SUMMARY: This document amends the Customs Regulations pertaining to the field organization of Customs by extending the geographical limits of the port of entry of Morgan City, Louisiana. The change is being made as part of Customs continuing program to obtain more efficient use of its personnel, facilities, and resources and to provide better service to carriers, importers, and the general public.

EFFECTIVE DATE: May 21, 1993.

FOR FURTHER INFORMATION CONTACT: Bob Jones, Office of Inspection and Control (202-927-0456).

SUPPLEMENTARY INFORMATION:

Background

As part of a continuing program to obtain more efficient use of its personnel, facilities, and resources, and to provide better service to carriers, importers, and the general public, Customs published a notice in the Federal Register on June 16, 1992 (57 FR 26806) proposing to amend §§101.3 and 101.4, Customs Regulations (19 CFR 101.3 and 101.4), by extending the geographical limits of the port of entry of Morgan City, Louisiana. In the list of Customs regions, districts, and ports of entry set forth in §101.3(b), Morgan City is listed as a port of entry in the New Orleans, Louisiana, Customs District within the South Central Region.

A total of 40 comments were received in response to the notice. Among those 40 commenters, none expressed opposition to the proposed expanded port limits, 30 affirmatively supported the expansion, and 36 (including many in favor of the expansion) expressed reservations regarding the consequential move of the office of the Port Director from Morgan City to Galliano which would fall within the expanded port limits. In addition, Customs received other correspondence suggesting that the proposed port limits be further expanded to include Lafayette Parish.

Notwithstanding the move of the office of the Port Director to Galliano, which Customs considers to be an operational necessity, Morgan City will continue to be staffed by Customs at a level consistent with the workload at that location. Moreover, since the suggestion to include Lafayette Parish within the expanded port limits was not a part of the proposal published for public comment, Customs believes that such action is inappropriate for this final rule document and thus should be handled under separate public notice and comment procedures.

Based on the above, Customs believes that the proposed port limits should be adopted as set forth in the notice. The list of Customs regions, districts, and ports of entry set forth in §101.3(b), Customs Regulations, and the list of Customs stations set forth in §101.4(c), Customs Regulations, are amended accordingly.

Limits of Port of Entry

The geographical limits of the port of entry of Morgan City are as follows:

In the State of Louisiana: All of the territory within the Parishes of Iberia, St. Mary, Terrebonne, and Lafourche; that portion of the right-of-way pertaining to State Highway 1 extending in a northeasterly direction from the Lafourche Parish and Jefferson Parish boundary line to the corporate limits of the town of Grand Isle; and the corporate limits of the town of Grand Isle.

Authority

This change is made under the authority of 5 U.S.C. 301 and 19 U.S.C. 2, 66 and 1624.

Regulatory Flexibility Act and Executive Order 12291

Although Customs solicited public comments, no notice of proposed rulemaking was required pursuant to 5 U.S.C. 553 because this matter relates to agency management and organization, and for this reason this document is not subject to the provisions of the Regulatory Flexibility Act (5 U.S.C. 601 et seq.). In addition, because this document relates to agency management and organization, it is not subject to E.O. 12291.

Drafting Information

The principal author of this document was Francis W. Foote, Regulations Branch, Office of Regulations and Rulings, U.S. Customs Service. However, personnel from other offices participated in its development.

List of Subjects in 19 CFR Part 101

Customs duties and inspection, Exports, Imports, Organization and functions (Government agencies).

Amendments to the Regulations

Part 101, Customs Regulations (19 CFR part 101), is amended as set forth below:

PART 101—GENERAL PROVISIONS

1. The authority citation for part 101 continues to read as follows:


§101.3 [Amended]

2. The list of Customs regions, districts, and ports of entry in §101.3(b), is amended by removing the reference “T.D. 84–126” and adding, in its place, “T.D. 93–30” following Morgan City in the column headed “Port of entry” in the New Orleans, Louisiana, District of the South Central Region.

§101.4 [Amended]

3. The list of Customs stations in §101.4(c) is amended by removing “New Orleans, La.” in the column headed “District”, by removing “Galliano, La.” and “Houma, La.” in the column headed “Customs stations”, and, in the column headed “Port of entry having supervision”, by removing “Morgan City” opposite each of the latter listings.

Michael H. Lane,
Acting Commissioner of Customs.

Approved: April 2, 1993.

John P. Simpson,
Deputy Assistant Secretary of the Treasury.

[FR Doc. 93–9233 Filed 4–20–93; 8:45 am]

BILLING CODE 4420–02–M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 50

[AD–FRL–4507–2]

RIN 2060–AA61

National Ambient Air Quality Standards for Sulfur Oxides (Sulfur Dioxide)—Final Decision

AGENCY: U.S. Environmental Protection Agency (EPA).

ACTION: Final decision.

SUMMARY: In 1971, the EPA promulgated primary and secondary national ambient air quality standards (NAAQS) for sulfur oxides (SO2) (measured as sulfur dioxide (SO2)). The primary standards were set at 365 micrograms per cubic meter (µg/m3) (0.14 parts per million (ppm)), averaged over a 24-hour period and not to be exceeded more than once per year, and 80 µg/m3 (0.03 ppm) annual arithmetic mean. The current secondary standard was set at 1,300 µg/m3 (0.5 ppm) averaged over a period of 3 hours and not to be exceeded more than once per year. In accordance with sections 108 and 109 of the Clean Air Act (Act), the EPA reviewed and revised the health and welfare criteria upon which these primary and secondary SO2 standards were based. On April 26, 1998, the EPA announced its proposed decision not to revise these standards based on its review of the revised air quality criteria. This action announces the EPA's final decision under section 100(d)(1) of the Act that revision of the secondary...
standard is not appropriate at this time. When the EPA completes action on the primary standards portion of the 1988 proposal, it will decide whether to adopt minor technical changes discussed in the 1988 proposal (restating the level of the standards in terms of ppm rather than μg/m³, adding explicit rounding conventions, and specifying data completeness and handling conventions). At that time, the EPA will also make final determinations regarding alternative averaging conventions discussed in the 1988 proposal, proposed revisions to the significant harm levels and associated episode contingency plan guidance, and proposed revisions to certain monitoring and reporting requirements.

