges do not reflect uncertainty in other model inputs, like risk factors in the case of risk reduction estimates and treatment unit costs in the case of compliance costs. Quantitative uncertainty analyses for risk reductions, benefits, and compliance costs will be conducted and reported in the preamble to the final rule. EPA expects that these uncertainty analyses will not impact final decisions.

Eliminating the combined radium-226/-228 monitoring deficiency [9] is predicted to lead to 210 to 250 systems out of compliance with an MCL of 5 μg/L, affecting 33,000 to 460,000

[9] The monitoring deficiency will be corrected by requiring the separate analysis of Ra-228 for systems with gross alpha levels below 5 pCi/L.

persons. Implementing an MCL of 20 μg/L for uranium is predicted to impact 830 to 970 systems, affecting 470,000 to 2,100,000 persons. An MCL for uranium of 40 μg/L is predicted to impact 300 to 430 systems, affecting 47,000 to 850,000 persons; 80 μg/L is predicted to impact 40 to 170 systems, affecting 7,000 to 170,000 persons. These estimates for uranium are based on the assumption that the activity-to-mass ratio in drinking water is 1:1. EPA's current best-estimate for the average activity-to-mass ratio for the various uranium isotopes in drinking water is 0.9. EPA will update this assumption for the uranium options in the Regulatory Impact Assessment supporting the rule finalization. However, the impact is expected to be small. For example, using the lognormal occurrence distribution model for the 40 μg/L option, an assumption of an activity-to-mass ratio of 0.9 results in an estimated number of impacted systems of 370, a decrease of only 12–13%.

The estimated risk reduction range for the option addressing the combined radium monitoring deficiency is 0.3 to 0.5 cancer cases avoided annually, with an associated annual monetized benefits range of one to two million dollars. The risk reductions estimated for the uranium options range from 0.2 to 2 cases avoided annually for an MCL of 20 mg/L, 0.04 to 1.5 cases avoided annually for an MCL of 40 μg/L, and 0.01 to 1 case avoided annually for an MCL of 80 μg/L. The associated annual monetized benefits for the uranium options range from 0.6 to 8 million dollars (20 mg/L), 0.1 to 6 million dollars (40 μg/L), and less than 0.1 to 4 million dollars (80 μg/L).

Annual compliance costs range from 20 to 30 million dollars for the option addressing the combined radium monitoring deficiencies. Annual compliance costs for the uranium options range from 30 to 140 million dollars for an MCL of 20 mg/L, 6 to 60 million dollars for an MCL of 40 μg/L, and 5 to 30 million dollars for an MCL of 80 μg/L.

As demonstrated by this analysis the estimated range of central-tendency annual compliance costs exceed the ranges of central-tendency annual monetized benefits for all options. This is not surprising given that most of the systems impacted are small water systems, which tend to have much higher per customer compliance costs relative to large systems, while the per customer risk reduction is independent of water system size. Except in cases where risk reductions are quite large, it is predictable that estimated annual costs will outweigh estimated annual benefits for small water systems (given the current methodologies for estimating benefits). However, it should be pointed out that all of the regulatory options being considered have associated lifetime morbidity risks near or in excess of one in ten thousand, which is the upper bound on the preferred risk range according to EPA's policies on regulating drinking water contaminants. In the case of uranium, it is also important to recognize that there may be considerable non-quantified (not monetizable) benefits associated with reductions in kidney toxicity risks. If such benefits were quantified, it is likely that the net benefits would be more favorable for all uranium options.

Some commenters may argue that costs and benefits considerations should lead to the conclusion that the finalization of the correction of the combined radium monitoring deficiencies and/or the establishment of a NPDWR for uranium are not warranted. However, this conclusion would lead to a situation where customers of many ground water systems face lifetime morbidity risks greatly in excess of the acceptable risk upper limit of one in ten thousand. According to EPA's policies, the proper use of this flexibility should lead to regulatory decisions that have associated risks that are within or acceptably close to EPA's longstanding goals of limiting excess lifetime morbidity risks to the range of one in a million to one in ten thousand, except under unusual circumstances. EPA solicits comment on this interpretation of costs and benefits for the finalization of the 1991 radionuclides proposal.

