WEST VIRGINIA
SECRETARY OF STATE
KEN HECHLER
ADMINISTRATIVE LAW DIVISION

FORM #1

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OFFICE OF WEST VIRGINIA
SECRETARY OF STATE

NOTICE OF PUBLIC HEARING ON A PROPOSED RULE

AGENCY: Division of Environmental Protection, Office of Air Quality TITLE NUMBER: 45

RULE TYPE: Legislative ; CITE AUTHORITY W. Va. Code §22-5-1 et seq.

AMENDMENT TO AN EXISTING RULE: YES X NO ____

IF YES, SERIES NUMBER OF RULE BEING AMENDED: 15

TITLE OF RULE BEING AMENDED: "Emission Standards for Hazardous Air Pollutants Pursuant to 40 CFR Part 61"

IF NO, SERIES NUMBER OF NEW RULE BEING PROPOSED: ____

TITLE OF RULE BEING PROPOSED: ____

DATE OF PUBLIC HEARING: August 14, 2000 TIME: 6:00 p.m.

LOCATION OF PUBLIC HEARING:

Office of Air Quality - Conference Room
7012 MacCorkle Avenue, SE
Charleston, WV 25304-2943

COMMENTS LIMITED TO: ORAL____, WRITTEN____, BOTH X

COMMENTS MAY ALSO BE MAILED TO THE FOLLOWING ADDRESS:

Edward L. Kropp, Chief
Office of Air Quality
7012 MacCorkle Avenue, SE
Charleston, WV 25304-2943

The Department requests that persons wishing to make comments at the hearing make an effort to submit written comments in order to facilitate the review of these comments.

The issues to be heard shall be limited to the proposed rule.

ATTACH A **BRIEF** SUMMARY OF YOUR PROPOSAL

Carrie J. Chambers

$12.70

Executive Office
#10 McJunkin Road
Nitro, WV 25143-2506
Telephone No: (304)759-0575
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West Virginia Bureau of Environment

Cecil H. Underwood
Governor

Michael C. Castle
Commissioner

July 12, 2000

Ms. Judy Cooper
Director, Administrative Law
Division
Secretary of State's Office
Capitol Complex
Charleston, WV 25305

RE: 45CSR15 - "Emission Standards for Hazardous Air Pollutants Pursuant to 40 CFR Part 61"

Dear Ms. Cooper:

This letter will serve as my approval to file the above-referenced Legislative Rule with your Office and the Legislative Rule-Making Review Committee as "Notice of a Public Hearing/ Comment Period on a Proposed Legislative Rule."

Your cooperation in the above request is very much appreciated. If you should have any questions or require additional information, please call Carrie Chambers in my Office at 759-0515.

Sincerely,

Michael C Castle

Michael C. Castle
Commissioner

MCC:cc

cc: Karen Watson
Carrie Chambers

BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION

BRIEFING DOCUMENT

Rule Title: 45CSR15 - "Emission Standards for Hazardous Air Pollutants Pursuant to 40 CFR Part 61"

A. **AUTHORITY:** W.Va. Code §§22-5-1 et seq.

B. SUMMARY OF RULE:

45CSR15, in conjunction with existing rule 45CSR34, establishes general provisions for emission standards for hazardous air pollutants (NESHAP) and other regulatory requirements promulgated by USEPA as of June 1, 2000, pursuant to section 112 of the federal Clean Air Act, as amended. 45CSR34 incorporates hazardous air pollutant standards codified by USEPA under 40 CFR Part 63 whereas this rule, 45CSR15, incorporates hazardous air pollutant standards promulgated by USEPA under 40 CFR Part 61. This rule codifies general procedures and emission standards for certain stationary sources that emit (or have the potential to emit) one or more of the eight substances listed as hazardous air pollutants in section 61.01(a) of 40 CFR Part 61 (asbestos, benzene, beryllium, coke oven emissions, inorganic arsenic, mercury, radionuclides, and vinyl chloride). This revised rule incorporates by reference additional provisions relating to technical amendments, amendments to Method 101A of Appendix B (Test Methods), Credible Evidence Revisions, and Recordkeeping and Reporting Burden Reduction.

C. STATEMENT OF CIRCUMSTANCES WHICH REQUIRE RULE:

Any person who constructs, modifies, or operates an affected facility after the effective date of any standard promulgated under 40 CFR Part 61 must comply with the national emission standards for hazardous air pollutants. The final adoption of the proposed rule amendment will enable the WVDEP to become the primary enforcement authority for NESHAP promulgated by U.S. EPA as of June 1, 2000. Promulgation of these amendments to 45CSR15 by the Legislature is necessary for the State to fulfill its responsibilities under the Clean Air Act, as amended.

D. FEDERAL COUNTERPART REGULATIONS - INCORPORATION BY REFERENCE/DETERMINATION OF STRINGENCY:

A federal counterpart to this proposed rule exists. In accordance with the Director's recommendation, and with limited exception, the Office of Air Quality proposes that the rule incorporate by reference the federal counterparts.

Because the proposed rule incorporates by reference the federal counterpart, no determination of stringency is required.

E. CONSTITUTIONAL TAKINGS DETERMINATION:

In accordance with §22-1A-1 and 3(c,) the Director has determined that this rule will not result in taking of private property within the meaning of the Constitutions of West Virginia and the United States of America.

F. CONSULTATION WITH THE ENVIRONMENTAL PROTECTION ADVISORY COUNCIL:

At its July 6, 2000 meeting, the Environmental Protection Advisory Council reviewed and discussed this rule. See attached minutes of that meeting.

MINUTES

ENVIRONMENTAL PROTECTION ADVISORY COUNCIL

July 6, 2000, Director's Conference Room, Nitro

The twenty-first meeting of the DEP Advisory Council was held Thursday, July 6, 2000, in the Director's Second Floor Conference Room located in Nitro. Chairman Mike Castle called the meeting to order at 10:00 a.m.

ATTENDING:

Advisory Council Members:

Mike Castle, Chairman
Lisa Dooley
Jacqueline Hallinan
Bill Raney
Rick Roberts
Bill Samples

Environmental Protection:

Greg Adolfson
John Ailes
John Benedict
Al Blankenship
Carrie Chambers
Dick Cooke
Mike Dorsey
Andy Gallagher
Randy Huffman
John Johnston
Ava King
Brian Long
Pam Nixon
Rocky Parsons
Jennifer Pauer
Cap Smith
Randy Sovic
Charlie Sturey
Darcy White

1) Review and Approval of April 6, 2000 Minutes. The April 6 Minutes were approved with note of two minor revisions.

2) Discussion of Proposed Rule Amendments - 2001 Legislative Session. In accordance with WV Code §22-1-1(c), and DEP's rule-making procedure policy that was implemented in 1998, and included involving DEP's Advisory Council in DEP's rule-making process as early as possible to enable the Council to

review, comment, and make recommendations to the Director on the proposed Legislative rules before they are filed for public hearing, the following proposed rules were brought to the Council's attention.

John Benedict, Deputy Chief of the Office of Air Quality (OAQ), reviewed the following OAQ rules:

☐ **45CSR1 - "NO_x Budget Trading Program as a Means of Control and Reduction of Nitrogen Oxides"**

☐ **45CSR6 - "To Prevent and Control Air Pollution From Combustion of Refuse"**

☐ **45CSR15 - "Emission Standards for Hazardous Air Pollutants Pursuant to 40 CFR Part 61"**

☐ **45CSR16 - "Standards of Performance for New Stationary Sources Pursuant to 40 CFR part 60"**

☐ **45CSR23 - "To Prevent and Control Emissions From Municipal Solid Waste Authorities"**

☐ **45CSR25 - "To Prevent and Control Air Pollution From Hazardous Waste Treatment, Storage, or Disposal Facilities"**

☐ **45CSR30 - "Requirements for Operating Permits"**

☐ **45CSR34 - "Emission Standards for Hazardous Air Pollutants for Source Categories Pursuant to 40 CFR Part 63"**

In discussion of **45CSR1**, John explained to the Council that they did not have the companion rule (which is 45CSR26) to this proposed rule amendment, but Council will be provided a copy of the proposed rule when the draft is complete. Both rules have been drafted as a response to EPA's NO_x SIP Call. Failure of states to respond to the SIP Call will result in a NO_x federal implementation plan or federal program to reduce NO_x emissions under Section 126 of the CAA. John explained that OAQ is late in drafting both rules because they were waiting until several issues were settled in federal court. EPA is now requiring, and the federal courts concurred, that states develop rules and meet the conditions of the SIP Call by October 28, 2000. EPA's SIP Call affects major utility sources, cement kilns, and large industrial-type boilers (those exceeding 250 lbs/mmBtu). The SIP Call originally included internal combustion engines.

45CSR1 establishes standards specifically for non-utility boilers, and follows EPA's model rule that states are to use in developing their SIPS. The model rule incorporates standards to allow sources to trade emissions between states. Therefore, states do not have a lot of flexibility to adjust their state-specific rules, if they want their sources to participate in a national NO_x budget-trading program.

John informed the Council that **45CSR15** adopts by reference the new federal provisions for emission standards for hazardous air pollutants (NESHAPS), and other regulatory requirements as outlined in 40 CFR Part 61, as of June 1, 2000. This also applies to **45CSR16**, which specifically includes associated reference methods, performance specifications, other test methods, and a minor correction to the reporting requirements for industrial-commercial-institutional steam generating units.

45CSR6 prevents and controls particulate matter air pollution from the combustion of refuse by the prohibition of open burning. This proposed rule also establishes weight and visible emission standards for incinerators and incineration, and is part of the West Virginia State Implementation Plan (SIP) approved by EPA. The rule does not prohibit bonfires, campfires, or other forms of open burning for the purposes of personal enjoyment and comfort, but establishes standards for open burning. The proposed revisions are intended to exempt certain flares and flare stacks from the requirement to obtain a permit under 45CSR13.

45CSR23 - This rule was first promulgated approximately three years ago, and for the most part adopts new federal standards by reference. There is a specific plan that each state puts together for "existing sources" that OAQ has done for previous rule versions, and the plan for West Virginia has been approved by EPA.

45CSR25 - This rule establishes a program of air quality regulation over the treatment, storage, and disposal of hazardous wastes. John informed Council that this proposed rule amendment is incorporating additional federal requirements promulgated by EPA, as of June 1, 2000. There is a shift from the Resource Conservation and Recovery Act (RCRA) requirements into the Clean Air Act (CAA) programs that OAQ operates. Many of the RCRA provisions previously contained in this rule are now being shifted to 45CSR34 (which will be discussed later in the meeting). John said this proposed rule amendment is also necessary to maintain consistency with the Office of Waste Management's current rule - 33CSR20.

45CSR26 (copy not provided for Council at this time) specifically addresses NO_x reduction requirements for electric generating units. This rule deviates somewhat from EPA's model rule, but follows the Governor's Coalition proposal. EPA's model rule requires electric generating units .15 lb/mmBtu NO_x limits, which is roughly an 85% reduction in NO_x emissions. Whereas, the Governor's coalition proposal requires .25 lb/mmBtu NO_x limits, or 65% reduction from their 1999 emissions.

45CSR30 establishes a comprehensive air quality operating permits program consistent with the requirements of Title V of the federal Clean Air Act and 40 CFR Part 70. These proposed amendments will incorporate various corrections and revisions associated with the November 1995 Federal Register Notice. John said OAQ has deferred making these changes until now in anticipation of additional changes they believe EPA will make in Part 70. There also has not been a great deal of concern since OAQ has received interim approval of the program since 1994; however, EPA was recently sued for issuing these interim approvals. This put OAQ in the position of amending the rule to comply with the November 1995 requirements, so that OAQ can receive final approval from EPA. John said the rule may need to be modified again in the near future when (and if) EPA modifies the Part 70 requirements.

45CSR34 - This rule provides authority for the Director to determine and enforce case-by-case maximum achievable control technology (MACT) standards for major hazardous air pollutant sources, in the absence of a federal standard under certain circumstances, as required for permit program approval under Title V of the CAA. John said this proposed amendment does delete the requirement that OAQ do a case-by-case MACT analysis for sources that modify. He said this is a fairly significant change in the rule. Previously, and even under OAQ's Title V program, sources that do even slight modifications and were to eventually receive a MACT standard from EPA, were required to make some kind of guess as to what that standard was under such modification, and then do a case-by-case analysis to make that source comply with what everybody thought would be the ultimate MACT standard for that source. EPA was sued over this particular requirement, and has since removed the requirement from the Title V program. As mentioned earlier in the meeting, OAQ is also proposing incorporating the provisions in 45CSR25, pertaining to hazardous waste combustors, into this rule.

After discussions and questions concerning OAQ's proposed rules, Council recommended the following to Chairman Castle:

Bill Raney deferred to Ray Joseph, representing the natural gas industry, for questions concerning Section 6 of 45CSR6 (To Prevent and Control Air Pollution From Combustion on Refuse) requirements for Permits before the installation and use of emergency flares. The concern from Mr. Joseph was that in certain situations emergency flares would exceed permitting trigger levels requiring a permit pursuant to 45CSR13. John Benedict concurred that permits would be required under those circumstances. However, that should not be that much of a burden since the emissions from a majority (90% +) of emergency flares used in the natural gas industry would be below permit trigger levels. It was noted that Section 6 was specifically revised to allow the use of emergency flares for the natural gas industry, and that others in OAQ were more directly involved in drafting the specific language in Section 6. Mr. Benedict recommended that proposed rule 45CSR6 go to public notice as drafted, and that the OAQ would meet with representatives of the natural gas industry to further discuss their concerns, and possibly consider revisions in Section 6.

Bill Raney asked if the Administrative Procedures Act requires Fiscal Notes to be completed as to the implications of the rule on the regulated community. Carrie Chambers advised Mr. Raney that fiscal notes are prepared for each rule before they are filed for public hearing, but the fiscal note requires information on the cost to the state in implementing the proposed rules, not on the regulated community. The Fiscal Notes are a work-in-progress, and will be submitted to Council after they are completed. Mr. Raney expressed his concern by stating that he has a problem in approving the proposed rules without the Council reviewing these documents beforehand. He said agencies have typically been known to crank out the standard responses to the fiscal notes, which leads to problems during the Legislative Rule-Making process. Bill Samples said he wasn't sure if the Council has a right to approve or disapprove the proposed rules, but only that the Director is to consult with Council on the proposed amendments, and then consider their comments. Mr. Raney stated that he would still like his concerns noted and included in the minutes that will be filed with the proposed rules.

Mr. Raney said he would also like to ask why there is nothing on the agenda concerning the Environmental Quality Board's (EQB) Water Quality Standards rule. Carrie Chambers explained that she has included a copy of EQB's rule (and also three of the Solid Waste Management Board's proposed rules), for Council's review, in the notebooks containing DEP's rules. She went on to explain that since the Boards have their own rule-making authority under §22B-3-4, they are not required to go before the Advisory Council during the rule-making process.

Mr. Raney said that DEP has a huge obligation in regards to water quality standards, regardless of who has the rule-making authority. He also said that the rules as proposed are huge, and the implications to the regulated community are immense.

Chairman Castle said he would try to find someone from OWR or EQB to discuss EQB's rule later in the meeting.

☐ **60CSR4 - "Awarding of West Virginia Stream Partners' Program Grant Rule."**

Jennifer Pauer, Program Coordinator for the Stream Partners' Program, briefed Council members on the proposed amendments to **60CSR4**. Jennifer said this rule was filed as an emergency rule in March. After one year of implementing the rule, it was discovered that the rigid spending caps contained in the original rule made it difficult to implement as intended by §20-13-4. The proposed amendments will loosen these spending caps, and therefore make it easier for grant recipients to complete their watershed improvement projects. The rule also contains minor technical cleanup.

After discussion and questions from the Council, there were no substantive recommendations made to the Director concerning the proposed amendments to 60CSR4.

☐ **199CSR1 - "Surface Mining Blasting Rule"**

Darcy White, Office of Explosives and Blasting (OEB), briefed Council on 199CSR1. Darcy explained that many of the proposed amendments to the Surface Mining Blasting rule are technical cleanup in nature and also involve changing the order of some provisions to improve clarity. Sections covering inspections and enforcement and appeals were extracted from portions of existing 38CSR2, the Surface Mining and Reclamation rule. These sections are being amended into the current rule to ensure OEB has authority to enforce a program that will satisfy OSM requirements. Another section extracted from 38CSR2 deals with pre-blast survey requirements, and is necessary if OEB is to gain OSM approval of the proposed rules. Darcy said that subsection 3.11 also contains a proposed revision that allows the Director to further restrict blasting on a case-by-case basis as an alternative to prohibiting blasting altogether. To correspond with the blaster's certification rules approved by OSM, and to help improve certified blaster's professionalism and knowledge, the requirements for blaster's certification is also being proposed as an amendment to this rule.

Larry Harris, Advisory Council member, was unable to attend the meeting; however, he expressed the following comments on 199CSR1 by e-mail. He asked whether these blasting rules will also apply to the quarry bill and rules. He said that in the Surface Mining Blasting rule there seems to be some consideration of the premining groundwater/wells. This presumes that any taking of this water right from nearby landowners is cause for a claim. Is this also true for limestone quarries?

Darcy responded by saying that no, 199CSR1 applies only to coal mining. Blasting requirements for quarries are addressed in §22-4 (revised during the past legislative session, and effective this July). Rocky Parsons is currently working on a rules package as required by this legislation. Until those are promulgated, there is no change in blasting requirements for quarries.

After discussion and questions from the Council, there were no recommendations made to the Director concerning the proposed amendments to 199CSR1.

John Johnston, Chief of the Office of Oil and Gas, discussed the following proposed rules.

☐ **35CSR4 - "Oil and Gas Wells and Other Wells"**

☐ **35CSR7 - "Certification of Gas Wells"**

John told Council that there are three proposed amendments to 35CSR4 and one to 35CSR7 that are both fairly straightforward. He said the proposed amendments in **35CSR4** will: 1) allow the plats to be submitted electronically. This is the first step in relation to authorizing permitting electronically for oil and gas wells; 2) will apply to the procedure for well transfer. These proposed amendments will eliminate the pre-circular, and cut the paperwork and mailing in half that the Office of Oil and Gas must perform in the transfer process. This will also allow the transfer of well responsibility to occur in a more timely manner; and 3) will waive the new certification for the reuse of plats when applying for plugging permits.

35CSR7 - The Federal Energy Regulatory Commission is proposing to reinstate certain regulations regarding well category determination under the Natural Gas Policy Act of 1978, Section 503. This section allows natural gas producers to obtain tax credits under Section 29 of the Interval Revenue Code. Section 503 first requires a determination by the local regulatory agency that a well is producing one of the types of gas eligible for the Section 29 tax credit. The promulgation of these proposed rules will enable the Office of Oil and Gas to review and conduct the first determination.

After discussion and questions from the Council, there were no substantive recommendations made to the Director concerning the proposed amendments to 35CSR4 and 35CSR7.

The following Office of Waste Management rules were discussed:

- ☐ **33CSR3 - "Yard Waste Management Rule"**
- ☐ **33CSR5 - "Waste Tire Management Rule"**
- ☐ **33CSR20 - "Hazardous Waste Management Rule"**
- ☐ **33CSR32 - "Underground Storage Tank Insurance Fund"**

Dick Cooke, Assistant Chief, Office Waste Management (OWM), briefed Council on **33CSR3**. He said OWM has taken a policy statement, that with a change in the yard waste laws approximately two years ago, provided for the Director to provide for reasonable and necessary exceptions to the prohibition of yard waste in landfills. This provision was not incorporated into the rule as the Legislature intended at that time. This proposed amendment incorporates that exception into the rule, and will allow West Virginia residents to dispose of small quantities of domestic yard waste in solid waste landfills, where there is no other option available.

Dick Cooke explained to Council that SB 427 (the Tire Bill) mandated that emergency rules be promulgated under **33CSR5**. The proposed emergency rule, among other amendments, will allow the disposal of waste tires in solid waste landfills, but only when the state agency authorizing the remediation or cleanup program has determined there is no reasonable alternative available. The proposed amendments also adds permitting or other requirements for salvage yards, waste tire dealers, waste tire transporters, and commercial landfill facilities.

Mike Dorsey, Assistant Chief, OWM, next discussed **33CSR20**. He explained the rule is being amended to adopt by federal reference the 1999 changes made to 40 CFR Parts 260 through 279. Those amendments include Hazardous Waste Management System: Modification of the Hazardous Waste Program, Hazardous Waste Lamps, and 180-day Accumulation Time Under RCRA for Waste Water Treatment Sludges from the Metal Finishing Industry. These amendments are less stringent than federal regulations and are intended to assist the regulated community, and encourage recycling and waste minimization.

Mike said OWM has two rule amendments this year that deal with underground storage tanks. The first, **33CSR30**, applies to a very small segment of the population. This rule, as well as federal EPA requirements, requires that all underground storage tanks (UST) have corrosion protection by December 22, 1998. Many UST systems were upgraded to meet the standards rather than new USTs being installed; however, the UST inspectors are finding that many of the systems were not installed correctly. Since the current rules do not specifically require certification of persons who install corrosion protection, the burden falls solely on the UST owners and/or operators to correct the system. This proposed amendment should prevent this from continuing in the future.

33CSR32, OWM's final proposed rule, deals with the Underground Storage Tank Insurance Fund. This rule requires that accrued interest on the UST Insurance Trust Fund Capitalization Fund remain in that fund. The UST Administrative Fund has been depleted, and the annual registration fee assessment no longer generates enough revenue to support the UST program. The expenditures from the UST Administrative Fund are used as the required match for the federal grant. Unless more revenue is deposited in the UST Administrative Fund, there will be insufficient funds to pay personnel and other operating costs. The proposed amendments to this rule will allow the transfer of the interest money and alleviate the need to increase the annual registration fees. Mike said this amendment has the full support of the UST Advisory Committee.

After discussion of OWM's proposed rules, the following amendment to 33CSR5 (the Waste Tire Disposal rule) was offered by Counsel:

Bill Samples said that section 3.1.a indicates that a permit is required for persons who generate waste tires, but he couldn't find a definition of "generator," and this could be confusing when trying to interpret the rule. Cap Smith, Chief of OWM, said that is a very good point, and it will certainly be taken into consideration during the public hearing/comment period timeframe.

The following Office of Mining and Reclamation rules were discussed:

- ☐ **38CSR2 - "WV Surface Mining Reclamation Rule"**
- ☐ **38CSR3 - "Rules for Quarrying and Reclamation"**

John Ailes, Assistant Chief, OMR, briefly described the proposed amendments to **38CSR2**, and noted that most of the amendments deal with Office of Surface Mining program amendments.

After discussion/questions concerning 38CSR2, the following comments were made by Council:

In Section 14.15.f, OMR is proposing to tie contemporaneous reclamation to reclamation liability. The proposed amendment stated that the reclamation liability cannot exceed the bond posted for the site. Bill Raney stated his concern with limiting the area to be disturbed based upon liability. He questioned who would be determining reclamation liability, and how. He said that he understands the reasoning, but would like to go on record as being "cautiously reserved," and additional comments would be forthcoming during the public hearing/comment period.

The proposed amendment to strike Section 23, which deals with coal extraction as an incidental part of development of land for commercial, residential, industrial or civic use, was questioned by Council. John explained to Council that this provision was amended into the rule a few years ago, but never approved by OSM, and therefore deleted from the rule mainly as a cleanup. Bill Raney said that he is hesitant to see the Section deleted from the rule since it is still in DEP's statute, and has been beneficial to businesses several times throughout the state. After further discussion, Chairman Castle agreed to reinstate Section 23 and will work with OSM to seek program approval.

Rocky Parsons, OMR Assistant Chief, discussed the newly-proposed Quarry mining rules, 38CSR3, authorized in HB 4055, effective June 8. He said that the Statue was developed through the stakeholders' process, and the rules have been drafted the same way. DEP intends to file the rules as "Emergency," and at the same time file the rules to go through the normal legislative rule-making process. He said it is still a working document, but any changes made will be as a result of the stakeholders' process.

After discussion/questions on 38CSR3, the following comments are noted by Council members:

Mr. Larry Harris commented by e-mail on 38CSR3. He stated that his concerns for quarries are "related to degradation of nearby streams and water tables. Where limestone is located the quality of streams is generally high, often being trout streams. Quarries can alter the quality of the stream through siltation, and the quantity through alterations of the water table due to blasting. Hence, we want to make sure that the rules adequately address these two issues. I think that the water quality baseline studies should include a bottom fines analysis of receiving streams. Duffield of the Forest Service has established a direct relationship between the % of fines in stream sediment and the biological productivity of the stream. Having a baseline value for the receiving stream, and requiring monitoring to assure that this figure is not increased to the point where productivity is altered, would be a suitable protection for the stream - Part of 3.5 of the proposed rules."

Mr. Harris also noted his objection to calling streams "Natural Drainways" in subsection 2.17 of the definitions - He stated that "this nomenclature lowers the status of streams to drains, which are essentially industrial conduits or pipes. Very often these streams are manipulated in a way that destroys habitat and degrades the productivity of that stream."

Rocky responded that he will take these comments to the next stakeholders' meeting for their consideration, including a possible rewrite of 2.17.

Mr. Harris also asked if there are any preblast assessments or surveys of the groundwater level. Rocky responded by saying that preblast surveys do require a sampling of the water wells. With, quarries, operations in existence now have a year to do a preblast survey to the nearest protected structure within 1,000 *feet of the blasting area. A new permit has to do a preblast survey for any structure within 1,500 feet of the blasting area., as opposed to 1/2 mile with coal.*

Bill Samples pointed out section 7.4.b., that deals with sediment control, seems to be awkwardly worded. As it is worded, the Director has to make a very definitive determination on something that the applicant only has to have a reasonable likelihood of. Chairman Castle agreed with this comment, and the rule will be amended accordingly.

Mr. Samples also noted in 7.4.c., that normally in an environmental regulation when something has to be removed, you say it has to be disposed of in an appropriate manner. Chairman Castle agreed with this comment and amendment to this section.

3. Open Discussion.

Chairman Castle introduced Libby Chatfield, Technical Advisor for the Environmental Quality Board. Chairman Castle thanked Libby for taking the time to appear before Council to discuss 46CSR1, EQB's Water Quality Standard Rule. Randy Sovic, DEP's Office Water Resources, also participated in the discussion.

After discussions/questions concerning the proposed EQB rule, the following comments are noted from Council members:

Bill Raney said that even though the Boards (the Environmental Quality Board and Solid Waste Management Board) are not required to come before the Council with their proposed Legislative rules, he would like to go on record as being "absolutely in opposition" to the proposed Groundwater Quality Standards' rule amendments until a full-blown, socio-economic impact statement is done. He said he does take exception to the fact that the Board can autonomously go forward with the rules without coming to the Advisory Council, and that he believes the obligations and costs will be enormous, both to the state and to industry.

Lisa Dooley stated that she is in complete agreement with Mr. Raney, and would also like to go on record as being opposed to EQB's proposed rule. She said that the proposed rule amendments, especially as they relate to the economic development part, very much concern her. She believes any economic development in West Virginia will be subject to the state's anti-degradation policy. And that policy should be reviewed and compared to surrounding states so that it is not detrimental for businesses and municipalities.

Bill Samples said that there is a multitude of concerns with this rule amendment, and that industry certainly has a major concern with it. He said that other states with anti-degradation rules may not have brought things to a stop, but certainly delayed them. He said that he would also like to go on record as being opposed to this rule amendment.

Rick Roberts asked to be included, for the record, his opposition to the proposed rule.

Director Castle said that the connection and link to DEP with regard to implementing the proposed EQB rules will definitely be taken into consideration.

Before adjournment of the meeting Bill Raney said he would like to go on record to thank Carrie Chambers for putting together the rules package and e-mailing them to Counsel in a timely fashion. Chairman Castle adjourned the meeting at 4:00 p.m.

APPENDIX B

FISCAL NOTE FOR PROPOSED RULES

Rule Title: 45CSR15 "Emission Standards for Hazardous Air Pollutants Pursuant to 40 CFR Part 61"

Type of Rule: X Legislative ________ Interpretive _______ Procedural

Agency: Office of Air Quality

Address: 7012 MacCorkle Avenue, SE

Charleston, WV 25304

1. Effect of Proposed Rule	Annual		Fiscal Year		
Estimated Total Cost	Increase	Decrease	Current	Next	Thereafter
	$ 0	$ 0	$ 0	$ 0	$ 0
Personal Services	0	0	0	0	0
Current Expense	0	0	0	0	0
Repairs and Alterations	0	0	0	0	0
Equipment	0	0	0	0	0
Other	0	0	0	0	0

2. Explanation of above estimates: With the exception of asbestos removal oversight, costs anticipated to be incurred in the implementation of federal rules promulgated under 40 CFR Part 61 as of June 1, 2000 will be covered under prior budget estimates for implementing Title V of the Clean Air Act, as amended, under 45CSR30 authorized by the Legislature during the 1994 session and approved (interim approval) by the U.S. Environmental Protection Agency by Final Rule issued on November 15, 1995. OAQ's limited activities associated with implementation of the asbestos NESHAP 40 CFR 61 Subpart M are supported by non-Title V state funding (general revenue) and federal grant funds.

3. Objectives of these rules: This rule establishes general provisions for emission standards for hazardous air pollutants and other regulatory requirements pursuant to section 112 of the Clean Air Act, as amended. Promulgation of this rule by the Legislature is necessary

for the State to fulfill its responsibilities under the Clean Air Act, as amended.

4. Explanation of Overall Economic Impact of Proposed Rule.

A. Economic Impact on State Government.

See Section 2.

B. Economic Impact on Political Subdivisions; Specific Industries; Specific groups of Citizens.

No impact above that resulting from the currently applicable federal emission standards.

C. Economic Impact on Citizens/Public at Large.

No impact above that resulting from the currently applicable federal emission standards.

Date: July 12, 2000

Signature of Agency Head or Authorized Representative

Barri J. Chambers

FILED

JUL 12 3 35 PM '00

OFFICE OF WEST VIRGINIA
SECRETARY OF STATE

TITLE 45
LEGISLATIVE RULE
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF AIR QUALITY

SERIES 15
EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS PURSUANT TO 40 CFR PART 61

§45-15-1. General.

1.1. Scope. -- This rule adopts emission standards for hazardous air pollutants promulgated by the United States Environmental Protection Agency ~~under~~ pursuant to section 112 of the federal Clean Air Act, as amended (CAA). It is the intent of the Director to adopt these standards by reference. It is also the intent of the Director to adopt associated reference methods, performance specifications and other test methods which are appended to such standards.

1.2. Authority. -- W. Va. Code §22-5-1 et seq.

1.3. Filing Date. -- ~~April 28, 1995~~.

1.4. Effective Date. -- ~~May 1, 1995~~.

1.5. Incorporation by Reference. -- Federal Counterpart Regulation. The Director has determined that a federal counterpart regulation exists and in accordance with the Director's recommendation, with limited exception, this rule incorporates by reference, 40 CFR Part 61, effective July 1, 1999, as amended by the Federal Register through June 1, 2000.

1.6. Former Rules. -- This legislative rule amends 45CSR15 "Emission Standards For Hazardous Air Pollutants Pursuant to 40 CFR Part 61" which was filed April 28, 1995, and which became effective May 1, 1995.

§45-15-2. Requirements.

2.1. No person may construct, reconstruct, modify, or operate, or cause to be constructed, modified, or operated any National Emission Standards for Hazardous Air Pollutants (NESHAP) source which results, or will result, in a violation of this rule.

§45-15-3. Definitions.

3.1. "Administrator" means the Administrator of the United States Environmental Protection Agency or his or her authorized representative.

3.2. "Clean Air Act" ("CAA") means 42 U.S.C. §§7401 et seq.

3.3. "Director" means the director of the division of environmental protection or such other person to whom the Director has delegated authority or duties pursuant to W. Va. Code §22-1-6 or §22-1-8.

3.4. "Hazardous air pollutant" means any air pollutant listed pursuant to 40 CFR Part 61.01(a).

§45-15-~~3~~4. Adoption of Standards.

~~3~~4.1. Standards. -- ~~Emission standards for hazardous air pollutants including associated reference methods, performance specifications and other test methods which are appended to such standards promulgated by the United States Environmental Protection Agency pursuant to 42 U.S.C. 7412 (C.A.A. §112) of the Federal Clean Air Act, as amended, as of July 1, 1994, and contained in 40 CFR Part 61 are hereby adopted in their entirety and incorporated herein by reference~~ The Director hereby adopts and incorporates by reference the provisions of 40 CFR Part 61 including any reference methods, performance specifications and other test methods which are appended to such standards and contained in 40 CFR Part 61, effective July 1, 1999, as amended by the Federal Register through June 1, 2000, for the purposes of implementing a program for emission standards for hazardous air pollutants, except as follows:

~~3~~4.1.a. 40 CFR Part 61.16 is amended to provide that information shall be available to the public in accordance with W. Va. Code §§22-5-1 et seq., W. Va. Code §§29B-1-1 et seq., and 45CSR31.

~~3~~4.1.b. Sub-parts B, H, I, K, Q, R, T, and W; Methods 111, 114, 115 and Appendix D and E of 40 CFR Part 61 shall be excluded.

§45-15-~~4~~5. Director.

~~4~~5.1. Any and all references in ~~said~~ 40 CFR Part 61 to the "Administrator" ~~is~~are amended to be the "Director" ~~of the West Virginia Division of Environmental Protection "except in the following references which such references shall remain "Administrator of the United States Environmental Protection Agency"~~except as follows:

~~4~~5.1.a. ~~Part 61.02.~~where the federal regulations specifically provide that the Administrator shall retain authority and not transfer such authority to the State;

~~4~~5.1.b. ~~Part 61.04.~~where provisions occur which refer to:

5.1.b.1. alternate means of emission limitations;

5.1.b.2. alternate control technologies;

5.1.b.3. innovative technology waivers;

5.1.b.4. alternate test methods;

5.1.b.5. alternate monitoring methods;

5.1.b.6. waivers/adjustments to recordkeeping and reporting;

5.1.b.7. emissions averaging; or

5.1.b.8. applicability determinations; or

~~4~~5.1.c. ~~Part 61.11~~ where the context of the regulation clearly requires otherwise.

~~4.1.d. Part 61.14.~~

§45-15-~~5~~6. Permits.

~~5~~6.1. Nothing contained in this adoption by reference shall be construed or inferred to mean that permit requirements in accordance with applicable rules shall in any way be limited or inapplicable.

§45-15-~~6~~7. Inconsistency Between Rules.

~~6~~7.1. In the event of any inconsistency between this rule and any other existing rule of the Director, such inconsistency shall be resolved by the determination of the Director and such determination shall be based upon the application of the more stringent provision, term, condition, method, or rule.

List of Subjects in 40 CFR Part 52

Air pollution control, Hydrocarbons, Incorporation by reference, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

Note: Incorporation by reference of the SIP for the State of Texas was approved by the Director of the Federal Register on July 1, 1982.

Dated: February 9, 1995.

William B. Hathaway,

Acting Regional Administrator.

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. 7401–7671q.

Subpart SS—Texas

2. Section 52.2270 is amended by adding paragraph (c)(95) to read as follows:

§ 52.2270 Identification of plan.

* * * * *

(c) * * *

(95) Alternative emission reduction (bubble) plan for the Shell Oil Company's Deer Park manufacturing complex submitted to the EPA by the Governor of Texas in a letter dated July 26, 1993.

(i) Incorporation by reference.

(A) TACB Order 93–11, as adopted by the TACB on June 18, 1993.

(B) SIP narrative entitled, "Site-Specific State Implementation Plan," section IV.H.1.b., attachment (4), entitled, "Alternate Emission Reduction ("Bubble") Plan Provisions for Uncontrolled Vacuum-Producing Vents, Shell Oil Company, Deer Park Manufacturing Complex, HG-0659-W," adopted by the TACB on June 18, 1993.

(ii) Additional material.

(A) SIP narrative entitled, "Site-Specific State Implementation Plan," section IV.H.1.b., adopted by the TACB on June 18, 1993.

(B) TACB certification letter dated July 5, 1993, and signed by William R. Campbell, Executive Director, TACB.

[FR Doc. 95–14852 Filed 6–16–95; 8:45 am]

BILLING CODE 6560–50–P

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40 CFR Parts 52 and 81

[OH50–3–7070; FRL–5222–9]

Approval and Promulgation of Implementation Plans and Designation of Areas for Air Quality Planning Purposes; Ohio

AGENCY: United States Environmental Protection Agency.

ACTION: Final rule; withdrawal.

SUMMARY: On May 2, 1995, the United States Environmental Protection Agency (USEPA) published a proposed rule (60 FR 21490) and a direct final rule (60 FR 21456) approving a request by Ohio to redesignate the Toledo ozone nonattainment area to attainment of the National Ambient Air Quality Standard for ozone, and also approving the State's maintenance plan for this area. Because comments adverse to the rulemaking were received, USEPA is withdrawing the direct final rule. In a final rule, USEPA will summarize and respond to the comments received and announce final rulemaking action on the redesignation request and maintenance plan as revisions to Ohio's State Implementation Plan. The approval of the maintenance plan for the Toledo area was also included in the codification in a direct final rule concerning the redesignation and maintenance plan approval for the Dayton area, published on May 5, 1995, (60 FR 22289). That codification of the Toledo maintenance plan approval is also withdrawn.

EFFECTIVE DATE: June 19, 1995.

ADDRESSES: Copies of the documents relevant to this action are available for public inspection during normal business hours at the following location: U.S. Environmental Protection Agency, Region 5, Regulation Development Branch, 77 West Jackson Boulevard, Chicago, Illinois 60604.

FOR FURTHER INFORMATION CONTACT: Angela Lee, Regulation Development Section, Air Enforcement Branch (AE-17J), U.S. Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604. Telephone: (312) 353–5142.

List of Subjects

40 CFR Part 52

Air pollution control, Carbon monoxide, Environmental protection, Hydrocarbons, Nitrogen dioxide, Ozone, Reporting and record keeping requirements, Volatile organic compounds.

40 CFR Part 81

Air pollution control, Environmental protection, National parks, Wilderness areas.

Dated: June 7, 1995.

Valdas V. Adamkus,

Regional Administrator.

Title 40 of the Code of Federal Regulations, Chapter I, Parts 52 and 81, are amended as follows:

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

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

Authority: 42 U.S.C. 7401–7671q.

2. The amendments to add § 52.1870(c)(105) and § 52.1885(b)(5), published on May 2, 1995, at 60 FR 21463, are withdrawn.

3. The amendment to revise § 52.1885(b)(5) published on May 5, 1995, at 60 FR 22295, is withdrawn.

PART 81—DESIGNATION OF AREAS FOR AIR QUALITY PLANNING PURPOSES

4. The authority citation for part 81 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

5. The amendment to revise the entry in the ozone table in § 81.336, published on May 2, 1995, at 60 FR 21463, is withdrawn.

[FR Doc. 95–14850 Filed 6–16–95; 8:45 am]

BILLING CODE 6560–50–M

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40 CFR Parts 61, 704, 710, 712, 762, 763, 766, 790, 795, 796, 797, 798, and 799]

[OPPTS–00168; FRL–4955–2]

Chemical Substances; Deletion of Certain Chemical Regulations; Technical Amendments to the Code of Federal Regulations

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is removing several provisions from the Code of Federal Regulations (CFR) that pertain to the Toxic Substances Control Act. These provisions are being removed from the CFR because they have no current legal effect. The removal of these provisions from the CFR and the technical changes that are being made are necessary to clarify the current status of the provisions for both the regulated

community and the public. EPA is also removing the text of two reporting forms, without making any substantive changes in the reporting requirements.

EFFECTIVE DATE: This final rule takes effect on June 19, 1995.

FOR FURTHER INFORMATION CONTACT: Susan B. Hazen, Director, Environmental Assistance Division (7408), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460, Telephone: (202) 554–1404, TDD: (202) 554–0551, e-mail address: TSCA-Hotline@epamail.epa.gov.