**EFFECTIVE DATE:** This action is effective May 21, 1993.

**ADDRESSES:** A docket containing information relating to the EPA’s review of the SO₂ secondary standard (Docket No. A–84–23) is available for public inspection in the Central Docket Section of the U.S. Environmental Protection Agency, South Conference Center, room 4, 401 M Street, SW., Washington, DC. The docket may be inspected between 8 a.m. and 3 p.m. on weekdays, and a reasonable fee may be charged for copying. For the availability of related information, see **SUPPLEMENTARY INFORMATION.**

**FOR FURTHER INFORMATION CONTACT:** Mr. John H. Haines, Air Quality Management Division (MD–12), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711, telephone (919) 541–5533.

**SUPPLEMENTARY INFORMATION:**

Availability of Related Information

The revised criteria document, Air Quality Criteria for Particulate Matter and Sulfur Oxides (three volumes, EPA–600/8–82–029AF–CF, December 1982; Volume I, NTIS # PB–84–120401, $25.95 paper copy and $6.95 microfiche; Volume II, NTIS # PB–84–120419, $50.95 paper copy and $6.95 microfiche; Volume III, NTIS # PB–84–120427, $50.95 paper copy and $14.50 microfiche); the criteria document addendum, Second Addendum to Air Quality Criteria for Particulate Matter and Sulfur Oxides (1983): Assessment of Newly Available Health Effects Information (EPA/600/8–86–020–F, NTIS # PB–87–176574, $25.95 paper copy and $6.95 microfiche); the 1982 staff paper, Review of the National Ambient Air Quality Standards for Sulfur Oxides: Assessment of Scientific and Technical Information-OAQPS Staff Paper (EPA–450/5–82–007, November 1982; NTIS # PB–84–102920, $25.95 paper copy and $6.95 microfiche); and the staff paper addendum, Review of the National Ambient Air Quality Standards for Sulfur Oxides: Updated Assessment of Scientific and Technical Information (EPA–450/05–86–013, December 1986; NTIS # PB–87–200259, $14.95 paper copy and $6.95 microfiche) are available from: U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161. (Add $3.00 handling charge per order.) A limited number of copies of other documents generated in connection with this standard review, such as the control techniques document, can be obtained from: U.S. Environmental Protection Agency Library (MD–35), Research Triangle Park, NC 27711, telephone (919) 541–2777. These and other related documents are also available in the EPA docket identified in **ADDRESSES.**

The contents of this action are listed in the following outline:

I. Background
   A. Legislative Requirements Affecting This Rule
   1. Secondary Standards
   2. Related Control Requirements
   B. Sulfur Oxides and Existing Secondary Standard for SO₂
   C. Development of Revised Air Quality Criteria for Sulfur Oxides and Review of the Standards: Development of the Staff Paper
   D. Rulemaking Docket
   II. Summary of 1988 Proposal Not To Revise the Current Standards
   III. Post-Propositional Developments
      A. Opportunities for Public Comment
      B. Legislative Activity
      C. Litigation
   IV. Summary of Public Comments on the Secondary Standard
   V. Rationale for This Decision
      A. Basis for the Current Standard
      B. Acidic Deposition and Related SO₂ Welfare Effects
      1. Background
      2. Legislative Initiative
      3. Congressional Consideration
      4. Possible Need for Further Action
      5. This Final Decision
      C. Other Proposed Changes
   VI. Regulatory Impacts
      A. Regulatory Impact Analysis
      B. Impact on Reporting Requirements
      C. Impact on Small Entities
   VII. Other Reviews
   References

I. Background

A. Legislative Requirements Affecting This Rule

1. Secondary Standards

Two sections of the Act govern the establishment and revision of secondary NAAQS. Section 108 (42 U.S.C. 7408) directs the Administrator to identify pollutants which may reasonably be anticipated to endanger public health or welfare and to issue air quality criteria for them. These air quality criteria are to reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare which may be expected from the presence of a pollutant in the ambient air.

Section 109 (42 U.S.C. 7409) directs the Administrator to propose and promulgate “secondary” NAAQS for pollutants identified under section 108. A secondary standard, as defined in section 109(b)(2), must specify a level of air quality the attainment and maintenance of which, in the judgment of the Administrator, based on the criteria, is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of the pollutant in the ambient air. Welfare effects are defined in section 302(h) (42 U.S.C. 7602(h)) to include effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being.

Section 109(d) of the Act (42 U.S.C. 7409(d)) requires periodic review and, if appropriate, revision of existing criteria and standards. The process by which the EPA has reviewed the original criteria and the secondary standard for SO₂ under section 109(d) is described in a later section of this notice.

2. Related Control Requirements

States are primarily responsible for ensuring attainment and maintenance of ambient air quality standards once the EPA has established them. Under section 110 and part D of the Act (42 U.S.C. 7410; 7472), States are to submit, for EPA approval, State implementation plans (SIP’s) that provide for the attainment and maintenance of such standards through control programs directed to sources of the pollutants involved. The States, in conjunction with the EPA, also administer the prevention of significant deterioration program (42 U.S.C. 7470–7479) and the visibility protection program (42 U.S.C. 7491–7492) for these and other air pollutants. In addition, Federal programs provide for nationwide reductions in emissions of air pollutants through the Federal motor vehicle control program under title II of the Act (42 U.S.C. 7521–7574), which involves controls for automobile, truck, bus, motorcycle, and aircraft emissions; the new source performance standards under section 111 (42 U.S.C. 7411); the national emission standards for
hazardous air pollutants under section 112 (42 U.S.C. 7412); and title IV of the Clean Air Act Amendments of 1990 (42 U.S.C. 7651–7651a), which specifically provides for major reductions in SO2 emissions.

**B. Sulfur Oxides and Existing Secondary Standard For SO2**

The principal focus of this portion of the standard review is on the welfare effects of SO2 alone and in combination with other pollutants. Other SOx vapors (e.g., sulfur trioxide) are not commonly found in the atmosphere. Information on the effects of the principal atmospheric transformation products of SO2 (i.e., sulfuric acid and sulfates) was considered in the review of the particulate matter standards and addressed in the revisions to these standards promulgated on July 1, 1987 (52 FR 24634); acid sulfate aerosols were examined in a separate issue paper (ECAO, 1988).