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Table V-2

SUMMARY OF COSTS AND BENEFITS FOR COMMUNITY WATER SYSTEMS PREDICTED TO BE IMPACTED BY THE REGULATORY OPTIONS BEING CONSIDERED FOR FINALIZATION

Options	Numbers of Systems Impacted[1] (Population Exposed Above MCL)	Estimated Lifetime Excess Cancer Morbidity Risk at MCL[2,3,4]	Ranges of Total Cancer Cases Avoided Annually (fatal cases)	Best-Estimate Values of Avoided Cases, in millions of $ / year) (low-end/high-end[4,5] estimate)	Ranges of Compliance Costs, in millions of $ / year)
Systems predicted to be impacted by corrections to the monitoring deficiencies for combined radium-226 and -228:					
Eliminate combined radium monitoring deficiency	**270 - 320 systems (380 - 460 K persons)**	1×10^{-4}	0.3 - 0.5 (0.2 - 0.4)	1 - 2 (0.3 - 4)	20 - 30
Systems predicted to be out of compliance with proposed options for uranium MCL:					
Uranium at 20 pCi/L (20 Ug/L)	**830 - 970 systems (470 - 2,100 K persons)**	5×10^{-5}	0.2 - 2 (0.1 - 1.5)	0.6 - 8 (0.2 - 16)	30 - 140
Uranium at 40 pCi/L (40 Ug/L)	**300 - 430 systems (47 - 850 K persons)**	1×10^{-4}	0.04 - 1.5 (0.02 - 1)	0.1 - 6 (< 0.1 - 12)	6 - 60
Uranium at 80 pCi/L (80 Ug/L)	**40 - 170 systems (7 - 170 K persons)**	2×10^{-4}	0.01 - 1 (< 0.01 - 0.7)	< 0.1 - 4 (< 0.1 - 8)	5 - 30

Notes:

Ranges based on directly proportional versus lognormal distribution approach.

1. Compared to the initial baseline (i.e., occurrence data are adjusted to eliminate existing MCL violations) for combined radium. Occurrence data is unadjusted for uranium options.

2. 1×10^{-4} is equivalent to "one in ten thousand", EPA's usual upper limit of acceptable cancer incidence (morbidity) risk for contaminants in drinking water.

3. These risk estimates are based on several simplifying assumptions and are only meant to be illustrative. The reported combined radium risk is based on an "occurrence weighted average" for Ra-226 and Ra-228 (2.3×10^{-5} per pCi/L). The "best-estimate"for a particular situation would depend on the actual levels of Ra-226 and Ra-228 that comprise the combined level of 5 pCi/L. Regarding uranium risks, since the individual uranium isotopes that make up naturally-occurring uranium have cancer morbidity risks that are similar in magnitude (6.4 to 7.1×10^{-11} per pCi), the assumptions about isotopic prevalence are not important. Here, we assumed that the simple average applied (3.83×10^{-6} per pCi/L).

4. Kidney toxicity is not considered in this estimate of risk or monetized benefits.

5.. Ranges in parentheses reflect low and high estimates of values of cases avoided. The low-end estimate is based on the cases avoided estimate from the "direct proportions" occurrence model and the low-end risk reduction valuations estimates. The high-end estimate is based on the "lognormal model" for occurrence and the high-end risk reduction valuations estimates. All estimates (best, low, and high) include valuations for both fatal and non-fatal risk reductions.

2. Uncertainties in the Estimates of Benefits and Costs

The models used to estimate costs and benefits related to regulatory measures have uncertainty associated with the model inputs. The types and uncertainties of the various inputs and the uncertainty analyses for risks, benefits, and costs are qualitatively discussed later in this section.

a. Uncertainties in Risk Reduction Estimates. For each individual radionuclide, EPA developed a central-tendency risk coefficient that expresses the estimated probability that cancer will result in an exposed individual per unit of radionuclide activity (e.g., per pCi/L) over the individual's lifetime (assumed to be 70 years). Two types of risks are considered, cancer morbidity, which refers to any incidence of cancer (fatal or non-fatal), and cancer mortality, which refers to a fatal cancer illness. For this analysis, we used the draft September 1999 risk coefficients developed as part of EPA's revisions to Federal Guidance Report 13 (FGR–13, EPA 1999e). FGR–13 compiled the results of several models predicting the cancer risks associated with radioactivity. The cancer sites considered in these models include the esophagus, stomach, colon, liver, lung, bone, skin, breast, ovary, bladder, kidney, thyroid, red marrow (leukemia), as well as residual impacts on all remaining cancer sites combined.