SUPPLEMENTARY INFORMATION:

I. Introduction

On March 4, 1995, the President directed all Federal agencies and departments to conduct a comprehensive review of the regulations they administer and, by June 1, 1995, to identify those rules that are obsolete, not in effect, unduly burdensome, or amenable to streamlining and simplification. The Office of Prevention, Pesticides and Toxic Substances has completed its initial page-by-page review of the CFR provisions within its purview--those issued under the Toxic Substances Control Act (TSCA), the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), and certain sections of the Emergency Planning and Community Right-to-Know Act (EPCRA) and the Federal Food, Drug and Cosmetic Act (FFDCA). Based on this initial review, EPA will be amending or eliminating several provisions in the CFR. This notice, which is one of several notices that are being issued at the same time, specifically involves the provisions associated with TSCA. Other notices, appearing elsewhere in this **Federal Register**, involve provisions associated with FFDCA and FIFRA.

The provisions that EPA is eliminating with this notice are not currently in effect because they have (1) expired by their own terms or by the terms of the statute, (2) become obsolete due to subsequent rulemakings, legislation, or policy decisions, or (3) because they have been otherwise identified as being unnecessary. Those provisions that are being amended with this notice reflect minor technical changes that are necessary as a result of the elimination of the provisions, are otherwise nonsubstantive corrections that are necessary, or involve the removal of the text of reporting forms without substantive changes to the reporting requirements.

The removal of these provisions from the CFR is not intended to affect the status of any civil or criminal actions that were initiated prior to June 19, 1995 or which may be initiated in the future to redress violations of the rules that occurred when the rules were still legally in effect.

II. Good Cause Exemption from Rulemaking Procedures

The Administrative Procedure Act (APA) generally requires agencies to provide prior notice and opportunity for public comment before issuing a final rule. 5 U.S.C. 553(b). Similarly, the APA generally requires at least 30 days after publication before a rule can become effective. 5 U.S.C. 553(d). Rules are exempt from this requirement if the issuing agency finds for good cause that notice and comment or delayed effectiveness are unnecessary. 5 U.S.C. 553(b)(3)(B) and (d)(3).

EPA has determined that providing prior notice and opportunity for comment on these changes to the CFR is unnecessary. For the reasons discussed in Units I and III of this preamble, a number of the rules are no longer legally in effect; thus, withdrawing them from the CFR has no legal impact and merely codifies the current legal status of the rules. The associated technical amendments are merely to correct cross-references to the rules that are being removed and related reorganizations resulting from the removal of these regulations. In addition, other technical changes include the removal of the text of reporting forms, without making any substantive changes to the reporting requirements. For the same reasons, EPA believes there is good cause for making these changes to the CFR immediately effective. See 5 U.S.C. 553(d).

III. Regulations Being Eliminated

A. Part 704, Subparts C and D - Reporting and Recordkeeping Requirement; Comprehensive Assessment Information Rule (CAIR)

Part 704 specifies the reporting and recordkeeping procedures under section 8(a) of TSCA for manufacturers, importers, and processors of chemical substances and mixtures that are identified in subpart B or D of part 704. The reporting and recordkeeping provisions in subpart A of part 704apply throughout this part unless revised in any other subpart. Subpart C of part 704 sets out the general reporting provisions for the Comprehensive Assessment Information Rule (CAIR). CAIR was intended to standardize certain section 8(a) rules by: providing a set of uniform questions for EPA and other agencies to use in assembling specific reporting requirements; requiring the submission of information on a standard reporting form; and establishing uniform reporting and recordkeeping provisions that supplement the reporting and recordkeeping provisions in subpart A of part 704. CAIR provisions apply only to those persons who manufacture, import, or process a substance identified in subpart D of part 704 during the time period for which reporting is required. Subpart D of part 704 contains a matrix that identifies the substances for which EPA requires reporting under subpart C, the persons who must report the information to EPA, the information that must be reported, the coverage period (as that term is defined in § 704.203), and the effective date of the final rule.

After the first use of the CAIR in 1989, a lawsuit resulted in a stay of the effectiveness of this regulation until EPA promulgates amendments. Although amendments to this regulation were proposed in 1993, the amendments have not been finalized and EPA does not anticipate taking action for some time as it reassesses its TSCA information needs. Given the current inactive status of this regulation, EPA has decided to remove subparts C and D of part 704 from the CFR. The requirements of subpart C and D are not in effect and their presence in the CFR is confusing to the public and the regulated community. At the time EPA decides to promulgate amendments to CAIR, EPA will repromulgate subparts C and D, as appropriate.

B. Part 710 - Inventory Reporting Regulations; Compilation of the Inventory

This part establishes regulations governing reporting by certain persons who manufacture, import, or process chemical substances subject to TSCA for commercial purposes. Subpart A of this regulation was issued pursuant to TSCA Section 8(b), which requires EPA to compile an inventory of chemical substances manufactured or processed for a commercial purpose. Following an initial reporting period, EPA was required to publish an initial inventory of chemical substances manufactured or imported for commercial purposes, with revised inventories published after supplemental reporting periods.

Subpart A mandated the reporting which was used to create the initial inventory. By the terms of the regulation itself, the initial reporting period closed in 1979, meriting the deletion of subpart A from the CFR. Nevertheless, some provisions of subpart A are referenced in the Inventory Update Rule of subpart B, and are extensively used in other TSCA regulatory contexts. For this reason, only the provisions associated with the initial reporting period in subpart A are being removed. In addition, the headings for both subparts A and B are being removed so that part 710 no longer has any subpart designations. Cooresponding references are also being corrected where necessary.

C. Part 712, Subpart B - Chemical Information Rules; Manufacturers Reporting - Preliminary Assessment Information

This part establishes procedures for chemical manufacturers and processors to report production, use, and exposure-related information on listed chemical substances. Subpart A establishes requirements that apply to all reporting under this part. Subpart B covers manufacturers' and processors' reporting. Section 712.28 requires manufacturers and importers subject to this subpart to submit a single EPA Form No. 7710–35, "Manufacturer's Report-Preliminary Assessment Information," for each plant site manufacturing or importing a chemical substance listed in § 712.30. The instructions and a facsimile of the form appear in § 712.28(d).

EPA is removing the instructions and facsimile of EPA Form No. 7710–35, entitled Manufacturer's Report-Preliminary Assessment Information from § 712.28(d). In addition, EPA is removing § 712.30(d)-(v) and each chemical listed in § 712.30(w) and (x) with a reporting date pre-1990. To accommodate these changes, EPA is also deleting the reference to subpart C which appears in the title for § 712.7; deleting the reference to subpart C in § 712.1(a) and § 712.7; is amending § 712.28(d) to delete and substitute language similar to § 704.216 with new mail code; and is redesignating § 712.30(w) and (x) as paragraphs (d) and (e), respectively.

D. Part 762 - Fully Halogenated Chlorofluoroalkanes

This part prohibits the manufacture, processing, and distribution in commerce of fully halogenated chlorofluoroalkanes for those aerosol propellant uses which are subject to TSCA, requires submission of annual reports, and lists the exemptions to the prohibitions. This prohibition has become obsolete because it has been superseded by a subsequent ban of CFC propellants under the Clean Air Act section 610 and implementing regulations at 40 CFR 82.64(c) and 82.66(d).

E. Part 763, Subpart D - Asbestos; Reporting Commercial and Industrial Uses of Asbestos

This rule required reporting by persons who manufacture, import, or process asbestos. Different reporting requirements were imposed depending on the person's activity. Manufacturers, importers and processors of commercial and industrial asbestos fiber were required to report quantity, use, and exposure information. Importers of mixtures and articles containing asbestos and processors of asbestos mixtures were required to report to EPA in two phases. They initially had to report limited information about processing or importation, and some were required to subsequently report additional information if they were selected as respondents in a sample survey.

This regulation includes a sunset provision at § 763.78, which specifies that all the requirements of this rule terminate 5 years after promulgation. Accordingly, this regulation sunsetted in 1987 and is now obsolete.

F. Part 763, Subpart E - Asbestos; Asbestos-Containing Materials in Schools (AHERA Rule)

At one of the OPPTS "Regulatory Review Stakeholders' Meeting" in April 1995, a commenter indicated that the OPPTS preliminary report missed two sections of the AHERA rule that have been superseded. Specifically, the commenter pointed out that 40 CFR 763.90(i)(4) gives the requirement for completion of a response action by TEM sampling. However, the rule allowed for a gradual phasing in of TEM and a phasing out of PCM in § 763.90(i)(6) and (7). As the commenter correctly noted, § 763.90(i)(6) and (7) have now expired, and are superseded by § 763.90(i)(4).

EPA is therefore removing § 763.90(i)(6) and (7), removing the citations to these sections which appear in § 763.90(i)(3), (4) and (8), and will redesignate § 763.90(i)(8) as § 763.90(i)(6).

G. Part 763, Subpart F - Asbestos; Friable Asbestos-Containing Materials in Schools

This rule requires local education agencies to identify friable asbestos-containing material in public and private schools by visually inspecting school buildings for friable materials, sampling such materials, and having samples analyzed by appropriate techniques referred to in the rule. In addition, the rule requires local education agencies to post a notice of the results of inspections and analyses. The rule requires local education agencies to provide warnings on the health effects of asbestos and instructions on methods to avoid or reduce exposure to school employees of any school with friable asbestos-containing material and to notify parent-teachers associations of the results of inspections. The rule also includes recordkeeping requirements.

This regulation was superseded by the 1987 Asbestos in School Rule at 40 CFR part 763, subpart E, which implemented the Asbestos Hazard Emergency Response Act (AHERA), and is therefore no longer in effect. However, appendix A to subpart F, which provides EPA's regulatory method for analysis of building materials samples for the presence of asbestos, is cited by the AHERA rule as well as the Asbestos National Emission Standards Hazardous Air Pollutants (NESHAP) rule in 40 CFR part 61, subpart M.As such, although the subpart is no longer in effect and may be eliminated, appendix A is still in use and must be retained. To retain appendix A, EPA is moving appendix A of subpart F to subpart E (the AHERA Rule), as a new appendix E. Corresponding changes are also being made for the citations to appendix A in both the AHERA and NESHAP rules.

H. Part 766 - Dibenzo-para-dioxins/ Dibenzofurans

This part identifies requirements for testing under TSCA section 4 to ascertain whether certain specified chemical substances may be contaminated with halogenated dibenzodioxins (HDDs)/dibenzofurans (HDFs) as defined in § 766.3, and requirements for reporting results under TSCA section 8. This regulation is still in effect, and EPA continues to receive a few reports each year. EPA is deleting the Dioxin/Furan Reporting form (EPA 7710–51) from 40 CFR 766.35(d). The form is easily available from EPA.

I. Parts 795 through 798 - TSCA Testing Guidelines

TSCA Section 4(b)(1) specifies that test rules shall include standards for the development of test data. Certain test guidelines, which become test standards when promulgated in individual section 4 test rules, are currently published in parts 795-798 of the CFR. Codification of these test guidelines alone does not impose any regulatory obligation. This final rule deletes from the CFR those test guidelines that are not currently cited as test standards in any test rules.

J. Part 799 - Chemical Specific Test Rules

Part 799 identifies the chemical substances, mixtures, and categories of substances and mixtures for which data are to be developed, specifies the persons required to test, specifies the test substances in each case, prescribes the tests that are to be conducted, including test standards, and provides deadlines for the submission of reports and data to EPA. For several of the substances subject to testing under part 799, EPA has determined that the testing reimbursement period (as defined under 40 CFR 790.3 and 791.3) has terminated (sunset). This final rule removes from the CFR test rules and testing consent order listings under part 799 on substances for which the testing reimbursement periods have sunset.

For a given test rule, the reimbursement period is defined in TSCA section 4 and the associated regulations as the later of (1) the date 5 years after the date the data are submitted in accordance with the rule and (2) the period that begins on the date the data are submitted and equal to the time period that EPA determines was necessary to develop such data. Generally, the reimbursement period is 5 years from the date of submission of the data because EPA has not required any tests that take more than 5 years to develop data from the time data development begins. For all the test rules affected by today's action, EPA has determined that the period required for developing the data is less than or equal to 5 years (by using the dates for submission of data contained in the rules); thus the reimbursement period ends 5 years after submission of the data. For all of the rules being deleted today, over 5 years have passed since the last test data were submitted under that rule.

Section 4 test rules trigger export notification under TSCA section 12(b) (see 40 CFR part 707, subpart D). The period during which the export notification requirements apply for a particular chemical substance or mixture subject to a section 4 test rule ends when the reimbursement period ends. Thus, the obligation to submit section 12(b) export notices for the substances and mixtures subject to the test rules being deleted today has also terminated.

Additionally, this rule adds § 799.18; this new section lists in a table, substances and mixtures that are the subjects of test rules and/or consent orders for which the testing reimbursement period has sunset. "Sunset date," as the term is used in the table at § 799.18, identifies the end of (1) the period during which TSCA section 4 test rule reporting requirements apply under the particular test rule (e.g., submission of exemption requests, notices of intent to conduct testing), and (2) the reimbursement period during which certain persons are subject to an obligation to reimburse test sponsors for their share of the costs (calculated using market share and other bases during the reimbursement period) associated with testing these chemicals (see 40 CFR part 791).

EPA intends to update the table at § 799.18 on a periodic basis.

IV. Rulemaking Record

EPA has established a record for this rulemaking (docket control number OPPTS-00168. A public version of the record, without any confidential business information is available in the TSCA Public Docket Office from 12 noon to 4 p.m., Monday through Friday, except legal holidays. The TSCA Public Docket Office is located in Rm. NEB-607, 401 M St., SW., Washington, DC.

V. Analyses under E.O. 12866, the Unfunded Mandates Reform Act of 1995, the Regulatory Flexibility Act and the Paperwork Reduction Act

Because the withdrawal of these rules from the CFR merely reflects their current legal status, this action is not a "significant" regulatory action within the meaning of Executive Order 12866 (58 FR 51735, October 4, 1993), and does not impose any Federal mandate on State, local or tribal governments or the private sector within the meaning of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4). For the same reasons, pursuant to the Regulatory Flexibility Act (5 U.S.C. 605(b)), it has been determined that this action would not have a significant economic impact on a substantial number of small entities. In addition, because these rules are not currently in effect or are being eliminated, their deletion from the CFR does not affect requirements under the Paperwork Reduction Act, 44 U.S.C. 3501.

List of Subjects in 40 CFR Parts 61, 704, 710, and 762, 763, 766, 795, 796, 797, 798 and 799

Administrative practice and procedure, Air pollution control, Arsenic, Asbestos, Benzene, Beryllium, Chemicals, Confidential business information, Dibenzo-para-dioxins, Dibenzofurans, Environmental protection, Fully halogenated chlorofluoroalkanes, Hazardous substances, Health, imports, Intergovernmental relations, Labeling, Laboratories, Mercury, Occupational safety and health, Radionuclides, Radon, Reporting and recordkeeping requirements, School, Vinyl chloride.

Dated: June 14, 1995.

Lynn R. Goldman,

Assistant Administrator for Prevention, Pesticides and Toxic Substances.

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

1. In part 61:

PART 61—[AMENDED]

a. The authority citation for part 61 continues to read as follows:

Authority: Secs. 101, 112, 114, 116, 301, Clean Air Act as amended (42 U.S.C. 7401, 7412, 7414, 7416, 7601).

§ 61.141 [Amended]

b. Section 61.141 is amended by replacing "appendix A, subpart F," with "appendix E, subpart E," in each of the following five definitions: "Category I non-friable asbestos- containing material (ACM);" "Category II nonfriable ACM"; "Friable asbestos material"; "Nonfriable asbestos-containing material"; and "Resilient floor covering".

§ 61.146 [Amended]

c. In § 61.146, paragraphs (a) and b are amended by replacing "appendix A, subpart F," with "appendix E, subpart E,".

§ 61.156 [Amended]

d. In § 61.156, Table 1 is amended by replacing in the "CFR citation" column "40 CFR 763, Subpart E, F" with "40 CFR part 763, subpart E".

Appendix A to Subpart M [Amended]

e. In subpart M, appendix A, section I.1.1. is amended by replacing "appendix A, subpart F," with "appendix E, subpart E,".

2. In part 704:

PART 704—[AMENDED]

a. The authority citation for part 704 continues to read as follows:

Authority: 15 U.S.C. 2607(a).

§ 704.1 [Amended]

b. Section 704.1 is amended in paragraph (a), in the first sentence, by removing the words "or D," and by removing paragraphs (c) and (d).

§ 704.104 [Amended]

c. Section 704.104(c)(3) is amended by removing the phrase ", as required by § 712.30(d) of this chapter."

Subparts C and D [Removed]

d. Subparts C and D, consisting of § 704.200 through 704.225 are removed.

3. In part 710:

PART 710—[AMENDED]

a. The authority citation for part 710 continues to read as follows:

Authority: 15 U.S.C. 2607(a).

Subparts A and B Headings [Removed]

b. By removing the subpart A and B headings.

c. In § 710.1, by revising paragraphs (a) and (c) to read as follows:

§ 710.1 Scope and compliance.

(a) This part establishes regulations governing reporting by certain persons who manufacture, import, or process chemical substances for commercial purposes under section 8(a) of the Toxic Substances Control Act (15 U.S.C. 2607(a)). Section 8(a) authorizes the Administrator to require reporting of information necessary for administration of the Act and requires EPA to issue regulations for the purpose of compiling an inventory of chemical substances manufactured or processed for a commercial purpose, as required by section 8(b) of the Act. Following an initial reporting period, EPA published an initial inventory of chemical substances manufactured, processed or imported for commercial purposes. In accordance with section 8(b), EPA periodically amends the inventory to include new chemical substances which are manufactured or imported for a commercial purpose and reported under section 5(a)(1) of the Act. EPA also revises the categories of chemical substances and makes other amendments as appropriate.

* * * * *

(c) Each person who reports under these regulations shall maintain records that document information reported under these regulations and, in accordance with the Act, permit access to, and the copying of, such records by EPA officials.

d. In § 710.2 by revising the introductory text to read as follows:

§ 710.2 Definitions.

In addition to the definitions in § 704.3 of this chapter, the following definitions also apply to this part:

* * * * *

§ 710.3, 710.5, through 710.8 [Removed]

e. By removing § 710.3, and 710.5 through 710.8 .

§ 710.23 [Redesignated and Removed]

f. In § 710.23, by redesignating paragraphs (a), (b), and (c) as § 710.2 (dd), (ee), and (ff), respectively, and by removing the remainder of § 710.23.

§ 710.32 [Amended]

g. In § 710.32 introductory text, change the phrase "this subpart" to read "this part".

§ 710.35 [Amended]

h. In § 710.35 change the phrase "this subpart" to read "this part", each time the phrase appears.

§ 710.37 [Amended]

i. In § 710.37, in the first sentence, change the phrase "this subpart" to read "this part".

§ 710.38 [Amended]

j. In § 710.38 (a), (b), (c)(1)(i), and (d), change the phrase "this subpart" to read "this part", each time the phrase appears.

4. In part 712:

PART 712—[AMENDED]

a. The authority citation for part 712 continues to read as follows:

Authority: 15 U.S.C. 2607(a).

§ 712.1 [Amended]

b. In § 712.1(a) by revising the phrase "Subparts B and C, respectively, cover" to read "Subpart B covers".

§ 712.7 [Amended]

c. In § 712.7, the first sentence, by revising the phrase "Subparts B and C" to read "subpart B".

d. In § 712.28, paragraph (d) is revised to read as follows:

§ 712.28 Form and instructions.

* * * * *

(d) Form 7710–35,Manufacturer's Report--Preliminary Assessment Information or PAIR form and instructions may be obtained by telephoning or writing the Environmental Assistance Division. The telephone number and the address of the Environmental Assistance Division is: Phone Number (202) 554–1404, TDD (202) 554–0551. Address: Environmental Assistance Division (7406), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460.

e. Section 712.30 is amended in paragraph (c) by changing the parenthetical "(TS-790), Rm. L-100," to read "(7409)", by removing paragraphs (d) through (v), by redesignating paragraphs (w) and (x) as paragraphs (d) and (e) and revising newly designated paragraph (d) to read as follows:

§ 712.30 Chemical lists and reporting periods.

* * * * *

(d) Manufacturers and importers of the substances listed below must submit a Preliminary Assessment Information Manufacturer's Report for each site at which they manufacture or import each substance by the reporting date shown in the table below. The substances are listed in Chemical Abstracts Service Registry Number order. Typically EPA lists the trivial or common name first, then, following the symbol "- -", EPA lists the substance by its TSCA Chemical Substance Inventory name. Whenever EPA lists a single name, the name may be either the TSCA Chemical Substance Inventory name, a trivial name, or a common name. Generally, when a single name is listed, it is the TSCA Chemical Substances Inventory name.

CAS No.	Substance	Effective date	Reporting date
90-30-2	N-Phenyl-1-naphthylamine	9/30/91	11/27/91
100-40-3	4-Vinylcyclohexene	1/11/90	3/12/90
108-95-5	Thiophenol	1/26/94	3/28/94
118-79-6	2,4,6-tribromophenol	1/11/90	3/12/90
143-33-9	Sodium cyanide	10/29/90	12/27/90
632-79-1	Tetrabromophthalic anhydride	1/11/90	3/12/90
637-92-3	Ethyl tert-butyl ether	12/28/94	2/27/95
994-05-8	Tert-amyl methyl ether	12/28/94	2/27/95
1163-19-5	Decabromodiphenyl ether	1/11/90	3/12/90
3194-55-6	Hexabromocyclododecane	1/11/90	3/12/90
3296-90-0	Dibromoneopentyl glycol	1/11/90	3/12/90

CAS No.	Substance	Effective date	Reporting date
12185-10-3	White phosphorus	1/26/94	3/28/94
32534-81-9	Pentabromodiphenyl ether	1/11/90	3/12/90
32536-52-0	Octabromodiphenyl ether	1/11/90	3/12/90
32588-76-4	Ethylene Bis-(tetrabromophthalimide)	1/11/90	3/12/90
37853-59-1	1,2-Bis(tribromophenoxy) ethane	1/11/90	3/12/90
41291-34-3	Ethylene(5,6-dibromonorbornane-2,3-dicarboximide)	1/11/90	3/12/90
52907-07-0	Ethylene bis(5,6-dibromonorbornane-2,3-dicarboximide)	1/26/94	3/28/94
57137-10-7	Tribrominated polystyrene	1/11/90	3/12/90
61262-53-1	Ethylene bis(pentabromophenoxide)	1/11/90	3/12/90

* * * * *

PART 762—[REMOVED]

5. By removing part 762.

6. In part 763:

PART 763—[AMENDED]

a.The authority citation for part 763 is revised to read as follows:

Authority: 15 U.S.C. 2605, 2607(c), 2643, and 2646

Subpart D [Removed and Reserved]

b. By removing and reserving subpart D, consisting of § 763.60 through 763.78.

§ 763.87 [Amended]

c. Section 763.87(b) is amended by changing the phrase "Appendix A to subpart F in 40 CFR Part 763," to read "appendix E to subpart E of this part."

§ 763.90 [Amended]

d. Section 763.90 is amended, in paragraph (i)(3) by changing the phrase "paragraphs (i)(4), (5), (6), or (7)" to read "paragraphs (i)(4), and (i)(5)," in paragraph (i)(4), last sentence, by changing the phrase "paragraph (i)(3), (5), (6), or (7)," to read "paragraph (i)(3) or (i)(5)," by removing paragraphs (i)(6) and (i)(7), by redesignating paragraph (i)(8) as paragraph (i)(6), and by changing the phrase "paragraphs (i)(5), (6), and (7)," to read "paragraph (i)(5)," each time this phrase appears.

Subpart E, Appendix C [Amended]

e. In Subpart E, Appendix C, section I.B.3.(l) "Regulatory review," revise the phrase "the Friable Asbestos in Schools Rule (40 CFR Part 763, Subpart F)" to read "the Asbestos-Containing Materials in Schools Rule (40 CFR Part 763, Subpart E)".

Appendix A to Subpart F [Redesignated]

f. In subpart F, by redesignating "Appendix A to Subpart F" as "Appendix E to Subpart E."

Subpart F [Removed and Reserved]

g. By removing the remainder of subpart F to part 763, consisting of § 763.100 through 763.119 and by reserving the subpart F designation.

7. In part 766:

PART 766—[AMENDED]

a. The authority citation for part 766 continues to read as follows:

Authority: 15 U.S.C. 2603 and 2607.

§ 766.7 [Amended]

b. In § 766.7, by changing "Document Control Office (TS- 790), Office of Prevention, Pesticides and Toxic Substances, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460" to read "Document Control Office, (7407), Information Management Division, Office of Polution Prevention and Toxics, Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460 , ATTN: Dioxin/Furan Report.

§ 766.12 [Amended]

c. In § 766.12, by changing "(TS-799)" to "(7408)", removing "(800–424–9065)" and "OPPTS," by changing "NE-G004" to "NEB-607", and by changing "8 a.m."to "12 noon".

d. In § 766.35, by revising paragraph (c)(1)(i), in paragraph (c)(2), the first sentence, by changing "EPA Form 7910–51 (appearing in § 766.35(d)" to "EPA Form 7710–51", and by removing and reserving paragraph (d), to read as follows

§ 766.35 Reporting requirements.

* * * * *

(c) * * *

(1)

(i) A completed form (EPA 7710-51) for that chemical substance. The form and instructions are available from the Environmental Assistance Division (7408), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 401 M St., SW., Washington, DC, 20460. One form must be submitted for each chemical substance for which a positive test result has been submitted.

* * * * *

§ 766.38 [Amended]

e. In § 766.38(c), by changing "Part II of form EPA 7910-51 (appearing at § 766.35(d)) for each chemical product. A separate form EPA 7910-51 must" to "Part II of EPA Form 7710-51 for each chemical product. A separate EPA Form 7710-51 must", and by removing the parenthetical text at the end of the section.

8. In part 790:

PART 790—[AMENDED]

a. The authority citation for part 790 continues to read as follows:

Authority: 15 U.S.C. 2603.

§ 790.5 [Amended]

b. Section 790.5(a) is amended by removing the phrase "e.g., § 799.4400 1,1,1-Trichloroethane,".

9. In part 795:

PART 795—[AMENDED]

a. The authority citation for part 795 continues to read as follows:

Authority: 15 U.S.C. 2603.

§§ 795.45, 795.54, 795.223, 795.230, 795.235, 795.260, 795.285 [Removed]

b. By removing §§ 795.45, 795.54, 795.223, 795.230, 795.235, 795.260, 795.285.

10. In part 796:

PART 796—[AMENDED]

a. The authority citation for part 796 continues to read as follows:

Authority: 15 U.S.C. 2603.

§§ 796.1220, 796.1370, 796.1520, 796.1550, 796.1570, 796.1720, 796.1840, 796.1860, 796.2700, 796.3140, 796.3180, 796.3200, 796.3220, 796.3240, 796.3260, 796.3300, 796.3340, 796.3360, 796.3400, 796.3480, 796.3700, 796.3780, and 796.3800 [Removed]

b. By removing §§ 796.1220, 796.1370, 796.1520, 796.1550, 796.1570, 796.1720, 796.1840, 796.1860, 796.2700, 796.3140, 796.3180, 796.3200, 796.3220, 796.3240, 796.3260, 796.3300, 796.3340, 796.3360, 796.3400, 796.3480, 796.3700, 796.3780, and 796.3800.

11. In part 797:

PART 797—[AMENDED]

a. The authority citation for part 797 continues to read as follows:

Authority: 15 U.S.C. 2603.

§§ 797.1060, 797.1075, 797.1160, 797.1350, 797.1440, 797.1520, 797.1560, 797.1800, 797.1830, and 797.1970 [Removed]

b. By removing §§ 797.1060, 797.1075, 797.1160, 797.1350, 797.1440, 797.1520, 797.1560, 797.1800, 797.1830, and 797.1970.

Subpart C [Removed]

c. By removing subpart C, consisting of §§ 797.2050, 797.2130, 797.2150, 797.2175, 797.2750, 797.2800, and 797.2850.

12. In part 798:

PART 798—[AMENDED]

a. The authority citation for part 798 continues to read as follows:

Authority: 15 U.S.C. 2603.

Subpart B [Removed and Reserved]

b. By removing subpart B, consisting of §§ 798.1100, 798.1150, and 798.1175 and designating subpart B as reserved.

§§ 798.2675, 798.4420, 798.4470, 798.4500, 798.5100, 798.5140, 798.5250, 798.5550, 798.5575, 798.5900, 798.5915, 798.6450, 798.6540, and 798.6850 [Removed]

c. By removing §§ 798.2675, 798.4420, 798.4470, 798.4500, 798.5100, 798.5140, 798.5250, 798.5550, 798.5575, 798.5900, 798.5915, 798.6450, 798.6540, and 798.6850.

Subpart H [Removed]

d. By removing subpart H, consisting of § 798.7100.

13. In part 799:

PART 799—[AMENDED]

a. The authority citation for part 799 continues to read as follows:

Authority: 15 U.S.C. 2603, 2611, 2625.

b.Section 799.5 is amended by removing the parenthetical text "(e.g. § 799.4400 for 1,1,1-Trichloroethane)".

c. Section 799.18 is added to subpart A to read as follows:

§ 799.18 Chemicals subject of test rules or consent orders for which the testing reimbursement period has passed.

The following table lists substances and mixtures that have been the subjects of section 4 testing actions and for which the testing reimbursement period has terminated (sunset). The **Federal Register** citation in the table is for the final rule/consent order that includes the particular substance for which the sunset date listed in the table below applies. Section 12(b) export notification is no longer required for these substances and mixtures. Substances that are the subjects of two or more section 4 testing actions may have section 4 reimbursement or section 12(b) export notification requirements that have not sunset; see subparts B, C, and D of this part to determine if certain other section 4 testing requirements apply. Additionally, section 12(b) export notification may also be triggered by proposed or final action under TSCA section 5, 6, or 7 (in addition to final actions under section 4); see 40 CFR part 707, subpart D for further information regarding the TSCA section 12(b) export notification requirements.

CAS No.	Chemical Name	FR cite	Sunset dates
	C-9 Aromatic Hydrocarbon Fraction[1]	50 FR 20662, 5/17/85	Aug 13, 1994
62–53–3	Aniline	53 FR 31804, 8/19/88	July 27, 1994
71–55–6	1,1,1-Trichloroethane	49 FR 39810, 10/10/84	June 29, 1992
75–56–9	Propylene oxide	50 FR 48762, 11/27/85	Dec,21, 1992
78–87–5	1,2-Dichloropropane	52 FR 37138, 10/5/87	April 17, 1995
79–94–7	Tetrabromobisphenol-A	52 FR 25219, 7/6/87	Aug 24, 1994
80–05–7	Bisphenol A	51 FR 33047, 9/18/86	April 6, 1993
84–65–1	Anthraquinone	52 FR 21018, 6/4/87	Aug 21,1994
87–61–6	1,2,3-trichlorobenzene	51 FR 11728,4/7/86	Nov 13, 1993
88–74–4	2-nitroaniline	53 FR 31804, 8/19/88	Sept 19, 1994
92–52–4	1,1-Biphenyl	50 FR 37182, 9/12/85	March 15,1994
95–48–7	Ortho-cresols AKA 2-methylphenol	51 FR 15771, 4/28/86	Dec. 6, 1994
95–50–1	1,2-dichlorobenzene	51 FR 24657, 7/8/86	April 27, 1994
95–51–2	2-chloroaniline	53 FR 31804, 8/19/88	Sept 6, 1994
95–76–1	3,4-dichloroaniline	53 FR 31804, 8/19/88	Oct 2, 1994
95–94–3	1,2,4,5-tetrachlorobenzene	51 FR 24657,7/8/86	April 27, 1994
97–02–9	2,4-dinitroaniline	53 FR 31804, 8/19/88	Oct 19, 1993
98–82–8	Cumene	53 FR 28195, 7/27/88	March 11, 1995
99–30–9	2,6-dichloro-4-nitroaniline	53 FR 31804, 8/19/88	Aug 6, 1994
100–01–6	4-nitroaniline	53 FR 31804, 8/19/88	Sept 19, 1994
106–44–5	Para-cresols AKA 4-methylphenol	51 FR 15771, 4/28/86	Dec. 6, 1994
106–46–7	1,4-dichlorobenzene	51 FR 24657, 7/8/86	Jan 22, 1994
106–47–8	4-chloroaniline	53 FR 31804, 8/19/88	Oct 19, 1993
108–39–4	Meta-cresols AKA 3-methylphenol	51 FR 15771, 4/28/86	Dec. 6, 1994
108–90–7	Monochlorobenzene	51 FR 24657, 7/8/86	Nov 13, 1991
112–90–3	Oleylamine	52 FR 31962, 8/24/87	Nov 28, 1994
116–14–3	Tetrafluoroethene	52 FR 21516, 6/8/87	May 19, 1993

CAS No.	Chemical Name	FR cite	Sunset dates
116–15–4	Hexafluoropropene	52 FR 21516, 6/8/87	Jan 22, 1994
123–31–9	Hydroquinone	50 FR 53145, 12/30/85	Dec. 11, 1994
149–57–5	2-Ethylhexanoic Acid	51 FR 40318, 11/6/86	June 19, 1993
328–84–7	3,4-Dichlorobenzotrifluoride	52 FR 23547, 6/23/87	Dec. 5, 1993
25550–98–5	Diisodecyl Phenyl Phosphite	54 FR 8112, 2/24/89	May 21, 1995

[1] Only substances obtained from the reforming of crude petroleum.

§§ 799.500, 799.925, 799.940, 799.1051, 799.1052, 799.1054, 799.1250, 799.1285, 799.1550, 799.1650, 799.2175, 799.2200, 799.3175, 799.3450, 799.4000, 799.4400 [Removed]

d. Sections 799.500, 799.925, 799.940, 799.1051, 799.1052, 799.1054, 799.1250, 799.1285, 799.1550, 799.1650, 799.2175, 799.2200, 799.3175, 799.3450, 799.4000, and 799.4400 are removed.

§ 799.5000 [Amended]

e. Section 799.5000 is amended by removing from the table the complete entries for the following substances and/or mixtures: Aniline, 2-nitroaniline, 2-chloroaniline, 3,4-dichloroaniline, 2,4-dinitroaniline, 2,6-dicloro-4-nitroaniline, 4-nitroaniline, 4-chloroaniline, 3,4-dichlorobenzotrifluoride, and diisodecyl phenyl phosphite.

[FR Doc. 95–14910 Filed 6–16–95; 8:45 am]

BILLING CODE 6560–50–F

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 63

[CC Docket No. 87–266; FCC 95–203]

Cross-Ownership Rules

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: The Commission has voted to adopt the tentative conclusion regarding the Commission's legal authority to grant waivers to telephone companies allowing them to provide video programming directly to subscribers in their telephone service areas. For "good cause" the Commission may waive Section 613(b) of the Communications Act, the cable-telco cross-ownership restriction, where a waiver is "justified by the particular circumstances." In response to the decisions of the Fourth and Ninth Circuits which found Section 613(b) unconstitutional on First Amendment grounds, the Commission concluded that under Section 613(b)(4), the waiver provision, it has the legal authority to grant waivers to allow telephone companies to provide video programming in their telephone service areas on video dialtone networks. The Commission further concluded that waiving the restriction in that manner is fully consistent with the language of the statute and Section 613(b)'s underlying policy, and obviates the constitutional infirmities identified by the court of appeals. This order is intended to provide guidance to the public regarding the Commission's legal authority to grant waivers of the cable-telco cross-ownership rule to telephone companies seeking to provide video programming directly to subscribers in their telephone service areas.

EFFECTIVE DATE: June 19, 1995.

FOR FURTHER INFORMATION CONTACT: Aliza Katz, Office of General Counsel, (202) 418–1720.

SUPPLEMENTARY INFORMATION: A summary of the Commission's *Third Report and Order* (TR&O), adopted May 16, 1995 and released May 16, 1995, is set forth below. The full text of this document is available for inspection and copying during normal business hours in the Administrative Law Division, Office of General Counsel (Room 616), 1919 M Street NW., Washington, DC. The full text may also be purchased from the Commission's copy contractor, International Transcription Services, Inc. (ITS), 2100 M Street NW., Suite 140, Washington, DC 20037.

Summary of Third Report and Order

Introduction. In this *Third Report and Order,* we adopt the tentative conclusion set forth in the *Fourth Further Notice of Proposed Rulemaking* ("*Fourth FNPRM*"), 60 FR 8996, February 16, 1995, in the above captioned docket regarding the Commission's legal authority to waive Section 613(b) of the Communications Act, 47 U.S.C. § 533(b). Section 613(b) generally prohibits telephone companies from providing "video programming directly to subscribers in the[ir] telephone service area." However, the statute expressly authorizes us to waive the restriction for "good cause." We conclude that Section 613(b)(4) authorizes us to grant waivers to allow telephone companies to provide video programming directly to subscribers in their telephone service areas under certain conditions. In particular, in response to decisions of the Fourth and Ninth Circuits, we conclude that under Section 613(b)(4) we have the legal authority to grant waivers allowing telephone companies to provide video programming in their telephone service areas on video dialtone networks. We adopt that construction of the waiver provision because it is fully consistent with the language of the statute and Section 613(b)'s underlying policy, and because waiving the restriction in that manner obviates the constitutional infirmities identified by the courts of appeals.

2. *Background and Summary.* Section 613(b), the "cable-telco cross-ownership rule," prohibits a telephone company from operating a cable system where it has a monopoly on local telephone service. Although Section 613(b) does *not* bar a telephone company from acting as a conduit to carry video programming selected and provided by an unaffiliated party, it *does* generally bar a telephone company from selecting (or "exerting editorial control over") and providing the video programming carried over its wires in its local service area. Two counts of appeals, the Fourth and Ninth Circuits, have recently held Section 613(b) unconstitutional because it prohibits telephone companies from choosing the video programming to be provided in their local exchange telephone service areas *altogether. See US West, Inc.* v. *United States,* 48 F.3d 1092 (9th Cir. 1995) (US West); *Chesapeake and Potomac Tel. Co.* v. *United States,* 42 F.3d 181 (4th Cir. 1994) (*C&P*). In so holding, both courts referred to the Commission's 1992 recommendation to Congress is our video dialtone docket, a proposal that the Ninth Circuit described in *US West* as a "more speech-friendly plan" than the absolute ban contained in the statute. Under the Commission's legislative recommendations, as described by the Fourth Circuit in *C&P,* "telephone companies' editorial control

effective date by publishing a subsequent document that will withdraw the final action. All public comments received will then be addressed in a subsequent final rule based on the separate proposed rule. The EPA will not institute a second comment period on this action. Any parties interested in commenting on this action should do so at this time. If no such comments are received, the public is advised that this action will be effective June 24, 1996.

Under section 307(b)(1) of the Clean Air Act (CAA), 42 U.S.C. 7607(b)(1), petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by June 24, 1996. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for 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) of the CAA, 42 U.S.C. 7607(b)(2).)

This action has been classified as a Table 3 action for signature by the Regional Administrator under the procedures published in the Federal Register on January 19, 1989 (54 FR 2214–2225), as revised by a July 10, 1995 memorandum from Mary Nichols, Assistant Administrator for Air and Radiation. The Office of Management and Budget (OMB) has exempted this regulatory action from E.O. 12866 review.

Nothing in this action shall be construed as permitting or allowing or establishing a precedent for any future request for a revision to any state implementation plan. Each request for revision to the state implementation plan shall be considered separately in light of specific technical, economic, and environmental factors and in relation to relevant statutory and regulatory requirements.

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.