Sulfur dioxide is a rapidly diffusing reactive gas that is very soluble in water. It is emitted principally from combustion or processing of sulfur-containing fossil fuels and ores. Sulfur dioxide occurs in the atmosphere with a variety of particles and other gases, and undergoes chemical and physical interactions with them forming sulfates and other transformation products. At elevated concentrations, SO2 can adversely affect vegetation, materials, economic values, and personal comfort and well-being. Sulfur dioxide, largely through its transformation products, is also a major contributor to pollutants related to acidic deposition and visibility degradation. Annual average SO2 levels range from less than 0.004 ppm in remote rural sites to over 0.03 ppm in the most polluted urban industrial areas. The highest short-term values are found in the vicinity (<20 km) of major point sources. In the absence of adequate controls, maximum short-term levels at such sites for 3-hour averages can reach or exceed 1.4 ppm.

The origins, relevant concentrations, and potential effects of SO2 are discussed in more detail in the staff paper (U.S. EPA, 1982a), and in the revised criteria document (U.S. EPA, 1982b).

On April 30, 1971, the EPA promulgated secondary NAAQS for SO2 under section 109 of the Act (36 FR 8186). The current secondary standard is 1.300 μg/m³ (0.5 ppm), averaged over a period of 3 hours and not to be exceeded more than once per year. An annual secondary standard was revoked by the EPA in 1973 after court remand (38 FR 25681, September 14, 1973). The scientific and technical bases for the current secondary standard are contained in the original criteria document, Air Quality Criteria for Sulfur Oxides (U.S. DHEW, 1970) and a revised chapter on vegetation (U.S. EPA, 1973).

Implementation of SO2 air quality standards by the states and the EPA, together with fuel-use shifts and siting decisions motivated by changing economic conditions, has resulted in substantial improvements in ground-level air quality and significant reductions in nationwide emissions over the last decade. Where sufficient trends data exist, they indicate that annual SO2 concentrations decreased by 20 percent, and 3-hour concentrations decreased by 27 percent from 1982–1991. This pattern is consistent with a general decrease in SO2 concentrations from the inception of the 1970 Act.

Examination of the trends data from those areas with a continuous monitoring record since 1982 reveals that the average number of exceedances of the 24-hour NAAQS or the 3-hour NAAQS have both dropped 98 percent. In 1991, only 8 sites in the Nation recorded any exceedances of either the 24-hour or 3-hour NAAQS. The composite annual average for all sites for 1991 was 0.0078 ppm. Today, SO2 air quality is generally good with respect to the current standards, with only a small fraction (2 percent) of the Nation’s counties designated as nonattainment for SO2 (40 CFR part 81).

Moreover, in most cases, the nonattainment designations apply only to limited geographical areas in the immediate vicinity of certain major point sources.

**C. Development of Revised Air Quality Criteria for Sulfur Oxides and Review of the Standards: Development of the Staff Paper.**

On October 2, 1979, the EPA announced it was revising the original criteria document for SO2 concurrently with that for particulate matter (PM) to produce a combined PM/NOx criteria document (44 FR 56731). A complete discussion of the review and revision of the criteria document and the development and review of the staff paper is presented, together with the text of all Clean Air Scientific Advisory Committee (CASAC) closure letters, in the 1988 proposal (53 FR 14926). A brief summary of that discussion is presented below.

The EPA provided a number of opportunities for review and comment on the revised criteria document by organizations and individuals outside the Agency. Three drafts of the revised criteria document, prepared by the EPA’s Environmental Criteria and Assessment Office (ECAO), were made available for external review (45 FR 24913; 46 FR 9746; 46 FR 53210). The EPA received and considered numerous and often extensive comments on each of these drafts, and the CASAC held three public meetings (August 20–22, 1980; July 7–9, 1981; November 16–18, 1981) to review successive drafts of the document. Transcripts of these meetings were placed in the docket for the criteria document (ECAO CD 79–1). In addition, five public workshops were held at which the EPA, its consulting authors and reviewers, and other scientifically and technically qualified experts, discussed the various chapters of the draft document and suggested ways of resolving outstanding issues (45 FR 74047; 45 FR 76790; 45 FR 78224; 45 FR 80350; 46 FR 1775). The comments received were considered in the preparation of the final document. A CASAC “closure” memorandum indicating the Committee’s satisfaction with the final draft of the criteria document and outlining key issues and recommendations was issued in December 1981.

Following closure, a number of scientific articles were published, or accepted for publication, that appeared to be of sufficient importance concerning the potential health effects of SO2 to necessitate the preparation of an addendum to the criteria document. Two drafts of the addendum were reviewed by the CASAC and members of the public in two public meetings (April 26–27, 1982; August 30–31, 1982), and transcripts have been placed in the docket. The addendum was included as Appendix A to Volume I of the criteria document (U.S. EPA, 1982b) when the document was officially issued on March 20, 1984 with proposed revisions to the ambient air quality standards for PM (49 FR 10408).

As part of this process, the EPA’s Office of Air Quality Planning and Standards (OAQPS) in the spring of 1982 prepared the first draft of a staff paper, “Review of the National Ambient Air Quality Standards for Sulfur Oxides: Assessment of Scientific and Technical Information—OAQPS Staff Paper.” The first draft and a second draft of the staff paper were reviewed at the CASAC meetings on April 26–27 (47 FR 16885), and August 30–31, 1982 (47 FR 34855), respectively, and transcripts of these meetings have been placed in the docket. Numerous written and oral comments were received on the drafts from the CASAC, representatives of organizations, individual scientists, and other interested members of the public, and some revisions these comments
engendered are discussed in an August 5, 1982 letter to the CASAC (Padgett, 1982), as well as in the executive summary of the staff paper. The EPA released the final staff paper (U.S. EPA, 1982a), upon receipt of the formal CASAC closure letter in August 1983 (Goldstein, 1983), accompanied by a minority statement by one member (Higgins, 1983).