There are substantial uncertainties associated with the risk coefficients in FGR–13 (EPA 1999e): researchers estimate that some of the coefficients may change by a factor of more than 10 if plausible alternative models are used to predict risks. While the report does not bound the uncertainty for all radionuclides, it estimates that the central-tendency risk coefficients for uranium-234 and radium-226 may change by a factor of seven depending on the models employed to estimate risk.[10] Ranges that reflect uncertainty and variability in the risk coefficients will be used in a Monte Carlo analysis of risk reductions and benefits, the results of which will be reported in the preamble to the final rule.

In addition, as previously described in appendix I, ''Occurrence,'' the available occurrence data do not provide information on the contribution of individual radionuclides or isotopes to the total concentrations of gross alpha or uranium. Therefore, there is uncertainty involved in the assumptions about which radionuclides comprise the reported gross alpha or uranium activity. These and other uncertainties related to occurrence information (e.g., uncertainty in extending the NIRS database results to the national level) will also be incorporated in a Monte Carlo analysis of benefits to estimate the range of uncertainty surrounding the central-tendency estimates. Other inputs that will be used in the Monte Carlo analysis of benefits are the age- and gender-dependent distributions of water ingestion, which are used in estimating lifetime exposure, and the credible range for the ''value of a statistical life.'' This uncertainty analysis is not expected to alter the regulatory options discussed in today's NODA.

b. Effects of the Inclusion of a Latency Period and Other Factors on the Estimate of Benefits. The expected analytical impacts of the inclusion of other factors, *e.g.,* a cancer-latency period, cancer premiums, and non-quantifiable benefits have been discussed in the recent radon proposed NPDWR (64 FR 59295). The relevant points are summarized briefly here and in more detail in the Technical Support Document for the Radionuclides NODA (USEPA 2000a).

There are several potentially important sources of uncertainty related to the valuations of risk reductions for the regulatory options examined. Since the mortality valuations dominate the estimated benefits, factors that affect the VSL are most important. Factors that may affect the VSL include discounting due to cancer latency periods,[11] cancer-related premiums that may raise the value of statistical life, and other currently non-quantifiable benefits. Cancer latency-related discounting would be expected to decrease the present VSL, while cancer premiums would tend to increase the present VSL. It is not clear whether an inclusion of all of these factors would be expected to result in a lower or higher present VSL. However, EPA is currently working with the Science Advisory Board (SAB) to determine how to best include these factors, whether the inclusion is quantitative or qualitative.

c. Uncertainty in Compliance Cost Estimates. Regarding uncertainty in the compliance cost estimates, these estimates assume that most systems will install treatment to comply with the MCLs, while recent research suggests that water systems usually select compliance options like blending (combining water from multiple sources), developing new ground water wells, and purchasing water (EPA 1998a and c, EPA 2000a). Preliminary data (202 compliance actions from 14 States) on nitrate violations suggest that only around a quarter (25%) of those systems talking action in response to a nitrate violation installed treatment, while roughly a third developed a new well or wells. The remainder either modified the existing operations (10–15%), blended (15%), or purchased water (15–20%). Similar data for radium violations from the State of Illinois (77 compliance actions) indicate that around a quarter of systems taking action installed treatment, while the majority (50–55%) purchased water, with the remainder (20–25%) either installing a new well, blending, or stopping production from the contaminated well or wells. The prevalence of the use of these non-treatment options is a cross-cutting issue for future Regulatory Impact Assessments and probably will not be resolved before the radionuclides NPDWR is finalized. EPA is following up with this study and will report the results at a later date.

While these ''other than treatment'' options may cost as much as or more than treatment in some cases, they are expected to be less expensive on average, which largely explains their prevalence as compliance options. For example, EPA has recently estimated the costs associated with developing municipal wells to range from $0.08/kgal to $0.46/kgal, depending on system size, geologic setting, and other site specific parameters (EPA 1999b), with an average of $0.23/kgal for systems serving between 501 and 1,000 persons and $0.17/kgal for systems serving between 10,001 and 50,000 persons.[12] These costs include testing and drilling, steel casings with cement lining, pumps, including electrical connections and controls, and a pump shelter. For smaller, non-municipal PWS systems, we estimate that wells could cost from 10 to 80 percent of the costs presented for municipal systems. As shown in the Technical Support Document (EPA 2000a), these production costs are much lower than those for typical treatment, especially for small systems. When feasible, selection of such options may reduce compliance costs significantly. The Technical Support Document includes data on other non-treatment options like purchasing water and blending.

