

WEST VIRGINIA
SECRETARY OF STATE
KEN HECHLER
ADMINISTRATIVE LAW DIVISION

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OFFICE OF THE SECRETARY OF STATE
WEST VIRGINIA

FORM #1

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 NO

IF YES, SERIES NUMBER OF RULE BEING AMENDED: 34

TITLE OF RULE BEING AMENDED: "Emission Standards for Hazardous Air Pollutants Pursuant to 40 CFR Part 63"

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

TITLE OF RULE BEING PROPOSED: _____

DATE OF PUBLIC HEARING: July 19, 1999 TIME: 6:00 p.m.

LOCATION OF PUBLIC HEARING: Office of Air Quality - Conference Room
1558 Washington Street East
Charleston, WV 25311-2599

COMMENTS LIMITED TO: ORAL , WRITTEN , BOTH

COMMENTS MAY ALSO BE MAILED TO THE FOLLOWING ADDRESS: Edward L. Kropp, Chief

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.

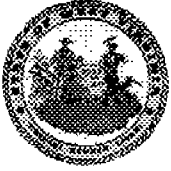
Office of Air Quality
1558 Washington Street, East
Charleston, WV 25311-2599

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

ATTACH A BRIEF SUMMARY OF YOUR PROPOSAL

Karen G. Watson
Karen G. Watson, Attorney

\$5.40 w/out fed. reg's
\$47.00 w/fed. reg's



Executive Office
10 McJunkin Road
Nitro, West Virginia 25143-2506
Telephone: 304-759-0515
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West Virginia Bureau of Environment

Cecil H. Underwood
Governor

Michael P. Miano
Commissioner

June 14, 1999

Ms. Judy Cooper
Director, Administrative Law Division
Office of the Secretary of State
Capitol Complex
Charleston, West Virginia 25305


RE: 45CSR34 - "EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS PURSUANT TO 40
CFR PART 63"

Dear Ms. Cooper:

This is to advise that I am giving approval to file the above-referenced rule with your Office as "Notice of Public Hearing/Comment Period."

If you should have questions or require additional information, please contact Carrie Chambers in my office at 759-0515. Your cooperation in this regard is very much appreciated.

Sincerely yours,


Michael P. Miano
Commissioner

MPM:cc

Attachment

cc: Skipp Kropp
Karen Watson
Carrie Chambers

**BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION**

BRIEFING DOCUMENT

Rule Title: 45CSR34 - "Emission Standards for Hazardous Air Pollutants Pursuant to 40 CFR Part 63"

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

B. SUMMARY OF RULE:

The current version of 45CSR34 provides authority for the Director to determine and enforce case-by-case 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 Clean Air Act.

The rule also establishes general provisions for emission standards for hazardous air pollutants (NESHAPs) and other regulatory requirements pursuant to section 112 of the federal Clean Air Act (CAA). The rule codifies general procedures and criteria to implement emission standards for stationary sources that emit (or have the potential to emit) one or more of the hazardous air pollutants (HAP) in or pursuant to section 112(b) of the CAA. This revised rule incorporates by reference additional provisions relating to petroleum refineries, industrial process cooling towers, pulp and paper production, secondary lead smelting, aerospace manufacturing and rework facilities, pharmaceuticals production, flexible polyurethane foam production, ethylene oxide sterilization and fumigation operations, organic hazardous air pollutants from the synthetic organic chemical manufacturing industry, halogenated solvent cleaning, wood furniture manufacturing operations, polymer and resin production facilities and volatile organic compound emissions from the polymer manufacturing industry, magnetic tape manufacturing, ferroalloys production, mineral wool production, and polyether polyols production.

C. STATEMENT OF CIRCUMSTANCES WHICH REQUIRE RULE:

This rule, in conjunction with existing rule 45CSR15, establishes general provisions for emission standards for hazardous air pollutants and other regulatory requirements promulgated by USEPA as of June 1, 1999, pursuant to section 112 of the federal Clean Air Act, as amended. 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 substances listed as hazardous air pollutants in section 112(b) of the Clean Air Act, as amended.

45CSR34 incorporates hazardous air pollutant standards codified by USEPA under 40 CFR Part 63 whereas the earlier existing rule for hazardous air pollutants, 45CSR15, primarily incorporates hazardous air pollutant standards promulgated by USEPA under 40 CFR Part 61 prior to amendment of the Clean Air Act. The Director intends to incorporate the additional federal counterpart rules by reference. Promulgation of this rule 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 their June 10, 1999 meeting, the Environmental Protection Advisory Council reviewed and discussed this rule - there were no substantive changes as a result of their discussion. (See attached minutes of that meeting.)