In 1984, the EPA reviewed the standards in light of the above information and decided not to propose any revision of the standards at that time.

In 1986, in response to the publication in the scientific literature of a number of additional studies on the health effects of SO\textsubscript{2} (as well as some new PM studies), the ECAO commenced preparation of a second addendum to the PM/SO\textsubscript{2} criteria document (51 FR 11058, April 1, 1986). An external review draft was made available for public comment (51 FR 24392) and reviewed by the CASAC at a public meeting on October 15–16, 1986 (transcript in public docket A–82–37). The OAQPS prepared a corresponding addendum to the staff paper (51 FR 24392), an external review draft of which was issued for public comment and CASAC review during the same period. The CASAC sent the Administrator closure letters on the criteria document addendum, dated December 15, 1986, and on the staff paper addendum, dated February 19, 1987 (copies in Docket No. A–84–25).

D. Rulemaking Docket

The EPA established a standard review docket (Docket No. A–79–28) for the SO\textsubscript{2} NAAQS in July 1979. Subsequently, the EPA established a rulemaking docket (Docket No. A–84–25) for the April 26, 1988 proposal as required by section 307(d) of the Act. The standard review docket and a separate docket established for review of the criteria document (Docket No. ECAO–CD–79–1) have been incorporated into the rulemaking docket.

II. Summary of 1988 Proposal Not To Revise the Current Standards

On April 26, 1988 (53 FR 14926), the EPA announced its proposed decision not to revise the existing primary and secondary SO\textsubscript{2} standards (measured as SO\textsubscript{2}). In reaching the provisional conclusion that the current standards provide adequate protection against the health and welfare effects associated with SO\textsubscript{2}, the EPA was mindful of uncertainties in the available evidence concerning the possible need for a new 1-hour standard to protect against potential short-term health effects of SO\textsubscript{2}. Therefore, the EPA specifically requested broad public comment on the alternative of revising the current standards and adding a new 1-hour primary standard of 0.4 ppm. The notice also announced that if a 1-hour primary standard was adopted, consideration would be given to replacing the current 3-hour secondary standard (1,300 g/m\textsuperscript{3} (0.5 ppm)) with a 1-hour secondary standard set equal to the primary standard, and adopting an expected-exceedance form for all of the standards.

The EPA also concluded in the April 26, 1988 notice, based upon the then-current scientific understanding of the acidic deposition problem, that it would not be appropriate, at that time, to propose a separate secondary SO\textsubscript{2} standard to provide increased protection against the acidic deposition-related effects of SO\textsubscript{2}. The notice added that when the fundamental scientific uncertainties had been reduced through ongoing research activities, the EPA would draft and support an appropriate set of control measures.

The EPA also proposed minor technical revisions to the standards, including restating the levels for the primary and secondary standards in terms of ppm rather than μg/m\textsuperscript{3}, adding explicit rounding conventions, and specifying data completeness and handling conventions. The EPA also announced its intention to retain the block averaging convention for the 24-hour, annual, and 3-hour standards and proposed to eliminate any future questions in this regard by adding clarifying language to 40 CFR 50.4 and 50.5. Based on its assessment of the SO\textsubscript{2} health effects information, the EPA also proposed to revise the significant harm levels for SO\textsubscript{2} and associated example air pollution episode levels (40 CFR Part 51). Finally, the EPA proposed some minor modifications to the ambient air quality surveillance requirements (40 CFR Part 58).

The April 26, 1988 notice sets forth in detail the rationale for the proposals discussed above and provides other background information.

III. Post-Proposal Developments

A. Opportunities for Public Comment

Following publication of the proposal notice, the EPA held a public hearing in Washington, DC, on June 10, 1988 to receive oral or written comments on the proposals summarized above. A transcript of the meeting has been placed in the public docket (Docket No. A–84–25). On July 20, 1988, the EPA announced an extension of the public comment period from July 25, 1988 to September 23, 1988 (53 FR 27362). The EPA issued a second notice on September 21, 1988 (53 FR 36587) to clarify that issues concerning block versus running averaging conventions should be fully aired in the SO\textsubscript{2} rulemaking initiated by the April 26, 1988 notice. At the same time, the EPA extended the comment period until November 22, 1988 to provide ample opportunity for the public to comment.

B. Legislative Activity

In July 1989, the President sent legislative proposals for amending the Act to Congress. This initiative included a comprehensive program to address the acidic deposition problem. After extensive deliberation, the Acid Rain Amendments, including provisions to reduce annual SO\textsubscript{2} emissions by 10 million tons, were passed by Congress and signed into law by the President on November 15, 1990. As discussed more fully below, title IV of the 1990 Amendments was developed specifically to address the acidic deposition problem and will have an attendant benefit of reducing other SO\textsubscript{2}-related welfare effects.

C. Litigation

Prior to the 1988 proposal, the Environmental Defense Fund and other plaintiffs had sued the EPA under section 304 of the Act to compel review and revision of the NAAQS for SO\textsubscript{2}, under section 109(d)(1) of the Act, Environmental Defense Fund v. Reilly, No. 85 C.V. 9507 (S.D. N.Y.). In response to a decision of the U.S. Court of Appeals for the Second Circuit in 1989, Environmental Defense Fund v. Thomas, 870 F.2d 892 (2d Cir. 1989), the EPA and the plaintiffs ultimately agreed on a proposed consent decree as an alternative to further litigation. After an opportunity for public comment on the proposed decree under section 113(g) of the Act, the U.S. District Court for the Southern District of New York entered it in final form on March 4, 1993. The decree requires the EPA to take final action by April 15, 1993 on the secondary standard portion of the pending rulemaking.