Preliminary uncertainty analyses suggest that variability in the unit compliance costs and decision tree assumptions dominate the over-all cost variability. To evaluate the potential variability in the compliance cost estimates, a Monte Carlo analysis will support the Regulatory Impact Assessment for the final rule. Inputs that influence cost variability include:

- Numbers of total systems in the various system size categories.
- Distributions of entry points per system in the various system size categories.
- Distributions of populations served by size category.
- Flow sizes as a function of population served.
- Daily household water consumption.
- Proportions of systems and sources exceeding regulatory limits.
- Unit costs (capital and O&M) of treatment technologies and annual costs of alternate source and regionalization.
- Proportions of non-compliant systems choosing between treatment, alternate source, and regionalization.

Since per system costs are much higher for very large systems, the assumptions used in the larger water system size categories can be expected to dominate the variability in national costs. Each of these inputs will be modeled using probability distributions that

[10] Table 2.4, Uncertainty Categories for Selected Risk Coefficients. Federal Guidance Report 13 (1999).

[11] A latency period refers to the average amount of time that passes between the beginning of exposure to a carcinogen or multiple carcinogens and the on-set of fatal cancer. There is considerable uncertainty in estimating a ''typical latency period'' for the options studies here for many reasons, including the large ranges in estimated latency periods for given cancer types and the large uncertainty involved in predicting which type or types of cancer will result from exposure to a given radionuclide in drinking water. It is also uncertain what discounting rate would be appropriate in this situation. Some may argue that discounting is entirely inappropriate (a rate of zero) and others may argue that typical financial discount rates are appropriate (3 to 7%).

[12] This estimate is based on total capital costs ranging from approximately $135,000 to $550,000 per MGD of flow. The estimate assumes typical relationships between design and average daily flows and a capital discount rate of 3 or 7%.

reflect the state of the available data. In some cases, input variability will be estimated from SDWIS, the CWSS, or other sources (e.g., distributions of populations served, daily household water consumption, unit costs) . In other cases, input variability will have to be based on best professional judgement. Again, this uncertainty study is expected to provide useful information, but is not expected to result in changes to the regulatory decisions described in today's NODA.

D. Estimates of Costs and Benefits for Non-Transient Non-Community Water Systems

The available data are not sufficient to allow EPA to predict a central-tendency impact of the regulatory options on non-transient non-community water systems (NTSC systems). Instead, EPA conducted a ''what-if'' analysis of potential costs and benefits based on reasonable assumptions of the percentage of NTSC systems impacted by the various options (EPA 2000b). A ''what-if'' analysis allows us to pose hypothetical occurrence scenarios and to estimate costs and benefits for these scenarios. If the scenarios are chosen properly, they should bound the reasonable set of potential costs and benefits for NTSC systems. However, the estimates should not be interpreted as representing ''best estimates,'' which would be based on an occurrence survey of radionuclides occurring at NTSC systems. The Technical Support Document (EPA 2000a) provides details on the inputs and assumptions used for estimating regulatory impacts for NTSC systems. The resulting estimates of the percentage of systems out of compliance are provided in Table V–3.

TABLE V–3.—ASSUMPTIONS FOR HYPOTHETICAL ''WHAT-IF'' ANALYSIS FOR NON-TRANSIENT NON-COMMUNITY WATER SYSTEMS (APPROXIMATELY 19,300 SYSTEMS NATIONWIDE)

Regulatory option	Percent of national systems in states with elevated levels (1) (percent)	Upper bound: 10% of col. (1) (percent)	Lower bound: 1% of col. (1) (percent)
Gross Alpha at 15 pCi/L	60	6	1
Combined Radium at 5 pCi/L	79	8	1
Uranium at 20 pCi/L:			
Ground water	54	5	1
Surface water	29	3	0

We calculated risk reductions associated with each set of assumptions using the same analytic approach as outlined for the community water systems. However, we use lower water intake assumptions because the population affected generally is not at the location served full-time or year-round. The risk factors were estimated using the same risk coefficients as a starting point (risk per pCi), but use different water consumption assumptions to calculate lifetime excess risk factors (risk per pCi/L). A cost model is used to predict the annual compliance costs for these systems based on their size classes (EPA 2000); in general, non-transient non-community systems tend to use ground water and serve small populations.