SIP approvals under section 110 and subchapter I, part D of the CAA do not create any new requirements, but simply approve requirements that the State is already imposing. Therefore, because the Federal SIP-approval does not impose any new requirements, I certify that it does not have a significant impact on any small entities affected. Moreover, due to the nature of the Federal-state relationship under the CAA, preparation of a regulatory flexibility analysis would constitute Federal inquiry into the economic reasonableness of state action. The CAA forbids EPA to base its actions concerning SIPs on such grounds. *Union Electric Co.* v. *U.S. E.P.A.*, 427 U.S. 246, 256–66 (S.Ct. 1976); 42 U.S.C. section 7410(a)(2) and 7410(k)(3).

Unfunded Mandates

Under Sections 202, 203, and 205 of the Unfunded Mandates Reform Act of 1995 ("Unfunded Mandates Act"), signed into law on March 22, 1995, EPA must undertake various actions in association with proposed or final rules that include a Federal mandate that may result in estimated costs of $100 million or more to the private sector, or to State, local, or tribal governments in the aggregate.

Through submission of this state implementation plan or plan revision, the State and any affected local or tribal governments have elected to adopt the program provided for under Section 110 of the CAA. These rules may bind State, local and tribal governments to perform certain actions and also require the private sector to perform certain duties. EPA has examined whether the rules being approved by this action will impose no new requirements, since such sources are already subject to these regulations under State law. Accordingly, no additional costs to State, local, or tribal governments, or to the private sector, result from this action, and therefore there will be no significant impact on a substantial number of small entities.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Hydrocarbons, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements.

Dated: January 29, 1996.

Phyllis P. Harris,

Acting Regional Administrator.

Part 52 of chapter I, title 40, *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. 7401–7671q.

Subpart K—Florida

2. Section 52.520, is amended by adding paragraph (c)(94) to read as follows:

§ 52.520 Identification of plan.

* * * * *

(c) * * *

(94) Revisions to the Florida SIP regarding perchloroethylene dry cleaning facilities submitted on April 24, 1995.

(i) Incorporation by reference.

Sections 62–210.200(17) and (48)(c); 62–210.300(2)(b) and (4); 62–296.200(58); and 62–296.412 of the F.A.C., effective April 18, 1995.

(ii) Other material. None.

[FR Doc. 96–10127 Filed 4–24–96; 8:45 am]

BILLING CODE 6560–50–P

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40 CFR Parts 60 and 61

[AD–FRL 5407–4]

Standards of Performance for New Stationary Sources National Emission Standards for Hazardous Air Pollutants Addition of Method 29 to Appendix A of Part 60 and Amendments to Method 101A of Appendix B of Part 61

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This rule adds Method 29, "Determination of Metals Emissions from Stationary Sources," to Appendix A of Part 60, and makes amendments to Method 101A of Appendix B of Part 61. Method 29 is being added so that it can be used to determine cadmium, lead, and mercury emissions from municipal waste combustors (MWC) under subpart Ea of part 60. The amendments to Method 101A of appendix B of part 61 are to expand that method's applicability, and to revise procedures for handling and analyzing samples collected by the sampling train.

EFFECTIVE DATE: April 25, 1996.

Incorporation by Reference. The incorporation by reference of certain publications listed in the regulation is approved by the Director of the Office of the Federal Register April 25, 1996.

ADDRESSES: *Docket.* Docket No. A–94–28, containing materials relevant to this rulemaking, is available for public inspection and copying between 8:30 a.m. and Noon, and 1:30 and 3:30 p.m., Monday through Friday, at EPA's Air And Docket Section, Room M1500, First Floor, Waterside Mall, Gallery 1, 401 M Street, S.W., Washington, D.C. 20460. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: William Grimley at (919) 541–1065, Source Characterization Group B (MD–19), Emissions, Monitoring, and Analysis Division, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711.

SUPPLEMENTARY INFORMATION:

I. The Rulemaking

Under Subparts Ca and Ea, the EPA promulgated guidelines and standards to regulate mercury, cadmium, and lead emissions from MWC's which were published in the Federal Register on December 19, 1995 (see 60 FR 65382). Method 29 is being promulgated for addition to Appendix A of 40 CFR Part 60 and will serve as the compliance test method for mercury, cadmium, and lead. Amendments to Method 101A of Appendix B of Part 61 are being promulgated to provide consistency with Method 29. These regulations were proposed on September 20, 1994 (see 59 FR 48259).

II. Public Participation

The opportunity to hold a public hearing on October 20, 1994 at 10 a.m. was present in the proposal notice, but no one wanted to make an oral presentation. The public comment period was from September 21, 1994 to November 21, 1994.

III. Significant Comments and Changes to the Proposed Rulemaking

One comment letter was received from the proposed rulemaking. The comments and responses are summarized in this preamble.

The first comment dealt with the analytical detection limits stated in Method 29. The commenter believes the detection limits are unrealistically low, and represent values achievable only under ideal conditions. The commenter concludes by saying that the method should state that it is the analyst's responsibility to determine the actual detection limit achieved.

The detection limits stated in Method 29 are those listed in the *SW-846* methods manual, and EPA believes they are reasonable ones for use in this application of *SW-846* analytical methods. However, Method 29 as proposed is clear in its discussion of the application of quality assurance procedures to document the quality of the data actually produced, and is also clear in the description of the procedure to be used to establish the actual detection limits achieved during the measurement of emissions.

The second comment addressed the point that dilution is likely to be effective in avoiding the analytical problem of spectral interference only if the analyte is present at a much greater concentration than the interferant. The commenter then suggests that Method 29 be revised to say that the effective way to adjust for spectral interference is by making background corrections or overlap corrections.

The EPA agrees with this comment, and Section 2.5 of the Method has been revised to permit these corrective techniques.

The third comment addressed the use of an alumina torch in the inductively coupled argon plasma (ICAP) emission spectroscopy procedure. The commenter believes that few ICAP users have this capability, and that an alternative technique for dealing with hydrogen fluoride could be suggested in the Method.

The EPA notes that the use of an alumina torch in this procedure has been described in related methodology for several years and is commercially available and is in use by many analysts. The alternative procedure suggested in the comment may be suitable if the detection limits needed in the particular emission measurement situation can be met.

The fourth comment addressed the required purity of the nickel nitrate used to produce the nickel nitrate matrix modifier. The commenter suggests that commercial nickel nitrate may contain small amounts of impurities.

The EPA is not aware of instances where commercial nickel nitrate that would be purchased for this purpose would contain objectionable amounts of impurities, however the Method has been revised to permit other nickel compounds of suitable purity to be used.

The fifth and final comment made a general statement concerning the length and complexity of the Method, with the commenter suggesting that the EPA should attempt to streamline and simplify the Method in order to make it less costly and easier to use.

The EPA recognizes the need to simplify methods to reduce costs, and believes that to meet the needed quality of the data to be generated by Method 29, that the best possible effort has been made.

IV. Administrative Requirements

A. Docket

The docket is an organized and complete file of all the information submitted to or otherwise considered by the EPA in the development of this final rulemaking. The principal purposes of the docket are: (1) to allow interested parties to identify and locate documents so that they can effectively participate in the rulemaking process, and (2) to serve as the record in case of judicial review (except for interagency review materials) [Section 307(d)(7)(A)].

B. Office of Management and Budget Review

1. Paperwork Reduction Act

This rule does not contain any information collection requirements subject to the Office of Management and Budget (OMB) review under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*

2. Executive Order 12866 Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the EPA must determine whether the regulatory action is "significant" and therefore subject to the OMB review and the requirements of the Executive Order. The Order defines "significant" regulatory action as one that is likely to lead to 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, users fees, or loan programs or 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 Executive Order.

Pursuant to the terms of Executive Order 12866, the EPA does not consider this action to be significant because it does not involve any of the above mentioned items.

D. Unfunded Mandates Act

Section 202 of the Unfunded Mandates Reform Act of 1995 ("Unfunded Mandates Act") (signed into law on March 22, 1995) requires that the Agency prepare a budgetary impact statement before promulgating a rule that includes a Federal mandate that may result in expenditure by State, local, and tribal governments, in aggregate, or by the private sector of $100 million or more in any one year. Section 204 requires the Agency to establish a plan for obtaining input from and informing, educating, and advising any small governments that may be significantly or uniquely affected by the rule.

Under section 205 of the Unfunded Mandates Act, the Agency must identify and consider a reasonable number of regulatory alternatives before promulgating a rule for which a budgetary impact statement must be prepared. The agency must select from those alternatives the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule, unless the Agency explains why this alternative is not selected or the selection of this alternative is inconsistent with law.

Because this rule is estimated to result in the expenditure by State, local, and tribal governments or the private sector of less than $100 million in any one year, the Agency has not prepared a budgetary impact statement or specifically addressed the selection of the least costly, most cost-effective, or least burdensome alternative. Because small governments will not be significantly or uniquely affected by this rule, the Agency is not required to develop a plan with regard to small governments.

E. Regulatory Flexibility Act Compliance

Pursuant to the provisions of 5 U.S.C. 601 *et seq.*, I hereby certify that this final rule will not have an economic impact on small entities because no additional costs will be incurred.

List of Subjects in 40 CFR Parts 60 and 61

Environmental protection, Air pollution control, Arsenic, Asbestos, Beryllium, Cadmium, Lead, Hazardous materials, Incorporation by reference, Intergovernmental relations, Mercury, Municipal waste combustors, Reporting and recordkeeping requirements, Sewage sludge incineration.

Statutory Authority. The statutory authority for this final rule is provided by sections 101, 111, 112, 114, 116, 129, and 301 of the Clean Air Act, as amended; 42 U.S.C., 7401, 7411, 7412, 7414, 7416, 7429, and 7601.

Dated: January 18, 1996.

Carol M. Browner,

Administrator.

40 CFR parts 60 and 61 are amended as follows:

PART 60—[AMENDED]

1. The authority citation for part 60 continues to read as follows:

Authority: 42 U.S.C. 7401, 7411, 7412, 7414, 7416, and 7601.

2. Section 60.17 is amended by revising paragraph (a)(22) and by adding paragraphs (i) and (j) to read as follows:

§60.17 Incorporations by reference.

* * * * *

(a) * * *

(22) ASTM D 1193–77, Standard Specification for Reagent Water, for appendix A to part 60, Method 6, par. 3.1.1; Method 7, par. 3.2.2; Method 7C, par. 3.1.1; Method 7D, par. 3.1.1; Method 8, par. 3.1.3; Method 12, par. 4.1.3; Method 25D, par. 3.2.2.4; Method 26A, par. 3.1.1; Method 29, pars. 4.2.2., 4.4.2., and 4.5.6.

* * * * *

(i) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW–846 Third Edition (November 1986), as amended by Updates I (July, 1992), II (September 1994), IIA (August, 1993), and IIB (January, 1995). Test Method are incorporated by reference for appendix A to part 60, Method 29, pars. 2.2.1; 2.3.1; 2.5; 3.3.12.1; 3.3.12.2; 3.3.13; 3.3.14; 5.4.3; 6.2; 6.3; 7.2.1; 7.2.3; and Table 29–2. The Third Edition of SW–846 and Updates I, II, IIA, and IIB (document number 955–001–00000–1) are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 512–1800. Copies may be obtained from the Library of the U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

(j) Standard Methods for the Examination of Water and Wastewater, 16th edition, 1985, Method 303F Determination of Mercury by the Cold Vapor Technique. This document may be obtained from the American Public Health Association, 1015 18th Street, NW., Washington, DC 20036, and is incorporated by reference for Method 29, pars 5.4.3; 6.3; and 7.2.3 of appendix A to part 60.

3. In part 60, by adding method 29 to appendix A to read as follows:

Appendix A—Test Methods

* * * * *

Method 29—Determination of Metals Emissions from Stationary Sources

1. Applicability and Principle

1.1 Applicability. This method is applicable to the determination of antimony (Sb), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), lead (Pb), manganese (Mn), mercury (Hg), nickel (Ni), phosphorus (P), selenium (Se), silver (Ag), thallium (Tl), and zinc (Zn) emissions from stationary sources. This method may be used to determine particulate emissions in addition to the metals emissions if the prescribed procedures and precautions are followed.

1.1.1 Hg emissions can be measured, alternatively, using EPA Method 101A of Appendix B, 40 CFR Part 61. Method 101–A measures only Hg but it can be of special interest to sources which need to measure both Hg and Mn emissions.

1.2 Principle. A stack sample is withdrawn isokinetically from the source, particulate emissions are collected in the probe and on a heated filter, and gaseous emissions are then collected in an aqueous acidic solution of hydrogen peroxide (analyzed for all metals including Hg) and an aqueous acidic solution of potassium permanganate (analyzed only for Hg). The recovered samples are digested, and appropriate fractions are analyzed for Hg by cold vapor atomic absorption spectroscopy (CVAAS) and for Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn, Ni, P, Se, Ag, Tl, and Zn by inductively coupled argon plasma emission spectroscopy (ICAP) or atomic absorption spectroscopy (AAS). Graphite furnace atomic absorption spectroscopy (GFAAS) is used for analysis of Sb, As, Cd, Co, Pb, Se, and Tl if these elements require greater analytical sensitivity than can be obtained by ICAP. If one so chooses, AAS may be used for analysis of all listed metals if the resulting in-stack method detection limits meet the goal of the testing program. Similarly, inductively coupled plasma-mass spectroscopy (ICP–MS) may be used for analysis of Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn, Ni, As, Tl and Zn.

2. Range, Detection Limits, Precision, and Interferences

2.1 Range. For the analysis described and for similar analyses, the ICAP response is linear over several orders of magnitude. Samples containing metal concentrations in the nanograms per ml (ng/ml) to micrograms per ml (μg/ml) range in the final analytical solution can be analyzed using this method. Samples containing greater than approximately 50 μg/ml As, Cr, or Pb should be diluted to that level or lower for final analysis. Samples containing greater than approximately 20 μg/ml of Cd should be diluted to that level before analysis.

2.2 Analytical Detection Limits. (Note: See section 2.3 for the description of in-stack detection limits.)

2.2.1 ICAP analytical detection limits for the sample solutions (based on Method 6010 in EPA Publication SW–846, Third Edition (November 1986) including updates I, II, IIA, and IIB, as incorporated by reference in §60.17(i)) are approximately as follows: Sb (32 ng/ml), As (53 ng/ml), Ba (2 ng/ml), Be (0.3 ng/ml), Cd (4 ng/ml), Cr (7 ng/ml), Co (7 ng/ml), Cu (6 ng/ml), Pb (42 ng/ml), Mn (2 ng/ml), Ni (15 ng/ml), P (75 ng/ml), Se (75 ng/ml), Ag (7 ng/ml), Tl (40 ng/ml), and Zn (2 ng/ml). ICP–MS analytical detection limits (based on based on Method 6020 in EPA Publication SW–846, Third Edition (November 1986) as incorporated by reference in §60.17(i)) are lower generally by a factor of ten or more. Be is lower by a factor of three. The actual sample analytical detection limits are sample dependent and may vary due to the sample matrix.

2.2.2 The analytical detection limits for analysis by direct aspiration AAS are approximately as follow: Sb (200 ng/ml), As (2 ng/ml), Ba (100 ng/ml), Be (5 ng/ml), Cd (5 ng/ml), Cr (50 ng/ml), Co (50 ng/ml), Cu (20 ng/ml), Pb (100 ng/ml), Mn (10 ng/ml), Ni (40 ng/ml), Se (2 ng/ml), Ag (10 ng/ml), Tl (100 ng/ml), and Zn (5 ng/ml).

2.2.3 The detection limit for Hg by CVAAS (on the resultant volume of the *disgestion* of the aliquots taken for Hg analyses) can be approximately 0.02 to 0.2ng/ml, depending upon the type of CVAAS analytical instrument used.

2.2.4 The use of GFAAS can enhance the detection limits compared to direct aspiration AAS as follows: Sb (3 ng/ml), As (1 ng/ml), Be (0.2 ng/ml), Cd (0.1 ng/ml), Cr (1 ng/ml), Co (1 ng/ml), Pb (1 ng/ml), Se (2 ng/ml), and Tl (ng/ml).

2.3 *In-stack Detection Limits.*

2.3.1 For test planning purposes in-stack detection limits can be developed by using the following information (1) the procedures described in this method, (2) the analytical detection limits described in Section 2.2 and in EPA Publication SW–846, Third Edition (November 1986) including updates I, II, IIA and IIB, as incorporated by reference in § 60.17(i), (3) the normal volumes of 300 ml (Analytical Fraction 1) for the front-half and 150 ml (Analytical Fraction 2A) for the back-half samples, and (4) a stack gas sample volume of 1.25 m^3. The resultant in-stack method detection limits for the above set of conditions are presented in Table 29–1 and were calculated by using Eq. 29–1.

$$A \times B/C = D \qquad \text{Eq. 29–1}$$

Where:

A=Analytical detectin limit, μg/ml.
B=Liquid volume of digested sample prior to aliquotting for analysis, Ml.
C=Stack sample gas volume, dsm^3.
D=In-stack detection limit, μg/m^3.

TABLE 29–1.—IN-STACK METHOD DETECTION LIMITS (μg/m^3) FOR THE FRONT-HALF, THE BACK-HALF, AND THE TOTAL SAMPLING TRAIN USING ICAP AND AAS

Metal	Front-half: Probe and filter	Back-half: Impingers 1–3	Back-half: Impingers (4–6) [a]	Total train:
Antimony	[1] 7.7 (0.7)	[1] 3.8 (0.4)		[1] 11.5 (1.1)
Arsenic	[1] 12.7 (0.3)	[1] 6.4 (0.1)		[1] 19.1 (0.4)
Barium	0.5	0.3		0.8
Beryllium	[1] 0.07 (0.05)	[1] 0.04 (0.03)		[1] 0.11 (0.08)
Cadmium	[1] 1.0 (0.02)	[1] 0.5 (0.01)		[1] 1.5 (0.03)
Chromium	[1] 1.7 (0.2)	[1] 0.8 (0.1)		[1] 2.5 (0.3)
Cobalt	[1] 1.7 (0.2)	[1] 0.8 (0.1)		[1] 2.5 (0.3)
Copper	1.4	0.7		2.1
Lead	[1] 10.1 (0.2)	[1] 5.0 (0.1)		[1] 15.1 (0.3)
Manganese	[1] 0.5 (0.2)	[1] 0.2 (0.1)		[1] 0.7 (0.3)
Mercury	[2] 0.06	[2] 0.3	[2] 0.2	[2] 0.56
Nickel	3.6	1.8		5.4
Phosphorus	18	9		27
Selenium	[1] 18 (0.5)	[1] 9 (0.3)		[1] 27 (0.8)
Silver	1.7	0.9		2.6
Thallium	[1] 9.6 (0.2)	[1] 4.8 (0.1)		[1] 14.4 (0.3)
Zinc	0.5	0.3		0.8

[a] Mercury analysis only.
[1] Detection limit when analyzed by GFAAS.
[2] Detection limit when analyzed by CVAAS, estimated for Back-Half and Total Train. See Sections 2.2 and 5.4.3.
Note: Actual method in-stack detection limits may vary from these values, as described in Section 2.3.3.

2.3.2 To ensure optimum precision/resolution in the analyses, the target concentrations of metals in the analytical solutions should be at least ten times their respective analytical detection limits. Under certain conditions, and with greater care in the analytical procedure, these concentrations can be as low as approximately three times the respective analytical detection limits without seriously impairing the precision of the analyses. On at least one sample run in the source test, and for each metal analyzed, perform either repetitive analyses, Method of Standard Additions, serial dilution, or matrix spike addition, etc., to document the quality of the data.

2.3.3 Actual in-stack method detection limits are based on actual source sampling parameters and analytical results as described above. If required, the method in-stack detection limits can be improved over those shown in Table 29–1 for a specific test by either increasing the sampled stack gas volume, reducing the total volume of the digested samples, improving the analytical detection limits, or any combination of the three. For extremely low levels of *Hg only*, the aliquot size selected for digestion and analysis can be increased to as much as 10 ml, thus improving the in-stack detection limit by a factor of ten compared to a 1 ml aliquot size.

2.3.3.1 A nominal one hour sampling run will collect a stack gas sampling volume of about 1.25 m^3. If the sampling time is increased to four hours and 5 m^3 are collected, the in-stack method detection limits would be improved by a factor of four compared to the values shown in Table 29–1.

2.3.3.2 The in-stack detection limits assume that all of the sample is digested and the final liquid volumes for analysis are the normal values of 300 ml for Analytical Fraction 1, and 150 ml for Analytical Fraction 2A. If the volume of Analytical Fraction 1 is reduced from 300 to 30 ml, the in-stack detection limits for that fraction of the sample would be improved by a factor of ten. If the volume of Analytical Fraction 2A is reduced from 150 to 25 ml, the in-stack detection limits for that fraction of the sample would be improved by a factor of six. Matrix effect checks are necessary on sample analyses and typically are of much greater significance for samples that have been concentrated to less than the normal original sample volume. Reduction of Analytical Fractions 1 and 2A to volumes of less than 30 and 25 ml, respectively, could interfere with the redissolving of the residue and could increase interference by other compounds to an intolerable level.

2.3.3.3 When both of the modifications described in Sections 2.3.3.1 and 2.3.3.2 are used simultaneously on one sample, the resultant improvements are multiplicative. For example, an increase in stack gas volume by a factor of four and a reduction in the total liquid sample digested volume of both Analytical Fractions 1 and 2A by a factor of six would result in an improvement by a factor of twenty-four of the in-stack method detection limit.

2.4 Precision. The precision (relative standard deviation) for each metal detected in a method development test performed at a sewage sludge incinerator were found to be as follows: Sb (12.7 percent), As (13.5 percent), Ba (20.6 percent), Cd (11.5 percent), Cr (11.2 percent), Cu (11.5 percent), Pb (11.6 percent), P (14.6 percent), Se (15.3 percent), Tl (12.3 percent), and Zn (11.8 percent). The precision for Ni was 7.7 percent for another test conducted at a source simulator. Be, Mn, and Ag were not detected in the tests. However, based on the analytical detection limits of the ICAP for these metals, their precisions could be similar to those for the other metals when detected at similar levels.

2.5 Interferences. Iron (Fe) can be a spectral interference during the analysis of As, Cr, and Cd by ICAP. Aluminum (Al) can be a spectral interference during the analysis of As and Pb by ICAP. Generally, these interferences can be reduced by diluting the analytical sample, but such dilution raises the in-stack detection limits. Background and overlap corrections may be used to adjust for spectral interferences. Refer to Method 6010 in EPA Publication SW-846 Third Edition (November 1986) including updates I, II, IIA and IIB, as incorporated by reference in § 60.17(i) the other analytical methods used for details on potential interferences to this method. For all GFAAS analyses, use matrix modifiers to limit interferences, and matrix match all standards.

3. Apparatus

3.1 Sampling. A schematic of the sampling train is shown in Figure 29-1. It has general similarities to the Method 5 train.

BILLING 6560-50-M

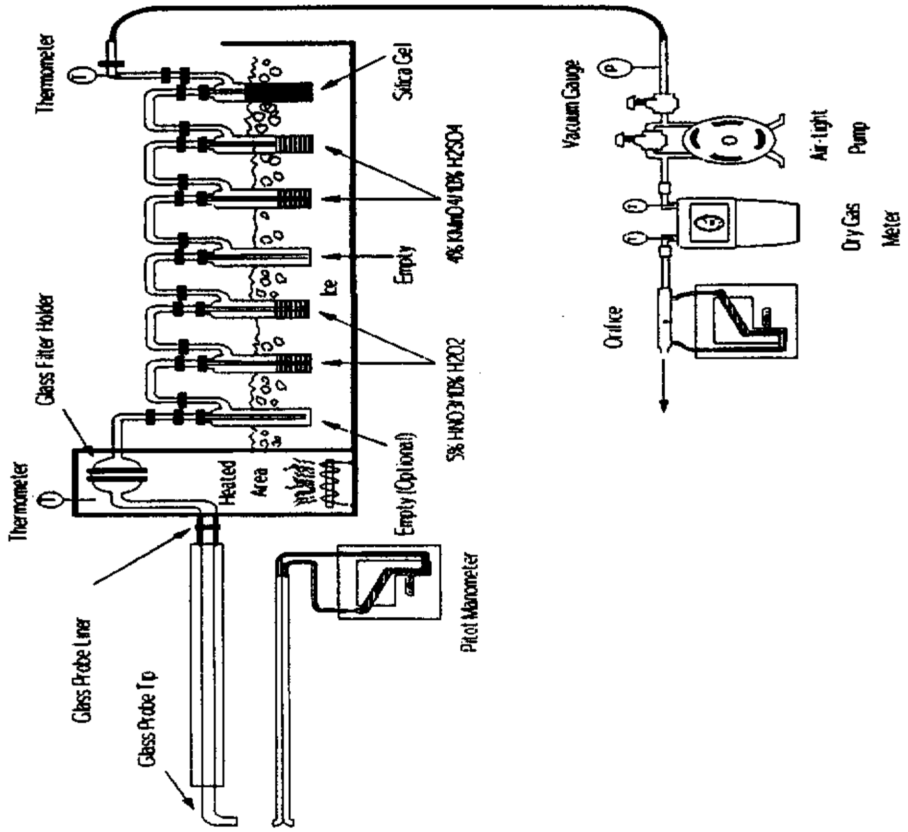

Figure 29-1. Sampling train.

BILLING 6560-50-C

3.1.1 Probe Nozzle (Probe Tip) and Borosilicate or Quartz Glass Probe Liner. Same as Method 5, Sections 2.1.1 and 2.1.2, except that glass nozzles are required unless alternate tips are constructed of materials that are free from contamination and will not interfere with the sample. If a probe tip other than glass is used, no correction to the sample test results to compensate for the nozzle's effect on the sample is allowed. Probe fittings of plastic such as Teflon, polypropylene, etc. are recommended instead of metal fittings to prevent contamination. If one chooses to do so, a single glass piece consisting of a combined probe tip and probe liner may be used.

3.1.2 Pitot Tube and Differential Pressure Gauge. Same as Method 2, Sections 2.1 and 2.2, respectively.

3.1.3 Filter Holder. Glass, same as Method 5, Section 2.1.5, except use a Teflon filter support or other non-metallic, non-contaminating support in place of the glass frit.

3.1.4 Filter Heating System. Same as Method 5, Section 2.1.6.

3.1.5 Condenser. Use the following system for condensing and collecting gaseous metals and determining the moisture content of the stack gas. The condensing system shall consist of four to seven impingers connected in series with leak-free ground glass fittings or other leak-free, non-contaminating fittings. Use the first impinger as a moisture trap. The second impinger (which is the first HNO_3/H_2O_2 impinger) shall be identical to the first impinger in Method 5. The third impinger (which is the second HNO_3/H_2O_2 impinger) shall be a Greenburg Smith impinger with the standard tip as described for the second impinger in Method 5, Section 2.1.7. The fourth (empty) impinger and the fifth and sixth (both acidified $KMnO_4$) impingers are the same as the first impinger in Method 5. Place a thermometer capable of measuring to within 1°C (2°F) at the outlet of the last impinger. If no Hg analysis is planned, then the fourth, fifth, and sixth impingers are not used.

3.1.6 Metering System, Barometer, and Gas Density Determination Equipment. Same as Method 5, Sections 2.1.8 through 2.1.10, respectively.

3.1.7 Teflon Tape. For capping openings and sealing connections, if necessary, on the sampling train.

3.2. Sample Recovery. Same as Method 5, Sections 2.2.1 through 2.2.8 (Probe-Liner and Probe-Nozzle Brushes or Swabs, Wash Bottles, Sample Storage Containers, Petri Dishes, Glass Graduated Cylinder, Plastic Storage Containers, Funnel and Rubber Policeman, and Glass Funnel), respectively, with the following exceptions and additions:

3.2.1 Non-metallic Probe-Liner and Probe-Nozzle Brushes or Swabs. Use non-metallic probe-liner and probe-nozzle brushes or swabs for quantitative recovery of materials collected in the front-half of the sampling train.

3.2.2 Sample Storage Containers. Use glass bottles (see the *Precaution:* in Section 4.3.2 of this Method) with Teflon-lined caps that are non-reactive to the oxidizing solutions, with capacities of 1000- and 500-ml, for storage of acidified $KMnO_4$-containing samples and blanks. Glass or polyethylene bottles may be used for other sample types.

3.2.3 Graduated Cylinder. Glass or equivalent.

3.2.4 Funnel. Glass or equivalent.

3.2.5 Labels. For identifying samples.

3.2.6 Polypropylene Tweezers and/or Plastic Gloves. For recovery of the filter from the sampling train filter holder.

3.3 Sample Preparation and Analysis.

3.3.1 Volumetric Flasks, 100-ml, 250-ml, and 100-ml. For preparation of standards and sample dilutions.

3.3.2 Graduated Cylinders. For preparation of reagents.

3.3.3 Parr^{R} Bombs or Microwave Pressure Relief Vessels with Capping Station (CEM Corporation model or equivalent). For sample digestion.

3.3.4 Beakers and Watch Glasses. 250-ml beakers, with watch glass covers, for sample digestion.

3.3.5 Ring Stands and Clamps. For securing equipment such as filtration apparatus.

3.3.6 Filter Funnels. For holding filter paper.

3.3.7 Disposable Pasteur Pipets and Bulbs.

3.3.8 Volumetric Pipets.

3.3.9 Analytical Balance. Accurate to within .01 mg.

3.3.10 Microwave or Conventional Oven. For heating samples at fixed power levels or temperatures, respectively.

3.3.11 Hot Plates.

3.3.12 Atomic Absorption Spectrometer (AAS). Equipped with a background corrector.

3.3.12.1 Graphite Furnace Attachment. With Sb, As, Cd, Co, Pb, Se, and Tl hollow cathode lamps (HCLs) or electrodeless discharge lamps (EDLs). Same as Methods 7041 (Sb), 7060 (As), 7131 (Cd), 7201 (Co), 7421 (Pb), 7740 (Se), and 7841 (Tl) in EPA publication SW–846 Third Edition (November 1986) including updates I, II, IIA and IIB, as incorporated by reference in § 60.17(i).

3.3.12.2 Cold Vapor Mercury Attachment. With a mercury HCL or EDL, an air recirculation pump, a quartz cell, an aerator apparatus, and a heat lamp or desiccator tube. The heat lamp shall be capable of raising the temperature at the quartz cell by 10°C above ambient, so that no condensation forms on the wall of the quartz cell. Same as Method 6020 in EPA publication SW–846 Third Edition (November 1986) including updates I, II, IIA and IIB, as incorporated by reference in § 60.17(i). See Note No. 2: Section 5.4.3 for other acceptable approaches for analysis of Hg in which analytical detection limits of 0.002 ng/ml were obtained.

3.3.13 Inductively Coupled Argon Plasma Spectrometer. With either a direct or sequential reader and an alumina torch. Same as EPA Method 6010 in EPA publication SW–846 Third Edition (November 1986) including updates I, II, IIA and IIB, as incorporated by reference in § 60.17(i).

3.3.14 Inductively Coupled Plasma-Mass Spectrometer. Same as EPA Method 6020 in EPA publication SW–846 Third Edition (November 1986) including updates I, II, IIA and IIB, as incorporated by reference in § 60.17(i).

4. Reagents

4.1 Unless otherwise indicated, it is intended that all reagents conform to the specifications established by the Committee on Analytical Reagents of the American Chemical Society, where such specifications are available. Otherwise, use the best available grade.

4.2 Sampling Reagents.

4.2.1 Sample Filters. Without organic binders. The filters shall contain less than 1.3 µg/in.^{2} of each of the metals to be measured. Analytical results provided by filter manufacturers stating metals content of the filters are acceptable. However, if no such results are available, analyze filter blanks for each target metal prior to emission testing. Quartz fiber filters meeting these requirements are recommended. However, if glass fiber filters become available which meet these requirements, they may be used. Filter efficiencies and unreactiveness to sulfur dioxide (SO_2) or sulfur trioxide (SO_3) shall be as described in Section 3.1.1 of Method 5.

4.2.2 Water. To conform to ASTM Specification D1193–77, Type II (incorporated by reference—See § 60.17). If necessary, analyze the water for all target metals prior to field use. All target metals should be less than 1 ng/ml.

4.2.3 Nitric Acid (HNO_3). Concentrated. Baker Instra-analyzed or equivalent.

4.2.4 Hydrochloric Acid (HCL). Concentrated. Baker Instra-analyzed or equivalent.

4.2.5 Hydrogen Peroxide (H_2O_2), 30 Percent (V/V).

4.2.6 Potassium Permanganate ($KMnO_4$).

4.2.7 Sulfuric Acid (H_2SO_4). Concentrated.

4.2.8 Silica Gel and Crushed Ice. Same as Method 5, Sections 3.1.2 and 3.1.4, respectively.

4.3 Pretest Preparation of Sampling Reagents.

4.3.1 HNO_3/H_2O_2 Absorbing Solution, 5 Percent HNO_3/10 Percent H_2O_2. Add carefully with stirring 50 ml of concentrated HNO_3 to a 1000-ml volumeric flask containing approximately 500 ml of water, and then add carefully with stirring 333 ml of 30 percent H_2O_2. Dilute to volume with water. Mix well. This reagent shall contain less than 2 ng/ml of each target metal.

4.3.2 Acidic $KMnO_4$ Absorbing Solution, 4 Percent $KMnO_4$ (W/V), 10 Percent H_2SO_4 (V/V). Prepare fresh daily. Mix carefully, with stirring, 100 ml of concentrated H_2SO_4 into approximately 800 ml of water, and add water with stirring to make a volume of 1 liter: this solution is 10 percent H_2SO_4 (V/V). Dissolve, with stirring, 40 g of $KMnO_4$ into 10 percent H_2SO_4 (V/V) and add 10 percent H_2SO_4 (V/V) with stirring to make a volume of 1 liter. Prepare and store in glass bottles to prevent degradation. This reagent shall contain less than 2 ng/ml of Hg.

Precaution: To prevent autocatalytic decomposition of the permanganate solution, filter the solution through Whatman 541 filter paper. Also, due to the potential reaction of the potassium permanganate with the acid, there could be pressure buildup in the solution storage bottle. Therefore these bottles shall not be fully filled and shall be vented to relieve excess pressure and prevent explosion potentials. Venting is required, but not in a manner that will allow contamination of the solution. A No. 70–72 hole drilled in the container cap and Teflon liner has been used.

4.3.3 HNO_3, 0.1 N. Add with stirring 6.3 ml of concentrated HNO_3 (70 percent) to a flask containing approximately 900 ml of water. Dilute to 1000 ml with water. Mix well. This reagent shall contain less than 2 ng/ml of each target metal.

4.3.4 HCl, 8 N. Carefully add with stirring 690 ml of concentrated HCl to a flask containing 250 ml of water. Dilute to 1000 ml with water. Mix well. This reagent shall contain less than 2 ng/ml of Hg.

4.4 Glassware Cleaning Reagents.

4.4.1 HNO_3, Concentrated. Fisher ACS grade or equivalent.

4.4.2 Water. To conform to ASTM Specification D1193–77, Type II (incorporated by reference—See § 60.17).

4.4.3 HNO_3, 10 Percent (V/V). Add with stirring 500 ml of concentrated HNO_3 to a flask containing approximately 4000 ml of water. Dilute to 5000 ml with water. Mix well. This reagent shall contain less than 2 ng/ml of each target metal.

4.5 Sample Digestion and Analysis Reagents.

The metals standards, except Hg, may also be made from solid chemicals as described in Citation 3 of the Bibliography. Refer to Citations 1, 2, or 5 of the Bibliography for additional information on Hg standards. The 1000 µg/ml Hg stock solution standard may be made according to Section 6.2.5 of Method 101A.

4.5.1 HCL, Concentrated.

4.5.2 Hydrofluoric Acid (HF), Concentrated.

4.5.3 HNO_3, Concentrated. Baker Instra-analyzed or equivalent.

4.5.4 HNO_3, 50 Percent (V/V). Add with stirring 125 ml of concentrated HNO_3 to 100 ml of water. Dilute to 250 ml with water. Mix well. This reagent shall contain less than 2 ng/ml of each target metal.

4.5.5 HNO_3, 5 Percent (V/V). Add with stirring 50 ml of concentrated HNO_3 to 800 ml of water. Dilute to 1000 ml with water. Mix well. This reagent shall contain less than 2 ng/ml of each target metal.

4.5.6 Water. To conform to ASTM Specification D1193–77, Type II (incorporated by reference—See § 60.17).

4.5.7 Hydroxylamine Hydrochloride and Sodium Chloride Solution. See Citation 2 of the Bibliography for preparation.

4.5.8 Stannous Chloride. See Citation 2 of the Bibliography for preparation.

4.5.9 $KMnO_4$, 5 Percent (W/V). See Citation 2 of the Bibliography for preparation.

4.5.10 H_2SO_4, Concentrated.

4.5.11 Potassium Persulfate, 5 Percent (W/V). See Citation 2 of the Bibliography for preparation.

4.5.12 Nickel Nitrate, Ni $(NO_3)_2$ $6H_2O$.

4.5.13 Lanthanum Oxide, La_2O_3.

4.5.14 Hg Standard (AAS Grade), 1000 µg/ml.

4.5.15 Pb Standard (AAS Grade), 1000 µg/ml.

4.5.16 As Standard (AAS Grade), 1000 µg/ml.

4.5.17 Cd Standard (AAS Grade), 1000 µg/ml.

4.5.18 Cr Standard (AAS Grade), 1000 µg/ml.

4.5.19 Sb Standard (AAS Grade), 1000 µg/ml.

4.5.20 Ba Standard (AAS Grade), 1000 µg/ml.

4.5.21 Be Standard (AAS Grade), 1000 µg/ml.

4.5.22 Co Standard (AAS Grade), 1000 µg/ml.

4.5.23 Cu Standard (AAS Grade), 1000 µg/ml.

4.5.24 Mn Standard (AAS Grade), 1000 µg/ml.

4.5.25 Ni Standard (AAS Grade), 1000 µg/ml.

4.5.26 P Standard (AAS Grade), 1000 µg/ml.

4.5.27 Se Standard (AAS Grade), 1000 µg/ml.

4.5.28 Ag Standard (AAS Grade), 1000 µg/ml.

4.5.29 Tl Standard (AAS Grade), 1000 µg/ml.

4.5.30 Zn Standard (AAS Grade), 1000 µg/ml.

4.5.31 Al Standard (AAS Grade), 1000 µg/ml.

4.5.32 Fe Standard (AAS Grade), 1000 µg/ml.

4.5.33 Hg Standards and Quality Control Samples. Prepare fresh weekly a 10 µg/ml intermediate Hg standard by adding 5 ml of 1000 µg/ml Hg stock solution prepared according to Method 101A to a 500-ml volumetric flask; dilute with stirring to 500 ml by first carefully adding 20 ml of 15 percent HNO_3 and then adding water to the 500-ml volume. Mix well. Prepare a 200 ng/ml working Hg standard solution fresh daily: add 5 ml of the 10 µg/ml intermediate standard to a 250-ml volumetric flask, and dilute to 250 ml with 5 ml of 4 percent $KMnO_4$, 5 ml of 15 percent HNO_3, and then water. Mix well. Use at least five separate aliquots of the working Hg standard solution and a blank to prepare the standard curve. These aliquots and blank shall contain 0.0, 1.0, 2.0, 3.0, 4.0, and 5.0 ml of the working standard solution containing 0, 200, 400, 600, 800, and 1000 ng Hg, respectively. Prepare quality control samples by making a separate 10 µg/ml standard and diluting until in the calibration range.

4.5.34 ICAP Standards and Quality Control Samples. Calibration standards for ICAP analysis can be combined into four different mixed standard solutions as follows:

MIXED STANDARD SOLUTIONS FOR ICAP ANALYSIS

Solution	Elements
I	As, Be, Cd, Mn, Pb, Se, Zn.
II	Ba, Co, Cu, Fe.
III	Al, Cr, Ni.
IV	Ag, P, Sb, Tl.