MINUTES

ENVIRONMENTAL PROTECTION ADVISORY COUNCIL

June 10, 1999, Director's Conference Room, Nitro

The sixteenth meeting of the DEP Advisory Council was held Thursday, June 10, 1999, in the Director's Conference Room located in Nitro. Chairman Mike Miano called the meeting to order at 10:00 a.m.

ATTENDING:

Advisory Council Members:

Mike Miano, Chairman
Jacqueline Hallinan
William Raney
Rick Roberts
William Samples

Environmental Protection:

Bill Adams	Pam Nixon
Andy Gallagher	Rocky Parsons
Tony Grbac	Cap Smith
Randy Huffman	Charlie Sturey
Mike Johnson	Barbara Taylor
Mike Lewis	Karen Watson
Robert Keatley	Mike Zeto

1) Review and Approval of March 22, 1999 Minutes. Chairman Miano called the meeting to order at 10:00 a.m. The first item on the agenda was approval of the minutes of the March 22 Advisory Council; they were approved as written.

2) Discussion of Proposed Rule Amendments - 2000 Legislative Session. In accordance with WV Code §22-1-1(c), and DEP's new rule-making procedure that was implemented by Director Miano in September 1998 to involve the 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 DEP's proposed legislative rule changes before they are filed for public hearing, the following proposed rules were brought to the Council's attention.

Chairman Miano said he would like to begin by saying he hoped all Council members had received their draft rules by E-mail without any complications and they were able to review them before the meeting. He informed the Council that due to the large number of rules being proposed for the 2000 Legislative Session, DEP's program offices would review them with the

Council as thoroughly as possible, in the allotted time frame, and try to answer any questions or concerns the Council may have.

The following Office of Air Quality's proposed rule amendments were discussed by Karen Watson, OAQ, with assistance from Richard Keatley, also from the OAQ office:

- **45CSR1 - "TO PREVENT AND CONTROL AIR POLLUTION FROM COAL REFUSE DISPOSAL AREAS"**
- **45CSR2 - "TO PREVENT AND CONTROL PARTICULATE AIR POLLUTION FROM COMBUSTION OF FUEL IN INDIRECT HEAT EXCHANGERS"**
- **45CSR3 - "TO PREVENT AND CONTROL AIR POLLUTION FROM THE OPERATION OF HOT MIX ASPHALT PLANTS"**
- **45CSR4 - "TO PREVENT AND CONTROL THE DISCHARGE OF AIR POLLUTANTS INTO THE OPEN AIR WHICH CAUSES OR CONTRIBUTES TO AN OBJECTIONABLE ODOR OR ODORS"**
- **45CSR5 - "TO PREVENT AND CONTROL AIR POLLUTION FROM THE OPERATION OF COAL PREPARATION PLANTS, COAL HANDLING OPERATIONS AND COAL REFUSE DISPOSAL AREAS"**
- **45CSR6 - "TO PREVENT AND CONTROL AIR POLLUTION FROM COMBUSTION OF REFUSE"**
- **45CSR7 - "TO PREVENT AND CONTROL PARTICULATE MATTER AIR POLLUTION FROM MANUFACTURING PROCESSES AND ASSOCIATED OPERATIONS"**
- **45CSR10 - "TO PREVENT AND CONTROL AIR POLLUTION FROM THE EMISSION OF SULFUR OXIDES"**
- **45CSR12 - "AMBIENT AIR QUALITY STANDARD FOR NITROGEN DIOXIDE"**
- **45CSR16 - "STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES PURSUANT TO 40 CFR PART 60"**
- **45CSR17 - "TO PREVENT AND CONTROL PARTICULATE MATTER AIR POLLUTION FROM MATERIALS HANDLING, PREPARATION, STORAGE AND OTHER SOURCES OF FUGITIVE PARTICULATE MATTER"**
- **45CSR18 - "TO PREVENT AND CONTROL PARTICULATE AIR POLLUTION FROM DIRECT MEAT-FIRING DEVICES"**
- **45CSR23 - "TO PREVENT AND CONTROL EMISSIONS FROM MUNICIPAL SOLID WASTE LANDFILLS"**
- **45CSR25 - "TO PREVENT AND CONTROL AIR POLLUTION FROM HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES"**
- **45CSR33 - "ACID RAIN PROVISIONS AND PERMITS"**
- **45CSR34 - "EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS PURSUANT TO 40 CFR PART 63"**