IV. Summary of Public Comments on the Secondary Standard

A limited number of comments were received on the 1988 proposal not to revise the existing secondary NAAQS. Of the 21 written submissions, 10 were provided by individual industrial concerns or industry groups, 6 by State, local, and Federal government agencies and other entities, and 5 by environmental and public interest groups. A summary of comments...
received and the EPA's responses has been placed in Docket No. A–84–25. Most commenters either agreed with the EPA's 1988 conclusion that the current 3-hour standard appeared to be both necessary and adequate to protect against damage to vegetation from short-term SO\textsubscript{2} peaks near major point sources, or did not directly address the issue. In contrast, the comments were sharply divided on whether the existing standard should be supplemented by a new secondary standard to provide increased protection against acidic deposition and related SO\textsubscript{2} welfare effects. Twelve commenters generally supported the EPA's April 1988 conclusion that based upon the then-current scientific understanding of the acidic deposition phenomenon, it would be premature and unwise to prescribe any regulatory program at that time. The other nine commenters argued that additional protection, beyond that provided by the existing 3-hour standard and other NAAQS, and other control programs under the Act, was needed to protect against acidic deposition and related SO\textsubscript{2} welfare effects. Several commenters argued that an acidic deposition standard should be adopted to provide the necessary protection. Others suggested that the adoption of a 1-hour secondary standard in the range (0.2 to 0.5 ppm) that the staff had recommended be considered for a 1-hour primary standard would provide adequate protection.

V. Rationale for This Decision

A. Basis for the Current Standard

The rationale for retaining the current 3-hour secondary standard was presented in some detail in the 1988 proposal (53 FR 14930) and remains unchanged. At that time, the EPA concluded that the current 3-hour standard appeared to be both necessary and adequate to protect against damage to vegetation from short-term SO\textsubscript{2} peaks near major point sources. The EPA also concluded that retaining the current 3-hour standard was consistent with scientific data assessed in the criteria document and staff paper and with the advice and recommendations of the staff and the CASAC.

After taking into account the public comments, the EPA again concludes, based on the information assessed in the criteria document and staff paper, that the current secondary standard provides adequate protection against effects associated with the current SO\textsubscript{2} concentrations. In reaching this decision, the EPA recognizes that the body of scientific information on the welfare effects of SO\textsubscript{2} has increased since completion of the criteria document and staff paper that serve as the bases for this decision. When this new information has undergone the rigorous and comprehensive assessment, including CASAC review, necessary for incorporation into a new criteria document, it will provide the basis for the next periodic review.

B. Acidic Deposition and Related SO\textsubscript{2} Welfare Effects

1. Background

Among the major welfare effects associated with SO\textsubscript{2} emissions and their transformation products are those related to the acidic deposition phenomenon. As noted in the 1988 proposal notice (53 FR 14935), the issue of acidic deposition was not addressed in the staff paper because the EPA followed guidance provided by the CASAC at an August 20–22, 1980 public meeting on the draft criteria document. The CASAC concluded that acidic deposition was a topic of extreme scientific complexity because of the difficulty in establishing firm quantitative relationships among: (1) Emissions of relevant pollutants (e.g., SO\textsubscript{2} and oxides of nitrogen), (2) formation of acidic wet and dry deposition products, and (3) effects on terrestrial and aquatic ecosystems. For these and other reasons, the CASAC recommended that a separate, comprehensive document on acidic deposition be prepared prior to any consideration of using the NAAQS as a regulatory mechanism for the control of acidic deposition. For the sake of completeness, the CASAC also suggested that a summary discussion of acidic deposition be included in the criteria documents for nitrogen oxides (NO\textsubscript{x}) and PM/NO\textsubscript{x}. As discussed in the April 26, 1988 notice, the EPA subsequently prepared the following documents: The Acidic Deposition Phenomenon and Its Effects: Critical Assessment Review Papers, Volume I and II (U.S. EPA, 1984), and The Acidic Deposition Phenomenon and Its Effects: Critical Assessment Document (U.S. EPA, 1985). Although these documents were not criteria documents and had not undergone CASAC review, they represented the most comprehensive summary of relevant scientific information on acidic deposition completed by the EPA prior to the 1988 proposal.

At about the same time in 1980 that the CASAC recommended that the EPA undertake a comprehensive assessment of acidic deposition, the Congress created the National Acid Precipitation Assessment Program (NAPAP) (title VII of Public Law 96–294) in response to growing public concern about acidic deposition. The NAPAP was given a broad 10-year mandate to examine the causes and effects of acidic deposition, and to explore alternative control options to alleviate acidic deposition and its effects. During the course of the program, the NAPAP issued a series of interim reports that were made available to the Congress, the EPA, and the public prior to the completion of a final report in 1990 (NAPAP, 1990).

As discussed in the April 26, 1988 notice, the EPA reviewed the then-available scientific information on acidic deposition in the larger context of the EPA's examination of the acidic deposition issue as a whole. This examination included a broad review of options for addressing the issue through mechanisms available under then-existing Act authorities, including secondary air quality standards and other emissions reduction mechanisms. Based on that review, the EPA reached the following conclusions of relevance to a secondary standard for SO\textsubscript{2}:

a. Based upon the then-current scientific understanding of the acidic deposition problem, it would be premature and unwise to prescribe any regulatory program at that time.

b. When the fundamental scientific uncertainties had been reduced through ongoing research efforts, the EPA would draft and support an appropriate set of control measures.

For these reasons, the EPA concluded in April 1988 that it was not appropriate at that time to propose a separate secondary SO\textsubscript{2} standard to provide increased protection against the acidic deposition-related effects of SO\textsubscript{2} (53 FR 14936, April 26, 1988).

2. Legislative Initiative

In the post-proposal period, the EPA continued to assess alternative approaches for addressing the acidic deposition problem. While significant scientific uncertainties remained, it had become apparent at the highest levels of Government that the development of a program to address acidic deposition was necessary in light of increased concerns about the welfare effects associated with this phenomenon. As a result, the President announced on February 9, 1989, his intention to seek changes to the Act, including a comprehensive new program to address acidic deposition.