Prepare these standards by combining and diluting the appropriate volumes of the 1000 µg/ml solutions with 5 percent HNO_3. A minimum of one standard and a blank can be used to form each calibration curve. However, prepare a separate quality control sample spiked with known amounts of the target metals in quantities in the mid-range of the calibration curve. Suggested standard levels are 25 µg/ml for Al, Cr and Pb, 15 µg/ml for Fe, and 10 µg/ml for the remaining elements. Prepare any standards containing less than 1 µg/ml of metal on a daily basis. Standards containing greater than 1 µg/ml of metal should be stable for a minimum of 1 to 2 weeks. For ICP–MS, follow Method 6020 in EPA Publication SW–846 Third Edition (November 1986) including updates I, II, IIA and IIB, as incorporated by reference in § 60.17(i).

4.5.35 GFAAS Standards. Sb, As, Cd, Co, Pb, Se, and Tl. Prepare a 10 µg/ml standard by adding 1 ml of 1000 µg/ml standard to a 100-ml volumetric flask. Dilute with stirring to 100 ml with 10 percent HNO_3. For GFAAS, matrix match the standards. Prepare a 100 ng/ml standard by adding 1 ml of the 10 µg/ml standard to a 100-ml volumetric flask, and dilute to 100 ml with the appropriate matrix solution. Prepare other standards by diluting the 100 ng/ml standards. Use at least five standards to make up the standard curve. Suggested levels are 0, 10, 50, 75, and 100 ng/ml. Prepare quality control samples by making a separate 10 µg/ml standard and diluting until it is in the range of the samples. Prepare any standards containing less than 1 µg/ml of metal on a daily basis. Standards containing greater than 1 µg/ml of metal should be stable for a minimum of 1 to 2 weeks.

4.5.36 Matrix Modifiers.

4.5.36.1 Nickel Nitrate, 1 Percent (V/V). Dissolve 4.956 g of Ni $(NO_3)_2 \bullet 6H_2O$ or other nickel compound suitable for preparation of this matrix modifier in approximately 50 ml of water in a 100-ml volumetric flask. Dilute to 100 ml with water.

4.5.36.2 Nickel Nitrate, 0.1 Percent (V/V). Dilute 10 ml of 1 percent nickel nitrate solution to 100 ml with water. Inject an equal amount of sample and this modifier into the graphite furnace during GFAAS analysis for As.

4.5.36.3 Lanthanum. Carefully dissolve 0.5864 g of La_2O_3 in 10 ml of concentrated HNO_3, and dilute the solution by adding it with stirring to approximately 50 ml of water. Dilute to 100 ml with water, and mix well. Inject an equal amount of sample and this modifier into the graphite furnace during GFAAS analysis for Pb.

4.5.37 Whatman 40 and 541 Filter Papers (or equivalent). For filtration of digested samples.

5. Procedure

5.1 Sampling. The complexity of this method is such that, to obtain reliable results, both testers and analysts must be trained and experienced with the test procedures, including source sampling; reagent preparation and handling; sample handling; safety equipment and procedures; analytical calculations; reporting; and the specific procedural descriptions throughout this method.

5.1.1 Pretest Preparation. Follow the same general procedure given in Method 5, Section 4.1.1, except that, unless particulate emissions are to be determined, the filter need not be desiccated or weighed. First, rinse all sampling train glassware with hot tap water and then wash in hot soapy water. Next, rinse glassware three times with tap water, followed by three additional rinses with water. Then soak all glassware in a 10 percent (V/V) nitric acid solution for a minimum of 4 hours, rinse three times with water, rinse a final time with acetone, and allow to air dry. Cover all glassware openings where contamination can occur until the sampling train is assembled for sampling.

5.1.2 Preliminary Determinations. Same as Method 5, Section 4.1.2.

5.1.3 Preparation of Sampling Train.

5.1.3.1 Set up the sampling train as shown in Figure 29–1. Follow the same general procedures given in Method 5, Section 4.1.3, except place 100 ml of the HNO_3/H_2O_2 solution (Section 4.3.1. of this method) in each of the second and third impingers as shown in Figure 29–1. Placee 100 ml of the acidic $KMnO_4$ absorbing solution (Section 4.3.2 of this method) in each of the fifth and sixth impingers as shown in Figure 29–1, and transfer approximately 200 to 300 g of pre-weighed silica gel from its container to the last impinger. Alternatively, the silica gel may be weighed directly in the impinger just prior to final train assembly.

5.1.3.2 Based on the specific source sampling conditions, the use of an empty first impinger can be eliminated if the moisture to be collected in the impingers will be less than approximately 100 ml.

5.1.3.3 If Hg analysis will not be performed, the fourth, fifth, and sixth impingers as shown in Figure 29–1 are not required.

5.1.3.4 To insure leak-free sampling train connections and to prevent possible sample contamination problems, use Teflon tape or other non-contaminating material instead of silicone grease.

Precaution: Exercise extreme care to prevent contamination within the train. Prevent the acidic $KMnO_4$ from contacting any glassware that contains sample material to be analyzed for Mn. Prevent acidic H_2O_2 from mixing with the acidic $KMnO_4$.

5.1.4 Leak-Check Procedures. Follow the leak-check procedures given in Method 5, Section 4.1.4.1 (Pretest Leak-Check), Section 4.1.4.2 (Leak-Checks During the Sample Run), and Section 4.1.4.3 (Post-Test Leak-Checks).

5.1.5 Sampling Train Operation. Follow the procedures given in Method 5, Section 4.1.5. When sampling for Hg, use a procedure analagous to that described in Section 7.1.1 of Method 101A, 40 CFR Part 61, Appendix B, if necessary to maintain the desired color in the last acidified permanganate impinger. For each run, record the data required on a data sheet such as the one shown in Figure 5–2 of Method 5.

5.1.6 Calculation of Percent Isokinetic. Same as Method 5, Section 4.1.6.

5.2 Sample Recovery.

5.2.1 Begin cleanup procedures as soon as the probe is removed from the stack at the end of a sampling period. The probe should be allowed to cool prior to sample recovery. When it can be safely handled, wipe off all external particulate matter near the tip of the probe nozzle and place a rinsed, non-contaminating cap over the probe nozzle to prevent losing or gaining particulate matter. Do not cap the probe tip tightly while the sampling train is cooling; a vacuum can form in the filter holder with the undesired result of drawing liquid from the impingers onto the filter.

5.2.2 Before moving the sampling train to the cleanup site, remove the probe from the sampling train and cap the open outlet. Be careful not to lose any condensate that might be present. Cap the filter inlet where the probe was fastened. Remove the umbilical cord from the last impinger and cap the impinger. Cap the filter holder outlet and impinger inlet. Use non-contaminating caps, whether ground-glass stoppers, plastic caps, serum caps, or Teflon tape to close these openings.

5.2.3 Alternatively, the following procedure may be used to disassemble the train before the probe and filter holder/oven are completely cooled: Initially disconnect the filter holder outlet/impinger inlet and loosely cap the open ends. Then disconnect the probe from the filter holder or cyclone inlet and loosely cap the open ends. Cap the probe tip and remove the umbilical cord as previously described.

5.2.4 Transfer the probe and filter-impinger assembly to a cleanup area that is clean and protected from the wind and other potential causes of contamination or loss of sample. Inspect the train before and during disassembly and note any abnormal conditions. Take special precautions to assure that all the items necessary for recovery do not contaminate the samples. The sample is recovered and treated as follows (see schematic in Figures 29–2a and 29–2b):

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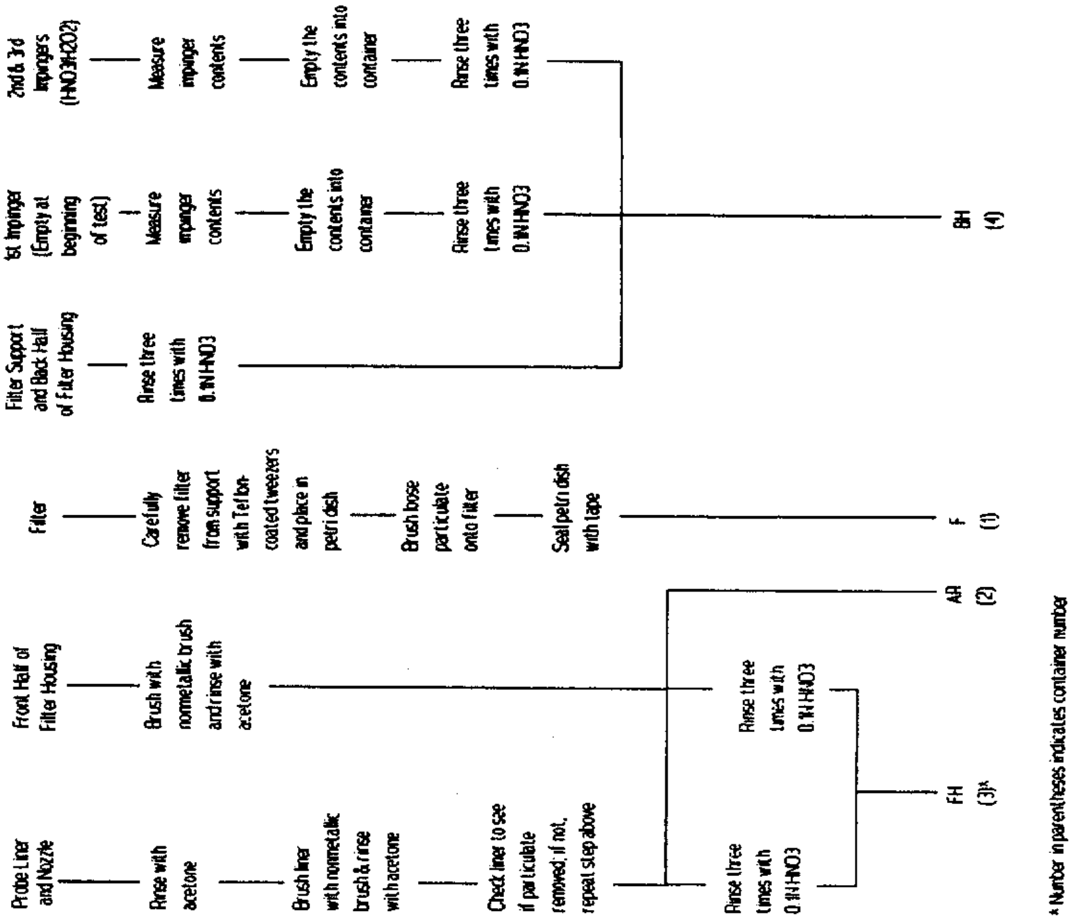

Figure 29-2a. Sample recovery scheme.

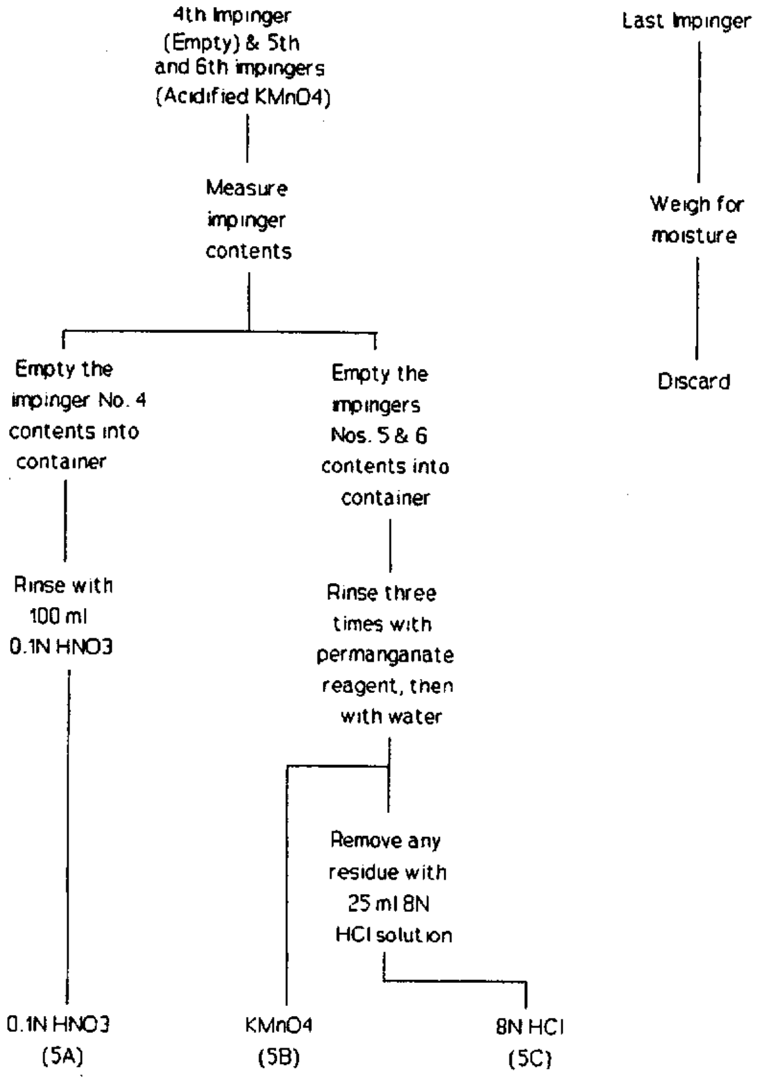

Figure 29-2b. Sample recovery scheme.

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5.2.5 Container No. 1 (Sample Filter). Carefully remove the filter from the filter holder and place it in its labeled petri dish container. To handle the filter, use either acid-washed polypropylene or Teflon coated tweezers or clean, disposable surgical gloves rinsed with water and dried. If it is necessary to fold the filter, make certain the particulate cake is inside the fold. Carefully transfer the filter and any particulate matter or filter fibers that adhere to the filter holder gasket to the petri dish by using a dry (acid-cleaned) nylon bristle brush. Do not use any metal-containing materials when recovering this train. Seal the labeled petri dish.

5.2.6 Container No. 2. (Acetone Rinse). Perform this procedure only if a determination of particulate emissions is to be made. Quantitatively recover particulate matter and any condensate from the probe nozzle, probe fitting, probe liner, and front half of the filter holder by washing these components with a total of 100 ml of acetone, while simultaneously taking great care to see that no dust on the outside of the probe or other surfaces gets in the sample. The use of exactly 100 ml is necessary for the subsequent blank correction procedures. Distilled water may be used instead of acetone when approved by the Administrator and shall be used when specified by the Administrator; in these cases, save a water blank and follow the Administrator's directions on analysis.

5.2.6.1 Carefully remove the probe nozzle, and clean the inside surface by rinsing with acetone from a wash bottle while brushing with a non-metallic brush. Brush until the acetone rinse shows no visible particles, then make a final rinse of the inside surface with acetone.

5.2.6.2 Brush and rinse the sample exposed inside parts of the probe fitting with acetone in a similar way until no visible particles remain. Rinse the probe liner with acetone by tilting and rotating the probe while squirting acetone into its upper end so that all inside surfaces will be wetted with acetone. Allow the acetone to drain from the lower end into the sample container. A funnel may be used to aid in transferring liquid washings to the container. Follow the acetone rinse with a non-metallic probe brush. Hold the probe in an inclined position, squirt acetone into the upper end as the probe brush is being pushed with a twisting action three times through the probe. Hold a sample container underneath the lower end of the probe, and catch any acetone and particulate matter which is brushed through the probe until no visible particulate matter is carried out with the acetone or until none remains in the probe liner on visual inspection. Rinse the brush with acetone, and quantitatively collect these washings in the sample container. After the brushing, make a final acetone rinse of the probe as described above.

5.2.6.3 It is recommended that two people clean the probe to minimize sample losses. Between sampling runs, keep brushes clean and protected from contamination. Clean the inside of the front-half of the filter holder by rubbing the surfaces with a non-metallic brush and rinsing with acetone. Rinse each surface three times or more if needed to remove visible particulate. Make a final rinse of the brush and filter holder. After all acetone washings and particulate matter have been collected in the sample container, tighten the lid so that acetone will not leak out when shipped to the laboratory. Mark the height of the fluid level to determine whether or not leakage occurred during transport. Clearly label the container to identify its contents.

5.2.7 Container No. 3 (Probe Rinse). Keep the probe assembly clean and free from contamination during the probe rinse. Rinse the probe nozzle and fitting, probe liner, and front-half of the filter holder thoroughly with a total of 100 ml of 0.1 N HNO_3, and place the wash into a sample storage container.

(Note: The use of a total of exactly 100 ml is necessary for the subsequent blank correction procedures.)

Perform the rinses as applicable and generally as described in Method 12, Section 5.2.2. Record the volume of the rinses. Mark the height of the fluid level on the outside of the storage container and use this mark to determine if leakage occurs during transport. Seal the container, and clearly label the contents. Finally, rinse the nozzle, probe liner, and front-half of the filter holder with water followed by acetone, and discard these rinses.

5.2.8 Container No. 4 (Impingers 1 through 3, Moisture Knockout Impinger, when used, HNO_3/H_2O_2 Impingers Contents and Rinses). Due to the potentially large quantity of liquid involved, the tester may place the impinger solutions from impingers 1 through 3 in more than one container, if necessary. Measure the liquid in the first three impingers to within 0.5 ml using a graduated cylinder. Record the volume. This information is required to calculate the moisture content of the sampled flue gas. Clean each of the first three impingers, the filter support, the back half of the filter housing, and connecting glassware by thoroughly rinsing with 100 ml of 0.1 N HNO_3 using the procedure as applicable in Method 12, Section 5.2.4.

(Note: The use of exactly 100 ml of 0.1 N HNO_3 rinse is necessary for the subsequent blank correction procedures. Combine the rinses and impinger solutions, measure and record the final total volume. Mark the height of the fluid level, seal the container, and clearly label the contents.)

5.2.9 Container Nos. 5A (0.1 N HNO_3), *5B ($KMnO_4/H_2SO_4$* absorbing solution), and 5C (8 N HCl rinse and dilution).

5.2.9.1 When sampling for Hg, pour all the liquid from the impinger (normally impinger No. 4) that immediately preceded the two permanganate impingers into a graduated cylinder and measure the volume to within 0.5 ml. This information is required to calculate the moisture content of the sampled flue gas. Place the liquid in Container No. 5A. Rinse the impinger with exactly 100 ml of 0.1 N HNO_3 and place this rinse in Container No. 5A.

5.2.9.2 Pour all the liquid from the two permanganate impingers into a graduated cylinder and measure the volume to within 0.5 ml. This information is required to calculate the moisture content of the sampled flue gas. Place this acidic $KMnO_4$ solution into Container No. 5B. Using a total of exactly 100 ml of fresh acidified $KMnO_4$ solution for all rinses (approximately 33 ml per rinse), rinse the two permanganate impingers and connecting glassware a minimum of three times. Pour the rinses into Container No. 5B, carefully assuring transfer of all loose precipitated materials from the two impingers. Similarly, using 100 ml total of water, rinse the permanganate impingers and connecting glass a minimum of three times, and pour the rinses into Container 5B, carefully assuring transfer of any loose precipitated material. Mark the height of the fluid level, and clearly label the contents. Read the Precaution: in Section 4.3.2. *NOTE:* Due to the potential reaction of $KMnO_4$ with acid, pressure buildup can occur in the sample storage bottles. Do not fill these bottles completely and take precautions to relieve excess pressure. A No. 70–72 hole drilled in the container cap and Teflon liner has been used successfully.

5.2.9.3 If no visible deposits remain after the water rinse, no further rinse is necessary. However, if deposits remain on the impinger surfaces, wash them with 25 ml of 8 N HCl, and place the wash in a separate sample container labeled No. 5C containing 200 ml of water. First, place 200 ml of water in the container. Then wash the impinger walls and stem with the HCl by turning the impinger on its side and rotating it so that the HCl contacts all inside surfaces. Use a total of only 25 ml of 8 N HCl for rinsing both permanganate impingers combined. Rinse the first impinger, then pour the actual rinse used for the first impinger into the second impinger for its rinse. Finally, pour the 25 ml of 8 N HCl rinse carefully into the container. Mark the height of the fluid level on the outside of the container to determine if leakage occurs during transport.

5.2.10 Container No. 6 (Silica Gel). Note the color of the indicating silica gel to determine whether it has been completely spent and make a notation of its condition. Transfer the silica gel from its impinger to its original container and seal it. The tester may use a funnel to pour the silica gel and a rubber policeman to remove the silica gel from the impinger. The small amount of particles that might adhere to the impinger wall need not be removed. Do not use water or other liquids to transfer the silica gel since weight gained in the silica gel impinger is used for moisture calculations. Alternatively, if a balance is available in the field, record the weight of the spent silica gel (or silica gel plus impinger) to the nearest 0.5 g.

5.2.11 Container No. 7 (Acetone Blank). If particulate emissions are to be determined, at least once during each field test, place a 100-ml portion of the acetone used in the sample recovery process into a container labeled No. 7. Seal the container.

5.2.12 Container No. 8A (0.1 N HNO_3 Blank). At least once during each field test, place 300 ml of the 0.1 N HNO_3 solution used in the sample recovery process into a container labeled No. 8A. Seal the container.

5.2.13 Container No. 8B (Water Blank). At least once during each field test, place 100 ml of the water used in the sample recovery process into a container labeled No. 8B. Seal the container.

5.2.14 Container No. 9 (5 Percent HNO_3/10 Percent H_2O_2 Blank). At least once during each field test, place 200 ml of the 5 Percent HNO_3/10 Percent H_2O_2 solution used as the nitric acid impinger reagent into a container labeled No. 9. Seal the container.

5.2.15 Container No. 10 (Acidified $KMnO_4$ Blank). At least once during each field test, place 100 ml of the acidified $KMnO_4$ solution used as the impinger solution and in the sample recovery process into a container labeled No. 10. Prepare the container as described in Section 5.2.9.2. Read the *Precaution:* in Section 4.3.2. and read the Note in Section 5.2.9.2.

5.2.16 Container No. 11 (8 N HCl Blank). At least once during each field test, place 200 ml of water into a sample container labeled No. 11. Then carefully add with stirring 25 ml of 8 N HCl. Mix well and seal the container.

5.2.17 Container No. 12 (Sample Filter Blank). Once during each field test, place into a petri dish labeled No. 12 three unused blank filters from the same lot as the sampling filters. Seal the petri dish.

5.3 *Sample Preparation.* Note the level of the liquid in each of the containers and determine if any sample was lost during shipment. If a noticeable amount of leakage has occurred, either void the sample or use methods, subject to the approval of the Administrator, to correct the final results. A diagram illustrating sample preparation and analysis procedures for each of the sample train components is shown in Figure 29-3.

5.3.1 *Container No. 1 (Sample Filter).*

5.3.1.1 If particulate emissions are being determined, first desiccate the filter and filter catch without added heat (do not heat the filters to speed the drying) and weigh to a constant weight as described in Section 4.3 of Method 5.

5.3.1.2 Following this procedure, or initially, if particulate emissions are not being determined in addition to metals analysis, divide the filter with its filter catch into portions containing approximately 0.5 g each. Place the pieces in the analyst's choice of either individual microwave pressure relief vessels or Parr^R Bombs. Add 6 ml of concentrated HNO_3 and 4 ml of concentrated HF to each vessel. For microwave heating, microwave the samples for approximately 12 to 15 minutes total heating time as follows: heat for 2 to 3 minutes, then turn off the microwave for 2 to 3 minutes, then heat for 2 to 3 minutes, etc., continue this alternation until the 12 to 15 minutes total heating time are completed (this procedure should comprise approximately 24 to 30 minutes at 600 watts). Microwave heating times are approximate and are dependent upon the number of samples being digested simultaneously. Sufficient heating is evidenced by sorbent reflux within the vessel. For conventional heating, heat the Parr^R Bombs at 140 °C (285 °F) for 6 hours. Then cool the samples to room temperature, and combine with the acid digested probe rinse as required in Section 5.3.3.

5.3.1.3 If the sampling train includes an optional glass cyclone in front of the filter, prepare and digest the cyclone catch by the procedures described in section 5.3.1.2 and then combine the digestate with the digested filter sample.

5.3.2 Container No. 2 (Acetone Rinse). Note the level of liquid in the container and confirm on the analysis sheet whether or not leakage occurred during transport. If a noticeable amount of leakage has occurred, either void the sample or use methods, subject to the approval of the Administrator, to correct the final results. Measure the liquid in this container either volumetrically within 1 ml or gravimetrically within 0.5 g. Transfer the contents to an acid-cleaned, tared 250-ml beaker and evaporate to dryness at ambient temperature and pressure. If particulate emissions are being determined, desiccate for 24 hours without added heat, weigh to a constant weight according to the procedures described in Section 4.3 of Method 5, and report the results to the nearest 0.1 mg. Redissolve the residue with 10 ml of concentrated HNO_3.

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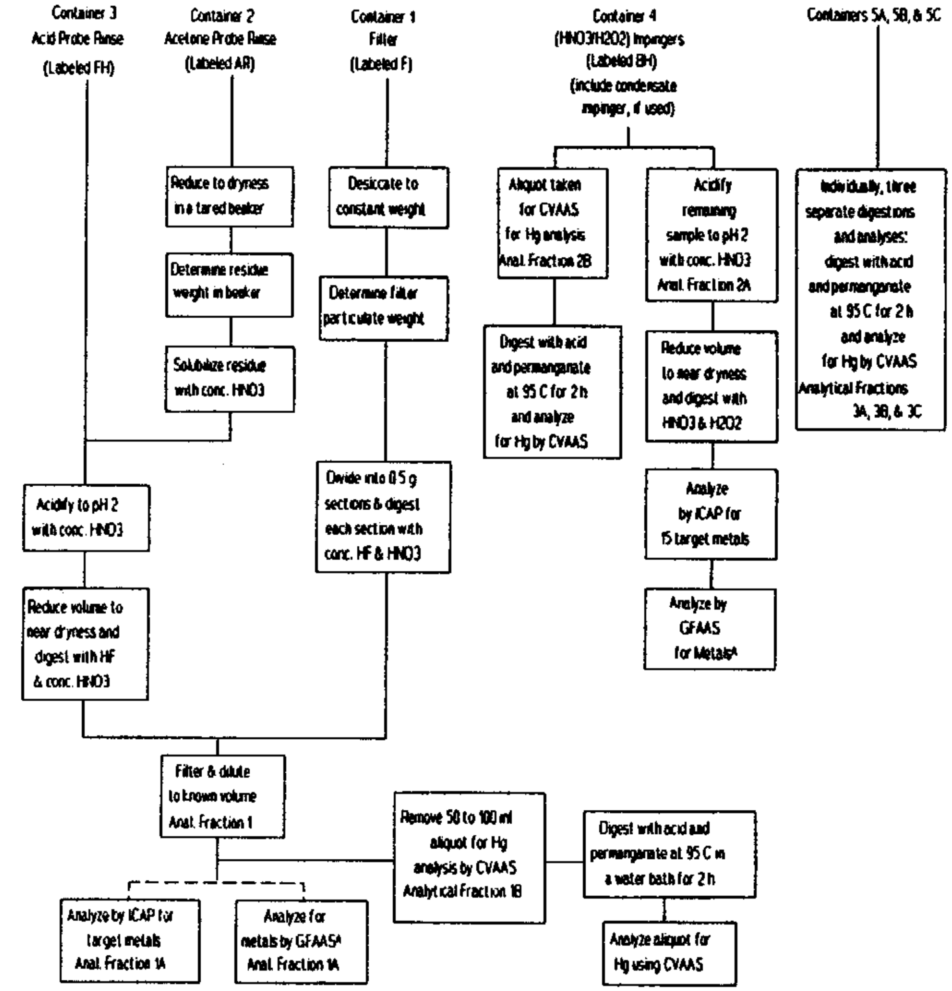

^AAnalysis by AAS for metals found at less than 2 ug/ml in digestate solution, if desired. Or analyze for each metal by AAS, if desired.

Figure 29-3. Sample preparation and analysis scheme.

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Quantitatively combine the resultant sample, including all liquid and any particulate matter, with Container No. 3 before beginning Section 5.3.3.

5.3.3 Container No. 3 (Probe Rinse). Verify that the pH of this sample is 2 or lower. If it is not, acidify the sample by careful addition with stirring of concentrated HNO_3 to pH 2. Use water to rinse the sample into a beaker, and cover the beaker with a ribbed watch glass. Reduce the sample volume to approximately 20 ml by heating on a hot plate at a temperature just below boiling. Digest the sample in microwave vessels or Parr^R Bombs by quantitatively transferring the sample to the vessel or bomb, carefully adding the 6 ml of concentrated HNO_3, 4 ml of concentrated HF, and then continuing to follow the procedures described in Section 5.3.1.2. Then combine the resultant sample directly with the acid digested portions of the filter prepared previously in Section 5.3.1.2. The resultant combined sample is referred to as "*Sample Fraction 1*". Filter the combined sample using Whatman 541 filter paper. Dilute to 300 ml (or the appropriate volume for the expected metals concentration) with water. This diluted sample is "*Analytical Fraction 1*". Measure and record the volume of Analytical Fraction 1 to within 0.1 ml. Quantitatively remove a 50-ml aliquot and label as "*Analytical Fraction 1B*". Label the remaining 250-ml portion as "*Analytical Fraction 1A*". Analytical Fraction 1A is used for ICAP or AAS analysis for all desired metals except Hg. Analytical Fraction 1B is used for the determination of front-half Hg.

5.3.4 Container No. 4 (Impingers 1–3). Measure and record the total volume of this sample to within 0.5 ml and label it "*Sample Fraction 2*". Remove a 75- to 100-ml aliquot for Hg analysis and label the aliquot "*Analytical Fraction 2B*". Label the remaining portion of Container No. 4 as "*Sample Fraction 2A*". Sample Fraction 2A defines the volume of Analytical Fraction 2A *prior* to digestion. All of Sample Fraction 2A is digested to produce "*Analytical Fraction 2A*". Analytical Fraction 2A defines the volume of Sample Fraction 2A *after* its digestion and the volume of Analytical Fraction 2A is normally 150 ml. Analytical Fraction 2A is analyzed for all metals except Hg. Verify that the pH of Sample Fraction 2A is 2 or lower. If necessary, use concentrated HNO_3 by careful addition and stirring to lower Sample Fraction 2A to pH 2. Use water to rinse Sample Fraction 2A into a beaker and then cover the beaker with a ribbed watch glass. Reduce Sample Fraction 2A to approximately 20 ml by heating on a hot plate at a temperature just below boiling. Then follow either of the digestion procedures described in Sections 5.3.4.1 or 5.3.4.2.

5.3.4.1 Conventional Digestion Procedure. Add 30 ml of 50 percent HNO_3, and heat for 30 minutes on a hot plate to just below boiling. Add 10 ml of 3 percent H_2O_2 and heat for 10 more minutes. Add 50 ml of hot water, and heat the sample for an additional 20 minutes. Cool, filter the sample, and dilute to 150 ml (or the appropriate volume for the expected metals concentrations) with water. This dilution produces Analytical Fraction 2A. Measure and record the volume to within 0.1 ml.

5.3.4.2 Microwave Digestion Procedure. Add 10 ml of 50 percent HNO_3 and heat for 6 minutes total *heating* time in alternations of 1 to 2 minutes at 600 Watts followed by 1 to 2 minutes with no power, etc., similar to the procedure described in Section 5.3.1. Allow the sample to cool. Add 10 ml of 3 percent H_2O_2 and heat for 2 more minutes. Add 50 ml of hot water, and heat for an additional 5 minutes. Cool, filter the sample, and dilute to 150 ml (or the appropriate volume for the expected metals concentrations) with water. This dilution produces Analytical Fraction 2A. Measure and record the volume to within 0.1 ml.

(Note: All microwave heating times given are approximate and are dependent upon the number of samples being digested at a time. Heating times as given above have been found acceptable for simultaneous digestion of up to 12 individual samples. Sufficient heating is evidenced by solvent reflux within the vessel.)

5.3.5 Container No. 5A (Impinger 4), Container Nos. 5B and 5C (Impingers 5 and 6). Keep the samples in Containers Nos. 5A, 5B, and 5C separate from each other. Measure and record the volume of 5A to within 0.5 ml. Label the contents of Container No. 5A to be Analytical Fraction 3A. To remove any brown MnO_2 precipitate from the contents of Container No. 5B, filter its contents through Whatman 40 filter paper into a 500 ml volumetric flask and dilute to volume with water. Save the filter for digestion of the brown MnO_2 precipitate. Label the 500 ml filtrate from Container No. 5B to be Analytical Fraction 3B. Analyze Analytical Fraction 3B for Hg within 48 hours of the filtration step. Place the saved filter, which was used to remove the brown MnO_2 precipitate, into an appropriately sized *vented* container, which will allow release of any gases including chlorine formed when the filter is digested. In a laboratory hood which will remove any gas produced by the digestion of the MnO_2, add 25 ml of 8 N HCl to the filter and allow to digest for a minimum of 24 hours at room temperature. Filter the contents of Container No. 5C through a Whatman 40 filter into a 500-ml volumetric flask. Then filter the result of the digestion of the brown MnO_2 from Container No. 5B through a Whatman 40 filter into the same 500-ml volumetric flask, and dilute and mix well to volume with water. Discard the Whatman 40 filter. Mark this combined 500-ml dilute HCl solution as Analytical Fraction 3C.

5.3.6 Container No. 6 (Silica Gel). Weigh the spent silica gel (or silica gel plus impinger) to the nearest 0.5 g using a balance.

5.4 Sample Analysis. For each sampling train sample run, seven individual analytical samples are generated; two for all desired metals except Hg, and five for Hg. A schematic identifying each sample container and the prescribed analytical preparation and analysis scheme is shown in Figure 29–3. The first two analytical samples, labeled Analytical Fractions 1A and 1B, consist of the digested samples from the front-half of the train. Analytical Fraction 1A is for ICAP, ICP-MS or AAS analysis as described in Sections 5.4.1 and 5.4.2, respectively. Analytical Fraction 1B is for front-half Hg analysis as described in Section 5.4.3. The contents of the back-half of the train are used to prepare the third through seventh analytical samples. The third and fourth analytical samples, labeled Analytical Fractions 2A and 2B, contain the samples from the moisture removal impinger No. 1, if used, and $HNO_3H_2O_2$ impingers Nos. 2 and 3. Analytical Fraction 2A is for ICAP, ICP–MS or AAS analysis for target metals, except Hg. Analytical Fraction 2B is for analysis for Hg. The fifth through seventh analytical samples, labeled Analytical Fractions 3A, 3B, and 3C, consist of the impinger contents and rinses from the empty impinger No. 4 and the $H_2SO_4/KMnO_4$ Impingers Nos. 5 and 6. These analytical samples are for analysis for Hg as described in Section 5.4.3. The total back-half Hg catch is determined from the sum of Analytical Fractions 2B, 3A, 3B, and 3C. Analytical Fractions 1A and 2A can be combined proportionally prior to analysis.

5.4.1 ICAP and ICP–MS Analysis. Analyze Analytical Fractions 1A and 2A by ICAP using Method 6010 or Method 200.7 (40 CFR part 136, appendix C). Calibrate the ICAP, and set up an analysis program as described in Method 6010 or Method 200.7. Follow the quality control procedures described in Section 7.3.1. Recommended wavelengths for analysis are as follows:

Element	Wave-length (nm)
Aluminum	308.215
Antimony	206.833
Arsenic	193.696
Barium	455.403
Beryllium	313.042
Cadmium	226.502
Chromium	267.716
Cobalt	228.616
Copper	324.754
Iron	259.940
Lead	220.353
Manganese	257.610
Nickel	231.604
Phosphorous	214.914
Selenium	196.026
Silver	328.068
Thallium	190.864
Zinc	213.856

These wavelengths represent the best combination of specificity and potential detection limit. Other wavelengths may be substituted if they can provide the needed specificity and detection limit, and are treated with the same corrective techniques for spectral interference. Initially, analyze all samples for the target metals (except Hg) plus Fe and Al. If Fe and Al are present, the sample might have to be diluted so that each of these elements is at a concentration of less than 50 ppm so as to reduce their spectral interferences on As, Cd, Cr, and Pb. Perform ICP-MS analysis by following Method 6020 in EPA Publication SW–846 Third Edition (November 1986) including updates I, II, IIA, and IIB, as incorporated by reference in § 60.17(i).

(Note: When analyzing samples in a HF matrix, an alumina torch should be used;

since all front-half samples will contain HF, use an alumina torch.)

5.4.2. AAS by Direct Aspiration and/or GFAAS. If analysis of metals in Analytical Fractions 1A and 2A by using GFAAS or direct aspiration AAS is needed, use Table 29–2 to determine which techniques and procedures to apply for each target metal. Use Table 29–2, if necessary, to determine techniques for minimization of interferences. Calibrate the instrument according to Section 6.3 and follow the quality control procedures specified in Section 7.3.2.

TABLE 29–2.—APPLICABLE TECHNIQUES, METHODS AND MINIMIZATION OF INTERFERENCE FOR AAS ANALYSIS

Metal	Technique	SW–846 [1] method No.	Wavelength (nm)	Interferences	
				Cause	Minimization
Fe	Aspiration	7380	248.3	Contamination	Great care taken to avoid contamination.
Pb	Aspiration	7420	283.3	217.0 nm alternate	Background correction required.
Pb	Furnace	7421	283.3	Poor recoveries	Matrix modifier, add 10 ul of phosphorus acid to 1 ml of prepared sample in sampler cup.
Mn	Aspiration	7460	279.5	403.1 nm alternate	Background correction required.
Ni	Aspiration	7520	232.0	352.4 nm alternate Fe, Co, and Cr.	Background correction required. Matrix matching or nitrous-oxide/acetylene flame.
				Nonlinear response	sample dilution or use 352.3 nm line.
Se	Furnace	7740	196.0	Volatility	Spike samples and reference materials and add nickel nitrate to minimize volatilization.
				Adsorption & scatter	Background correction is required and Zeeman background correction can be useful.
Ag	Aspiration	7760	328.1	Adsorption & Scatter AgCl insoluble.	Background correction is required. Avoid Hydrochloric acid unless silver is in solution as a chloride complex Sample and standards monitored for aspiration rate.
Tl	Aspiration	7840	276.8		Background correction is required. Hydrochloric acid should not be used.
Tl	Furnace	7841	276.8	Hydrochloric acid or chloride	Background correction is required. Verify that losses are not occurring for volatization by spiked samples or standard addition; Palladium is a suitable matrix modifier.
Zn	Aspiration	7950	213.9	High Si, Cu, & P Contamination	Strontium removes Cu and phosphate, Great care taken to avoid contamination.
Sb	Aspiration	7040	217.6	1000 mg/ml Pb Ni, Cu, or acid	Use secondary wavelengths of 231.1.nm; match sample & standards acid concentration or use nitrous oxidefacetylene flame.
Sb	Furnace	7041	217.6	High Pb	Secondary Wavelength or Zeeman correction.
As	Furnace	7060	193.7	Arsenic volatilization Aluminum	Spiked samples and add nickel nitrate solution to digestates prior to analysis. Use Zeeman background correction.
Ba	Aspiration 7080	7080	553.6	Calcium Barium ionization	High hollow cathode current and narrow band set. 2 ml of KCl per 100 ml of sample.
Be	Aspiration	7090	234.9	500 ppm Al High Mg and Si	Add 0.1% fluoride. Use method of standard additions.
Be	Furnace	7091	234.9	Be in optical path	Optimize parameters to minimize effects.
Cd	Aspiration	7130	228.8	Absorption and light scattering	Background correction is required.

TABLE 29–2.—APPLICABLE TECHNIQUES, METHODS AND MINIMIZATION OF INTERFERENCE FOR AAS ANALYSIS—Continued

Metal	Technique	SW–846[1] method No.	Wavelength (nm)	Interferences	
				Cause	Minimization
Cd	Furnace	7131	228.8	As above Excess Chloride Pipet tips	As above. Ammonium phosphate used as a matrix modifier. Use cadmiun-free tips.
Cr	Aspiration	7190	357.9	Akali metal	KCl ionization suppressant in samples and standards—Consult mfgs literature.
Co	Furnace	7201	240.7	Excess chloride	Use Method of Standard Additions.
Cr	Furnace	7191	357.9	200 mg/L Ca and P	All calcium nitrate for a known constant effect and to eliminate effect of phosphate.
Cu	Aspiration	7210	324.7	Absorption & scatter	Consult manufacturer's manual.