The results of the analysis are summarized in Table V–4. If EPA requires non-transient non-community systems to comply with the gross alpha standard of 15 pCi/L, under the assumptions used in the analysis the number of systems out of compliance could range from 110 to 1,100 systems. The associated annual costs range from $1 million to $4 million and the statistical cancer cases (fatal and nonfatal) avoided annually range from 0.01 cases to 0.1 cases. For combined radium, the resulting number of impacted systems ranges from 150 to 1,500 systems with annual costs ranging from $1 million to $6 million and an associated number of annual statistical cancer cases avoided ranging from 0.02 cases to 0.2 cases. For a uranium MCL of 20 μg/L, the results suggest a range of impacted ground water systems from 100 up to 1,000 systems with annual costs ranging from $1 million to $4 million and an associated number of annual statistical cancer cases avoided ranging from less than 0.01 cases up to 0.04 cases. The resulting number of surface water systems impacted by a uranium MCL of 20 μg/L ranges from less than 10 to less than 20 systems. The associated national annual costs for surface water systems is less than $0.1 million up to 0.1 million with annual risk reductions of less than 0.01 statistical cancer cases.

TABLE V–4.—HYPOTHETICAL ''WHAT-IF'' RESULTS FOR NON-TRANSIENT NON-COMMUNITY WATER SYSTEMS

Regulatory option	Lower Bound Estimate			Upper Bound Estimate		
	Number of systems out of compliance	Annual costs (million dollars)	Statistical cancer cases avoided (cases)	Number of systems out of compliance	Annual costs (million dollars)	Statistical cancer cases avoided
Gross Alpha at 15 pCi/L	110	1	0.01	1,100	4	0.1
Combined Radium at 5 pCi/L	150	1	0.02	1,500	6	0.2
Uranium at 20 pCi/L:						
Ground water	100	1	<0.01	1,000	4	0.04
Surface water	< 10	0.03	<0.01	< 20	0.1	<0.01

Note: These results are based on hypothetical assumptions regarding the percent of systems likely to be out of compliance with each regulatory option as discussed in the preceding text. These are not estimates of actual compliance costs or risk reductions, and are provided for illustrative purposes only.

E. Impacts for Systems Serving Greater Than One Million Persons

Based on an Internet search of the available water quality information for water systems serving greater than one million persons (very large systems), there is no direct evidence that closing the monitoring deficiencies for radium will impact these systems. However, the internet search was not conclusive in ruling out the possibility that one or more systems serving greater than one million persons would be impacted by these options. For this reason, EPA has followed up with the few systems in question to determine the likelihood of impact. The follow-up confirmed that there were no impacts expected for these systems. Uranium occurrence data for these systems was collected to the extent feasible and there is no evidence of an impact at 20 or 40 μg/L.

F. References

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Dated: April 7, 2000.

Charles J. Fox,

Assistant Administrator, Office of Water.

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Federal Register

Friday,
April 21, 2000

Part V

Department of Agriculture

Cooperative State Research, Education, and Extension Service

7 CFR Part 3419

Matching Funds Requirement for Formula Funds for Agricultural Research and Extension Activities at 1890 Land-Grant Institutions, Including Tuskegee University, and at the 1862 Land-Grant Institutions in Insular Areas; Final Rule

DEPARTMENT OF AGRICULTURE

Cooperative State Research, Education, and Extension Service

7 CFR Part 3419

RIN 0524–AA24

Matching Funds Requirement for Formula Funds for Agricultural Research and Extension Activities at 1890 Land-Grant Institutions, Including Tuskegee University, and at the 1862 Land-Grant Institutions in Insular Areas

AGENCY: Cooperative State Research, Education, and Extension Service, USDA.

ACTION: Final Rule.

SUMMARY: The Cooperative State Research, Education, and Extension Service (CSREES) adds a new part 3419 to Title 7, Subtitle B, Chapter XXXIV of the Code of Federal Regulations, for the purpose of implementing new statutory matching requirements applicable to Federal agricultural research and extension formula funds for 1890 land-grant institutions, including Tuskegee University, and to the 1862 land-grant institutions in the Commonwealth of Puerto Rico and the insular areas of American Samoa, Guam, Micronesia, Northern Marianas, and the Virgin Islands.

EFFECTIVE DATE: April 21, 2000.