In July 1989, the President sent his legislative proposals to Congress, including a program to address the acid deposition problem by reducing total annual SO\textsubscript{2} emissions by 10 million tons. Like other proposals that had been
considered by Congress, this “total loading” approach was designed to attack the problem on a broad geographical basis commensurate with the nature of the problem. Based on its review of options, the Administration had concluded that existing authorities under the Act, including those for secondary NAAQS and the associated implementation process, were not well designed to address regional air pollution problems, especially those involving long-range transport of pollutants and their transformation products. The President accordingly decided that a comprehensive program aimed at reducing SO₂ emissions across broad “source” regions would be the best way to afford increased protection for sensitive “receptor” areas, hundreds to thousands of kilometers downwind of major point sources of SO₂ emissions. This approach would bypass two major scientific and technical obstacles that had stood in the way of addressing the acidic deposition problem under existing authorities. First, it would avoid the seemingly intractable problems inherent in attempting to specify a nationally uniform secondary NAAQS that would account for, and provide adequate protection to, the various regions of the country with differing sensitivities to acidic deposition. Second, it would avoid the individual source-attribution problem that would necessarily hamper any attempt to implement such a standard through SIP’s. A broad-scale program requiring all major electric utility emitters of SO₂ to reduce their emissions to predetermined levels would make it unnecessary to identify each individual “upwind” source that might be contributing to the problem in remote “downwind” areas, so that significant protection could be achieved without awaiting resolution of the above problems. In addition, this broader approach, involving congressional decisions as to the nature and extent of the control program, would provide an opportunity to reconcile the differing environmental and economic interests of the most affected regions of the country through the political process.

3. Congressional Consideration

During its deliberations on the President’s proposed program to address acidic deposition, the Congress also recognized that existing authorities under the Act, including those for NAAQS and associated implementation programs, might not be the most appropriate mechanisms for addressing acidic deposition and other welfare effects, in that they were originally designed to reduce high pollution levels that tend to occur near major pollution sources. In their discussions of the proposed legislation, the cognizant House and Senate committees noted that the original framers of the Act did not contemplate that long distance, interstate transport of pollutants could cause widespread adverse impacts in areas well removed from emissions sources, as is the case with acidic deposition (e.g., S. Rep. No. 228, 101st Cong., 1st Sess. 289 (1989); H.R. Rep. No. 490, 101st Cong., 1st Sess. 157 (1989)). The complexities of setting and implementing either a secondary NAAQS or an acidic deposition standard led both bodies of Congress to conclude that a new legislative program was needed to address acidic deposition effects despite significant uncertainties concerning underlying scientific data and arguments over whether the EPA could address the acidic deposition problem under existing law (e.g., S. Rep. at 289; H.R. Rep. at 363–64). After considerable debate, the 1990 Amendments were passed by Congress, and signed into law by the President on November 15, 1990 (Pub. L. 101–549, 104 Stat. 2399 (1990)). Title IV of the 1990 Amendments requires a 10 million ton reduction in SO₂ emissions from 1980 levels. These reductions are to be achieved primarily from electric utility generating units. In the year 2000, emissions from utilities are to be capped at just over 8.9 million tons per year, in order to safeguard environmental benefits from being eroded by increased energy consumption. The 1990 Amendments also require NOₓ reduction measures intended to achieve a 2 million ton reduction in NOₓ emissions from 1980 levels (Pub. L. 101–549, secs. 401–413, 104 Stat. 2399, 2384–2384 (1990)).

4. Possible Need for Further Action

The 10 million ton reduction in SO₂ emissions, together with the national cap on SO₂ emissions and the controls on NOₓ emissions mandated by the 1990 Amendments, will significantly reduce acidic deposition and related SO₂ welfare effects. In enacting these requirements, Congress decided the nature, extent, and timing of the control program it considered necessary and appropriate to address the acidic deposition problem for the time being, considering the scientific uncertainties, the environmental risks, available control technologies, the differing interests of different units of the country, and other factors considered relevant. The 1990 Amendments and the legislative history indicate, however, that Congress reserved judgment as to whether further action might be necessary or appropriate in the longer term and, if so, what form it should take. Congress seems to have viewed these as questions it would itself address in the future, based on further studies and research to be conducted by the EPA and other agencies. Consistent with the 1988 proposal notice, Congress does not seem to have expected that the EPA would set a secondary standard for acidic deposition (triggering adoption of SIP requirements) in the interim. To the contrary, in section 404 of the 1990 Amendments, Congress specifically required the EPA to conduct a study of the feasibility and effectiveness of an acid deposition standard or standards, and to report to Congress by November 15, 1993 on the role that a deposition standard might play in supplementing the acidic deposition control program adopted in title IV, and what measures would be needed to integrate it with that program (Pub. L. 101–549, sec. 404, 104 Stat. 2399, 2632 (1990)).

In its discussion of section 404, the Senate committee recognized that the set of premises that served as the basis for enacting the title IV program were not the only ones possible, and that other approaches could be used to establish an acidic deposition control program. One such approach, the committee noted, would be to set “an explicit acidic deposition standard—a numerical limitation on the watershed or terrestrial loadings of acid compounds—designed to protect the resources most at risk” (S. Rep. No. 228, 101st Cong., 1st Sess. 342 (1989)). The committee recognized that developing and implementing such standards would be an involved process:

a. The buffering capacity of all aquatic and terrestrial resources need to be measured to identify those which may be sensitive or critically sensitive, and appropriate numerical value(s) or standard(s) would need to be developed;

b. Deposition monitoring would need to be conducted in areas of sensitive resources to determine whether the standard(s) were met;

c. For those areas failing to meet the standard(s), source-receptor relationships would have to be established that would identify those emission sources or groups of emission sources causing deposition in excess of the standard(s); and

d. Control requirements would have to be imposed on the identified sources to assure that deposition would be reduced to levels below the standard(s) (S. Rep. No. 228, 101st Cong., 1st Sess. 343 (1989)).

Recognizing the difficulties inherent in this process, the Congress adopted instead the total-loading approach in
title IV. In addition, Congress directed the EPA to conduct a study of the feasibility and effectiveness of adopting an acid deposition standard at some future date after completion of the study. At a minimum, the study is to include consideration of the following:

1. Identification of the sensitive and critically sensitive aquatic and terrestrial resources in the United States and Canada which may be affected by the deposition of acidic compounds;
2. Description of the nature and numerical value of a deposition standard or standards that would be sufficient to protect such resources;
3. Description of the use of such standard or standards in other Nations or by any of the several States in acid deposition control programs;
4. Description of the measures that would need to be taken to integrate such standard or standards with the control program required by title IV of the Clean Air Act;
5. Description of the state of knowledge with respect to source-receptor relationships necessary to develop a control program on such standard or standards and the additional research that is ongoing or would be needed to make such a control program feasible;
6. Description of the impediments to implementation of such control program and the cost-effectiveness of deposition standards compared to other control strategies including ambient air quality standards, new source performance standards and the requirements of title IV of the Clean Air Act (Pub. L. 101–549, sec. 404, 104 Stat. 2399, 2362 (1990)).