[1] Refer to EPA publication SW–846 Third Edition (November 1986) including updates I, II, IIA, and IIB, as incorporated by reference in § 60.17(i).

5.4.3 CVAAS Hg analysis. Analyze Analytical Fractions 1B, 2B, 3A, 3B, and 3C separately for Hg using CVAAS following the method outlined in Method 7470 in EPA Publication SW–846 Third Edition (November 1986) including updates I, II, IIA and IIB, as incorporated by reference in § 60.17(i) or in *Standard Methods for the Examination of Water and Wastewater,* 16th Edition, (1985), Method 303F, as incorporated by reference in § 60.17, or, optionally using *NOTE No. 2* in this section. Set up the calibration curve (zero to 1000 ng) as described in Method 7470 or similar to Method 303F using 300-ml BOD bottles instead of Erlenmeyers. Perform the following for each Hg analysis. From each original sample, select and record an aliquot in the size range from 1 ml to 10 ml. If no prior knowledge of the expected amount of Hg in the sample exists, a 5 ml aliquot is suggested for the first dilution to 100 ml (see *NOTE No. 1* in this Section). The total amount of Hg in the aliquot shall be less than 1 μg and within the range (zero to 1000 ng) of the calibration curve. Place the sample aliquot into a separate 300-ml BOD bottle, and add enough water to make a total volume of 100 ml. Next add to it sequentially the sample digestion solutions and perform the sample preparation described in the procedures of Method 7470 or Method 303F. (See *NOTE No. 2* in this Section). If the maximum readings are off-scale (because Hg in the aliquot exceeded the calibration range; including the situation where only a 1-ml aliquot of the original sample was digested), then dilute the original sample (or a portion of it) with 0.15 percent HNO_3 (1.5 ml concentrated HNO_3 per liter aqueous solution) so that when a 1- to 10-ml aliquot of the "0.15 HNO_3 percent dilution of the original sample" is digested and analyzed by the procedures described above, it will yield an analysis within the range of the calibration curve.

Note No. 1 to Section 5.4.3. When Hg levels in the sample fractions are below the in-stack detection limit given in Table 29–1, select a 10 ml aliquot for digestion and analysis as described.

Note No. 2 to Section 5.4.3. Optionally, Hg can be analyzed by using the CVAAS analytical procedures given by some instrument manufacturer's directions. These include calibration and quality control procedures for the Leeman Model PS200, the Perkin Elmer FIAS systems, and similar models, if available, of other instrument manufacturers. For digestion and analyses by these instruments, perform the following two steps:

(1) Digest the sample aliquot through the addition of the aqueous hydroxylamine hydrochloride/sodium chloride solution the same as described in this Section 5.4.3.: (*The Leeman, Perkin Elmer, and similar instruments described in this note add automatically the necessary stannous chloride solution during the automated analysis of Hg.*) and

(2) Upon completion of the digestion described in paragraph (1), of this note, analyze the sample according to the instrument manufacturer's directions. This approach allows multiple (including duplicate) automated analyses of a digested sample aliquot.

6. Calibration

Maintain a laboratory log of all calibrations.

6.1 Sampling Train Calibration. Calibrate the sampling train components according to the indicated sections of Method 5: Probe Nozzle (Section 5.1); Pitot Tube (Section 5.2); Metering System (Section 5.3); Probe Heater (Section 5.4); Temperature Gauges (Section 5.5); Leake-Check of the Metering System (Section 5.6); and Barometer (Section 5.7).

6.2 Industively Coupled Argon Plasma Spectrometer Calibration. Prepare standards as outlined in Section 4.5. Profile and calibrate the instrument according to the manufacturer's recommended procedures using those standards. Check the calibration once per hour. If the instrument does not reproduce the standard concentrations within 10 percent, perform the complete calibration procedures. Perform ICP–MS analysis by following Method 6020 in EPA Publication SW–846 Third Edition (November 1986) including updates I, II, IIA and IIB, as incorporated by reference in § 60.17(i).

6.3 Atomic Absorption Spectrometer—Direct Aspiration AAS, GFAAS, and CVAAS analyses. Prepare the standards as outlined in Section 4.5 and use them to calibrate the spectrometer. Calibration procedures are also outlined in the EPA methods referred to in Table 29–2 and in Method 7470 in EPA Publication SW–846 Third Edition (November 1986) including updates I, II, IIA and IIB, as incorporated by reference in § 60.17(i) or in *Standard Methods for the Examination of Water and Wastewater,* 16th Edition, (1985), Method 303F (for Hg) as incorporated by reference in § 60.17. Run each standard curve in duplicate and use the mean values to calculate the calibration line. Recalibrate the instrument approximately once every 10 to 12 samples.

7. Quality Control

7.1 Field Reagent Blanks, if analyzed. Perform the digestion and analysis of the blanks in Container Nos. 7 through 12 that were produced in Sections 5.2.11 through 5.2.17, respectively. For Hg field reagent blanks, use a 10 ml aliquot for digestion and analysis.

7.1.1 Digest and analyze one of the filters from Container No. 12 per Section 5.3.1, 100 ml from Container No. 7 per Section 5.3.2, and 100 ml from Container No. 8A per Section 5.3.3. This step produces blanks for Analytical Fractions 1A and 1B.

7.1.2 Combine 100 ml of Container No. 8A with 200 ml from Container No. 9, and digest and analyze the resultant volume per Section 5.3.4. This step produces blanks for Analytical Fractions 2A and 2B.

7.1.3 Digest and analyze a 100-ml portion of Container No. 8A to produce a blank for Analytical Fraction 3A.

7.1.4 Combine 100 ml from Container No. 10 with 33 ml from Container No. 8B to produce a blank for Analytical Fraction 3B. Filter the resultant 133 ml as described for Container No. 5B in Section 5.3.5, except do not dilute the 133ml. Analyze this blank for Hg within 48 hrs. of the filtration step, and use 400 ml as the blank volume when calculating the blank mass value. Use the actual volumes of the other analytical blanks when calculating their mass values.

7.1.5 Digest the filter that was used to remove any brown MnO_2 precipitate from the blank for Analytical Fraction 3B by the same procedure as described in Section 5.3.5 for the similar sample filter. Filter the digestate and the contents of Container No. 11 through Whatman 40 paper into a 500-ml volumetric flask, and dilute to volume with water. These steps produce a blank for Analytical Fraction 3C.

7.1.6 Analyze the blanks for Analytical Fraction Blanks 1A and 2A per Section 5.4.1 and/or Section 5.4.2. Analyze the blanks for Analytical Fractions 1B, 2B, 3A, 3B, and 3C per Section 5.4.3. Analysis of the blank for Analytical Fraction 1A produces the front-half reagent blank correction values for the desired metals except for Hg; Analysis of the blank for Analytical Fraction 1B produces the front-half reagent blank correction value for Hg. Analysis of the blank for Analytical Fraction 2A produces the back-half reagent blank correction values for all of the desired metals except for Hg, while separate analyses of the blanks for Analytical Fractions 2B, 3A, 3B, and 3C produce the back-half reagent blank correction value for Hg.

7.2 Quality Control Samples. Analyze the following quality control samples.

7.2.1 ICAP and ICP-MS Analysis. Follow the respective quality control descriptions in Section 8 of Methods 6010 and 6020 of EPA Publication SW-846 Third Edition (November 1986) including updates I, II, IIA and IIB, as incorporated by reference in § 60.17(i). For the purposes of a source test that consists of three sample runs, modify those requirements to include the following: two instrument check standard runs, two calibration blank runs, one interference check sample at the beginning of the analysis (analyze by Method of Standard Additions unless within 25 percent), one quality control sample to check the accuracy of the calibration standards (required to be within 25 percent of calibration), and one duplicate analysis (required to be within 20 percent of average or repeat all analyses).

7.2.2. Direct Aspiration AAS and/or GFAAS Analysis for Sb, As, Ba, Be, Cd, Cu, Cr, Co, Pb, Ni, Mn, Hg, P, Se, Ag, Tl, and Zn. Analyze all samples in duplicate. Perform a matrix spike on at least one front-half sample and one back-half sample, or one combined sample. If recoveries of less than 75 percent or greater than 125 percent are obtained for the matrix spike, analyze each sample by the Method of Standard Additions. Analyze a quality control sample to check the accuracy of the calibration standards. If the results are not within 20 percent, repeat the calibration.

7.2.3 CVAAS Analysis for Hg. Analyze all samples in duplicate. Analyze a quality control sample to check the accuracy of the calibration standards (if not within 15 percent, repeat calibration). Perform a matrix spike on one sample (if not within 25 percent, analyze all samples by the Method of Standard Additions). Additional information on quality control can be obtained from Method 7470 of EPA Publication SW-846 Third Edition (November 1986) including updates I, II, IIA and IIB, as incorporated by reference in § 60.17(i) or in *Standard Methods for the Examination of Water and Wastewater*, 16th Edition, (1985), Method 303F as incorporated by reference in § 60.17.

8. Calculations

8.1 Dry Gas Volume. Using the data from this test, calculate $V_{m(std)}$, the dry gas sample volume at standard conditions as outlined in Section 6.3 of Method 5.

8.2 Volume of Water Vapor and Moisture Content. Using the total volume of condensate collected during the source sampling, calculate the volume of water vapor $V_{w(std)}$ and the moisture content B_{ws} of the stack gas. Use Equations 5–2 and 5–3 of Method 5.

8.3 Stack Gas Velocity. Using the data from this test and Equation 2–9 of Method 2, calculate the average stack gas velocity.

8.4 Metals (Except Hg) in Source Sample.

8.4.1 Analytical Fraction 1A, Front-Half, Metals (except Hg). Calculate separately the amount of each metal collected in Sample Fraction 1 of the sampling train using the following equation:

$$M_{fh}=C_{a1}\ F_d\ V_{soln,1} \qquad \text{Eq. 29–1}$$

where:

M_{fh}=Total mass of each metal (except Hg) collected in the front half of the sampling train (Sample Fraction 1), µg.

C_{a1}=Concentration of metal in Analytical Fraction 1A as read from the standard curve, µg/ml.

F_d=Dilution factor (F_d = the inverse of the fractional portion of the concentrated sample in the solution actually used in the instrument to produce the reading C_{a1}. For example, if a 2 ml aliquot of Analytical Fraction 1A is diluted to 10 ml to place it in the calibration range, F_d = 5).

$V_{soln,1}$=Total volume of digested sample solution (Analytical Fraction 1), ml.

8.4.1.1 If Analytical Fractions 1A and 2A are combined, use proportional aliquots. Then make appropriate changes in Equations 29–1 through 29–3 to reflect this approach.

8.4.2 Analytical Fraction 2A, Back-Half, Metals (except Hg). Calculate separately the amount of each metal collected in Fraction 2 of the sampling train using the following equation.

$$M_{bh}=C_{a2}\ F_a\ V_a \qquad \text{Eq. 29–2}$$

where:

M_{bh}=Total mass of each metal (except Hg) collected in the back-half of the sampling train (Sample Fraction 2), µg.

C_{a2}=Concentration of metal in Analytical Fraction 2A as read from the standard curve, (µg/ml).

F_a=Aliquot factor, volume of Sample Fraction 2 divided by volume of Sample Fraction 2A (*see Section 5.3.4.*)

V_a=Total volume of digested sample solution (Analytical Fraction 2A), ml (see Section 5.3.4.1 or 5.3.4.2, as applicable).

8.4.3 Total Train, Metals (except Hg). Calculate the total amount of each of the quantified metals collected in the sampling train as follows:

$$M_t=(M_{fh}-M_{fhb})+(M_{bh}-M_{bhb}) \qquad \text{Eq. 29–3}$$

where:

M_t=Total mass of each metal (separately stated for each metal) collected in the sampling train, µg.

M_{fhb}=Blank correction value for mass of metal detected in front-half field reagent blank, µg.

M_{bhb}=Blank correction value for mass of metal detected in back-half field reagent blank, µg.

8.4.3.1 If the measured blank value for the front half (M_{fhb}) is in the range 0.0 to "A" µg [where "A" µg equals the value determined by multiplying 1.4 µg/in.^{2} times the actual area in in.^{2} of the sample filter], use M_{fhb} to correct the emission sample value (M_{fh}); if M_{fhb} exceeds "A" µg, use the greater of I or II:

I. "A" µg.

II. the lesser of (a) M_{fhb}, or (b) 5 percent of M_{fh}.

If the measured blank value for the black-half (M_{bhb}) is in the range 0.0 to 1 µg, use M_{bhb} to correct the emission sample value (M_{bh}); if M_{bhb}) exceeds 1 µg, use the greater of I or II:

I. 1 µg.

II. the lesser of (a) M_{bhb} or (b) 5 percent of M_{bh}.

8.5 Hg in Source Sample.

8.5.1 Analytical Fraction 1B; Front-Half Hg. Calculate the amount of Hg collected in the front-half, Sample Fraction 1, of the sampling train by using Equation 29–4:

$$Hg_{fh}=\frac{Q_{fh}}{V_{f1B}}\left(V_{soln,1}\right) \qquad \text{Eq. 29-4}$$

where:

Hg_{fh}=Total mass of Hg collected in the front-half of the sampling train (Sample Fraction 1), µg.

Q_{fh}=Quantity of Hg, µg, *TOTAL in the ALIQUOT of Analytical Fraction 1B selected for digestion and analysis.*

8.5.1.1 For example, if a 10 ml aliquot of Analytical Fraction 1B is taken and digested and analyzed (according to Section 5.4.3 and its NOTES Nos. 1 and 2), then calculate and use the total amount of Hg in the 10 ml aliquot for Q_{fh}.

$V_{soln,1}$=Total volume of Analytical Fraction 1, ml.

V_{f1B}=Volume of aliquot of Analytical Fraction 1B analyzed, ml.

8.5.1.2 For example, if a 1 ml aliquot of Analytical Fraction 1B was diluted to 50 ml with 0.15 percent HNO_3 as described in Section 5.4.3 to bring it into the proper analytical range, and then 1 ml of that 50-ml wa digested according to Section 5.4.3 and analyzed, V_{f1B} would be 0.02 ml.

8.5.2 Analytical Fractions 2B, 3A, 3B, and 3C; Back Half Hg.

8.5.2.1 Calculate the amount of Hg collected in Sample Fraction 2 by using Equation 29–5:

$$Hg_{bh2}=\frac{Q_{bh2}}{V_{f2B}}\left(V_{soln,2}\right) \qquad \text{Eq. 29-5}$$

where:

Hg_{bh2}=Total mass of Hg collected in Sample Fraction 2, µg.

Q_{bh2}=Quantity of Hg, µg, *TOTAL in the ALIQUOT of Analytical Fraction 2B selected for digestion and analysis.*

8.5.2.1.1 For example, if a 10 ml aliquot of Analytical Fraction 2B is taken and digested and analyzed (according to Section 5.4.3 and its NOTES Nos. 1 and 2), then calculate and use the total amount of Hg in the 10 ml aliquot for Q_{bh2}.

$V_{soln,2}$=Total volume of Sample Fraction 2, ml.

V_{f2B}=Volume of Analytical Fraction 2B analyzed, ml.

8.5.2.1.2 For example, if 1 ml of Analytical Fraction 2B was diluted to 10 ml with 0.15 percent HNO_3 as described in Section 5.4.3 to bring it into the proper analytical range, and then 5 ml of that 10-ml was analyzed, V_{f2B} would be 0.5 ml.

8.5.2.2 Calculate each of the back-half Hg values for Analytical Fractions 3A, 3B, and 3C by using Equation 29-6:

$$Hg_{bh3(A,B,C)} = \frac{Q_{bh3(A,B,C)}}{V_{f3(A,B,C)}}\left(V_{soln,3(A,B,C)}\right) \quad \text{Eq. 29-6}$$

where:

$Hg_{bh3\,(A,B,C)}$=Total mass of Hg collected separately in Fraction 3A, 3B, or 3C, µg.

$Q_{bh3\,(A,B,C)}$=Quantity of Hg, µg, *TOTAL, separately, in the ALIQUOT of Analytical Fraction 3A, 3B, and 3C selected for digestion and analysis,* (see previous notes in Sections 8.5.1 and 8.5.2 describing the quantity "Q" and calculate similarly).

$V_{f3\,(A,B,C)}$=Volume, separately, of Analytical Fraction 3A, 3B, or 3C analyzed, ml (see previous notes in Sections 8.5.1 and 8.5.2, describing the quantity "V" and calculate similarly).

$V_{soln,\,3\,(A,B,C)}$=Total volume, separately, of Analytical Fraction 3A, 3B, or 3C, ml.

8.5.2.3 Calculate the total amount of Hg collected in the back-half of the sampling train by using Equation 29-7:

$$Hg_{bh}=Hg_{bh2}+Hg_{bh3A}+Hg_{bh3B}+Hg_{bh3C} \quad \text{Eq. 29-7}$$

where:

Hg_{bh}=Total mass of Hg collected in the back-half of the sampling train, µg.

8.5.3 Total Train Hg Catch. Calculate the total amount of Hg collected in the sampling train by using Equation 29-8:

$$Hg_t=(Hg_{fh}-Hg_{fhb})+(Hg_{bh}-Hg_{bhb}) \quad \text{Eq. 29-8}$$

where:

Hg_t=Total mass of Hg collected in the sampling train, µg.

Hg_{fhb}=Blank correction value for mass of Hg detected in front-half field reagent blank, µg.

Hg_{bhb}=Blank correction value for mass of Hg detected in back-half field reagent blanks, µg.

8.5.4 If the total of the measured blank values ($Hg_{fhb}+Hg_{bhb}$) is in the range of 0.0 to 0.6 µg, then use the total to correct the sample value ($Hg_{fh}+Hg_{bh}$); if it exceeds 0.6 µg, use the greater of I. or II:

I. 0.6 µg.

II. the lesser of (a) ($Hg_{fhb}+Hg_{bhb}$), or (b) 5 percent of the sample value ($Hg_{fh}+Hg_{bh}$).

8.6 Individual Metal Concentrations in Stack Gas. Calculate the concentration of each metal in the stack gas (dry basis, adjusted to standard conditions) by using Equation 29-9:

$$C_s = \frac{K_4 M_t}{V_{m(std)}} \quad \text{Eq. 29-9}$$

C_s=Concentration of a metal in the stack gas, mg/dscm.

K_4=10^{-3} mg/µg.

M_t=Total mass of that metal collected in the sampling train, µg; (substitute Hg_t for M_t for the Hg calculation).

$V_{m(std)}$=Volume of gas sample as measured by the dry gas meter, corrected to dry standard conditions, dscm.

8.7 Isokinetic Variation and Acceptable Results. Same as Method 5, Sections 6.11 and 6.12, respectively.

9. Bibliography

1. Method 303F in *Standard Methods for the Examination of Water Wastewater,* 16th Edition, 1985. Available from the American Pubic Health Association, 1015 18th Street NW., Washington, DC 20036.

2. EPA Methods 6010, 6020, 7000, 7041, 7060, 7131, 7421, 7470, 7740, and 7841, *Tesdt Methods for Evaluating Solid Waste: Physical/Chemical Methods.* SW-846, Third Edition, September 1986, with updates I, II, IIA and IIB. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, DC 20460.

3. EPA Method 200.7, *Code of Federal Regulations,* Title 40, Part 136, Appendix C. July 1, 1987.

4. EPA Methods 1 through 5, *Code of Federal Regulations,* Title 40, Part 60, Appendix A, July 1, 1991.

5. EPA Method 101A, *Code of Federal Regulations,* Title 40, Part 61, Appendix B. July 1, 1991.

PART 61—[AMENDED]

3. The authority citation for part 61 continues to read as follows:

Authority: 42 U.S.C. 7401, 7412, 7414, 7416, and 7601.

4. In part 61, Method 101A of appendix B, by revising the heading, Sections 6.1.5, 7.2.1, 7.2.3, 7.2.5, 7.3.1., 7.3.2, 7.3.3, and 9.2; and by adding sections 5.2.4 through 5.2.7, 6.1.7, 6.1.8, 7.2.1.1 through 7.2.1.3, 7.2.6, 9.2.1, 9.2.2 and reference 3 of item 10 bibliograph; and by adding text to the end of section 6.1.6 to read as follows:

Appendix B—Test Methods

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Method 101A—Determination of Particulate and Gaseous Mercury Emissions From Stationary Sources

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5.2.4 Atomic Absorption Spectrophotometer or Equivalent. Any atomic absorption unit with an open sample presentation area in which to mount the optical cell is suitable. Use those instrument settings recommended by the particular manufacturer. Instruments designed specifically for the measurement of mercury using the cold-vapor technique are commercially available and may be substituted for the atomic absorption spectrophotometer.

5.2.5 Optical Cell. Alternatively, a heat lamp mounted above the cell or a moisture trap installed upstream of the cell may be used.

5.2.6 Aeration Cell. Alternatively, aeration cells available with commercial cold vapor instrumentation may be used.

5.2.7 Aeration Gas Cylinder. Nitrogen, argon, or dry, Hg-free air, equipped with a single-stage regulator. Alternatively, aeration may be provided by a peristaltic metering pump. If a commercial cold vapor instrument is used, follow the manufacturer's recommendations.

* * * * *

6.1.5 Sulfuric Acid (H_2SO_4), 10 Percent (V/V). Carefully add and mix 100 ml of concentrated H_2SO_4 to 800 ml of deionized distilled water. Then, by adding deionized distilled water, mix and bring to a final volume of 1000 ml.

6.1.6 * * *

Precaution: To prevent autocatalytic decomposition of the permanganate solution, filter the solution through Whatman 541 filter paper. Also, due to the potential reaction of the potassium permanganate with the acid, there could be pressure buildup in the solution storage bottle; therefore these bottles shall not be fully filled and shall be vented to relieve excess pressure and prevent explosive potentials. Venting is required, but should not allow contamination of the solution; a No. 70-72 hole drilled in the container cap and Teflon liner has been used.

6.1.7 Hydrochloric Acid (HCL). Concentrated. Trace-metals grade is recommended. The Hg level shall be less than 3 ng/ml.

6.1.8 HCL, 8 N. Dilute 67 ml of concentrated HCl to 100 ml with water (slowly add the HCl to the water).

* * * * *

7.2.1 Container No. 1 (Impinger, Probe, and Filter Holder) and, if applicable, No. 1A (HCl rinse).

7.2.1.1 Using a graduated cylinder, measure the liquid in the first three impingers to within 1 ml. Record the volume of liquid present (e.g., see Figure 5–3 of Method 5 in 40 CFR Part 60). This information is required to calculate the moisture content of the effluent gas. (Use only graduated cylinder and glass storage bottles that have been precleaned as in Section 7.1.2.) Place the contents of the first three impingers into a 1000-ml glass sample bottle labeled Container No. 1. See the *Precaution* in Section 6.1.6.

Note No. 1 to Section 7.2.1.1: Due to the potential reaction of $KMnO_4$ with acid, there could be pressure buildup in the sample storage bottles. These bottles shall not be filled completely and shall be vented to relieve excess pressure. A No. 70–72 hole drilled in the container cap and Teflon liner has been used successfully).

Note No. 2 to Section 7.2.1.1: If a filter is used in the sampling train, remove the filter from its holder as outlined under "Container No. 3" below.)

7.2.1.2 Taking care that dust on the outside of the probe or other exterior surfaces does not get into the sample, quantitatively recover the Hg (and any condensate) from the probe nozzle, probe fitting, probe liner, front half of the filter holder (if applicable), and impingers as follows: Rinse these components with a total of 250 to 400 ml of fresh acidified 4 percent $KMnO_4$ solution carefully assuring removal of all loose particulate matter from the impingers; add all washings to Container No. 1. See the *Precaution* in Section 6.1.6 and see the *Note No. 1* in Section 7.2.1.1. To remove any residual brown deposits on the glassware following the permanganate rinse, rinse with approximately 100 ml of water carefully assuring removal of all loose particulate matter from the impingers, and add this rinse to Container No. 1. If no visible deposits remain after this water rinse, do not rinse with 8 N HCl. However, if deposits do remain on the glassware after the water rinse, wash the impinger walls and stems with a total of only 25 ml of 8 N HCl as follows: turn and shake the impingers so that the 8 N HCl contacts all inside surfaces (wash the first impinger, then pour the wash from the first impinger into the second impinger, and finally pour the wash from the second into the third). DO NOT PLACE THE HCl WASH INTO THE ACIDIFIED PERMANGANATE SOLUTION. Place the HCl wash into a separate container labeled Container No. 1A as follows: place 150 ml of water in an empty sample container labeled Container No. 1A. Pour the HCl wash carefully, with stirring, into Container No. 1A. Rinse the impinger walls and stem with a total of 50 ml of water, and place this rinse into Container No. 1A.

7.2.1.3 After all washings have been collected in the sample containers, prepare as described above to prevent leakage during shipment to the laboratory. Mark the height of the fluid level to determine whether leakage occurs during transport. Label the containers to identify their contents clearly.

7.2.3 Container No. 3 (Filter). If a filter was used, carefully remove it from the filter holder, place it into a 100 ml glass sample container, and add 20 to 40 ml of acidified $KMnO_4$. If it is necessary to fold the filter, be sure that the particulate cake is inside the fold. Carefully transfer to the 100 ml sample bottle any particulate matter and filter fibers that might adhere to the filter holder gasket by using a dry Nylon bristle brush and a sharp edged blade. See the *Precaution* in Section 6.1.6 and see the *Note No. 1* in Section 7.2.1.1. Label the container to clearly identify its contents. Mark the height of the fluid level to determine whether leakage occurs during transport.

* * * * *

7.2.5 Container No. 5 (Absorbing Solution Blank). For a blank, place 500 ml of acidified absorbing solution in a 1000 ml sample bottle. See the *Precaution* in Section 6.1.6 and see the *Note No. 1* in Section 7.2.1.1.

7.2.6 Container No. 6 (HCl rinse blank). For a blank, place 200 ml of water in a 1000-ml sample bottle, and add 25 ml of 8 N HCl carefully with stirring. Seal the container. Only one blank sample per 3 runs is required.

* * * * *

7.3.1 Containers No. 3 and No. 4 (Filter and Filter Blank). If a filter is used, place the contents, including the filter, of Containers No. 3 and 4 in separate 250-ml beakers, and heat the beakers on a steam bath until most of the liquid has evaporated. Do not take to dryness. Add 20 ml of concentrated HNO_3 to the beakers, cover them with a watch glass, and heat on a hot plate at 70 °C for 2 hours. Remove from the hot plate. Filter the solution from digestion of the Container No. 3 contents through Whatman No. 40 filter paper, and save the filtrate for addition to the Container No. 1 filtrate as described in Section 7.3.2. Discard the filter. Filter the solution from the digestion of the Container No. 4 contents through Whatman No. 40 filter paper, and save the filtrate for addition to Container No. 5 filtrate as described in Section 7.3.3. Discard the filter.

7.3.2 Container No. 1 (Impingers, Probe, and Filter Holder) and, if applicable, No. 1A (HCl rinse). Filter the contents of Container No. 1 through Whatman 40 filter paper into a 1-liter volumetric flask to remove the brown MnO_2 precipitate. Save the filter for digestion of the brown MnO_2 precipitate. Add the sample filtrate from Container No. 3 to the 1-liter volumetric flask, and dilute to volume with water. If the combined filtrates are greater than 1000 ml, determine the volume to the nearest ml and make the appropriate corrections for blank subtractions. Mix thoroughly. Mark the combined filtrates as ANALYSIS SAMPLE No. A.1. and analyze for Hg within 48 hr of the filtration step (Note: Do not confuse ANALYSIS SAMPLE No. A.1. with the contents of field Sample Container No. 1A which contains the 8 N HCl wash). Place the saved filter, which was used to remove the brown MnO_2 precipitate, into an appropriate sized *vented* container, which will allow release of any gases including chlorine formed when the filter is digested. In a laboratory hood which will remove any gas produced by the digestion of the MnO_2, add 25 ml of 8 N HCl to the filter and allow to digest for a minimum of 24 hours at room temperature. Filter the contents of Container 1A through Whatman 40 paper into a 500-ml volumetric flask. Then filter the result of the digestion of the brown MnO_2 from Container No. 1 through Whatman 40 filter into the same 500-ml volumetric flask, and dilute and mix well to volume with water. Discard the filter. Mark this combined 500-ml dilute solution as ANALYSIS SAMPLE No. HCL A.2., and analyze for Hg.

7.3.3 Container No. 5 (Absorbing Solution Blank) and No. 6 (HCl Rinse Blank). Prepare the contents of Container No. 5 for analysis by the same procedure used for Container No. 1 as described in Section 7.3.2. Add the filter blank filtrate from Container No. 4 to the 1-liter volumetric flask, and dilute to volume. Mix thoroughly. Mark this as ANALYSIS SAMPLE No. A.1. BLANK, and analyze for Hg within 48 hours of the filtration step. Digest any brown precipitate remaining on the filter from the filtration of Container No. 5 by the same procedure as described in Section 7.3.2. Filter the contents of Container No. 6 by the same procedure as described in Section 7.3.2, and combine in the 500-ml volumetric flask with the filtrate from the digested blank MnO_2 precipitate. Mark this resultant 500-ml combined dilute solution as ANALYSIS SAMPLE No. HCl A.2 blank. (Note: When analyzing samples A.1 blank and HCl A.2 blank, always begin with 10-ml aliquots. This applies specifically to blank samples.)

* * * * *

9. * * *

9.2 Total Mercury. For each source sample, correct the average maximum absorbance of the two consecutive samples whose peak heights agree within 3 percent of their average for the contribution of the blank. Then calculate the total Hg content in µg in each sample. Correct for any dilutions made to bring the sample into the working range of the spectrophotometer.

$$m_{(HCl)Hg} = \left[\frac{\left[C_{(HCl)Hg}\ D.F._{(HCl)Hg}\right]}{S} - \frac{\left[C_{(HCl\,blk)Hg}\ D.F._{(HCl\,blk)Hg}\right]}{S_{blk}}\right] V_{f(HCl)}\left(10^{-3}\right) \quad \text{Eq. 101A}-1$$

where:

$m_{(HCl)\,Hg}$=Total blank corrected µg of Hg in HCl rinse and HCl digestate of filter sample

$C_{(HCl)\,Hg}$=Total ng of Hg analyzed in the aliquot from the 500-ml ANALYSIS SAMPLE No. HCl A.2.

$C_{(HCl\ blk)\,Hg}$=Total ng of Hg analyzed in aliquot of the 500-ml ANALYSIS SAMPLE No. HCl A.2 blank.

$D.F._{(HCl)\,Hg}$=Dilution factor for the HCl-digested Hg-containing solution, ANALYSIS SAMPLE No. "HCl A.2." This dilution factor applies only to the dilution steps, if necessary, of the 500 ml of the original sample volume [$V_{f\,(HCl)}$] of "HCl A.2" because the original volume has been factored out in the equation along with the sample aliquot (S). In Eq. 101A–1, the sample aliquot, S, is digested according to Sections 7.4, 8.1, and 8.2 and the Hg from this digestion is introduced directly into the aeration cell for analysis. A dilution factor is required only if it is necessary to bring the sample into the analytical instrument's calibration range. If no dilution is necessary, then $D.F._{(HCl)\,Hg}$ equals 1.0.

D.F. (HCl blk)Hg=Dilution factor for the HCl-digested Hg-containing solution, ANALYSIS SAMPLE No. "HCl A.2 blank." (Refer to sample No. "HCl A.2" dilution factor information above.)

$V_{f(HCl)}$=Solution volume of original sample, 500 ml for the HCl samples diluted as described in Section 7.3.

10^{-3}=Conversion factor µg/ng.

S=Aliquot volume of sample: digested according to Sections 7.4, 8.1, 8.2 and the Hg from this digestion is introduced directly into the aeration cell for analysis, ml.

S_{blk}=Aliquot volume of blank: digested according to Sections 7.4, 8.1, and 8.2 and the Hg from this digestion is introduced directly into the aeration cell for analysis, ml.

9.2.1 The maximum allowable blank subtraction for the Hg in the HCl washes is the lesser of the two following values: (1) the actual blank measured value (ANALYSIS SAMPLE NO. HCl A.2 blank), or (2) 5% of the Hg content in the combined HCl rinse and digested sample (ANALYSIS SAMPLE No. HCl A.2).

$$m_{(fltr)Hg} = \left[\frac{\left[C_{(fltr)Hg}\ D.F._{(fltr)Hg}\ V_{f(fltr)} \right]}{S_{(fltr)}} - \frac{\left[C_{(fltr\ blk)Hg}\ D.F._{(fltr\ blk)Hg}\ V_{f(fltr\ blk)} \right]}{S_{(fltr\ blk)}} \right] \left(10^{-3}\right) \quad \text{Eq. 101A}-2$$

where:

$m_{(fltr)Hg}$=Total blank corrected µg of Hg in $KMnO_4$ filtrate and HNO_3 digestion of filter sample.

$C_{(fltr)Hg}$=Total ng of Hg in aliquot of $KMnO_4$ filtrate and HNO_3 digestion of filter analyzed (aliquot of ANALYSIS SAMPLE No. A.1).

$C_{(fltr\ blk)Hg}$=Total ng of Hg analyzed in aliquot of $KMnO_4$ blank and HNO_3 digestion of blank filter (aliquot of ANALYSIS SAMPLE No. A.1 blank).

$V_{f(fltr)}$=Solution volume of original sample, normally 100 ml for samples diluted as described in Section 7.3.

$V_{f(blk)}$=Solution volume of blank sample, 1000 ml for samples diluted as described in Section 7.3.

$D.F._{(fltr)Hg}$=Dilution factors, if necessary for ANALYSIS SAMPLE No. A.1, calculated similarly to those above for the (HCl) Hg samples.

$D.F._{(fltr\ blk)Hg}$=Dilution factors, if necessary for ANALYSIS SAMPLE No. A.1 blank, calculated similarly to those above for the (HCl blk)Hg samples.

9.2.2 The maximum allowable blank subtraction for the HCl is the lesser of the two following values: (1) the actual blank measured value (ANALYSIS SAMPLE No. "A.1 blank"), or (2) 5% of the Hg content in the filtrate (ANALYSIS SAMPLE No. "A.1").

$m_{Hg}=m_{(HCl)Hg}+m_{(fltr)Hg}$ Eq. 101A–3

where:

m_{Hg}=Total blank corrected Hg content in each sample, µg.

$m_{(HCl)Hg}$=Total blank corrected µg of Hg in HCl rinse and HCl digestate of filter sample.

$M_{(fltr)Hg}$=Total blank corrected µg of Hg in $KMnO_4$ filtrate and HNO_3 digestion of filter sample.

* * * * *

10. * * *

3. Wilshire, Frank W., J.E. Knoll, T.E. Ward, and M.R. Midgett. Reliability Study of the U.S. EPA's Method 101A—Determiantion of Particulate and Gaseous Mercury Emissions U.S. Environmental Protection Agency, Research Triangle Park, NC. Report No. 600/D–31/219 AREAL 367, NTIS Acc No. PB91–23361.

* * * * *

5. In Appendix B to part 61, Method 101A is amended by revising the second and last sentences of section 7.1.1 and by revising the last two sentences of the first paragraph of section 7.1.2 to read as follows:

Appendix B to Part 61—Test Methods

* * * * *

Method 101A Determination of Particulate and Gaseous Mercury Emissions From Sewage Sludge Incinerators Meth. 101A

* * * * *

7.1.1 * * * In this method, highly oxidizable matter could make it impossible to sample for the required minimum time.* * * In cases where an excess of water condensation is encountered, collect two runs to make one sample, or add an extra impinger in front of the first impinger (also containing acidified $KMnO_4$ solution).

7.2.1 * * * In this method, clean all the glass components (a hood is recommended) by rinsing with 50 percent HNO_3, tap water, 8 N HCl, tap water, and finally deionized distilled water. Then place 50 ml of the acidified 4 percent $KMnO_4$ absorbing solution in the first impinger and 100 ml in each of the second and third impingers.

* * * * *

[FR Doc. 96–9834 Filed 4–24–96; 8:45 am]

BILLING CODE 6560–50–M

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40 CFR Part 63

[FRL–5458–7]

State of Tennessee Request for Approval of Section 112(l) Authority

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: State of Tennessee has applied for approval of its Rule No. 1200–3–11–.08, Emission Standards for Emissions of Radionuclides Other Than Radon From Department of Energy Facilities; and also Rule No. 1200–3–11–.17, National Emission Standard for Radon Emissions From Department of Energy Facilities, under section 112(l) of the Clean Air Act (CAA) as amended November 15, 1990. The Environmental Protection Agency (EPA) has reviewed the State of Tennessee's submittal and has made the decision that the State of Tennessee's Rule No. 1200–3–11–.08 and Rule No. 1200–3–11–.17, satisfies all of the requirements necessary to qualify as a complete submittal. Thus, the EPA intends to take comment on whether the State of Tennessee's Rule No. 1200–3–11–.08 and Rule No. 1200–

federal register

Monday
February 24, 1997

Part II

Environmental Protection Agency

40 CFR Part 51, et al.
Credible Evidence Revisions; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 51, 52, 60 and 61

[FRL-5691-2]

RIN 2020-AA27

Credible Evidence Revisions

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: In an October 22, 1993 Federal Register, EPA solicited public comment on a proposal to amend 40 CFR Parts 51, 52, 60 and 61 to eliminate language that has been read to provide for exclusive reliance on reference test methods as the means of demonstrating compliance with various emission limits under the Clean Air Act ("CAA" or "Act"). These revisions—generally referred to as the "credible evidence" revisions—were designed to clarify that non-reference test data can be used in enforcement actions, and to remove any potential ambiguity regarding this data's use for compliance certifications under Section 114 and Title V of the Act. In the same document, EPA proposed an "enhanced monitoring" rule under Section 114 and Title V. EPA subsequently decided to suspend development of the original enhanced monitoring rule and develop a compliance assurance monitoring ("CAM") approach to serve the same statutory goals as the original enhanced monitoring proposal. Today's rulemaking finalizes the previously proposed credible evidence revisions to Parts 51, 52, 60 and 61. EPA will take final action regarding enhanced monitoring and CAM in a separate rulemaking.

DATES: *Effective Date:* April 25, 1997. *Judicial Review:* Under CAA section 307(b)(1), judicial review of this nationally applicable final action is available only by the filing of a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit within 60 days of today's publication of this rule. Under CAA section 307(b)(2), the regulations that are the subject of today's rule may not be challenged later in civil or criminal proceedings brought by EPA in reliance on them.

ADDRESSES: *Docket.* Supporting information used in developing this rulemaking is contained in Public Docket No. A-91-52. This docket is available for public inspection and copying between 8:00 a.m. and 5:30 p.m. on weekdays, excluding federal holidays, at the EPA Air and Radiation Docket and Information Center, Room M-1500, Waterside Mall, 401 M Street SW., Washington, DC 20460; telephone (202) 260-7548. A reasonable fee may be charged for photocopying docket materials.

FOR FURTHER INFORMATION CONTACT: Gregory Jaffe, Air Enforcement Division (Mailcode 2242-A), Office of Regulatory Enforcement, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, D.C. 20460; telephone (202) 564-2260.

SUPPLEMENTARY INFORMATION: The contents of the preamble are listed in the following outline:

I. Background

A. Statutory and Regulatory Authority

The credible evidence revisions are based on EPA's long-standing authority under the Act, and on amplified authority provided by the 1990 CAA Amendments. Section 113(a) of the Act authorizes EPA to bring an administrative, civil or criminal enforcement action "on the basis of any information available to the Administrator." In this provision, which predates the 1990 CAA Amendments, Congress gave EPA clear statutory authority to use any available information—not just data from reference tests or other federally promulgated or approved compliance methods—to prove CAA violations. (The preamble will generally use the phrase "reference tests" to include all these compliance methods. Where appropriate, the phrase "reference tests" will also include test conditions specified in individual regulations.)