Karen began by bringing the Council up to date on the status of two OAQ rules that were filed during the last session (or late in the session). 45CSR8 revised the ambient air quality for sulfur oxides and particulate matter, and 45CSR9 pertained to ambient air quality standards for carbon monoxide and ozone. The DC Circuit Court of Appeals has ordered EPA to show how they arrived at the new standards - EPA may go back to the previous standards. Karen also apprised the Council on the N_{ox} State Implementation Plan. The Circuit Court stayed the implementation of that rule and there are no plans to develop any other amendments in the

immediate future. 45CSR28, which is the emissions trading rule that was filed late in the 1999 Session, was not taken up by the Legislature, but plans are to put the rule on the July agenda of the Interim Legislative Committee.

Karen explained the reason for the unusually large number of DEP rules that are being filed for the next Legislative Session. She informed the Council that several of the rules were outdated and were amended for consistency and streamlining, and are a result of months of on-going meetings with stakeholders -- involving both the regulated community and citizens. A particulate matter and sulfur oxide work group was also involved. Those rule amendments as a result of the stakeholders process include: 45CSR1 (which is being repealed and replaced with language in 45CSR5), 45CSR2, 3, 4, 5, 6, 7, 10, 12, 17, and 18 (which is being repealed since the rule is no longer deemed necessary). The amendments to the remainder of the rules, 45CSR16, 23, 25, 33, and 34 were necessary to adopt by reference definitions, clarifications, technical amendments, etc., recently adopted by US EPA.

After several minutes of discussion, the Advisory Council recommended to the Director that the following amendments be made to the OAQ rules:

Mr. Samples pointed out that 45CSR2 and 45CSR7 contain different definitions for the term "opacity." The agency responded that this discrepancy was inadvertent and the language should be as it is in 45CSR2. The agency agreed to revise 45CSR7, subsection 2.23, accordingly.

Mr. Larry Harris was unable to attend the meeting; however, he expressed the following comments on 45CSR10 and 45CSR33 by e-mail. He stated that the State's rules should be more stringent than the federal counterpart regulations, since the State's streams are being adversely impacted. The agency responded that, at this point in time, it does not possess sufficient evidence to make the written finding that is required by WV Code §22-2-3a before promulgating a rule which is more stringent than a counterpart federal regulation.

Cap Smith and Mike Zeto discussed the following Office of Waste Management proposed rule amendments:

- 33CSR2 - "Sewage Sludge Management Rule"
- 33CSR20 - "Hazardous Waste Management Rule"

Mike Zeto briefed the Council on the proposed amendments to 33CSR2. He stated that in 1996 the Legislature mandated DEP to perform a study on soil limitations for sewage sludge land application sites. These amendments (as a result of the study) were to be proposed by June 30, 1999. Other amendments to the rule include specifying the analytical method used for soil analysis, placing conditions on variances from the soil limits for land application sites, providing an incentive for municipalities to produce higher quality compost products, and adjusting the sewage sludge limits for four metals. Mr. Zeto told the Council these amendments are being proposed to update other related areas of the rule in an attempt to provide better management of sewage sludge within the state.

Cap Smith discussed 33CSR20 with the Council. He informed the Council that amendments are proposed in section 2 of the rule that will allow the Office of Waste Management to delist hazardous wastes, which has previously been handled by EPA. The other significant amendments that are being proposed by adoption of the Federal Register pertain to revision standards for owners and operators of closed and closing hazardous waste management facilities, post closure permit requirements, and the closure process. These amendments are referenced throughout the rule and will hopefully expedite site cleanup while maintaining environmental protection.

There were several minutes of discussion on OWM's proposed rule amendments; however, no recommendations were made to the Director concerning the amendments.

Mike Lewis, Office of Oil and Gas, discussed the following new proposed rule:

- **35CSR7 - "Well Operations - Within and Around Gas Storage Reservoirs"**

Mike informed the Council that 35CSR7 is a proposed "new" rule for the O&G Office. The rule is needed to provide protection of the environment, the public, and the state's natural gas resources. It is the intent of the proposed rule to accomplish this by addressing certain operating procedures that oil and gas and gas storage operators are to use when drilling into or through a gas storage reservoir or the gas storage reservoir protective area. In order to assure absence of leaking gas, the proposed rule requires gas storage operators to conduct monitoring and inspections of gas storage wells.