In section 817 of the 1990 Amendments, Congress also directed the EPA to request a report from the National Academy of Sciences to Congress by November 15, 1993 on the role of secondary NAAQS in protecting public welfare and the environment (Pub. L. 101–549, sec. 817, 104 Stat. 2399, 2397 (1990)). In discussing the need for the report, the Senate committee noted among other things that secondary NAAQS may not be the most appropriate mechanism for protecting the public welfare and environment because much of the negative impact of criteria pollutants results from transformation products, (e.g., the conversion of SO2 to sulfate), and much of the damage occurs in areas far removed from where the precursor emissions are generated (S. Rep. No. 228, 101st Cong., 1st Sess. 82 (1989)). Because of such concerns, Congress directed that the report also consider mechanisms other than secondary NAAQS that may prove more effective in protecting the public welfare and the environment.

In addition to requiring these studies, Congress authorized the continuation of the NAPAP in order to assure that the research and monitoring efforts already undertaken would continue to be coordinated and would provide the basis for an impartial assessment of the effectiveness of the title IV program (Clean Air Act sec. 103(j); S. Rep. No. 228, 101st Cong., 1st Sess. 845–46 (1989)). As part of this assessment, the NAPAP is to report periodically on the costs, benefits and effectiveness of the acidic deposition program and, beginning in 1996, on what, if any, additional reductions in acidic deposition rates must be achieved in order to prevent adverse ecological effects.

Union title IX of the 1990 Amendments, Congress also laid out a comprehensive research program aimed at developing the necessary scientific and technical information, so that more informed decisions could be made on whether additional measures are necessary to address acidic deposition and other SO2-related welfare effects. These included the establishment of a comprehensive monitoring network to track progress resulting from the implementation of title IV in terms of air emissions, deposition, air quality, surface water quality, forest condition and visibility, as well as a broadly focused program on ecosystem research (Pub. L. 101–549, sec. 901, 104 Stat. 2399, 2700–07 (1990)).

In response to these legislative initiatives, the EPA and other Federal agencies are continuing research on the causes and effects of acidic deposition and related welfare effects of SO2 and implementing an enhanced monitoring program to track progress. As envisioned by Congress, these programs are designed to provide the necessary scientific information to allow for more informed judgments on whether additional measures are needed to address residual problems, if any, remaining after implementation of the title IV program. As part of the broad effort, the EPA has initiated work on the section 404 study to determine the feasibility and the potential effectiveness of an acidic deposition standard including the cost-effectiveness of such a standard in comparison to other control strategies. Of particular importance will be the study's assessment of the state of knowledge with respect to source-receptor relationships, the differing buffering capacities of various regions, other factors that might affect the validity of such a standard, the feasibility of its implementation, and the task of integrating it with the title IV program.

5. This Final Decision

In reaching a decision that revisions to the secondary standard for SO2 to address acidic deposition and related SO2 welfare effects are not appropriate at this time, the EPA has taken into account the significant reductions in SO2 emissions, ambient SO2 concentrations, and ultimately the deposition of sulfur that will result from implementation of the title IV program. By reducing total annual SO2 emissions by 10 million tons and by placing a national cap on SO2 emissions to prevent increases in future years, as well as requiring NOx controls, the title IV program will significantly reduce acidic deposition and related SO2 welfare effects. This should significantly decrease the acidification of water bodies and damage to forest ecosystems and permit much of the existing damage to be reversed with time. It should also result in major improvements in visibility, extend the lifespan of building materials and structures of cultural importance, and further reduce ground-level SO2 concentrations, thereby augmenting the protection provided by the existing air quality standards and other control programs under the Act.

The EPA recognizes that the Congress left open the question whether further action to address acidic deposition might be necessary in the longer term. The EPA is concerned, however, as was Congress, that a number of important scientific and implementation issues must be addressed through further research and study before a more informed decision can be made on whether such action is needed; if needed, what form it should take; and whether and how a given approach could be effectively integrated with the existing title IV program. Moreover, as discussed previously, setting either a secondary NAAQS or an acidic deposition standard would involve significant difficulties, especially as compared with the total-loading approach adopted in title IV. In the EPA's judgment, the prudent course of action is to await the results of the studies and research programs that are currently under way, especially those designed to monitor progress resulting from the implementation of title IV and those assessing the comparative merits of secondary standards, acidic deposition standards, and other approaches to control of acidic deposition and related welfare effects including the results of the section 404.
EPA will continue to assess the ecosystems. In establishing and visibility impairment, dry and wet acid place a long-term program to monitor research program called for by the and effects information. As part important to have adequate monitoring study, and then to determine whether additional measures needed to augm the title IV program.

C. Other Proposed Changes

Because this action addresses only the secondary standard, the EPA has concluded that it would not be appropriate to adopt the minor technical changes (i.e., restating the level of the primary and secondary standards in ppb rather than μg/m³; adding specific rounding conventions, and data completeness and handling conventions) presented in the 1988 proposal (53 FR 14935), because they are applicable to both the primary and secondary standards. In the EPA’s judgment, adoption of these changes for the secondary standard alone could result in confusion and disruption for State and local agencies. Accordingly, the EPA will decide whether to adopt these technical changes when it completes action on the primary standards portion of the 1988 proposal. At that time, the EPA will also make determinations regarding the alternative averaging conventions discussed in the 1988 proposal, as well as proposed revisions to the significant harm level and associated episode contingency plan guidance (40 CFR part 51) and proposed revisions to certain monitoring and reporting requirements (40 CFR part 58).