In the 1990 CAA Amendments, Congress included an enforcement title (Title VII) to enhance EPA's compliance and enforcement authorities. Among other things, Congress revised Section 113(e)(1) of the Act to overrule a federal court decision (*Kaiser Steel*, discussed below) that had held that only specified reference test data could prove violations. Thus, although the pre-existing authority of Section 113(a) forms the principal basis for today's action, the credible evidence revisions are also supported by the language, history and intent of the 1990 CAA Amendments. *See also* Section III.C. below.

In addition to clarifying EPA's, states' and citizens' enforcement authorities under the Act, the credible evidence revisions eliminate any potential ambiguity regarding the use of non-reference test data as a basis for Title V compliance certifications. Such potential ambiguity could arise from comparing the draft compliance assurance monitoring (CAM) approach and associated Part 70 changes, which would allow sources to include CAM data as a basis for certifying compliance, with various EPA regulations that could be read on their face to specify reference test methods as the sole means of determining compliance.

B. Benefits of the Credible Evidence Revisions

As a preliminary matter, EPA wishes to clearly state that this rulemaking merely addresses an evidentiary issue. The credible evidence revisions are not intended to and will not serve to affect the stringency of underlying emission standards by amending the nature of the compliance obligation. This rulemaking does not amend existing emission standards nor does it modify generic regulations affecting the compliance obligation such as exceptions for startup, shutdown, and malfunctions. See, e.g., 40 CFR 60.8(c). This regulation also does not designate any particular data as probative of a violation of an emission standard. Rather, this regulation merely removes what some have construed to be a regulatory bar to the admission of non-reference test data to prove a violation of an emission standard, no matter how credible and probative those data are that a violation has occurred. The credible evidence revisions do not affect the compliance obligation and thus do not affect the stringency of existing emission standards. What compliance obligation is imposed by any given emission standard remains an issue ultimately to be determined based on that emission standard and not this rulemaking.

For these reasons, we do not believe that this rulemaking affects whether emission standards require intermittent or continuous compliance. However, as made clear below, and in the detailed response to comments document, EPA's position continues to be that an emission standard requires continuous compliance unless the emission standard specifically provides otherwise.

Today's credible evidence revisions will benefit sources, state environmental agencies, EPA and the public. EPA, states and citizens will be able to use credible evidence to assess a source's compliance status and respond to noncompliance. This will help ensure that the government and citizens alike can respond to sources that are not complying with air pollutant emission standards on an ongoing basis, thus furthering the protection of public health and the environment. At the same time, sources will be able to use credible evidence for contesting allegations of noncompliance in enforcement actions. Accordingly, today's rulemaking exemplifies EPA's "common sense" approach to environmental protection, which encourages smarter, cheaper and more flexible means of achieving environmental goals without compromising the fundamental health and environmental protections provided by federal environmental laws.

In the past, state regulatory authorities and EPA have relied primarily on infrequent on-site inspections and even more infrequent reference tests in order to check compliance with emission limits at major stationary sources. According to a September, 1990, General Accounting Office (GAO) report, these on-site inspections were performed approximately once a year; the reference tests, typically once every five years. "Air Pollution: Improvements Needed in Detecting and Preventing Violations," GAO, No. GAO/RCED-90-155, September 1990, at 12, 19. These methods are inadequate to ensure that sources continuously stay within their emission limits: for example, Pennsylvania officials have estimated that, in comparison with continuous emissions monitoring, on-site inspections may be 50 times less likely to detect non-compliance. *Id.* at 18. Reference tests may not yield a representative emissions picture because the sources typically schedule, set up and run the tests themselves. This allows sources to "fine tune" their operations and emissions control processes prior to the tests, and generate results that may not be typical of day-to-day source operations. *Id.* at 19-20. Reference tests can also be expensive and burdensome: They can cost up to $100,000, and take a week or more to complete. *See, e.g.*, 43 FR 7568, 7571 (1978).

In contrast to the above approach, today's rule will make it clear that various kinds of information other than reference test data, much of which is already available and utilized for other purposes, may be used to demonstrate compliance or noncompliance with emission standards. (The preamble generally refers to this other information as "non-reference test data"). EPA, state agencies and industry routinely rely on many types of information, including engineering calculations, indirect estimates of emissions, and direct measurement of emissions by a variety of means, in order to assess compliance with CAA requirements. Where available, continuous emission monitoring (CEM) data and well-chosen parametric monitoring data, such as the operating temperature and air flow rate of a regenerative thermal oxidizer, generally provide accurate data regarding a source's compliance with emission limits and standards. These data also generally cover a greater percentage of a source's time in operation and are more representative of a source's ongoing compliance status than sporadic performance testing.

Under today's rule both sources and potential enforcers will be put on the same evidentiary footing in an enforcement action. Further, since 1992, EPA's Part 70 operating permit regulations have allowed the use of this data in compliance certifications. Today's action reaffirms this approach, and removes any potential ambiguity regarding the use of such data for this purpose.

Today's action reflects EPA's efforts to make existing regulatory programs work better rather than creating additional requirements. By ensuring greater compliance with existing emissions limits, the credible evidence revisions will help minimize the need for further requirements to achieve air quality goals. *See* the October, 1993, proposal, 58 FR 54654.

C. Public Participation

The final credible evidence revisions were developed with the benefit of insight from many parties that will be affected by the regulations, including State and local air pollution control agencies, large and small industries, trade associations and environmental organizations. Many comments regarding credible evidence issues were received during the development and after the proposal of the original enhanced monitoring rule, in 1991 through 1995. Many additional comments were received after the Agency announced that it was continuing to go forward with the credible evidence revisions in 1996.

To obtain the views of all interested parties at the early stages of developing the enhanced monitoring rulemaking, EPA published a notice in the Federal Register on August 8, 1991, to make available a Public Information Document on enhanced monitoring and to provide notice of a public meeting to be held on August 22, 1991, on the subject (56 FR 37700-37701, August 8, 1991). In response to the public meeting, EPA received many comments which were included in the docket for the proposed regulations.

Over the next four years, EPA held over one hundred informal informational and discussion sessions with representatives of interested organizations to receive their views on enhanced monitoring, as well as a second informational meeting with approximately fifty attendees held on August 12, 1993. Following publication of the proposed enhanced monitoring regulations on October 22, 1993 at 58 FR 54648, EPA conducted a public hearing in Washington, D.C., on November 19, 1993. Testimony was given by twelve individuals, representing industry and environmental organizations.

In addition, during the public comment period, which was first scheduled to close on December 30, 1993, and was extended until January 31, 1994, in response to requests for extension, EPA received comments from a wide variety of interested parties concerning the enhanced monitoring proposal, including numerous comments on credible evidence issues. In the fall of 1994, EPA held a series of informational meetings with interested parties affected by the rule. The Agency then reopened the public comment period on specific issues to solicit additional comments, and held an additional stakeholder meeting. In response to the reopened public comment period, EPA received over 200 additional comment letters.

In April, 1995, EPA announced that it was suspending development of the enhanced monitoring rule while it developed the CAM approach to serve the same statutory goals. In a September, 1995, public draft of the CAM approach, EPA stated that it would hold further discussions with stakeholders before it proceeded to finalize the credible evidence revisions. On March 8, 1996, EPA announced that a public meeting on credible evidence issues would be held on April 2, 1996. To focus the meeting's discussion, EPA released a paper on March 21, 1996, entitled "The Use of Information Other Than Reference Test Results for Determining Compliance With the Clean Air Act" (sometimes referred to as the "Credible Evidence White Paper"). EPA distributed this paper by electronic bulletin board to the same stakeholders who were involved in the enhanced monitoring and CAM rulemakings, further distributed it to various other interested parties, and made it generally available to the public.

The public meeting was held on April 2, 1996, where twenty-three organizations and individuals presented oral statements and written comments. At the meeting, EPA announced that, although the rulemaking docket would not formally be re-opened, additional written comments would be accepted for at least another 30 days. Moreover, EPA stated that it would meet with any interested parties to discuss the credible evidence rules. As a result, many additional written comments have been received, and numerous additional EPA/stakeholder meetings have been held.

Section III of this preamble contains a description of the most significant public comments and EPA's responses to them. Summaries of other public comments on the credible evidence revisions received over the past five years, together with the Agency's responses, are available in the docket in a document entitled "Credible Evidence Revisions: Detailed Response to Comments Document" (referred to in this preamble as the "Detailed Response Document").

II. Summary of Final Rule

The credible evidence revisions consist of various changes to 40 CFR 51.212, 52.12, 52.30, 60.11 and 61.12. These revisions provide minor modifications to existing regulatory provisions to clearly allow for the use of any credible evidence—that is, both reference test and comparable non-reference test data—to prove or disprove violations of the Act in enforcement actions. These revisions make clear that enforcement authorities can prosecute actions based exclusively on any credible evidence, without the need to rely on any data from a particular reference test. The revisions also have the effect of eliminating any potential ambiguity regarding the use of non-reference test data as a basis for Title V compliance certifications. The credible evidence revisions do not call for the creation or submission of any new emissions or parametric data, but rather address the role of existing data in enforcement actions and compliance certifications. As such, today's final action is distinct and separable from the bulk of the proposed enhanced monitoring rule, which addressed new monitoring requirements.

By clearly providing that federally approved SIP test methods or Agency reference test methods are not the exclusive means of establishing noncompliance or compliance, EPA in no way intends to alter the underlying emission standards. The Agency will still use the reference methods for exactly what they are: test methods of reference against which to compare information generated by means other than the reference tests. The National Bureau of Standards maintains a number of standards against which other measuring devices, used in scientific or commercial applications, are calibrated. Similarly, where a SIP, New Source Performance Standard or permit specifies EPA Method 25A, for example, for determining the amount of volatile organic compounds ("VOCs") that are emitted, the "other evidence" that could establish compliance would have to relate to the likely measurement of VOCs that would be obtained by a Method 25A measurement. This could include, for example, consideration of key operating parameters for the facility as correlated with emissions during a Method 25A test.

A. 40 CFR Part 51, § 51.212

Section 51.212(c) is revised to clarify that the inclusion in a state implementation plan (SIP) of enforceable test methods for SIP emissions limits does not preclude enforcement based on other credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test procedures or methods had been performed. This revision does not affect the existing requirements in §§ 51.212(a) and (b) for periodic testing and inspections, and establishment of a system of violation detection and investigation.

The proposed revisions to § 51.212 contained detailed lists of "presumptively credible evidence" and "presumptively credible monitoring methods." After consideration of public comments, EPA has decided to delete these lists because they are potentially confusing and unnecessary. While EPA continues to believe that the listed evidence and monitoring methods are indeed credible, the Agency recognizes that both judicial and administrative tribunals routinely make determinations concerning the admissibility and weight of evidence on a case-by-case basis.

B. 40 CFR Part 52, § 52.12

Section 52.12(c) is revised to clarify that, for purposes of federal enforcement, any credible evidence relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test procedures or methods had been performed may be used to establish whether or not SIP violations have occurred. As with § 51.212 above, EPA has deleted the proposed lists of presumptively credible evidence and monitoring methods for the same reasons stated above. Under today's final action, where an emission limitation specifies a particular monitoring or testing method approved by EPA for use in the SIP to determine compliance, data from such method will continue to be the benchmark against which other emissions or parametric data, or engineering analyses, will be measured. Similarly, where there are no approved SIP methods, the test methods specified in part 60 of this chapter will remain the standard against which other such information will be evaluated.

C. 40 CFR Part 52, § 52.30

Proposed § 52.30(a), which concerned compliance certifications, has been revised in accordance with § 51.212 above, and the same comments apply. The enforcement-related § 52.30(b) is rendered unnecessary by today's final § 52.12(c), which effectively encompasses it. Finally, the entire section has been renumbered as § 52.33.

D. 40 CFR Part 60, § 60.11

Similar to the existing regulation, § 60.11(a) states that compliance with Part 60 standards shall be determined in accordance with the applicable performance tests and performance testing provisions in this part. A new § 60.11(g) clarifies that nothing in § 60.11 precludes the use, including exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed, for purposes of submitting compliance certifications or establishing whether or not a source has violated or is in violation of any Part 60 standard, including opacity standards.

The first sentence in today's final § 60.11(a) has been modified from the proposal. EPA has decided to use mandatory phrasing in the first sentence ("Compliance with standards * * * shall be determined in accordance with the applicable performance tests * * *") as is included in the existing regulation, rather than adopt the permissive language proposed in 1993 ("Compliance with standards * * * may be determined by performance tests * * *). The rationale for retaining this mandatory language is to make clear that, although the regulation is being modified to clarify that it does not establish an exclusive method of determining compliance, the reference tests remain the benchmark against which other emissions or parametric data, engineering analyses, or other information will be evaluated. For similar reasons, EPA included in § 60.11(g) the requirement that evidence or information gathered by other means than the reference tests be "relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed". This phrase means that the evidence or information must bear on whether a facility would have been found to be in compliance, during the time period in question, if the appropriate performance test had been conducted. It does not mean that, to prove a violation occurred, ideal testing conditions, for example the sun light at a certain angle to the tester for an opacity reading, must exist if other credible evidence, such as continuous opacity monitor data, can establish that a violation occurred. These changes have been made in response to comments that EPA's proposal did not give full recognition to the role of reference tests in determining compliance with emission standards. Section 60.11(g) combines the requirements of the proposed subsections (g) and (h) with the exception of presumptions included in those sections which have been deleted. The clarifying language in § 60.11(g) renders unnecessary the previously proposed language in § 60.11(b). Accordingly, the proposed language for that subsection is deleted from today's rule. The proposed changes to subsection (e) have been deleted as unnecessary due to changes to subsections (a) and (g). Finally, § 60.11(f) is revised so as to clarify that it does not countermand subsection (g).

Under today's revisions, information generated from an appropriate and properly conducted test method established under the general provisions of Part 60 or in the applicable subpart will still generally be the best method for determining a source's compliance during the test period. Other emissions or parametric data, or engineering analyses, may be considered if relevant to the results that would have been obtained by the appropriate, properly conducted reference test methods.

E. 40 CFR Part 61, § 61.12

Today's revisions to § 61.12 generally mirror the revisions to § 60.11, largely for the same reasons. Section 61.12(b) remains unchanged from its current promulgated version because credible evidence has always been used to establish violations of these standards.

III. Major Issues

Throughout the development of this rulemaking, various commenters have expressed concerns regarding the proposed rule's potential effects on CAA enforcement, compliance certifications and emissions standards. The most significant of these comments, together with EPA's responses, are discussed below.

A. Use of Credible Evidence in Enforcement Actions

Commenters raised various concerns regarding the potential use of credible evidence in enforcement actions. Some commenters argued that the use of such evidence would be unconstitutional, unprecedented and unfair. Others expressed concern that EPA, states or citizen groups would use credible evidence to bring enforcement actions for insignificant violations. These comments are addressed below.

Industry commenters have argued that the use of credible evidence in enforcement actions would violate sources' constitutional right to due process. Specifically, the commenters argue that EPA must comprehensively identify the precise types of information that can be used as credible evidence, or else sources will not have sufficient "fair warning" regarding potential enforcement. EPA rejects this view. "Fair warning" jurisprudence holds that regulated sources must have adequate notice identifying "the standards with which the agency expects parties to conform." *General Electric Co.* v. *U.S. EPA*, 53 F.3d 1324, 1329 (D.C. Cir. 1995). Today's rule does not establish or alter standards with which sources regulated under the CAA must comply. Rather, today's rule only concerns the evidence that can be used to prove violations of a standard, giving full recognition to the role of reference test methods under the standards. The Federal Rules of Evidence govern the admission of evidence in all federal district court litigation, including CAA enforcement actions, without any discernible constitutional infirmity. Similar evidentiary rules govern federal administrative and state environmental actions. Our legal system provides that a federal or administrative law judge will be the ultimate, independent arbitrator of the evidence's admissibility and credibility.

Credible evidence is far from a new concept in judicial and administrative actions. In private lawsuits such as contract disputes, and in governmental and citizen enforcement actions brought under environmental laws other than the CAA, litigants can and do use a wide variety of information to prove their claims, or to refute the claims of opposing parties. In all these lawsuits, the judge acts as the final, independent arbitrator of what constitutes credible and admissible evidence. Today's final rule addresses problems arising from certain CAA regulations, which predate the 1990 Amendments to the CAA, containing language that has been read to allow only a very limited amount of information, i.e., data from reference test methods, to be used as evidence of violations. As such, the rule merely corrects an anomaly that has been read into these regulations, and brings their potential enforcement into line with that of other CAA requirements such as the "general duty obligations" in 40 CFR 60.11(d) (for NSPS standards) and 40 CFR 61.22(c) (for National Emission Standards for Hazardous Air Pollutants (NESHAPs)), and with other environmental statutes. It should be emphasized that the determination that evidence or information is credible is merely a threshold determination that the evidence or information in question is technically relevant, and therefore, legally admissible in an enforcement action. In light of section 113(a) providing that the Administrator may bring an enforcement action based on "any information", EPA believes that Congress intended this threshold to be a low one.

Industry commenters have also argued that using credible evidence in enforcement actions is unfair because sources will not know what credible evidence may be used against them. EPA believes that this claim lacks merit. This issue is no different in CAA enforcement than in any civil or criminal matter resolved by our nation's courts. Further, EPA disagrees with the notion that sources will likely be faced with an unknown and unlimited array of evidence. To the contrary, with regard to sources subject to Title V permits, EPA generally expects that most if not all of the data that EPA would consider as potentially credible evidence of an emission violation at a unit subject to monitoring under the agency's proposed CAM rule would be generated through means of appropriate, well-designed parametric or emission monitoring submitted by the source itself and approved by the permitting authority, or through other requirements in the source's permit. Sources not subject to CAM should still be readily able to discern the information, for example information about the operation of pollution control devices, that is relevant to their compliance with applicable regulation.

Some industry representatives have expressed concern that the use of credible evidence in compliance determinations will reveal multiple minor violations for which EPA, the states or citizens will bring lawsuits. It is not EPA's intent to foster frivolous lawsuits, and EPA does not expect that such lawsuits will occur as the result of today's action. As EPA explained in the Credible Evidence March 1996 memorandum, EPA generally focuses its judicial enforcement resources on violations that (1) may threaten or result in harm to public health or the environment, (2) are of significant duration or magnitude, (3) represent a pattern of noncompliance, (4) involve a refusal to provide specifically requested compliance information, (5) involve criminal conduct, or (6) allow a source to reap an economic windfall. *See* March 1996 Memorandum, p. 5.

An examination of EPA's judicial enforcement cases over the past few years reveals that EPA has focused its judicial enforcement resources on large, significant cases rather than a large number of relatively minor matters. The Credible Evidence March 1996 memorandum contains several examples that illustrate this point. In contrast, EPA's approach to minor unexcused violations generally has been to exercise prosecutorial discretion and use tools such as notices of violation and administrative compliance and penalty orders. In every case, EPA considers the nature and extent of the violation and all other circumstances surrounding the violation in determining whether and what kind of enforcement response is appropriate. Further, for any type of noncompliance, EPA generally will not bring a federal enforcement action where a state or local permitting authority has taken timely and appropriate action under existing policies to resolve the violations. Finally, for all violations, EPA will apply all other existing specific enforcement policies, such as the May, 1996, *Policy on Compliance Incentives for Small Businesses*, in accordance with their terms. EPA does not intend to use credible evidence to change any of these policies.

EPA has a balanced enforcement program that seeks to assure compliance using the mix of the compliance and enforcement tools available to it. Deterrence is also an overall goal of the program. Judicial enforcement against minor CAA violations generally is a lower enforcement priority, because EPA believes its other enforcement and compliance assistance tools allow it to respond to such violations without the need to file an action in federal court. Accordingly, in considering whether to bring a judicial action, or whether to use some other enforcement or compliance tool, EPA generally takes into consideration such factors as number and duration of the exceedances, harm or risk posed by the exceedance, potential for recurrence, the source's compliance history, and other circumstances surrounding the violation. For example, if a source were installing a new unit subject to an NSPS standard and had some difficulty getting the control equipment to operate properly after the "shakedown" period permitted before the initial performance test (*see* 40 CFR 60.8(a)) but solved the problem promptly after the test, this generally would be a low enforcement priority, absent other circumstances indicating a need for judicial action.

These same general policies regarding EPA's use of judicial and administrative enforcement actions were discussed in Section I.D. of the August 2, 1996, CAM draft approach. Therein, EPA provided various specific examples of circumstances where the Agency was or was not likely to take compliance or enforcement action based on the examination of CAM data.

Finally, the NSPS general provisions and many SIPs generally excuse sources from compliance with emissions limits during periods of startup, shutdown or malfunction. *See* 40 CFR 60.11(c). Some specific NSPS standards additionally excuse sources from compliance during certain operating periods. Exceedances monitored during any of these specifically excused periods are not violations of the emission limit. Moreover, some NSPS standards specify averaging periods for determining compliance and noncompliance. As a result, many short term emissions values when averaged with other values in the relevant averaging period, will not constitute violations. The credible evidence proposal does not change any of these general or specific periods of excused noncompliance, or any averaging periods, or any of their effects on compliance.

Regarding citizen suits, in February, 1996, EPA performed a review of citizen enforcement actions under the Clean Water Act (CWA), and found that citizen enforcers generally do not focus on sporadic, inconsequential violations. This analysis was summarized in the Credible Evidence White Paper, and is included in the Air Docket. Although to date there have been far fewer CAA citizen suits than CWA citizen suits, there have been at least two notable CAA citizen cases involving serious violations: *National Wildlife Federation* v. *Copper Range Co.*, Civil Action No. 2:92–CV–186 (W.D. Michigan), involving one of the largest sources of particulate matter in Michigan's Upper Peninsula, which was emitting particulates at 230 lbs/hour (over five times its permitted limit) and toxic air pollutants including mercury, arsenic, cadmium and lead; and *Sierra Club* v. *Public Service Company*, 894 F. Supp. 1455 (D.C. Col. 1995), involving a power plant that had committed over 19,000 opacity emission violations, which had allegedly affected a nearby wilderness area. Both of these suits were ultimately settled (with the United States an intervenor) for multi-million dollar penalties and significant injunctive relief, including the installation of appropriate pollution controls.

EPA notes that today's rule creates no new rights or powers for citizen enforcers; instead, the rule clarifies existing EPA regulations. Citizens have been free to use credible evidence in Clean Air Act enforcement, and have won at least two court cases using it. *See Sierra Club* v. *PSC*, cited above, and *Unitek Environmental Services* v.

Hawaiian Cement, Civ. No. 95–00723 (D. Hawaii 1996). Also, EPA is aware of no increase in citizen suits in any of the five states—Kansas, Iowa, Nebraska, North Dakota and Georgia—whose SIPs, based on EPA's SIP Call, have specifically clarified that credible evidence can be used for enforcement, or in those states that have credible evidence provisions in other parts of their state law.

Finally, EPA takes this opportunity to further elaborate on certain credible evidence and enforcement issues that were discussed in the August, 1996, draft CAM approach preamble. Therein, EPA explained that "the CAM rule cannot and does not replace a source's obligation to comply with otherwise applicable emission limits." Nonetheless, as a practical matter, "EPA expects that a unit that is operating within appropriately established indicator ranges as part of an approved CAM plan will, in fact, be in compliance with its applicable limits." (*See* draft CAM rule § 64.6(c), which requires that "the ranges shall be established so as to provide a reasonable assurance of compliance with emission limitations or standards for the anticipated range of operations at a pollutant-specific emissions unit.") Such a unit generally will not be an enforcement target. However, if the Agency obtains information that the unit is in fact exceeding its applicable emission limit even though it is operating within its approved indicator ranges, the Agency will consider whether or not to take compliance or enforcement action in accordance with its general enforcement policies. Further, under the CAM approach, the source has such information, it would have to promptly remedy the exceedance and notify the permitting authority and submit a proposed permit modification to correct its CAM monitoring as required under draft CAM rule § 64.3(b)(5).

Under today's rule, the legal burdens regarding the establishment of violations or compliance in an enforcement action are not changed. The means of meeting these burdens will vary in different circumstances. Today's rule provides that where information (such as non-reference emissions data, parametric data or engineering analyses) is equivalent to information generated by reference test methods, the former may be used to establish compliance or noncompliance in an enforcement action. There is no need to establish that every test condition specified in a reference test method has been matched by a surrogate condition in the method used to generate the comparable information. Typically, reference test methods (and any additional test conditions specified in individual regulations) quantify the presence of particular physical attributes—for example, mass or concentration of a chemical or group of chemicals—over a specified period of time. As long as these two elements—quantification and specified time period—are retained and the data from the alternate method is related to the reference test, information generated by alternate methods yield data bearing on what the results of a reference test would have been, and the use of such information to establish compliance or noncompliance in an enforcement action will not affect the stringency of the underlying standard. Of course, non-reference data that is already quantified in the same units as the underlying standard, e.g., emissions data generated by properly operating and calibrated non-reference CEMs, should generally be comparable to reference test data, with all specified averaging periods still applying.

For example, Method 9, the NSPS reference method for opacity, requires that a trained visible emissions observer (VEO) view a smoke plume with the sun at a certain angle to the plume in order to properly illuminate it. In contrast, a continuous opacity monitor (COM) contains a calibrated light source that provides for accurate and precise measurement of opacity at all times. Notably, EPA uses COM data to certify and re-certify the credentials of VEOs under Method 9. Accordingly, since a comparable light source is provided by a COM, if COM data were offered in an enforcement action to prove or disprove opacity violations, there would be no need to establish that the sun was shining during the period the COM data was collected. Where a reference test method or test requirements in an individual regulation include plant operating conditions, e.g., a requirement that testing be conducted at a specified percentage of maximum plant capacity, this does not mean that the underlying standard applies only when the plant is operating at that capacity or that the "other information" would have to show that the plant was operating at the specified capacity during the period that the other "credible evidence" was obtained.

Where a party seeks to introduce other sorts of information in an enforcement action, for example, expert testimony as to whether a unit was able to meet its emission limit based on the operation or nonoperation of its control equipment during the period of alleged violation, the information would still need to be relevant to reference test data in the sense that it must be related to reference test data in some fashion. In the expert testimony example, this might be accomplished by a qualified expert opinion that a reference test would have demonstrated noncompliance in these same circumstances. Finally, where general burdens of proof for the proponent of this information are reduced through statutory provisions or other means, the same reduced burdens will apply in circumstances where EPA uses non-reference test data to assert noncompliance. *See, e.g.*, CAA section 113(e)(2).

B. Use of Credible Evidence in Compliance Certifications

Some commenters argued that today's final action will create new uncertainties and burdens for sources, because sources will not know what information they must consider before certifying compliance with Title V permit requirements. Previously, these commenters argue, sources would have needed to consider only the results of any specified reference tests, whereas under the credible evidence revisions almost any information could be potentially relevant to determining compliance. Thus, as a practical matter sources would need to "go through every file drawer" and examine a great deal of additional information before certifying compliance. Even then, sources would not know whether they had reviewed all compliance information that was potentially credible. According to some commenters, even if the source determined its compliance using a reference method, the source would still be uncertain as to whether it could certify compliance during that period, because other contemporaneous information might still indicate noncompliance. Still other commenters argue that allowing a broad array of information to be considered in compliance certifications would render the certification requirement void for vagueness.

At the outset, EPA notes that today's action merely eliminates any potential ambiguity or conflict between Parts 51, 52, 60, and 61 and Part 70 regarding the ability of sources to use non-reference test data in compliance certifications. Consistent with the congressional intent reflected in Title V and section 114(a)(3), Part 70 already contemplates use of non-reference test data in compliance certifications. There are other pending rulemakings—specifically, pending actions involving the CAM approach and Part 70—that are proposing to modify existing Part 70 requirements to provide additional detail as to what information sources must consider when certifying compliance. Nothing in these rule revisions is meant to specify what degree of correlation there must be between CAM monitoring data and emissions violations or compliance certifications; rather this issue will be discussed in the CAM rulemaking.

In addition, EPA believes that the commenters have greatly exaggerated the purported uncertainties and burdens in certifying compliance under Part 70 and notes that facilities routinely determine their compliance with numerous statutory or regulatory obligations without government imposed "checklists." Under Title V, the source's substantive CAA obligations (i.e., the source's applicable requirements) are clearly set forth in the source's CAA operating permit.

Contrary to the commenters' claims, sources that are certifying compliance using properly conducted continuous reference methods may generally certify compliance based solely on the continuous reference method data, although naturally such sole reliance would be inappropriate in the face of obvious contrary information or fraud as discussed below.

Of course, if a source becomes aware of other material information that indicates that an emission unit has experienced deviations (as that term is defined in the draft CAM approach) or may otherwise be out of compliance with an applicable requirement even though the unit's permit-identified data indicates compliance, the source must consider this information, identify and address it in the compliance certification, and certify accordingly. This ensures, among other things, that sources will not certify compliance in circumstances where doing so would constitute a violation of CAA section 113(c) and 18 U.S.C. Section 1001, which prohibits sources from knowingly making a false certification or omitting material information, or a violation of other prohibitions on fraud. EPA emphasizes, however, that its purpose here is to make clear that sources may not ignore obvious relevant information. EPA does not view compliance certification requirements as imposing a duty on the source to search out and review every possible document to determine its relevance on the issue of the source's compliance.

Following on the above discussion, the Agency takes this opportunity to restate that while a Title V permit can include a "permit shield" protecting it from allegations that it has failed to satisfy CAA *monitoring* requirements, such shield does not relieve the source of its obligation to comply with the underlying emission limits or other applicable requirements being monitored. In other words, even where a source receives a "shield" providing that the monitoring provisions set forth in its Title V permit constitute compliance with all monitoring requirements of the CAA, the source would not be shielded from allegations of noncompliance with the underlying substantive requirements (e.g., emission limits) being monitored even if the source's required monitoring failed to detect the violation. *See also* the October, 1993, proposal, 58 FR 54678.

Industry commenters argued that allowing credible evidence in Title V compliance certifications would render the certification requirement constitutionally void for vagueness. According to these commenters, reference test methods are necessary to define, in a consistent and reproducible manner, the level of performance that constitutes compliance; without a reference method, an emission limit would be incomplete. As discussed above, EPA in no way intends to eliminate reference tests or to alter their methodology. Instead, these tests, performed as specified under EPA and state regulations, will remain the benchmark against which to compare other emissions or parametric data, or engineering analyses, regarding source compliance.

Finally, numerous commenters argued that allowing credible evidence in compliance certifications and enforcement actions would disrupt the Title V permit process and cause substantial delays in the issuance of these permits because local permitting authorities would have to adjust many of the sources' emission limits, which the commenters contend were not intended to be complied with continuously. Such Title V gridlock could occur only if today's action in fact changed the stringency of emission standards.

C. EPA's Authority To Promulgate the Credible Evidence Revisions

1. Statutory Authority

Today's rulemaking and related SIP call are based primarily on EPA's existing authority prior to the 1990 CAA Amendments. Section 113(a) of the Act authorizes EPA to bring an administrative, civil or criminal enforcement action "on the basis of any information available to the Administrator." This provision provides the Agency with clear statutory authority to use any available information to prove violations of requirements under the Act, and demonstrates that Congress did not intend to limit EPA to using reference test method results in bringing enforcement actions. The language of Section 113(a), together with the fact that the Act nowhere prohibits the use of information other than reference test results to prove violations, indicates that the Act does not limit the use of any information to prove a violation. Therefore, by law the Agency is limited only by general evidentiary rules in what it can use to prove a violation alleged in an enforcement action.

2. The Kaiser Steel Decision Does Not Constrain EPA's Authority To Amend Its Regulations

Although the Act sets no inherent limits on EPA's authority to use any type of information to prove a violation, some EPA regulations provide for specific test methods for determining compliance and have been read by some to constrain EPA's enforcement authority. In *United States* v. *Kaiser Steel Corp.*, No. CV–82–2623 IH (C.D. Cal. Jan. 17, 1984), the district court construed the language of EPA's regulations at 40 CFR 60.11 as limiting the admissible evidence of violations of opacity standards to observations utilizing Method 9, the opacity reference test method. Thus, when the Agency attempted to use expert testimony pertaining to opacity to prove the existence of violations without Method 9 test data, the court rejected the evidence and held that EPA could prove violations only on those days where the Method 9 test was conducted. This decision—which interpreted only EPA's existing regulations, not the Act—was specifically overruled by Congress in the 1990 CAA Amendments. Today's rulemaking is intended to clarify that EPA's regulations do not constrain EPA to using reference tests to prove a violation of an emission standard. Rather, EPA retains its full authority under Section 113(a) to use "any information" as the basis for an enforcement action.

3. Despite Commenters' Claims, Clean Air Act Case Law Does Not Mandate Exclusive Reference Tests

At least one commenter has asserted that the decision in *Portland Cement Ass'n* v. *Ruckelshaus*, 486 F.2d 375, 399 (D.C. Cir. 1973), *cert. denied*, 417 U.S. 921 (1974), stands for the proposition that CAA emission standards may be enforced only through an exclusive reference test method. First, the commenter relies on the court's ruling that a reference test method must make measurements with "reasonable accuracy" and be "objective." 486 F.2d at 401 & n. 103. Second, the commenter cited the court's concern with deviations between sampling methods used in gathering data to set an emission standard and sampling methods used in reference methods. The court stated that "a significant difference between techniques used by the agency in arriving at standards, and requirements presently prescribed for determining compliance with standards [i.e., the reference method], raises serious questions about the validity of the standards." 486 F.2d at 396. EPA disagrees with this reading of *Portland Cement*.

These holdings, individually or together, do not support the conclusion that violations of an emission standard may only be demonstrated by an exclusive reference method. The court's statements regarding the reliability of reference methods were made in context of a challenge to an opacity standard. The industry petitioner argued that testing compliance with that standard, inspector observations, is inaccurate and therefore arbitrary. The court agreed that the evidence called the reliability of inspector observations into question and remanded to EPA for it to determine if there was a way to measure compliance with the standard with "reasonable accuracy." In no way did the court imply that the opacity standard had to have an exclusive reference test but simply rejected the test EPA proposed to use as insufficiently supported.

The *Portland Cement* court's discussion of a compliance method that differed from the test method used to develop the standard also lends no support to the conclusion that an exclusive test method is required. It is true that the court mentioned reference methods "outlined by regulation." However, the mere description of an agency practice (here, the inclusion of a reference test in a regulation setting an emission standard) does not transform that practice into a statutory requirement. Moreover, the thrust of the court's remarks was to caution EPA that, where EPA has established by regulation a reference method for sources to demonstrate compliance, the best data EPA can put forth to show that a standard is in fact achievable is data generated by the reference method. The D.C. Circuit, however, has specifically rejected the assertion that standards can only be supported by reference test data. *See National Lime Ass'n* v. *EPA*, 627 F.2d 416, 446, fn.103 (D.C. Cir. 1980). None of this, thus, supports the commenter's claim that a standard's supporting data must be generated using the reference method, and its supposed corollary that only reference method data can be used to enforce the standard, especially where, as here, that other information must be related back to a reference test method. At best, the commenter's arguments would apply only in the context of an original standard-setting, where an emission limitation or other standard newly promulgated by EPA was being challenged on the basis that the standard's supporting data was inadequate. Today's rule sets no new emission or work-practice standards, and amends no existing ones.

Thus, the commenter is mistaken. Neither of the two passages in *Portland Cement* cited by the commenter address whether exclusive reference tests are necessary, much less mandate establishment of such tests. Further, EPA regulations are inconsistent with the exclusivity argument of the commenter. For example, section 60.8(a) of Title 40 of the CFR provides a whole string of circumstances under which a source can alter or completely replace the reference test required by the regulation. Finally, today's final action regarding the use of non-reference test data in enforcement is fully consistent with the court's requirement that reference testing be conducted in a nonarbitrary manner.

4. The 1990 CAA Amendments Further Support EPA's Authority

Various provisions of the 1990 CAA Amendments provide additional support for EPA's position that reference tests are not the exclusive means of proving violations. As noted above, Congress specifically reversed the *Kaiser Steel* decision in Section 113(e) of the Amendments by providing that the duration of a violation may be established "by any credible evidence (including evidence other than the applicable test method)." The legislative history for this provision shows that Congress meant to clarify that in an enforcement action courts are not restricted to reference test method data, but may consider any evidence of violation or compliance admissible under relevant evidentiary rules. *See* S. Rep. No. 228, 101st Cong., 1st Sess. 1, 358 (1989) ("Senate Report"), *reprinted in* 1990 U.S. Code Cong. & Admin. News 3385, 3741 ("Reprint").

Other provisions of the 1990 CAA Amendments also evidence Congressional intent that reference test methods should not be used as the exclusive means for assessing compliance with CAA emission limits. Most pointedly, the requirements in Section 114(a)(3) for enhanced monitoring and for compliance certifications based on a determination of whether compliance was continuous or intermittent presumes that data other than reference tests would be used for these purposes. As explained in the October, 1993, proposal, the use of non-reference test data is also consistent with the monitoring, compliance assurance, and compliance certification requirements in Sections 504(a), 504(c), and 503(b)(2) of the Act. *See* 58 FR 54649–50. In addition, Section 504(b) of the Act grants discretionary authority to the Administrator to prescribe procedures and methods for monitoring, and provides that continuous emission monitoring systems need not be required "if alternative methods are available that provide sufficiently reliable and timely information for determining compliance." In sum, Congress' repeated emphasis on providing reliable and timely compliance information is inconsistent with the notion that only data from infrequently performed reference tests is relevant to compliance certifications and enforcement actions.

5. Commenters' Attempts To Narrow the Scope of Sections 113(e) and 113(a) Are Unpersuasive

Several industry commenters have claimed that the legislative history of the 1990 CAA Amendments shows that section 113(e)(1) does not provide authority for today's final action. Additionally, these commenters have asserted that the section's legislative history upon which EPA has relied is ambiguous.

In the October, 1993, proposal, EPA cited to the Senate Report's discussion of Section 113(e)(1). The Senate Report stated:

> This title of the bill enhances the ability of the Environmental Protection Agency * * * by making clear that the Agency may rely upon any credible evidence of violations in pursuing alleged violations.

Senate Report at 358, Reprint at 3741. The Report further explained:

> [T]he amendment clarifies that courts may consider any evidence of violation or compliance admissible under the Federal Rules of Evidence, and that they are not limited to consideration of evidence that is based solely on the applicable test method in the State implementation [plan] or regulation. For example, courts may consider evidence from continuous emission monitoring systems, expert testimony, and bypassing and control equipment malfunctions, even if these are not the applicable test methods. Thus, this amendment overrules the ruling in *United States v. Kaiser Steel Corp.*, No. 82–2623 (C.D. Cal. January 17, 1984) to the extent that

> the court in that case excluded the consideration of such evidence.

Senate Report at 366, Reprint at 3749. Finally, the Report notes that data from enhanced monitoring and compliance certifications "will facilitate enforcement, due in part to the fact that such data and certifications can be used as evidence." Senate Report at 368, Reprint at 3751.

The commenters, in turn, rely on the views of Senator Chafee regarding S. 1630, inserted into the Congressional Record at the time the legislation was introduced. Senator Chafee stated with regard to Section 113(e)(1):

> Subsection 113(e) also clarifies and confirms that once EPA establishes evidence of a violation using a formal test method, EPA can use other credible evidence to prove additional violations, or that violation has continued.

135 Cong. Rec. S 9650, 9655 (August 3, 1989).

EPA believes that the best reading of the legislative history still supports its interpretation of Section 113(e)(1). First, there is no ambiguity in the Senate Report, the language of which unreservedly supports enforcement actions brought on the basis of non-reference test data. Second, EPA does not believe that Senator Chafee's floor statement outweighs the clear statement in the Senate Report. The Senate Report is a more authoritative reflection of congressional intent than a floor statement produced at the beginning of the legislative process.