There were no questions or discussion by the Council on this proposed rule.

The following proposed rules were discussed by the Office of Mining and Reclamation:

- **38CSR2 - "Surface Mining and Reclamation Rule"**
- **38CSR2A - "Rules for Mining and Restoration for Sandstone, Limestone, and Sand"**
- **38CSR2B - "RULES FOR MINING AND RECLAMATION OF MINERALS OTHER THAN COAL"**

Ed Griffith, Office of Surface Mining, discussed the proposed amendments to the Surface Mining and Reclamation Rule. Ed told the Council that there are only minor amendments being proposed to this year's rule. The proposed definition of "woodlands" in subsection 2.136 relates to the utilization of commercial woodlands in Approximate Original Contour variance areas. This change is being proposed in order for the state to meet the federal policy that is expected to change in July 1999. The proposed amendment to change the bonding requirements of mining operations that request variances from contemporaneous reclamation to the maximum amount per acre bond (\$5,000 per acre) is found in subdivision 14.15.f. All other amendments are being proposed in order to meet the requirements of the Office of Surface Mining's program amendments.

Rocky Parsons, OMR's Philippi Office, next addressed OMR's proposed rules 38CSR2A and 2B. Rocky explained to the Council members that 38CSR2B has been in place since 1983 and regulates all minerals other than coal. However, in accordance with the requirement that separate rules for limestone, sandstone, and sand are to be promulgated, DEP is proposing

38CSR2A which will regulate only those minerals - 38CSR2B will regulate all minerals other than limestone, sandstone, sand, and coal. Both proposed rules will regulate roads, blasting, drainage control, methods of operation, excess spoil disposal, revegetation, mapping, transfer of permits, permit renewals, revisions and incidental boundary revisions. 38CSR2A will provide provisions for restoration and 38CSR2B will include provisions for reclamation. Rocky gave the Council a brief history on the roadblocks the agency has encountered in the past several years in their attempt to amend the quarry statute. He said since the agency has been unsuccessful in that approach, it has become necessary to try to accomplish this through rule making. He informed the Council of a public meeting held the previous week to discuss the two proposed rules. He said the meeting was well attended and he believes the rules were well received by everyone in attendance.

The three OMR proposed rules were discussed by the Council members. Bill Raney said that although Rocky stated that the quarry rules have been well received by industry and the citizens, he is concerned about whether there has been enough time for the review of the proposed rules after they were drafted. He believes there would be a smoother transition into the rule making process, i.e., the public hearing/comment period, etc., if there had been more involvement from outside DEP during the drafting of the rules.

Mr. Larry Harris commented by e-mail 38CSR2A and 2B. His question is whether the siltation measures include silt fences where runoff might enter streams. He said it is not apparent what best management practices are for this situation, and he wonders if it needs to be spelled out. He knows of some operations in quarries where streams muddy after rainfalls, such as the Elkins and Waco quarries near Snowshoe, and he feels this is harming the streams. Do the new rules address this?

Rocky Parsons responded by saying that design criteria for drainage control structures is found in the technical handbook. Silt fences are not adequate for sediment control. The drainage system must be designed to hold .125 ac/ft of sediment for each acre of disturbed land. All runoff must pass through a drainage control structure. There is a provision for less sediment control (1/2 factor) for certain circumstances as approved by the Director. Effluent limits as established in the NPDES permit must be met.

Tony Grbac, Office of Surface Mining, addressed the following rule:

199CSR1 - "SURFACE MINING BLASTING RULE"

Tony began by briefing the Council on the history of the Surface Mining Blasting Rule. This rule is being proposed to comply with SB681 - passed during the last session. This bill created the Office of Explosives and Blasting and the Office of Coalfield Community Development, which is under the West Virginia Development Office. The proposed rule will regulate blasting laws and rules associated with all surface-mining operations. All duties currently performed by OMR related to blasting, and all rules which now regulate blasting (38CSR2C) will be transferred to this new office. Besides regulating blasting on all surface mining operations, it will also implement and oversee pre-blast survey processes; maintain and operate a system to receive and address questions, concerns and complaints relating to mining

operations; determine the qualifications for individuals and firms performing pre-blast surveys; establish the education, training, examination and certification of blasters; administer a claims process for property damage caused by blasting; and conduct a study of blasting and make recommendations regarding any appropriate rule or code changes.