FOR FURTHER INFORMATION CONTACT: Dr. Edward M. Wilson, Deputy Administrator; Plant and Animal Systems; Cooperative State Research, Education, and Extension Service; U.S. Department of Agriculture; Mail Stop 2220; 1400 Independence Avenue, S.W.; Washington, D.C. 20250–2220; at 202–401–4329, 202–401–4888 (fax) or via electronic mail at ewilson@reeusda.gov.

SUPPLEMENTARY INFORMATION:

Background and Purpose

The Cooperative State Research, Education, and Extension Service (CSREES) adds a new part 3419 to Title 7, Subtitle B, Chapter XXXIV of the Code of Federal Regulations, for the purpose of implementing the new matching requirements for agricultural research and extension formula funds authorized for the 1890 land-grant institutions and Tuskegee University. Section 226 of the Agricultural Research, Extension, and Education Reform Act of 1998 (AREERA), Pub. L. 105–185, amends Subtitle G of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA) by adding a new section 1449. This section requires matching funds from non-Federal sources for formula funds authorized under sections 1444 and 1445 of NARETPA for research and extension activities at the 1890 land-grant institutions and Tuskegee University.

This rule will also implement the new matching requirements for the 1862 land-grant institutions in the Commonwealth of Puerto Rico and the insular areas of American Samoa, Guam, Micronesia, Northern Marianas, and the Virgin Islands. Section 753(d) and (e) of the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 1999, enacted in Division A, section 101(a) of the Omnibus Consolidated and Emergency Supplemental Appropriations Act, 1999, Pub. L. 105–277, 112 Stat. 2681–33 (1999 Agriculture Appropriations Act), amended section 3(d) of the Hatch Act of 1887 and section 3(e) of the Smith-Lever Act to subject the 1862 land-grant institutions in the Commonwealth of Puerto Rico, the Virgin Islands, and Guam to the same matching requirements as those applicable to an eligible institution under section 1449 of NARETPA. The amendments made by section 753 apply by operation of law to American Samoa, Micronesia, and Northern Marianas by virtue of section 1361(a) of Pub. L. 96–374, as amended by 9(c) of Pub. L. 99–396, which provides that any provision of law related to land-grant institutions in the Virgin Islands or Guam applies to the land-grant institutions in American Samoa, the Northern Marianas, and the former Trust Territory of the Pacific Islands, the land-grant institution of which is the College of Micronesia.

Section 1449 requires that the State make available matching funds to an 1890 institution out of non-Federal funds. CSREES has determined that this does not necessarily limit the source of matching funds to those directly provided by the State as a part of its direct budget or appropriations process. Accordingly, CSREES has defined ''non-Federal sources'' to include direct State appropriations and any funds generated by the 1890 institution or by the 1862 institution in the Commonwealth of Puerto Rico or in an insular area and made available to the institution under other authority (other than authority to charge tuition and fees paid by students) provided by the State. This would include, for example, gift acceptance or user fee authority.

Public Comments and Changes to the Final Rule

One comment was received from an 1862 land-grant institution in an insular area requesting clarification on three issues: (1) Whether an institution is eligible for any agricultural research and extension formula funds if the institution fails to provide the full matching requirement, (2) whether the institution must certify that the required matching funds are available prior to the actual distribution of funds, and (3) whether the definition of matching funds, which indicates that they are not only from non-Federal sources but also funds made available by the State government, precludes other sources of non-Federal funds that are not from the State government.

Each 1890 land-grant institution and each 1862 land-grant institution in insular areas and the Commonwealth of Puerto Rico will be entitled to their allocation of Federal agricultural research and extension formula funds less an amount equal to any required matching amount that the institution fails to provide. For example, the matching requirement in fiscal year (FY) 2000 shall equal not less than 30 percent of the formula funds to be distributed. If an institution was entitled to $1,000,000 for extension but only matches 15 percent, then the $1,000,000 would be reduced by 15 percent and the institution would receive only $850,000. However, the maximum awarded by CSREES will be the amounts of the annual allocations as indicated on the CSREES–OD–1088's, Distributions of Hatch Act Funds and Smith-Lever Act Funds.

Each 1890 land-grant institution and each 1862 land-grant institution in insular areas and the Commonwealth of Puerto Rico must certify that the required matching funds are available prior to the actual distribution of any funds. CSREES has added section 3419.5, Certification of Matching Funds, to clarify that the annual certification of matching funds must be provided to CSREES prior to the distribution of formula funds. This section also provides that the eligible institutions may submit through July 1 of the fiscal year in which funds are appropriated any revisions to their annual certification of matching funds.