Various commenters also objected to EPA's reliance on Section 113(a) as a basis for today's action. One commenter argued that Section 113(a) does not preempt regulatorily specified reference test methods. Several commenters asserted that EPA's construction of Section 113(a) would render superfluous the new language in Section 113(e)(1) concerning credible evidence. These commenters claim that, under EPA's interpretation of Section 113(a), Congress could have "fixed" the *Kaiser Steel* decision simply by clarifying the scope of EPA's authority under Section 113(a).

These various commenters have misunderstood EPA's interpretation of Section 113(a). EPA has not asserted that Section 113(a) preempts reference test methods. Rather, EPA believes that Section 113(a) provides authority to amend current regulations to make clear that data from reference test methods are not the exclusive means of establishing noncompliance or compliance in enforcement actions. Given this interpretation of Section 113(a), Congress's passage of Section 113(e)(1) cannot be described as superfluous—particularly in light of the decision in *Kaiser Steel.*

6. EPA Can Promulgate the Credible Evidence Revisions Without Reproposal

Several commenters have argued that finalization of the proposed changes in Parts 51, 52, 60 and 61 without first reproposing those changes violates the Administrative Procedure Act (APA), the CAA, and due process. The commenters' main argument is based on EPA's presumed change in course on implementing the requirement in Section 114(a)(3) concerning enhanced monitoring and compliance certification. As noted above, the changes to Parts 51, 52, 60 and 61 were proposed in the same rulemaking that proposed an enhanced monitoring and compliance certification program. Since that proposal, EPA has re-evaluated its approach to enhanced monitoring and has made publicly available and has sought comment on a revised approach—the CAM approach—for satisfying the same statutory goals as the original enhanced monitoring proposal. Some commenters contend that switching to CAM will fundamentally change their view of the proposed changes to Parts 51, 52, 60 and 61 because those proposed changes were evaluated only in terms of how they would be implemented under the October, 1993, proposal on enhanced monitoring. Until CAM is formally proposed, these commenters assert, they cannot give meaningful comments on the credible evidence revisions. Further, the commenters argue that the proposed revisions provided insufficient notice and opportunity to comment because EPA has not adequately defined the term "credible evidence."

EPA believes today's rule has no procedural infirmities. EPA is today finalizing the enforcement-related portions of the proposal it made in 1993 with only minor changes.

The commenters' claim that they cannot meaningfully comment on credible evidence revisions prior to proposal of the CAM approach is not well-taken for two reasons. First, EPA does not believe that any knowledge of the draft CAM approach is necessary to comment on today's rulemaking. In today's final rule, EPA has removed any presumptions regarding the credibility of any specific data. If and when the draft CAM approach is finally adopted, CAM data will be treated under today's rule like any other potential source of compliance information. Thus, knowledge of the draft CAM approach is not critical to commenting on this rulemaking. In any event, the nature of the draft CAM approach has been generally available in some detail since September, 1995—well before EPA renewed its request for comment on today's rulemaking. Further, EPA has sought and received additional comment on the enforcement consequences of the draft CAM approach by distribution of a revision of the CAM approach in August, 1996. The revised approach specifically discussed the relationship of the draft CAM approach and today's action.

Second, the October, 1993, proposed rulemaking gave interested parties sufficient notice of the issues raised by the proposed changes to Parts 51, 52, 60 and 61. The Agency made clear that these revisions were designed to remove any potential ambiguity regarding the use of enhanced monitoring data in compliance certifications, and to clarify that any credible evidence of a violation of an emission standard was admissible to prove (or disprove) such a violation. *See* 58 FR 54677. To clarify that these credible evidence revisions extended beyond the data gathered under an enhanced monitoring program, EPA gave two specific examples of evidence collected outside the enhanced monitoring program that under the revised regulations could be used to prove a violation. *See* 58 FR 54676–54677. Thus, the October, 1993, proposal clearly put interested parties on notice that the credible evidence revisions were not merely an adjunct to the enhanced monitoring program. In fact, industry commenters on the October, 1993, proposal clearly understood the central issue posed by the proposed credible evidence changes, and they commented on it extensively. Today's final action promulgates revisions to *existing* regulations, and are not contingent upon *future* promulgation of the CAM approach or any other form of enhanced monitoring requirement.

Neither is this rulemaking procedurally deficient for not providing an express regulatory definition of the term "credible evidence"—a term which Congress itself inserted, without definition, into the Act. The issues of credibility, admissibility and weight of evidence have been exhaustively addressed by federal and state court evidentiary rules regarding evidence, and the thousands of cases decided under them. Today's final action defers to those regulations and makes clear that there are no bars in regulations under the CAA which prevent the use of evidence or information other than reference test methods in compliance certifications and enforcement actions. Of course, in judicial enforcement proceedings, what evidence is credible and admissible will be determined by the court taking into account how the evidence was gathered and the specifics of the emission standard and any associated reference method.

Finally, EPA believes that it has taken extensive steps, detailed in Section I.C. above, to ensure that the concerns of affected parties were fully aired. None of the additional public outreach actions that EPA undertook in 1996 were required by the APA or the CAA; instead, EPA undertook them voluntarily to ensure full input by interested parties regarding the credible evidence rules.

D. Stringency

Industry commenters have presented several arguments in support of their position that this rulemaking requires sources to be in continuous compliance and thus would effectively increase the stringency of underlying requirements, including SIP limits and standards established by EPA under the NSPS and NESHAP programs.

EPA believes that industry's arguments on this point are fundamentally wrong. It is not EPA's intent that these rules should increase the stringency of any applicable requirement. These rules do not do so because they maintain the focus of the compliance determination on whether or not the appropriate reference test would have shown a violation.

The commenters' arguments regarding increased stringency are as follows: applicable requirements are accompanied by specified reference tests. Any departure from past practice regarding the use of these tests, including the use of other credible information to directly assess compliance, particularly on a more frequent basis, will inevitably change the results of an inquiry into the compliance status of any source compared to exclusive reliance on the infrequent performance of the reference tests. Therefore, industry argues, using credible evidence would change the underlying applicable requirements—usually in a manner that makes them more stringent—without going through the necessary rulemaking procedures.

Industry's argument hinges on the premise that adoption of an emission standard that includes a particular form of reference test—one that is not required to be performed continuously as a matter of course—limits the compliance obligation. The scope of the compliance obligation is not at issue in this rulemaking. The scope of the compliance obligation prescribed by any particular standard shall be based on the emission standard and not this rulemaking. However, to fully respond to industry comments, and to give notice of the position EPA will take in future enforcement proceedings, EPA believes it is necessary to address in some detail the nature of the compliance obligation under emission standards with particular emphasis on the compliance obligation as it pertains to emission standards which have a reference test method that is not required to be performed continuously.

While the bulk of the commenters' concerns were expressed with respect to NSPS, the same concerns also apply in most cases to NESHAPs and SIPs. Likewise, EPA's responses focus on NSPS, but are generally applicable to other emissions limits as well.

1. Emissions Limits Require Continuous Compliance (Consistent With Any Averaging Times) Except During Periods Where Compliance Is Specifically Excused

To resolve commenters' claims of increased stringency, the nature of the compliance obligation facing owners and operators of sources of air pollution under the Act must be addressed. Under the CAA, its regulations, and the case law, a source's compliance with emission limitations must be continuous (consistent with any averaging times) except where a particular emission standard specifically provides for periods of noncompliance.

The Statute. The Clean Air Act defines the terms "emission limitation" and "emission standard" as meaning "a requirement established by the State or the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a *continuous* basis * * *." CAA section 302(k) (emphasis added). In accordance with this clear statutory statement, the Act authorizes penalties for multiple days of violation should a source fail to meet its continuing obligation. *See also* CAA sections 113(e)(2) (providing that "a penalty may be assessed for each day of violation," and establishing a presumption of continuing violation if certain conditions are met) and 113(e)(1).

CAA Regulations. The Act's general requirement of continuous compliance is mirrored in the NSPS regulations, which generally require that sources comply with established emission limits except during certain defined time periods. NSPS provisions typically specify that compliance with stated limits is required "on and after the date" of an initial performance test conducted in accordance with 40 CFR 60.8. *See, e.g.*, 40 CFR 60.502. The need for continuous compliance is also discussed in the preambles to numerous NSPS, including many older ones. For example, in proposing standards for glass manufacturing plants (Subpart CC), EPA stressed the need for effective monitoring to assure that affected facilities are "continuing to maintain the emission reduction observed during the performance test." 48 FR 50670, 50675 (1983). EPA has also made this point clear in publicly-available guidance memoranda. *See* Detailed Response Document at Section 4.

In addition to requirements for continuous compliance, NSPS regulations also typically contain specifically excused periods of noncompliance. These periods confirm that compliance is required at other times. They also confirm the basic reasonableness of this compliance scheme—that is, sources must generally comply continuously with their numerical emission limits, but not during periods of specifically excused noncompliance, and only in accordance with any specified averaging periods. For example, for many standards, compliance is not required during periods of startup, shutdown or malfunction. This exception is contained in the NSPS general provisions and in individual standards. *See* 40 CFR 60.8(c); *see also, e.g.*, 40 CFR 60.46a.

Case Law. In various judicial decisions, courts have approved of the basic NSPS regulatory scheme of continuous compliance accompanied by limited, specified exceptions for noncompliance. The courts have stated that the specified exceptions are needed because sources must comply at all other times. *See, e.g., Portland Cement*, 486 F.2d at 399 (court noted EPA's then-proposed "startup, shutdown and malfunction" compliance exclusion regulation with approval, suggested that it was a "limited safety valve" and stated that it imparts a construction of "reasonableness" to the standards as a whole and adopts a more flexible system of regulation that can be had by a system devoid of "give"; (*Essex Chemical Corp.* v. *Ruckelshaus*, 486 F.2d. 427, 433 (D.C. Cir. 1973), *cert. denied*, 416 U.S. 969 (1974) (in a challenge to sulfuric acid plant and coal-fired steam generator NSPS standards, the court again noted with approval the proposed start-up, shutdown and malfunction exception and remanded the rule stating that "such variant provisions appear necessary to preserve the reasonableness of the standards as a whole and that the record does not support the "never to be exceeded" standard currently in force") (emphasis added); and *Bunker Hill Co.* v. *EPA*, 572 F.2d 1286, 1301–02 (9th Cir. 1977) (in challenge to SIP sulfur dioxide standard, court observed that EPA regulations required that the standard be met "all of the time," and thus EPA must typically promulgate upset provisions to excuse noncompliance beyond the source's control). Similarly, the proposition that compliance must be continuous is reflected in numerous judicial decisions involving challenges to various NSPS rulemakings. In these cases, both the D.C. Circuit Court and industry petitioners have emphasized that for an emission standard to be achievable it must be able to be continuously complied with over wide operating ranges at varied facilities. *See, e.g., Portland Cement, Essex Chemical, National Lime*, and *Sierra Club* v. *Costle*, 657 F.2d 298 (D.C. Cir. 1981). In *National Lime*, for example, the lime industry's trade association itself complained that the data underlying the promulgated numerical emission standards were insufficient to show that the standards were "in fact achievable on a continuous basis." 627 F.2d at 430. In holding that EPA had not adequately demonstrated the achievability of the standards for the industry as a whole, the court explained that "to be achievable, we think a uniform standard must be capable of being met under most adverse conditions that can reasonably be expected to recur . . . ." *Id.* at 431. In *Sierra Club* v. *Costle*, various electric utility companies challenged a particulate standard on the basis that "the data reflect only short term performance while the standard requires long term continuous compliance." 657 F.2d at 377 (emphasis added). This challenge was rejected by the court based on data showing that certain sources had "consistently complied with the standard." *Id.* at 382.

2. Commenters' Advocacy of Noncontinuous Compliance Would Lead to Numerous Anomalies

Some industry commenters have argued that numerous emissions limitations do not require continuous compliance or, alternatively, that "continuous" does not have the straightforward meaning suggested above. The commenters' argument centers on NSPS standards issued under CAA section 111. In the commenters' view, many such standards do not contemplate that facilities will operate in compliance on a continuous basis with stated emissions limits, but rather require only an initial demonstration of compliance with stated limits upon start-up or shortly thereafter. After an initial performance test, continuous compliance is required only with respect to operation and maintenance "in a manner consistent with good air pollution control practice" as specified in 40 CFR 60.11(d). As to numerical emissions limits, commenters suggest that these must be met only on those infrequent occasions that a subsequent performance test is conducted. So long as any such performance test is passed, the source is in "continuous" compliance with numerical emissions limits without regard to whether its emissions in fact exceeded the numerical limit during the time between the tests, no matter how long that may be.

EPA rejects this view of the nature of the obligation to comply with NSPS and other emission limits under the CAA. *See* Detailed Response Document. EPA and the courts have long held that emission limits must be complied with continuously, consistent with any associated averaging periods, except where a particular limit provides otherwise. Adopting the commenters' view of compliance would lead to numerous anomalies.

In the April 2, 1996, public meeting and in follow-up written comments, several commenters argued that many reference test methods were selected specifically because they would only be performed infrequently—for example, on a yearly basis. These once a year tests would be proper for their associated emission standards, which in the commenters' view were intended to be complied with only 95% of the time. Specifically, performing a reference test once a year would yield "acceptable" compliance results, because on average a source would be found out of compliance only 5% of the time—that is, in one in twenty tests, or once every twenty years. According to these commenters, testing for compliance more frequently would be unfair, because it would increase the likelihood that the source would be found out of compliance during periods where the standard itself contemplated noncompliance. In order to avoid being found in noncompliance, sources would have to continuously stay below their emission limits—which in these commenters' view would effectively increase the stringency of the emission standard.

EPA disagrees with the commenters' notion that sources must meet their legal numerical air emission limits only seldomly. Further, EPA rejects as inconsistent with the Act and its underlying purposes the notion that sources can somehow be in routine "compliance" without staying within these limits on an ongoing basis. The fundamental goal of the CAA and the emission standards established under it, is to achieve clean air. Moreover, many emission standards, such as hazardous air pollutant standards under Section 112 and emission standards in State Implementation Plans designed to implement national ambient air quality standards, have a direct relationship to the protection of human health. Routine compliance with numerical emission standards is critical to achieving this goal. The commenters' view that such compliance is somehow not required would completely undercut these public health and safety goals.

If the commenters' view was correct, any EPA or state targeting of a specific source by requiring the source to perform more frequent reference tests would be unfair and presumably illegal, because any such increased frequency in reference testing would destroy the delicate balance of frequent noncompliance and infrequent testing that the commenters claim is contemplated by the rules. Under this view, EPA and states might not be able to require an apparently violating source to conduct a previously unscheduled reference test, because it would improperly raise the source's chances of being found in noncompliance and thereby "increase the stringency of the underlying standards."

The commenters" argument is also inconsistent with the language, structure, and purpose of the CAA. For example, if the frequency of testing must be limited to meet the intent of the emission limits, to be fair to all sources EPA's regulations should have required that the tests be performed only at infrequent intervals. EPA's rules contain no such restrictions; rather, CAA section 114(a)(1)(D) grants EPA broad discretion to order reference tests whenever the Administrator deems it appropriate. Moreover, commenters" argument is inconsistent with CAA section 113(e)(1), which even on its narrowest reading (note that EPA's reading is considerably broader) specifically provides for use of non-reference test data to prove continuing additional days of violation after an initial violation is established by reference test data, and by CAA section 113(e)(2), which establishes a presumption of continuing violation after notice of the violation has been given to the source, provided that EPA can make a prima facie showing that "the conduct or events giving rise to the violation are likely to have continued or recurred past the date of notice." This presumption continues until the violator "establishes that continuous compliance has been achieved."

Likewise, sections 114(a)(3) and 504(a)-(c) regarding enhanced monitoring and certification as to whether compliance is continuous or intermittent, and prompt reporting of deviations, are simply inconsistent with a regulatory regime that would require only occasional demonstrations of compliance with emission limits. Taken together, these provisions, represent a fundamental statutory rejection of the commenters' argument. *See* Detailed Response Document, Section 4, which discusses other reasons why these comments are without merit.

3. Comments Regarding Continuous Compliance Are Not Directed at Today's Action, but Rather at Underlying Emission Standards

Industry commenters have argued that the quality and quantity of the data used in establishing emissions limitations, such as those under the NSPS and NESHAP programs, reflect a conscious decision by EPA that compliance with such standards would need to be demonstrated only periodically. It follows that requiring continuous compliance with stated limits at this juncture would effectively increase the stringency of the standards. As discussed above, EPA believes that the commenters' general arguments strain common sense. Commenters have pointed to various NSPS standards to support their views, but EPA finds these examples unpersuasive.

In particular, commenters have pointed to the NSPS for kraft pulp mills, 40 CFR Part 60, Subpart BB, and for steam electric generators constructed between 1971 and 1978, Subpart D, as reflecting a general acknowledgment by EPA that national standards need not be complied with at all times. EPA believes that, to the contrary, Subparts BB and D and other cases demonstrate that where EPA intended to allow affected sources to exceed stated emissions limits, the standards in question expressly so provide. It is true that in the development of some NSPS and NESHAP standards, EPA was concerned with the limited number and distribution of test runs and the inherent variability in levels of emissions from even well-controlled facilities. Where appropriate, EPA addressed those concerns by adjusting the numerical value of the standard, providing excess emissions allowances and provisions for noncompliance during certain upset conditions, or through changes in averaging times. With other standards, EPA did not provide for any departure from the general requirement that compliance must be continuous. Examples of all these approaches, and specific responses to comments regarding Subparts D and BB, are provided in the Detailed Response Document.

The commenters' assertions that sources cannot comply on a continuous basis are really directed not to the propriety of today's rules, but rather to the adequacy of the underlying NSPS and other emission standards that are not at issue in this rulemaking. To the extent there is any documentation that a well-run facility cannot comply consistently with underlying national emission standards, or applicable SIP requirements, such documentation would be relevant only to those existing standards, not to today's rule. EPA notes that despite several requests to commenters to identify any standards that cannot be complied with on a regular basis, no specific information has been provided to this rulemaking docket that demonstrates that well operated and maintained facilities employing pollution control technologies of the types upon which the underlying emission standards were based cannot comply with those standards on a continuing basis. The most that was submitted was a statistical re-analysis of the data relied upon by EPA in promulgating several emission standards and a one page graph purporting to show that an industrial boiler could not comply with the NO_X emission limit at low levels.

The agency has considered this comment concerning the Subpart D NO_X standard carefully, as it does not intend to impose requirements that are impossible for well-designed sources to meet, but believes that this concern is largely theoretical. The information provided by the commenter to EPA was vague and did not prove that the undisclosed source could not comply with the emission standard. Further, if a standard was impossible to achieve under some circumstance, EPA and citizens are not likely to bring enforcement cases in such instances. In reviewing CAA enforcement actions the agency has been unable to identify any case where either the agency or a citizen sought to enforce a standard that was impossible to achieve. The agency was also unable to identify any case in which a defendant established that compliance was not possible at the time of the alleged violation. This appears to be the case even in those states and localities that have had "credible evidence" rules for years.

Additionally, should it be determined that a standard could not be met during some relatively infrequent or inconsequential period of source activity, the potential for significant adverse impact on that source is remote. The agency has previously expressed its policy that, generally, judicial enforcement is not the appropriate vehicle to redress sporadic, infrequent violations with no environmental consequence. Further, it is unlikely that a citizen could prevail in enforcing a theoretically impossible standard since Courts will not issue an injunction where there is nothing to be done. Similarly, where one cannot establish that a source failed to act in a manner required by law a significant penalty will not be imposed by the courts. The agency is not aware of any situation in which it has filed, and one should not anticipate large numbers of citizen suits being filed, where there is nothing the source could have done or could do to achieve a greater degree of compliance. Moreover, the courts today have additional tools, including fee awards and sanctions available under the Federal Rules of Civil Procedure and other statutes to address meritless suits.

In further response to these industry comments, EPA has included in the record a 1993 study conducted by EPA Region V that shows that almost all (95%) of sources with sulfur dioxide CEMs were meeting their federal and state sulfur dioxide emission limits approximately 97% of the time, with excess emission periods totaling only 3%. *See* Region V Study, Figure 2. Because this 3% figure included excess emissions recorded during periods in which compliance is specifically not required, such as startup and shutdown, the percentage of operating time in noncompliance with the standard is even smaller and may mean that most sources are in compliance all the time. EPA Region V sources with continuous opacity monitors showed similar results: the average source's percentage of opacity exceedances was less than 2%, with 95% of sources at or below approximately 4%. *See* Study, Figure 1. As with the sulfur dioxide data, opacity exceedances during periods of startup, shutdown and other excused periods were not excluded. Accordingly, the percentage of actual noncompliance with opacity limits was even smaller. Note that these figures are for the average (50th percentile) and worst (95th percentile) facilities. The best run facilities have fewer excess emissions reports.

Additional CEM data from EPA Region V that focused specifically on exceedances from NSPS Subpart D SO_2 emission standards shows similar results. This data shows that Subpart D sources report few or no excess SO_2 emissions. Approximately two-thirds of the sources report no excess emissions at all, during any three month reporting period. Further, since 1990, the vast majority of sources (95%) have reported total excess emissions averaging less than 2.5% of operating time; since 1993, less than 1.7%. Since these figures include all excess emission periods, including periods that are probably excused, the actual SO_2 exceedance rates were even lower.

These data show that there are not "fundamental flaws" in the subject standards such that the standard cannot be met. *Indeed*, the data demonstrate that most sources do comply all or nearly all of the time.

If the regulated community believes that a standard cannot be met across some meaningful range of normal operating conditions, or if specific exemptions beyond those currently provided are proper, we believe the appropriate action is for the affected industry to file a petition for amendment of the standard at issue or propose more specific permit conditions so that the matter can be fully assessed and addressed through the regulatory process. However, the information submitted by the commenters does not show that there currently exists a significant "impossibility" issue that is so widespread as to outweigh the benefits of the proposed rule.

4. Enforcement Using Continuous Monitoring Data Does Not Increase the Stringency of Applicable Requirements

Industry commenters have argued that the stringency of emission standards will be increased if enforceable data is obtained more frequently than has been ordinarily obtained in the past through reference testing. Further, the commenters argue that direct enforceability of this data would contradict EPA's stated positions in adopting standards under the NSPS and NESHAP programs because EPA intended that continuous monitoring would only show compliance with good operation and maintenance procedures, i.e., general duty requirements, and would not be otherwise used in enforcement. (*See, e.g.*, 38 FR 10820 (1973) (preamble to proposed startup, shutdown and malfunction regulation); 43 FR 7571 (1978) (preamble to final kraft pulp mill standards).

Because the NSPS and NESHAP emission standards must be met continuously, consistent with any averaging times and except during periods where compliance is specifically excused, any more frequent or continuous monitoring of the standards and any enforcement based on violations uncovered thereby have no effect on the stringency of the standards. To take a simple analogy, allowing the use of radar guns or increasing the number of police checking for speeding may raise the chance that a speeder will be detected, but this does not alter the legal stringency of a posted speed limit.

In some early NSPS, the agency required the installation of what were styled "indicator monitors" and provided policy guidance that such monitoring data would not be used as the sole basis of enforcement actions absent further rulemaking. 38 FR 10820. To the extent that the CAA Amendments of 1990 did not supersede this policy statement, today's action is that future rulemaking. These policy statements, like today's rulemaking, pertain only to the kinds of evidence EPA uses to prove violations. The policy change that was contemplated in our 1993 proposal and 1996 memorandum are supported by technological advances in the accuracy and reliability of continuous emission monitors, deficiencies in EPA's previous practices identified by GAO and others, and the language and intent of the Act and the 1990 CAA Amendments.

EPA's past statements regarding limitations on the use of data derived from continuous monitoring methods for purposes of enforcing standards were motivated in part by concerns over the cost and availability of such methods and their ability to accurately determine compliance. *See, e.g., National Lime*, 627 F.2d at 450 (responding to petitioners' argument that there was no adequately demonstrated technology for monitoring opacity, EPA stated that the continuous monitoring data would not be used to determine compliance with the opacity standard but "to keep a check on the operation and maintenance of the control equipment," and that the monitors were reliable enough to perform this limited function). For example, in the 1973 startup, shutdown and malfunction regulation proposal, EPA noted that while continuous monitoring data would not, at that time, be used to determine compliance as a general matter, such data could be used if "approved as [an] equivalent or alternative method for performance testing." 38 FR 10820. Indeed, the NSPS general provisions have long provided that in lieu of performance tests using reference methods, a source could demonstrate compliance using an approved equivalent or alternative method, and that EPA can waive reference tests where the source has otherwise satisfactorily demonstrated compliance. *See* 40 CFR 60.8(b).

Since the 1970s, the availability, cost and accuracy of methods that enable determinations of compliance on a continuous basis has improved markedly. *See, e.g.*, 1990 GAO report at 19, 22–23 (1986 and 1988 EPA studies showed CEM data highly reliable); *Continuous Emission Monitoring*, 1993, Jahake, Thomas Publishing Co. For these reasons, EPA believes it is appropriate as a technical matter to allow information derived from these methods to be used in compliance certifications and enforcement actions. In fact, more recent national standards issued by EPA provide for determining and enforcing compliance directly by use of continuous monitoring data.

5. Sources Must Comply Both With Good Operation and Maintenance Requirements and With Emission Limits

Industry commenters have claimed that as to the NSPS program, the only goal of the program was to insure that best demonstrated technology was employed, such that once an initial reference test demonstrated that compliance with the standards could be achieved, it need not be demonstrated thereafter, and that an affected source's only ongoing obligation was its "general duty" to employ good operation and maintenance practices to minimize emissions in accordance with 40 CFR 60.11(d).

EPA agrees that proper operation and maintenance of an emissions unit and any associated pollution controls in accordance with 40 CFR 60.11(d) is vital to complying with emission standards. However, while it is true that sources have a continuing duty to employ good operations and maintenance practices, this duty does not substitute for the sources' obligation to comply with its emission limits. The two obligations, while related, are separate requirements in the NSPS regulations and in legal effect.

EPA has made these points plain as far back as 1973 in the proposed NSPS startup, shutdown and malfunction rulemaking:

> It is anticipated that the initial performance test and subsequent performance tests will ensure that equipment is installed which will permit the standards to be attained and that such equipment is not allowed to deteriorate to the point where the standards are no longer maintained. In addition, the proposed regulation requires that the plant operator use maintenance and operating procedures designed to minimize emissions in excess of the standard.

38 FR 10820 (1973) (emphasis added). This preamble text clearly states both that proper equipment maintenance is vital to remaining within an emission

standard (otherwise equipment would deteriorate to the point where standards were not met) and that the general operation and maintenance obligation is a separate regulatory requirement. Additional discussion of the distinction between the emission limits and good operating practice requirements can be in the Detailed Response Document. These statements make it clear that good operating practices requirements are separate and distinct from the need to continuously comply with emissions limits.

E. SIP Call

In the October, 1993, proposal, EPA announced that it planned to call for States to amend their applicable implementation plans to ensure that owners or operators may use enhanced monitoring (or other monitoring approved for the source pursuant to part 70) for compliance certification purposes, and that data from this monitoring, along with any other credible evidence, may be used as evidence of a violation of an applicable plan. 58 FR 54660. In December, 1993, and February, 1994, the Office of Air and Radiation's Stationary Source Compliance Division, the division then responsible for writing and implementing the enhanced monitoring rules, issued memoranda to EPA's Regional offices instructing them to conduct the SIP call. As of September, 1996, fifteen states and local air pollution control districts, together with the Commonwealth of Puerto Rico, had responded to the call and submitted SIP amendments for EPA approval. Kansas, Iowa, Nebraska, North Dakota, Georgia and Puerto Rico had received approval; the other states and districts' revisions were pending.

For substantially the same reasons that allow EPA to go forward with today's final rule, EPA has the authority to initiate and continue this SIP call. EPA's decision to forego the enhanced monitoring approach in favor of the CAM proposal has no effect on the basic goals of the SIP call, which are to clarify that non-reference test data can be used in enforcement actions, and to remove any potential ambiguity regarding this data's use for Title V compliance certifications.

Today's action ensures that the evidentiary rules for CAA violations are consistent in all fifty states. EPA has surveyed those states that have responded to the SIP call and has determined that the credible evidence changes have not created the difficulties forecast by the commenters.

IV. Administrative Requirements

A. Docket

Today's final rulemaking action is subject to Section 307(d) of the Act. Accordingly, EPA has established a docket (No. A–91–52), which consists of an organized and complete file of all information submitted to, or otherwise considered by, EPA in the development of today's action and the CAM approach. The docket includes all memoranda and studies cited by EPA in this preamble. The principal purposes of the docket are: (1) to allow interested parties a means to identify and locate documents so that they can effectively participate in the rulemaking process, and (2) to serve as the record in case of judicial review. The docket is available for public inspection at EPA's Air Docket, which is listed under the **ADDRESSES** section of this document.

B. Office of Management and Budget (OMB) Review

Today's rulemaking is not a "significant regulatory action" because the revisions make only evidentiary changes and do not impose any additional implementation costs on regulated sources. Nevertheless, EPA submitted this final rule to OMB for review. Changes made in response to OMB suggestions and recommendations will be documented in the public record.

C. Unfunded Mandates Reform Act

Under section 202 of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, EPA generally must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in expenditure by State, local, or tribal governments in the aggregate, or by the private sector, of $100 million or more. Before promulgating a rule for which such a 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. Section 203 requires the Agency to establish a plan for obtaining input from and informing, educating, and advising any small governments that may be significantly or uniquely affected by the rule.

EPA has determined that this rule does not contain a Federal mandate that may result in expenditures of $100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any one year. Today's rulemaking makes only evidentiary changes and does not impose any additional costs on regulated sources or State, local, or tribal governments. For the same reason, these evidentiary changes will not significantly or uniquely affect small governments. Accordingly, this rulemaking is not subject to the requirements of sections 202, 203, and 205 of the UMRA.

D. Regulatory Flexibility Act

EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this final rule. EPA has also determined that this rule will not have a significant economic impact on a substantial number of small entities. As explained above, this rulemaking does not impose any additional implementation costs on small or large entities.

E. Paperwork Reduction Act

The information collection requirements for the proposed enhanced monitoring rule were previously submitted for approval to OMB under the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 *et seq.* In contrast, today's rule does not contain any information collection requirements subject to OMB review under the PRA.

F. Submission to Congress and the General Accounting Office

Under 5 U.S.C. 801(a)(1)(A) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121, 110 Stat. 847), EPA submitted a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives and the Controller General of the General Accounting Office prior to publication of this rule in today's Federal Register. For the same reasons that this rulemaking is not a "significant regulatory action" under Executive Order 12866, this rule is not a "major rule" as defined by 5 U.S.C. 804(2).

List of Subjects

40 CFR Part 51

Environmental protection, Air pollution control.

40 CFR Part 52

Air pollution control.

40 CFR Part 60

Air pollution control.

40 CFR Part 61

Air pollution control.

Dated: February 13, 1997.

Carol M. Browner,

Administrator, U.S. Environmental Protection Agency.

For the reasons set out in the preamble, 40 CFR Chapter I is amended as follows:

PART 51—REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS

1. The authority citation for part 51 is revised to read as follows:

Authority: 42 U.S.C. 7401, 7411, 7412, 7413, 7414, 7470–7479, 7501–7508, 7601, and 7602.

2. Section 51.212 is amended by revising paragraph (c) to read as follows:

§51.212 Testing, inspection, enforcement, and complaints.

* * * * *

(c) Enforceable test methods for each emission limit specified in the plan. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, the plan must not preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. As an enforceable method, States may use:

(1) Any of the appropriate methods in appendix M to this part, Recommended Test Methods for State Implementation Plans; or

(2) An alternative method following review and approval of that method by the Administrator; or

(3) Any appropriate method in appendix A to 40 CFR part 60.

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

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

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

2. Section 52.12 is amended by revising paragraph (c) to read as follows:

§52.12 Source surveillance.

* * * * *

(c) For purposes of Federal enforcement, the following test procedures and methods shall be used, provided that for the purpose of establishing whether or not a person has violated or is in violation of any provision of the plan, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test procedures or methods had been performed:

(1) Sources subject to plan provisions which do not specify a test procedure and sources subject to provisions promulgated by the Administrator will be tested by means of the appropriate procedures and methods prescribed in part 60 of this chapter unless otherwise specified in this part.

(2) Sources subject to approved provisions of a plan wherein a test procedure is specified will be tested by the specified procedure.

3. Subpart A is amended by adding a new §52.33 to read as follows:

§52.33 Compliance certifications.

(a) For the purpose of submitting compliance certifications, nothing in this part or in a plan promulgated by the Administrator shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed.

(b) For all federal implementation plans, paragraph (a) of this section is incorporated into the plan.

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

1. The authority citation for part 60 is revised to read as follows:

Authority: 42 U.S.C. 7401, 7411, 7413, 7414, 7416, 7601 and 7602.

2. Section 60.11 is amended by revising paragraphs (a) and (f) and by adding paragraph (g) to read as follows:

§60.11 Compliance with standards and maintenance requirements.

(a) Compliance with standards in this part, other than opacity standards, shall be determined in accordance with performance tests established by §60.8, unless otherwise specified in the applicable standard.

* * * * *

(f) Special provisions set forth under an applicable subpart shall supersede any conflicting provisions in paragraphs (a) through (e) of this section.

(g) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

PART 61—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

1. The authority citation for part 61 is revised to read as follows:

Authority: 42 U.S.C. 7401, 7412, 7413, 7414, 7416, 7601 and 7602.

2. Section 61.12 is amended by revising paragraph (a) and adding paragraph (e) to read as follows:

§61.12 Compliance with standards and maintenance requirements.

(a) Compliance with numerical emission limits shall be determined in accordance with emission tests established in §61.13 or as otherwise specified in an individual subpart.

* * * * *

(e) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed.

[FR Doc. 97–4196 Filed 2–21–97; 8:45 am]

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federal register

Friday
February 12, 1999

Part X

Environmental Protection Agency

40 CFR Parts 51, 60, 61, and 63

Clean Air Act: Recordkeeping and Reporting Burden Reduction; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 51, 60, 61, and 63

[AD–FRL–6300–4]

Recordkeeping and Reporting Burden Reduction

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final amendments.

SUMMARY: On September 11, 1996, the EPA proposed changes to reduce unnecessary reporting and recordkeeping burdens due to regulations implementing the Clean Air Act (the Act). This review was part of a Government-wide initiative as directed by the President on March 1, 1995. With today's document, the EPA is finalizing the proposed changes, with minor amendments as discussed below. On the whole, public comments that were received on the proposed changes were overwhelmingly supportive of the Agency's efforts.

DATES: *Effective Date.* April 13, 1999.

Judicial Review. Under Section 307(b)(1) of the Act, judicial review is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit within 60 days of today's publication of this final rule. Under Section 307(b)(2) of the Act, the requirements that are the subject of today's document may not be challenged later in civil or criminal proceedings brought by the EPA to enforce these requirements.

ADDRESSES: *Docket.* Docket No. A–95–50, containing supporting information used in developing the final amendments to the standards, is available for public inspection and copying from 8:00 a.m. to 5:30 p.m., Monday through Friday, at the EPA's Air and Radiation Docket and Information Center (6102), 401 M Street, SW, Washington, D.C. 20460; telephone (202) 260–7548. Both the public comment letters and a detailed summary of the comments and the EPA's responses to them are included in the docket. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: For information concerning the standards or technical aspects, contact Mr. David W. Markwordt, Emission Standards Division (MD–13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone (919) 541–0837.

SUPPLEMENTARY INFORMATION:

An electronic version of this rule is available for download from the EPA Technology Transfer Network (TTN) at "http://www.epa.gov/ttn/oarpg/ramain.html". For assistance in downloading files, call the TTN Help line at (919) 541–5384.

I. Significant Public Comments and Responses

Fourteen letters on the proposed revisions were received. Of these, four were from State agencies and ten were from industry commenters. A detailed discussion of all the comments and the EPA's responses can be found in the comment summary and response document, which is referenced in the **ADDRESSES** section of this preamble. This summary of comments and responses serves as the basis for the revisions that have been made to the standards between proposal and promulgation. Most of the comment letters contained multiple comments.

The comments addressed the General Provisions for 40 CFR parts 60, 61, and 63; NSPS for Steam Generators (40 CFR part 60 subparts D, Da, Db, and Dc); NSPS for Municipal Waste Combustors (40 CFR 60 subpart Ea); Emission Reporting Requirements for 40 CFR part 51; NSPS for New Residential Wood Heaters (40 CFR part 60 subpart AAA); and additional burden reduction. These comments and the EPA's responses are summarized below.

A. General Provisions for 40 CFR Parts 60, 61, and 63

The EPA's proposals concerning reducing the record keeping and reporting burden in the General Provisions were generally supported. Nine commenters strongly supported the EPA's commitment to reducing record keeping and reporting burdens. Three commenters also supported the EPA's proposal to allow electronic data submission, and made detailed suggestions concerning implementation of electronic reporting. The EPA's proposal to eliminate the notification of the anticipated date of initial startup was also supported by four commenters. Five commenters supported the EPA's proposal to require only a 7-day notice prior to rescheduling a performance test. However, sources in this situation should notify their delegated State agency (or EPA Region if there is no delegated State agency) as soon as possible, when they have a need to use this provision. There were no negative comments on the EPA's proposals concerning electronic data submission, eliminating notification of anticipated initial startup date, and requiring only a 7-day prior notice for rescheduling a performance test.

This document corrects a typographical error in the proposal notice (61 FR 47852). The EPA's intent was to delete the paragraph requiring notification of the anticipated date of startup for new affected facilities. Section 63.9(b)(2)(iv) was erroneously cited. The correct citation is section 63.9(b)(4)(iv).

1. Quarterly or Semi-Annual Reporting

Three commenters supported the proposed change to semi-annual excess emissions reporting, arguing that semi-annual reporting would be sufficient to ensure compliance and would reduce regulatory costs and burden. One of the commenters contended that State and local regulations would also need to be revised to semi-annual reporting to realize the cost savings. However, one commenter supported retaining the requirement for quarterly reporting, stating that a reduction of reporting frequency would result in an inability for State and local agencies to identify and respond to violations in a timely manner, and delay the resolution of enforcement actions. The commenter requested that the EPA add language to § 60.7(c), and any other applicable sections, specifying that semi-annual reporting would not apply when more frequent reporting is specifically required by a State or local agency. Two commenters supported retaining the quarterly reporting requirement only for continuous emissions monitoring (CEMs) and continuous opacity monitors (COMs), as such a requirement would allow response to emission problems in a timely manner.

The EPA recognizes that some State and local agencies audit quarterly. States are not precluded from adopting more stringent requirements than the Federal regulations and are free to maintain quarterly reporting requirements for CEMs and COMs data. The semi-annual reporting requirements comport with those under the part 70 and part 71 title V operating permit program regulations, which require monitoring, record keeping, and reporting sufficient to demonstrate compliance with applicable requirements under the Clean Air Act (Act).

One of the commenters noted that § 63.10(e)(3) already allows semi-annual reporting, but that the requirement is too restrictive. The commenter suggested that plants triggering quarterly reporting because of excess emissions only be subject to a 6-month period of quarterly reporting. If the 6 months expire with no further exceedances, the reporting schedule would automatically revert to semiannual reporting. While the commenter is correct that § 63.10(e)(3) allows semi-annual reporting, paragraph (e)(3)(i)(C) modifies the requirement in the case where a source experiences excessive emissions. As explained in the proposal notice (61 FR 47844), the EPA's experience over the past ten years with a variety of NSPS and NESHAP rulemakings covering industries of all types suggests that semi-annual reporting provides sufficiently timely information to both ensure compliance and enable adequate enforcement of applicable requirements, while imposing less burden on the affected industry than would quarterly reporting. Therefore, the EPA will finalize its proposal to remove § 63.10(e)(3)(i)(C), which results in a reduction of the burden for those sources who would have otherwise been affected by its requirements.