VI. Regulatory Impacts

A. Regulatory Impact Analysis

Under Executive Order 12291, the EPA must judge whether an action is a “major” regulation for which a Regulatory Impact Analysis (RIA) is required. The EPA has judged that today’s decision on the SO₂ secondary NAAQS is not a major action because there are no additional costs or environmental impacts as a result of not revising the standard. The EPA, therefore, has deemed unnecessary the preparation of either a final RIA or a final Environmental Impact Statement.

B. Impact on Reporting Requirements

The final decision does not impact any information collection requirements currently cleared under the Office of Management and Budget (OMB) Control Number 2060-0064.

C. Impact on Small Entities

Under the Regulatory Flexibility Act, 5 U.S.C. 600 et seq., the EPA must prepare a regulatory flexibility analysis assessing the impact of any proposed or final rule on small entities. Under 5 U.S.C. 605(b), this requirement may be waived if the EPA certifies that the rule will not have a significant economic effect on a substantial number of small entities.

Small entities include small businesses, small not-for-profit enterprises, and governmental entities with jurisdiction over populations of less than 50,000. A decision not to revise the existing secondary NAAQS for SO₂ would, of course, impose no new requirements. In addition, the SIP’s necessary to implement the existing secondary NAAQS have been substantially adopted. Additional SIP requirements will be needed only for those areas and sources which are designated as nonattainment for the existing SO₂ NAAQS now or in the future. An assessment of existing nonattainment areas indicates that, in general, only major sources such as utilities, primary smelters, and refineries owned by large businesses would be affected by any additional SIP requirements. In addition, the total number of sources is very small. These assessments suggest that any additional SIP requirements will not significantly affect a substantial number of small entities.

Furthermore, the control measures necessary to attain and maintain the secondary NAAQS are developed by the respective States as part of their SIPs. In selecting such measures, the States have considerable discretion so long as the mix of controls selected is adequate to attain and maintain the secondary standard. Whether a particular standard would have a significant effect on a substantial number of small entities, therefore, depends on how the States would choose to implement it. For these reasons, any assessment performed by the EPA on the impacts of additional SIP requirements at this time would necessarily be speculative. On the basis of the above considerations and findings, the EPA certifies that a decision not to revise the secondary SO₂ standard will not have a significant impact on a substantial number of small entities.

VII. Other Reviews

This decision was submitted to the OMB for review. Written comments from the OMB and the EPA’s written responses to these comments are available for public inspection at the EPA’s Central Docket Section (Docket No. A–84–25), South Conference Center, room 4, Waterside Mall, 401 M Street, SW., Washington, DC.

List of Subjects in 40 CFR Part 50

Air pollution control, Carbon monoxide, Environmental protection, Lead, Nitrogen dioxide, Ozone, Particulate matter, Sulfur oxides.

Carol M. Browner,
Administrator.

References


Particulate matter, Sulfur oxides.
Summary: This final rule establishes the provisions for an urban bus retrofit/rebuild program as required by section 219(d) of the Clean Air Act Amendments (CAA) of 1990. The program affects 1993 and earlier model year (MY) urban buses whose engines are rebuilt or replaced after January 1, 1995. The program is limited to urban buses operating in metropolitan areas with 1980 populations of 750,000 or more.

Operators of urban buses in the affected areas may choose between two options. Option 1 sets particulate matter (PM) emissions requirements for each urban bus in an operator's fleet whose engine is rebuilt or replaced. Option 2 is a fleet averaging program that requires an operator to meet a specified annual target level for the average PM emissions level from the 1993 and earlier MY urban buses in the operator's fleet. The target levels for an individual operator's fleet are based on the age and engine model distribution of the urban buses in the operator's fleet. The retrofit/rebuild program is intended to reduce the ambient levels of particulate matter in urban areas.

This action is also correcting errors in the sulfur content, cetane number, and cetane index specifications for heavy-duty engine certification diesel test fuel. The corrections contained in this final rule were brought to EPA's attention by interested parties.

Effective Date: This final rule is effective on May 21, 1993.

The information collection requirements contained in 40 CFR 85.1407, 85.1411, 85.1412, and 85.1414 have not been approved by the Office of Management and Budget (OMB) and are not effective until OMB has approved them. When the information collection requirements are approved by OMB, EPA will publish a technical amendment in the Federal Register.

Dockets may be inspected from 8 a.m. until 12 noon, and from 1:30 p.m. until 3 p.m. Monday through Friday. As provided in 40 CFR part 2, a reasonable fee may be charged by EPA for copying docket materials.

Supplementary Information:

I. Introduction

A. Urban Bus Retrofit/Rebuild CAA Requirements

B. General Background and Review of Proposals

II. Public Participation

A. Retrofit/Rebuild Options

1. Option 1

   a. Existence of Cost Ceilings

   b. Alternatives to Setting a Ceiling

   c. Revisions to the Cost Ceiling

   d. Remaining Option 1 Comments

2. Option 2

   a. Legal Authority for Averaging Program

   b. Rebuild Schedule

   c. Technology Availability Assumptions

   d. TLF and FIA Calculations

   e. Fuel Impacts

F. Emission Credits

3. Tying the Requirements of Option 2 to Actual Certification: Provisions of Option 1 and Option 2 if No Technology is Certified

B. Emission Standards for Pollutants Other Than PM

C. Equipment Certification

1. Test Procedures

2. Use of Existing New Engine Certification Data

3. Test Engines

4. Extrapolating Test Data to Other Engines

5. Durability Testing

6. Public Review of Notification of Intent To Certify

7. Labeling

8. Financial Stability of Manufacturer


10. Who Can Certify Technology

D. Liability Provisions

E. Enforcement

III. Final Rule Requirements

IV. Changes to Diesel Certification Fuel Specifications

V. Environmental Impact

VI. Economic Impact

VII. Administrative Designation and Regulatory Analysis

VIII. Impact on Small Entities

IX. Reporting and Recordkeeping Requirements

X. Statutory Authority

XI. Judicial Review

I. Introduction

This action finalizes regulations implementing an urban bus retrofit/rebuild program as required by section 219(d) of the Clean Air Act (CAA). EPA initially proposed two options for the