As mentioned in the ''Background and Purpose'' section, CSREES has determined that the definition of matching funds does not necessarily limit the source of matching funds to those directly provided by the State as part of its direct budget or appropriations process. Accordingly,

CSREES has defined ''non-Federal sources'' to include direct State appropriations and any funds generated by the 1890 land-grant institution or by the 1862 institution in the Commonwealth of Puerto Rico or in the insular areas and made available to the institution under other authority (other than authority to charge tuition and fees paid by students) provided by the State. This would include, for example, gift acceptance and user fee authority.

Classification

This rule was reviewed under Executive Order 12866 and was determined to be nonsignificant as it will not create a serious inconsistency or otherwise interfere with an action planned by another agency; will not materially alter the budgetary impact of entitlement, grants, user fees, or loan programs, or the rights and obligations of the recipients thereof; and will not raise novel legal or policy issues arising out of legal mandates, the President's priorities, or principles set forth in this executive order. This rule will not have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities.

Regulatory Flexibility Act

The Department certifies that this rule will not have a significant impact on a substantial number of small entities as defined in the Regulatory Flexibility Act, Pub. L. No. 96–534 (5 U.S.C. 601 *et seq.*). Accordingly, a regulatory flexibility analysis is not required for this rule.

Catalog of Federal Domestic Assistance

The programs affected by this rule are listed in the Catalog of Federal Domestic Assistance under No. 10.205, Payments to 1890 Land-Grant Institutions and Tuskegee University, No. 10.500, Cooperative Extension Service, and No. 10.203, Payments to Agricultural Experiment Stations Under the Hatch Act.

Paperwork Reduction Act

In accordance with the Office of Management and Budget (OMB) regulations (5 CFR Part 1320) which implement the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35), the information collection and recordkeeping requirements that will be imposed in the implementation of this rule have been approved under OMB Document No. 0524–0038.

Report to Congress

As required by 5 U.S.C. 801(a), CSREES submitted a report on this final rule to both Houses of Congress and the Comptroller General prior to publication.

List of Subjects in 7 CFR Part 3419

Agricultural extension, Agricultural research, Colleges and universities.

For reasons set forth in the preamble, Title 7, Subtitle B, Chapter XXXIV, of the Code of Federal Regulations is amnded by adding part 3419 to read as follows:

PART 3419—MATCHING FUNDS REQUIREMENT FOR AGRICULTURAL RESEARCH AND EXTENSION FORMULA FUNDS AT 1890 LAND-GRANT INSTITUTIONS, INCLUDING TUSKEGEE UNIVERSITY, AND AT 1862 LAND-GRANT INSTITUTIONS IN INSULAR AREAS

Sec.

3419.1 Definitions.
3419.2 Matching funds.
3419.3 Determination of non-Federal sources of funds.
3419.4 Limited waiver authority.
3419.5 Certification of matching funds.
3419.6 Use of matching funds.
3419.7 Redistribution of funds.

Authority: 5 U.S.C. 301, 7 U.S.C. 3222d; Sec. 753, Pub. L. No. 105–277, 112 Stat. 2681–33.

§ 3419.1 Definitions.

As used in this part:

Eligible institution means a college or university eligible to receive funds under the Act of August 30, 1890 (7 U.S.C. 321 *et seq.*) (commonly known as the Second Morrill Act), including Tuskegee University, or a college or university designated under the Act of July 2, 1862 (7 U.S.C. 301, *et seq.*) (commonly known as the First Morrill Act) and located in the Commonwealth of Puerto Rico and the insular areas of American Samoa, Guam, Micronesia, Northern Marianas, and the Virgin Islands.

Formula funds means agricultural research funds provided to the eligible institutions under section 1445 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA), as amended, or under section 3 of the Hatch Act of 1887, 7 U.S.C. 361c, and agricultural extension funds provided to the eligible institutions under section 1444 of NARETPA or under sections 3(b) and (c) of the Smith-Lever Act, 7 U.S.C. 343(b) and (c).

Matching funds means funds from non-Federal sources made available by the State to the eligible institutions:

(a) For programs or activities that fall within the purposes of agricultural research and cooperative extension under sections 1444 and 1445 of NARETPA, the Hatch Act of 1887, and the Smith-Lever Act; or

(b) For qualifying educational activities. Matching funds means cash contributions and excludes in-kind matching contributions.