2. Reduction in Retention of Sub-Hourly Data for CEMs

In today's amendments, the EPA is finalizing the proposed changes to allow owners or operators the option to reduce record keeping requirements of sub-hourly data recorded by CEMs. Six commenters provided specific comments pertaining to these amendments (IV–D–01, IV–D–02, IV–D–04, IV–D–08, IV–D–07, IV–D–10).

Two commenters (IV–D–07, IV–D–10) supported the revisions that allow for the reduced data record keeping from 15-minute to hourly interval.

Two other commenters (IV–D–02, IV–D–04) stated that the proposal would eliminate the regulatory authority's ability to determine if the hourly averages reflect the actual data readings. Additionally, one commenter (IV–D–02) requested EPA to revise the language concerning data availability to state that the 15-minute readings could be discarded except where a State or local agency requires retention of such data.

Two commenters (IV–D–01, IV–01–08) opposed the EPA's proposal on the grounds that it adds a record keeping requirement, maintaining that the current regulations do not require retention of the 15-minute data averages. One (IV–D–01) further commented that CEMs do not typically save sub-hourly measurements, and that the revision would conflict with requirements in 40 CFR part 75. These commenters (IV–D–01, IV–01–08) were also concerned that the revision would create an additional cost burden by requiring expansion of data acquisition capabilities.

The EPA has revised the proposed amendments to address compliance concerns raised by State agencies. In addition, the EPA believes that it is necessary to point out that these amendments provide an option to the owners or operator, and the requirement is not mandatory. For sources with CEMs that decide to comply with the record retention requirements as amended in today's rulemaking, the owner and operator maintains the burden of proof for hourly averages that the source claims is invalid. The owner or operator may not later assert that the hourly averages were based on invalid data, if the source did not previously identify the hour as including periods of monitor system breakdown, repair, calibration checks, and zero and span adjustments.

With respect to the amendments, the EPA no longer requires that a source achieve 95% data availability in order to discard the sub-hourly measurements. The EPA decided to eliminate the data availability requirement based on the fact that the general provisions define a priority data availability of 100%, unless allowed otherwise within individual rules. Further, a demonstration of compliance with the 95% data availability threshold would require additional record keeping, running counter to the goal of burden reduction.

The agency has restructured the final amendments to distinguish between automated and manual CEMs. This is because both systems have different ways (e.g., computerized versus manual) to reduce the data to the final form of the standard. The requirements provide record keeping reductions for both automated and manual CEMs, but differ in the record retention requirements depending on the type of CEMs. The basis for the difference is to allow an inspector to determine if the sub-hourly data is being properly reduced in both instances. In cases where the data reduction is automated, it is expected that data reduction procedures would not vary; hence, the Agency is only requiring the retention of sub-hourly measurements from the most recent three averaging periods, so as to allow a replicable check of the data reduction calculations. Where data is manually reduced, there is greater potential for variation between data reduction calculations; hence, it needs to be possible to confirm the accuracy of the periodic reports.

The agency has added language that requires the hourly averages include periods of CEMs malfunction or breakdown, for sources wishing to delete the sub-hourly data. This restriction is necessary to ensure that data which indicates potential emission violations are not both excluded from the hourly average and then destroyed due to mis-classification as a CEMs breakdown or malfunction. Since § 60.13(h) allows sources to exclude data from the hourly average which was collected during periods of monitor malfunction, § 60.13(h) has also been amended to reference the new provision at § 60.7(f) which allows for disposal of raw data in limited circumstances.

Finally a paragraph has been added to the final amendments to allow the Administrator or a delegated authority, such as the State or local agency, the ability to require an owner or operator to maintain all sub-hourly data, if the Administrator finds the data necessary to more accurately assess compliance.

As discussed above, two commenters (IV–D–01, IV–01–08) asserted that the current regulations do not require the retention of 15-minute data averages. EPA disagrees with this these commenters. In fact, § 63.10(b)(2)(vii) requires retention of all "required measurements needed to achieve compliance with a relevant standard (including, but not limited to 15-minute averages of CMS data . . .)," which is consistent with the monitoring requirements laid out in § 63.8. Similarly, § 60.7(f) requires retention of all continuous monitoring system device measurements, which builds from the requirement in § 60.13(e)(2) to measure and record data for each successive 15-minute period.

B. 40 CFR Part 60, Subparts D, Da, Db, and Dc

Several commenters supported the EPA's proposal to reduce reporting frequency for part 60 subparts D, Da, Db, and Dc boilers from quarterly to semi-annual. The EPA will implement the proposed changes with this document. In addition, the EPA has made other minor changes to related language in these subparts to clarify the semi-annual reporting requirements.

One commenter further suggested that the EPA accept the semi-annual reporting requirement for steam generators that are subject to part 75 (the acid rain program). This commenter explained that many units subject to subpart D are also subject to part 75, and would not benefit from the proposed revisions unless they were accepted for compliance with part 75 also. One commenter disagreed, preferring that both part 75 and part 60 retain the quarterly reporting requirement. This commenter stated that the quarterly data are used to determine continuous compliance, and the change would not reduce the reporting burden on sources.

One commenter suggested that the EPA could further reduce the regulatory burden for subpart Dc boilers by eliminating the reporting requirement in §§ 60.48c(f)(1) and 60.48c(e)(11) regarding fuel supplier certification, and allowing record keeping to document compliance. This commenter said that the record keeping provisions in § 60.48c(e)(11) should also be simplified to allow the affected facility to maintain records that the supplier is contractually obligated to provide fuel oil.

Revisions to part 75 are not within the scope of this rulemaking. However, the EPA will consider whether part 75 should be amended to require semi-annual, rather than quarterly, reporting in future rulemakings. States are not precluded from adopting more stringent requirements than the Federal regulations and are free to maintain quarterly reporting requirements for any CEMs or COMs data that may be required under parts 60, 61, and 63. The EPA will also consider the proposal to replace the reporting requirements in §§ 60.48c(f)(1) and 60.48c(e)(11) with record keeping requirements in future rulemakings.

C. 40 CFR Part 60, Subpart Ea

One commenter opposed changing the reporting requirements for municipal waste combustors from quarterly to semi-annual because these sources may potentially be opt-in units subject to the part 75 regulations, which require quarterly reporting. This commenter reasoned that acid rain municipal waste combustors are controversial sources that the public perceives as an environmental problem, and that the change would not reduce the reporting burden.

The Agency recognizes that State and local agencies may elect to be more stringent than the Federal regulations and require quarterly reporting for identified source categories such as municipal waste combustors. However, the EPA does not believe that any changes from the proposed rule are needed, in this case. The EPA has made minor wording changes to the final language to clarify the reporting requirements for affected sources.

D. 40 CFR Part 51, Subpart Q

Two commenters opposed the EPA's proposal to raise the emission reporting threshold from 100 to 200 tons per year (tpy). Both commenters indicated that a higher threshold would not reduce the source reporting burden, as the 100 tpy threshold information would still be required by the States to determine whether other Clean Air Act programs would apply.

The EPA did not propose the change to reduce the amount of information collected by the States. The Agency recognizes that the States gather this information to support their own planning and permitting purposes and do not gather this information in response to this rule. The proposed change focuses on reducing the amount of the information that States transfer to the EPA (and the burden that results from this transfer of information).

One commenter suggested that the EPA should revamp the entire subpart. The commenter identified four ways in which the Agency should revise the regulation: (1) Allow an additional six months for facilities to provide information to the States and for the States to then enter the data into their system for transferral to the Aerometric Information Retrieval System (AIRS); (2) Decrease the reporting of data items; (3) Update the users' manuals and forms for data submittal; and (4) Delete the requirement for HATREMS in § 51.323, as it no longer exists.

In general, the purpose of the proposed change is directed at reducing the burden that results from the States transmitting data to the EPA. The burden on industry to report this data to the States does not result from this rule. States require their industries to report such information for the States' own planning and permitting purposes. The EPA also considered the specific suggestions raised by the commenters. During recent discussions in a joint EPA/State and local work group, State and local representatives (STAPPA/ALAPCO) agreed that a 6-month schedule made sense and was feasible even if extending the time period is contrary to the need for timely emissions data. Second, the rule does not require most of the data items supported by AIRS; however, AIRS includes these data items at the request of State and local agencies to support their own program needs. Reporting additional data items is completely voluntary. Third, the EPA has acknowledged the need for updating § 51.323 as part of the burden reduction exercise and has done so in the final amendments. Finally, the Agency agrees with the need for removing any reference to HATREMS; however, the Agency views moving data reporting to the facility level as inappropriate because of the limited usefulness of such data.

E. 40 CFR Part 60, Subpart AAA

As part of the record keeping and reporting burden reduction initiative, the Agency proposed to revise part 60, subpart AAA—NSPS; New Residential Wood Heaters. The proposed revisions included editorial changes for two provisions of the rule, and deletion of the entire prohibitions section.

Written comments on the proposed changes to the wood heater NSPS were submitted by the Hearth Products Association (HPA), which had no objection to the two proposed editorial changes. However, they did object to changes to the prohibitions section of the rule. The HPA's comments regarding changes to the prohibitions section and the Agency's response to those comments are addressed in a separate **Federal Register** notice (see Docket #A–95–50 IV–E–01 and 02).

After reviewing the comments received, the Agency is proceeding with the editorial changes. These modifications to the rule will make it easier to understand as well as administer; thereby, reducing the resources needed to achieve compliance with the rule. However, the Agency has decided to revise § 60.538, Prohibitions, in a separate **Federal Register** notice (see Docket #A–95–50 IV–E–01 and 02).

F. 40 CFR Part 61, Subpart F

As part of the record keeping and reporting burden reduction initiative, the Agency solicited comment on the concept of removing the requirement for the fixed-point monitoring system and associated record keeping from the vinyl chloride standard.

Written comments explained that area monitoring requirements in the vinyl chloride NESHAP rule should be eliminated because they are duplicative of and less effective than instrumental monitoring; that computerized leak detecting systems or other similar devices would be more effective in identifying major releases; that the Hazardous Organic NESHAP (HON) rule applies to all facilities subject to the vinyl chloride NESHAP and supersedes that rule; and that area monitoring is extremely costly. The commenter requested that the EPA consider replacing the area monitoring program with the use of the Leak Detection and Repair (LDAR) program.

The EPA agrees that a continuous area monitoring program has significant costs, and that the area monitoring program is less effective in detecting leaking equipment than a leak detection and repair program using instrumental monitoring. The EPA disagrees with the comment regarding the Hazardous Organic NESHAP (HON) applying to all facilities subject to the vinyl chloride NESHAP. The HON leak detection and repair program applies to operations which produce ethylene dichloride (EDC) and vinyl chloride monomer (VCM) as primary products, but does not apply to polyvinyl chloride or copolymers production. And, the HON does not supersede the area monitoring requirements of the vinyl chloride NESHAP. The EPA regards the area monitoring role as distinctly different than that of a leak detection program, although at times the area monitoring is a helpful indicator when leaks exist. The EPA regards continuous area monitoring as the most reliable way to quickly detect major releases from process equipment including but not limited to leaking equipment. The EPA is open to innovative ways to achieve the same result in a less costly way. In recent cases, process related releases have occurred that would have been unnoticed by leak detection and repair procedures, and would have gone undetected for extended periods had it not been for an area monitoring program. These types of releases can be extremely harmful to human health and the environment, and the liability for these releases could be far more costly than the area monitoring requirements. For these reasons the EPA does not intend to make any change to the area monitoring requirements at this time.

G. Additional Burden Reductions

Suggestions for additional burden reduction included: (1) merging the part 60 reporting requirements with the emission inventory requirements to create a single coordinated set of requirements; (2) allowing the title V permitting authority to exempt area sources of hazardous air pollutants (HAP) from the startup, shutdown, and malfunction plan required under § 63.10(d)(5)(i) and (ii); (3) eliminating § 50.145(a)(2), as notifications of otherwise unrelated activities are good candidates for deletion; and (4) Eliminating all routine reports of compliance information under parts 60, 61, and 63 for sources that have title V permits.

One commenter requested that the EPA reduce the vinyl chloride NESHAP reporting requirement from quarterly to semi-annual.

One commenter explained in detail why the incidental wood furniture manufacturing requirements were onerous, and proposed three solutions to remedy the problems with the record keeping requirements of the rule: (1) eliminate the record keeping requirements for incidental wood manufacturers; (2) limit the record keeping requirement to incidental wood furniture manufacturers who make furniture for commercial sale; or (3) replace the record keeping requirements with a one-time certification that the facility does not use more than 100 gallons per month in manufacturing wood furniture. The commenter recommended the second approach, and suggested revisions to the language at § 63.800(a) to implement the change.

The EPA is committed to reducing regulatory burden. The Agency appreciates the positive response to its proposals, and will continue to seek ways to minimize record keeping and reporting requirements in future rulemakings.

II. Administrative Requirements

A. Docket

The docket for this rulemaking is A–95–50. The docket is an organized and complete file of all the information submitted to or otherwise considered by the EPA in the development of this rulemaking. The principle purposes of the docket are: (1) to allow interested parties a means to identify and locate documents so that they can effectively participate in the rulemaking process; and (2) to serve as the record in case of judicial review (except for interagency review materials) (Section 307(d)(7)(A) of the Act). The docket is available for public inspection at the EPA's Air and Radiation Docket and Information Center, the location of which is given in the **ADDRESSES** section of this document.

B. Analysis Under E.O. 12866, the Unfunded Mandates Reform Act of 1995, the Regulatory Flexibility Act, and the Small Business Regulatory Enforcement Fairness Act of 1996

Because the regulatory revisions that are the subject of today's document would reduce the regulatory burden, this action is not a "significant" regulatory action within the meaning of Executive Order 12866, and does not impose any Federal mandate on State, local and tribal governments or the private sector within the meaning of the Unfunded Mandates Reform Act of 1995. Further, the EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this action under the Regulatory Flexibility Act and the Small Business Regulatory Enforcement Fairness Act of 1996. The regulatory changes proposed here are expected to reduce regulatory burdens on small businesses, and are not expected to have any adverse effect on small businesses. Therefore, the EPA certifies that this rule will not have a significant impact on a substantial number of small entities.

C. Paperwork Reduction Act

The revisions to existing standards are intended to reduce existing record keeping and reporting requirements. In the proposal notice (61 FR 47840), the EPA explained the changes, identified who would be affected by the changes, and estimated the reductions associated with each change. The EPA also requested comment on all aspects of the paperwork burden reductions, including the number of affected entities and estimate of burden reduction. Comments on the proposed rule revisions were generally favorable, and acknowledged the burden reduction that would occur due to the proposed changes. Although there were no quantitative estimates of burden reduction, public comments in particular recognized the burden reduction that would occur as a result of the changes from quarterly to semi-annual reporting and of deleting notification of the anticipated date of initial startup. There were no public comments on the EPA's numerical estimates of burden reduction in the proposal (61 FR 47841). As the result of EPA's analysis of the public comments received on technical aspects of the proposed changes, the EPA is making only minor, insignificant changes to the proposed rule in the promulgated version of the revisions. Therefore, the EPA's original estimate of the record keeping and reporting burden due to the revisions remains unchanged from proposal.

D. National Technology Transfer and Advancement Act

Under Section 12 of the National Technology Transfer and Advancement Act of 1995, the EPA must consider the use of "voluntary consensus standards," if available and applicable, when implementing policies and programs, unless it would be "inconsistent with applicable law or otherwise impractical." The intent of the National Technology Transfer and Advancement Act is to reduce the costs to the private and public sectors by requiring federal agencies to draw upon any existing, suitable technical standards used in commerce or industry.

A "voluntary consensus standard" is a technical standard developed or adopted by a legitimate standards-developing organization. The Act defines "technical standards" as "performance-based or design-specific technical specifications and related management systems practices." A legitimate standards-developing organization must produce standards by consensus and observe principles of due process, openness, and balance of interests. Examples of organizations that are regarded as legitimate standards-developing organizations include the American Society for Testing and

Materials (ASTM), International Organization for Standardization (ISO), International Electrotechnical Commission (IEC), American Petroleum Institute (API), National Fire Protection Association (NFPA) and Society of Automotive Engineers (SAE).

Since today's action does not involve the establishment or modification of technical standards, the requirements of the National Technology Transfer and Advancement Act do not apply.

E. Executive Order 13045—Protection of Children From Environmental Health Risks and Safety Risks

Executive Order 13045, entitled Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997), applies to any rule that (1) OMB determines is "economically significant" as defined under Executive Order 12866, and (2) EPA determines the environmental health or safety risk addressed by the rule has a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety aspects 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.

These regulatory revisions are not subject to the Executive Order because it is not economically significant as defined in E.O. 12866, and because the Agency does not have reason to believe the environmental health or safety risks addressed by this action present a disproportionate risk to children.

F. 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 rule does not significantly or uniquely affect the communities of Indian tribal governments. These rule revisions impose no enforceable duties on these entities. Rather, these rule revisions reduce burdens associated with certain regulatory requirements. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

G. Executive Order 12875: Enhancing the Intergovernmental Partnership

Under Executive Order 12875, EPA may not issue a regulation that is not required by statute and that creates a mandate upon a State, local or tribal government, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by those governments, or EPA consults with those governments. If EPA complies by consulting, Executive Order 12875 requires EPA to provide to the Office of Management and Budget a description of the extent of EPA's prior consultation with representatives of affected State, local and tribal governments, the nature of their concerns, copies of any written communications from the governments, and a statement supporting the need to issue the regulation. In addition, Executive Order 12875 requires EPA to develop an effective process permitting elected officials and other representatives of State, local and tribal governments "to provide meaningful and timely input in the development of regulatory proposals containing significant unfunded mandates."

Today's rule changes do not create a mandate on State, local or tribal governments. The rule changes do not impose any enforceable duties on these entities. Rather, the rule changes reduce recordkeeping and reporting burden for certain regulatory requirements. Accordingly, the requirements of section 1(a) of Executive Order 12875 do not apply to this rule.

H. 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 affect, the agecy 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 action is not a "major rule" as defined by 5 U.S.C. 804(2). This rule will be effective April 13, 1999.

Statutory Authority: The statutory authority for this action is provided by Sections 101, 112, 114, 116, and 301 of the Clean Air Act, as amended, 42 U.S.C. 7401, 7412, 7414, 7416, and 7601.

List of Subjects

40 CFR Part 51

Environmental protection, Air pollution control, Reporting and recordkeeping requirements.

40 CFR Part 60

Environmental protection, Air pollution control, Reporting and recordkeeping requirements.

40 CFR Part 61

Environmental protection, Air pollution control, Reporting and recordkeeping requirements.

40 CFR Part 63

Environmental protection, Air pollution control, Reporting and recordkeeping requirements.

Dated: February 4, 1999.

Carol M. Browner,

Administrator.

For the reasons set out in the preamble title 40, chapter I of the Code of Federal Regulations is to be amended as follows:

PART 51—[AMENDED]

1. The authority citation for part 51 continues to read as follows:

Authority: 42 U.S. C. 7401–7671q.

Subpart Q—[Amended]

2. Section 51.322 is amended by revising paragraphs (a)(1) and (a)(2) to read as follows:

§ 51.322 Sources subject to emissions reporting.

(a) * * *

(1) For particulate matter, PM_{10}, sulfur oxides, VOC and nitrogen oxides, any facility that actually emits a total of 181.4 metric tons (200 tons) per year or more of any one pollutant. For particulate matter emissions, the reporting requirement ends with the

reporting of calendar year 1987 emissions. For PM_{10} emissions, the reporting requirement begins with the reporting of calendar year 1988 emissions.

(2) For carbon monoxide, any facility that actually emits a total of 1814 metric tons (2000 tons) per year or more.

* * * * *

3. Section 51.323 is amended by removing and reserving paragraph (a)(2) and revising paragraphs (a)(1), (a)(3), and (b) to read as follows:

§ 51.323 Reportable emissions data and information.

(a) * * *

(1) Emissions of particulate matter (PM10), sulfur oxides, carbon monoxide, nitrogen oxides, VOC and lead or lead compounds measured as elemental lead as specified by the AIRS Facility Subsystem User's Guide AF2 "AFS Data Coding" (EPA–454/B–94–004) point source coding form.

(2) [Reserved].

(3) Emissions of PM 2.5 as will be specified in a future guideline.

(b) Such emissions data and information specified in paragraph (a) of this section must be submitted to the AIRS/AFS database via either online data entry or batch update system.

* * * * *

PART 60—[AMENDED]

1. The authority citation for part 60 is revised to read as follows:

Authority: 42 U.S.C. 7401–7601.

Subpart A—[Amended]

2. Section 60.7 is amended by removing and reserving paragraph (a)(2) and revising paragraphs (a) introductory text and (c) introductory text, the last sentence of paragraph (f), and adding paragraphs (f)(1), (f)(2), and (f)(3) to read as follows:

§ 60.7 Notification and recordkeeping.

* * * * *

(a) Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:

* * * * *

(c) Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and-or summary report form (see paragraph (d) of this section) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:

* * * * *

(f) * * * The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

(1) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(2) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(3) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (f) of this section, if the Administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

* * * * *

3. Section 60.8 is amended by revising paragraph (d) to read as follows:

§ 60.8 Performance tests.

* * * * *

(d) The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.

* * * * *

3A. Section 60.13 is amended by revising the fourth sentence in paragraph (h) to read as follows:

§ 60.13 Monitoring requirements.

* * * * *

(h) * * *Data recorded during periods of continuous system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. For owners and operators complying with the requirements in § 60.7(f) (1) or (2), data averages must include any data recorded during periods of monitor breakdown or malfunction. * * *

* * * * *

4. Section 60.19 is amended by revising paragraph (b) to read as follows:

§ 60.19 General notification and reporting requirements.

* * * * *

(b) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be delivered or postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery, including the use of electronic media, agreed to by the permitting authority, is acceptable.

* * * * *

Subpart D—[Amended]

5. Section 60.45 is amended by revising paragraph (g) introductory text to read as follows:

§ 60.45 Emission and fuel monitoring.

* * * * *

(g) Excess emission and monitoring system performance reports shall be submitted to the Administrator semiannually for each six-month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and MSP report shall include the information required in § 60.7(c). Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:

* * * * *

Subpart Da—[Amended]

6. Section 60.49a is amended by revising paragraph (i) to read as follows:

§ 60.49a Reporting requirements.

* * * * *

(i) The owner or operator of an affected facility shall submit the written reports required under this section and subpart A to the Administrator semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period.

* * * * *

Subpart Db—[Amended]

7. Section 60.49b is amended by revising paragraphs (d), (e), (h) introductory text, (i), (j), (k)(2), (k)(3), (m) introductory text, (n) introductory text, (n)(1), (n)(2), (q) introductory text, (q)(2), (q)(3), (r), and (s) to read as follows:

§ 60.49b Reporting and recordkeeping requirements.

* * * * *

(d) The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

(e) For an affected facility that combusts residual oil and meets the criteria under §§ 60.46b(e)(4), 60.44b (j), or (k), the owner or operator shall maintain records of the nitrogen content of the residual oil combusted in the affected facility and calculate the average fuel nitrogen content for the reporting period. The nitrogen content shall be determined using ASTM Method D3431–80, Test Method for Trace Nitrogen in Liquid Petroleum Hydrocarbons (IBR-see § 60.17), or fuel suppliers. If residual oil blends are being combusted, fuel nitrogen specifications may be prorated based on the ratio of residual oils of different nitrogen content in the fuel blend.

* * * * *

(h) The owner or operator of any affected facility in any category listed in paragraphs (h) (1) or (2) of this section is required to submit excess emission reports for any excess emissions which occurred during the reporting period.

* * * * *

(i) The owner or operator of any affected facility subject to the continuous monitoring requirements for nitrogen oxides under § 60.48(b) shall submit reports containing the information recorded under paragraph (g) of this section.

(j) The owner or operator of any affected facility subject to the sulfur dioxide standards under § 60.42b shall submit reports.

(k) * * *

(2) Each 30-day average sulfur dioxide emission rate (ng/J or lb/million Btu heat input) measured during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent reduction in sulfur dioxide emissions calculated during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken.

* * * * *

(m) For each affected facility subject to the sulfur dioxide standards under § 60.42(b) for which the minimum amount of data required under § 60.47b(f) were not obtained during the reporting period, the following information is reported to the Administrator in addition to that required under paragraph (k) of this section:

* * * * *

(n) If a percent removal efficiency by fuel pretreatment (i.e., % R_f) is used to determine the overall percent reduction (i.e., % R_o) under § 60.45b, the owner or operator of the affected facility shall submit a signed statement with the report.

(1) Indicating what removal efficiency by fuel pretreatment (i.e., % R_f) was credited during the reporting period;

(2) Listing the quantity, heat content, and date each pre-treated fuel shipment was received during the reporting period, the name and location of the fuel pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the reporting period.

* * * * *

(q) The owner or operator of an affected facility described in § 60.44b(j) or § 60.44b(k) shall submit to the Administrator a report containing:

* * * * *

(2) The average fuel nitrogen content during the reporting period, if residual oil was fired; and

(3) If the affected facility meets the criteria described in § 60.44b(j), the results of any nitrogen oxides emission tests required during the reporting period, the hours of operation during the reporting period, and the hours of operation since the last nitrogen oxides emission test.

(r) The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil under § 60.42b(j)(2) shall obtain and maintain at the affected facility fuel receipts from the fuel supplier which certify that the oil meets the definition of distillate oil as defined in § 60.41b. For the purposes of this section, the oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition was combusted in the affected facility during the reporting period.

(s) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

Subpart Dc—[Amended]

8. Section 60.48c is amended by revising paragraphs (c), (d), (e) introductory text, (e)(2), (e)(3), and (e)(11); and by adding paragraph (j) to read as follows:

§ 60.48c Reporting and recordkeeping requirements.

* * * * *

(c) The owner or operator of each coal-fired, residual oil-fired, or wood-fired affected facility subject to the opacity limits under § 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility which occur during the reporting period.

(d) The owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under § 60.42c shall submit reports to the Administrator.

(e) The owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under § 60.43c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.

* * * * *

(2) Each 30-day average SO_2 emission rate (nj/J or lb/million Btu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent of potential SO_2 emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.

* * * * *

(11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), or (3) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

* * * * *

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

Subpart Ea—[Amended]

9. Section 60.59a is amended by revising paragraphs (e), (f), and (g) to read as follows:

§ 60.59a Reporting and recordkeeping requirements.

* * * * *

(e)(1) The owner or operator of an affected facility located within a large MWC plant shall submit annual compliance reports for sulfur dioxide, nitrogen oxide (if applicable), carbon monoxide, load level, and particulate matter control device temperature to the Administrator containing the information recorded under paragraphs (b)(1), (2)(ii), (4), (5), and (6) of this section for each pollutant or parameter. The hourly average values recorded under paragraph (b)(2)(i) of this section are not required to be included in the annual reports. Combustors firing a mixture of medical waste and other MSW shall also provide the information under paragraph (b)(15) of this section, as applicable, in each annual report. The owner or operator of an affected facility must submit reports semiannually once the affected facility is subject to permitting requirements under Title V of the Act.

(2) The owner or operator shall submit a semiannual report for any pollutant or parameter that does not comply with the pollutant or parameter limits specified in this subpart. Such report shall include the information recorded under paragraph (b)(3) of this section. For each of the dates reported, include the sulfur dioxide, nitrogen oxide, carbon monoxide, load level, and particulate matter control device temperature data, as applicable, recorded under paragraphs (b)(2)(ii)(A) through (D) of this section.

(3) Reports shall be postmarked no later than the 30th day following the end of the annual or semiannual period, as applicable.

(f)(1) The owner or operator of an affected facility located within a large MWC plant shall submit annual compliance reports, as applicable, for opacity. The annual report shall list the percent of the affected facility operating time for the reporting period that the opacity CEMS was operating and collecting valid data. Once the unit is subject to permitting requirements under Title V of the Act, the owner or operator of an affected facility must submit these reports semiannually.

(2) The owner or operator shall submit a semiannual report for all periods when the 6-minute average levels exceeded the opacity limit under § 60.52a. The semiannual report shall include all information recorded under paragraph (b)(3) of this section which pertains to opacity, and a listing of the 6-minute average opacity levels recorded under paragraph (b)(2)(i)(A) of this section, which exceeded the opacity limit.

(3) Reports shall be postmarked no later than the 30th day following the end of the annual of semiannual period, as applicable.

(g)(1) The owner or operator of an affected facility located within a large MWC plant shall submit reports to the Administrator of all annual performance tests for particulate matter, dioxin/furan, and hydrogen chloride as recorded under paragraph (b)(7) of this section, as applicable, from the affected facility. For each annual dioxin/furan compliance test, the maximum demonstrated MWC unit load and maximum demonstrated particulate matter control device temperature shall be reported. Such reports shall be submitted when available and in no case later than the date of required submittal of the annual report specified under paragraphs (e) and (f) of this section, or within six months of the date the test was conducted, whichever is earlier.

(2) The owner or operator shall submit a report of test results which document any particulate matter, dioxin/furan, and hydrogen chloride levels that were above the applicable pollutant limit. The report shall include a copy of the test report documenting the emission levels and shall include the corrective action taken. Such reports shall be submitted when available and in no case later than the date required for submittal of any semiannual report required in paragraphs (e) or (f) of this section, or within six months of the date the test was conducted, whichever is earlier.

* * * * *

Subpart J—[Amended]

10. Section 60.107 is amended by revising paragraphs (a), (c) introductory text, (d), and (e) to read as follows:

§ 60.107 Reporting and recordkeeping requirements.

* * * * *

(a) Each owner or operator subject to § 60.104(b) shall notify the Administrator of the specific provisions of § 60.104(b) with which the owner or operator seeks to comply. Notification shall be submitted with the notification of initial startup required by § 60.7(a)(3). If an owner or operator elects at a later date to comply with an alternative provision of § 60.104(b), then the Administrator shall be notified by the owner or operator in the report described in paragraph (c) of this section.

* * * * *

(c) Each owner or operator subject to § 60.104(b) shall submit a report except as provided by paragraph (d) of this section. The following information shall be contained in the report:

* * * * *

(d) For any periods for which sulfur dioxide or oxides emissions data are not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.

(e) The owner or operator of an affected facility shall submit the reports required under this subpart to the Administrator semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period.

* * * * *

11. Section 60.108 is amended by revising paragraph (e) to read as follows:

§ 60.108 Performance test and compliance provisions.

* * * * *

(e) Each owner or operator subject to § 60.104(b) who has demonstrated compliance with one of the provisions of § 60.104(b) but a later date seeks to comply with another of the provisions of § 60.104(b) shall begin conducting daily performance tests as specified under paragraph (d) of this section immediately upon electing to become subject to one of the other provisions of § 60.104(b). The owner or operator shall furnish the Administrator with a written notification of the change in the semiannual report required by § 60.107(e).

Subpart CC—[Amended]

12. Section 60.293 is amended by revising paragraphs (c)(4), (c)(5), (d)(3) introductory text and (d)(3)(iii) to read as follows:

§ 60.293 Standards for particulate matter from glass melting furnace with modified-processes.

* * * * *

(c) * * *

(4) Determine, based on the 6-minute opacity averages, the opacity value corresponding to the 99 percent upper confidence level of a normal distribution of average opacity values.

(5) For the purposes of § 60.7, report to the Administrator as excess emissions all of the 6-minute periods during which the average opacity, as measured by the continuous monitoring system installed under paragraph (c)(1) of this section, exceeds the opacity value corresponding to the 99 percent upper confidence level determined under paragraph (c)(4) of this section.

(d) * * *

(3) An owner or operator may redetermine the opacity value corresponding to the 99 percent upper confidence level as described in paragraph (c)(4) of this section if the owner or operator:

* * * * *

(iii) Uses the redetermined opacity value corresponding to the 99 percent upper confidence level for the purposes of paragraph (c)(5) of this section.

* * * * *

Subpart NN—[Amended]

13. Section 60.403 is amended by revising paragraph (f) to read as follows:

§ 60.403 Monitoring of emissions and operations.

* * * * *

(f) Any owner or operator subject to the requirements under paragraph (c) of this section shall report on a frequency specified in § 60.7(c) all measurement results that are less than 90 percent of the average levels maintained during the most recent performance test conducted under § 60.8 in which the affected facility demonstrated compliance with the standard under § 60.402.

Subpart XX—[Amended]

14. Section 60.502 is amended by revising paragraphs (e)(3) and (e)(4) to read as follows:

§ 60.502 Standards for Volatile Organic Compound (VOC) emissions from bulk gasoline terminals.

* * * * *

(e) * * *

(3)(i) The owner or operator shall cross-check each tank identification number obtained in paragraph (e)(2) of this section with the file of tank vapor tightness documentation within 2 weeks after the corresponding tank is loaded, unless either of the following conditions is maintained:

(A) If less than an average of one gasoline tank truck per month over the last 26 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed each quarter; or

(B) If less than an average of one gasoline tank truck per month over the last 52 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed semiannually.

(ii) If either the quarterly or semiannual cross-check provided in paragraphs (e)(3)(i) (A) through (B) of this section reveals that these conditions were not maintained, the source must return to biweekly monitoring until such time as these conditions are again met.

(4) The terminal owner or operator shall notify the owner or operator of each non-vapor-tight gasoline tank truck loaded at the affected facility within 1 week of the documentation cross-check in paragraph (e)(3) of this section.

* * * * *

Subpart AAA—[Amended]

15. Section 60.531 is amended by revising the definition for "wood heater" to read as follows:

§ 60.531 Definitions.

* * * * *

Wood heater means an enclosed, wood burning appliance capable of and intended for space heating or domestic water heating that meets all of the following criteria:

(1) An air-to-fuel ratio in the combustion chamber averaging less than 35-to-1 as determined by the test procedure prescribed in § 60.534 performed at an accredited laboratory;

(2) A usable firebox volume of less than 20 cubic feet;

(3) A minimum burn rate of less than 5 kg/hr as determined by the test procedure prescribed in § 60.534 performed at an accredited laboratory; and

(4) A maximum weight of 800 kg. In determining the weight of an appliance for these purposes, fixtures and devices that are normally sold separately, such as flue pipe, chimney, and masonry components that are not an integral part of the appliance or heat distribution ducting, shall not be included.

16. Section 60.536 is amended by revising paragraph (f)(3) to read as follows:

§ 60.536 Permanent label, temporary label, and owner's manual.

* * * * *

(f) * * *

(3) If an appliance is a coal-only heater as defined in § 60.530, the following statement shall appear on the permanent label:

U.S. Environmental Protection Agency

This heater is only for burning coal. Use of any other solid fuel except for coal ignition purposes is a violation of Federal law.

* * * * *

Subpart SSS—[Amended]

17. Section 60.714 is amended by revising paragraph (a) to read as follows:

§ 60.714 Installation of monitoring devices and recordkeeping.

* * * * *

(a) Each owner or operator of an affected coating operation that utilizes less solvent annually than the applicable cutoff provided in § 60.710(b) and that is not subject to § 60.712 (standards for coating operations) shall maintain records of actual solvent use.

* * * * *

18. Section 60.717 is amended by revising paragraphs (c) and (d) introductory text, to read as follows:

§ 60.717 Reporting and monitoring requirements.

* * * * *

(c) Each owner or operator of an affected coating operation initially utilizing less than the applicable volume of solvent specified in § 60.710(b) per calendar year shall report the first calendar year in which actual annual solvent use exceeds the applicable volume.

(d) Each owner or operator of an affected coating operation, or affected coating mix preparation equipment subject to § 60.712(c), shall submit semiannual reports to the Administrator documenting the following:

* * * * *

PART 61—[AMENDED]

1. The authority citation for part 61 continues to read as follows:

Authority: 42 U.S.C. 7401, 7412, 7414, 7416, 7601.

Subpart A—[Amended]

2. Section 61.04 is amended by revising paragraph (b) introductory text to read as follows:

§ 61.04 Address.

* * * * *

(b) Section 112(d) of the Act directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce national emission standards for hazardous air pollutants for stationary sources located in such State. If the authority to implement and enforce a standard under this part has been delegated to a State, all information required to be submitted to EPA under paragraph (a) of this section shall also be submitted to the appropriate State agency (provided, that each specific delegation may exempt sources from a certain Federal or State reporting requirement). The Administrator may permit all or some of the information to be submitted to the appropriate State agency only, instead of to EPA and the State agency. If acceptable to both the Administrator and the owner or operator of a source, notifications and reports may be submitted on electronic media. The appropriate mailing address for those States whose delegation request has been approved is as follows:

* * * * *

Subpart L—[Amended]

3. Section 61.139 is amended by removing paragraphs (i)(1)(ii), and paragraph (j)(3); re-designating paragraph (i)(1)(iv) as paragraph (i)(1)(ii); re-designating paragraph (i)(1)(v) as paragraph (i)(1)(iv); and revising newly designated paragraph (i)(1)(ii), and paragraphs (j)(2) introductory text, and (j)(2)(iv) to read as follows:

§ 61.139 Provisions for alternative means for process vessels, storage tanks, and tar-intercepting sumps.

* * * * *

(i) * * *

(1) * * *

(ii) For each carbon absorber, a plan for the method for handling captured benzene and removed carbon to comply with paragraphs (b)(1) and (2) of this section.

* * * * *

(j) * * *

(2) The following information shall be reported as part of the semiannual reports required in § 61.138(f).

* * * * *

(iv) For each vapor incinerator, the owner or operator shall specify the method of monitoring chosen under paragraph (f)(2) of this section in the first semiannual report. Any time the owner or operator changes that choice, he shall specify the change in the first semiannual report following the change.

* * * * *

Subpart M—[Amended]

4. Section 61.142 is amended by revising paragraph (b)(6) to read as follows:

§ 61.142 Standard for asbestos mills.

* * * * *

(b) * * *

(6) Submit semiannually a copy of visible emission monitoring records to the Administrator if visible emissions occurred during the report period. Semiannual reports shall be postmarked by the 30th day following the end of the six-month period.

* * * * *

5. Section 61.144 is amended by revising paragraph (b)(8) to read as follows:

§ 61.144 Standard for manufacturing.

* * * * *

(b) * * *

(8) Submit semiannually a copy of the visible emission monitoring records to the Administrator if visible emission occurred during the report period. Semiannual reports shall be postmarked by the 30th day following the end of the six-month period.

6. Section 61.147 is amended by revising paragraph (b)(8) to read as follows:

§ 61.147 Standard for fabricating.

* * * * *

(b) * * *

(8) Submit semiannually a copy of the visible emission monitoring records to the Administrator if visible emission occurred during the report period. Semiannual reports shall be postmarked by the 30th day following the end of the six-month period.

Subpart N—[Amended]

7. Section 61.163 is amended by revising paragraph (c)(3) to read as follows:

§ 61.163 Emission monitoring.

* * * * *

(c) * * *

(3) Determine, based on the 6-minute opacity averages, the opacity value corresponding to the 99 percent upper confidence level of a normal or log-normal (whichever the owner or operator determines is more representative) distribution of the average opacity values.

* * * * *

PART 63—[AMENDED]

1. The authority citation for part 63 continues to read as follows:

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

Subpart A—[Amended]

2. Section 63.8 is amended by adding the last sentence in paragraph (g)(5) to read as follows:

§63.8 Monitoring requirements.

* * * * *

(g) * * *

(5) * * * For owners or operators complying with the requirements of § 63.10(b)(2)(vii) (A) or (B), data averages must include any data recorded during periods of monitor breakdown or malfunction.

§ 63.9 [Amended]

3. Section 63.9 is amended by removing and reserving paragraph (b)(4)(iv).

4. Section 63.10 is amended by adding paragraphs (b)(2)(vii)(A), (b)(2)(vii)(B), and (b)(2)(vii)(C) and removing and reserving paragraph (e)(3)(i)(C) to read as follows:

§ 63.10 Recordkeeping and reporting requirements.

* * * * *

(b) * * *

(2) * * *

(vii) * * *

(A) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(B) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(C) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (b)(2)(vii), if the administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

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