Non-Federal sources means funds made available by the State to the eligible institution either through direct appropriation or under any authority (other than authority to charge tuition and fees paid by students) provided by a State to an eligible institution to raise revenue, such as gift acceptance authority or user fees.

Qualifying educational activities means programs that address food and agricultural sciences components of an eligible institution.

Secretary means the Secretary of Agriculture and any other officer or employee of the Department of Agriculture to whom the authority involved may be delegated.

State means the government of any one of the fifty States, the Commonwealth of Puerto Rico, Guam, American Samoa, the Commonwealth of Northern Marianas, the Virgin Islands of the United States, the Republic of Palau, the Republic of the Marshall Islands, and the Federated States of Micronesia.

§ 3419.2 Matching funds.

The distribution of formula funds shall be subject to the following matching requirements: (a) For fiscal year 2000, matching funds shall equal not less than 30 percent of the formula funds to be distributed to the eligible institution;

(b) For fiscal year 2001, matching funds shall equal not less than 45 percent of the formula funds to be distributed to the eligible institution; and

(c) For fiscal year 2002 and each fiscal year thereafter, the matching funds shall equal not less than 50 percent of the formula funds to be distributed to the eligible institution.

§ 3419.3 Determination of non-federal sources of funds.

Each eligible institution shall submit by September 30, 1999, a report describing for fiscal year 1999:

(a) The sources of non-Federal funds made available to the eligible institutions for agricultural research, extension, and qualified educational activity to meet the matching requirements of section 1449 of NARETPA, as amended; and

(b) The amount of funds generally available from each source. This report

for the fiscal year ending September 30, 1999, may also include a request for a waiver of the matching funds requirement for fiscal year 2000.

§ 3419.4 Limited waiver authority.

The Secretary may waive the matching funds requirement for fiscal year 2000 for an eligible institution of a State if the Secretary determines that, based on the report received under § 3419.3, the State will be unlikely to satisfy the matching requirement. The criteria to waive the match in fiscal year 2000 may include:

(a) Natural disaster, flood, fire, tornado, hurricane, or drought;

(b) State and/or institution facing a financial crisis; or

(c) Demonstration of a good faith effort to obtain funds. Approval or disapproval of the request for a waiver will be based on the report submitted under § 3419.3. The Secretary may not waive the matching requirement for any fiscal year other than fiscal year 2000.

§ 3419.5 Certification of matching funds.

Prior to the distribution of formula funds each fiscal year, each eligible institution must certify as to the availability of matching funds. Eligible institutions may revise their certification of matching funds through July 1 of the fiscal year in which funds are appropriated.

§ 3419.6 Use of matching funds.

The required matching funds for the formula programs shall be used by an eligible institution for agricultural research and extension activities that have been approved in the plan of work required under sections 1444(d) and 1445(c) of the National Agricultural Research, Extension, and Teaching Policy Act of 1977, section 7 of the Hatch Act of 1887, section 4 of the Smith-Lever Act, or for approved qualifying education activities.

§ 3419.7 Redistribution of funds.

All formula funds not matched and reported under § 3419.5 by July 1 of each fiscal year will be reapportioned to the other eligible institutions who have satisfied their current fiscal year requirement for matching funds for the formula funds. Unmatched research and extension funds will be reapportioned in accordance with the research and extension statutory distribution formulas applicable to the 1890 and 1862 land-grant institutions, respectively. Any redistribution of funds shall be subject to the same matching requirement under § 3419.2.

Done at Washington, D.C., this 13th day of April 2000.

Eileen Kennedy,

Deputy Under Secretary, Research, Education, and Economics.

[FR Doc. 00–9793 Filed 4–20–00; 8:45 am]

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H.R. 1374/P.L. 106–183

To designate the United States Post Office building located at 680 U.S. Highway 130 in Hamilton, New Jersey, as the ''John K. Rafferty Hamilton Post Office Building''. (Apr. 13, 2000; 114 Stat. 200)

H.R. 3189/P.L. 106–184

To designate the United States post office located at 14071 Peyton Drive in Chino Hills, California, as the ''Joseph Ileto Post Office''. (Apr. 14, 2000; 114 Stat. 201)

Last List April 11, 2000

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