Tony explained that the revenue generated by the proposed fee in 199CSR1 (one-half cent times the number of pounds of explosive material used during the preceding month for any purpose on the surface mining operations) would fund both the offices, as required by SB681. After one year of collection, both offices are to report to the Legislature as to whether the revenue collected is sufficient to operate both offices.

After several minutes of discussion between DEP and the Council members, Bill Raney expressed his concern in filing the rule for public hearing in the specified time frame. Mr. Raney asked if anyone outside DEP has been involved in drafting the rule. OMR answered by saying the rule was drafted by several staff within OMR. Mr. Raney replied that he believes there will be serious concerns with this rule once industry has had an opportunity to review it. He believes the rule drafting process definitely needs input from firms and individuals outside DEP, and he thinks the process will go smoother once everyone has had the opportunity to address their concerns. Mr. Raney recommended that the Director withhold this rule from the list of rules DEP proposes to file for public hearing/comment period in the coming week to give all interested parties a chance to participate in drafting the rule.

After discussion of this recommendation, Chairman Miano said he believes the best approach would be to continue with the filing of the proposed rule for public hearing, start the rule in the normal process and time frame, and in the meantime he would commit to putting together a work group of interested parties to discuss the rule. If DEP feels that more time is needed once the group begins their work on the rule, he will consider the possibility of either extending the comment period or filing for another public hearing. He said he will also decide in the near future whether DEP will file the rule as an "Emergency Rule" since HB 681 will become effective on June 11.

Council members also pointed out a typographical error in subdivision 3.9.a.3. of the rule relating to cross-references that will be corrected by DEP.

Barb Taylor and Mike Johnson, Office of Water Resources, briefed Council on the following rules:

- 47CSR57A - "Groundwater Protection Standards at Steam Electric Generating Facilities"
- 47CSR26 - "Water Pollution Control Permit Fee Schedule"
- 47CSR31 - "State Water Pollution Control Revolving Fund Program Rule"

Barb described the proposed "new" rule relating to Groundwater Protection Standards at Steam Electric Generating Facilities. She noted that the rule is a result of a Notice of Intent filed on October 24, 1994, by the West Virginia Steam Electric Generation Industry, with the Director of DEP, in accordance with 47CSR57 to apply for a class variance for all West Virginia power stations and associated disposal sites. At that time, DEP provided AEP and AP with the

opportunity to conduct a four-year study to gather the necessary data to support their variance request. The objectives were met by assembling and reviewing data, estimating potential impacts to receptors, and performing an economic assessment impact analysis to the industry, commercial enterprises, and citizens at large if compliance with the Groundwater Protection Act were required without benefit of the variances. After review of the four-year study, the Director determined that granting this request for a variance at these locations would not pose adverse effects to human health or the environment. There are no human or environmental sensitive receptors between the coal storage areas or as ponds; therefore, it is unlikely there will be adverse affects. Barb gave each member a copy of the four-year study on which the Director made his determination.

Chairman Miano told Council that DEP is definitely willing to look at such cases where extensive research and study have been done by the regulated community to back up their findings before granting such variances, and believes DEP will see more studies like this in the future.

Barb next apprised the members on the proposed amendments of the Water Pollution Control Permit Fee Schedule. She stated that amendments are being proposed as a result of HB 2684, passed March 11, 1999, and effective ninety days from passage. The Director is required to implement an emergency rule to implement the fee schedule authorized by the amendments by July 1, 1999. This rule was filed as an "Emergency Rule" on June 7, 1999.

Mike Johnson, Office of Water Resources' Construction Assistance Office, briefed the Council on 47CSR31 - the Water Pollution Control Revolving Fund Program rule. The amendments to this rule are being proposed to allow the State Revolving Fund low interest terms to be extended from 20 years to 30 years for communities that qualify as "disadvantaged." There is only one other state in the country to receive such approval from EPA. Mike informed the Council that he was only recently made aware of this extension by EPA to extend the low interest loans from 20 to 30 years while attending a meeting out of state. This rule was filed as an "Emergency Rule" on May 24, 1999.

Council members unanimously agreed that Mike Johnson should be commended for gathering this information and proposing the amendment to the rule that will enable disadvantaged communities to immediately take steps toward constructing watershed projects that will provide affordable monthly sewer rates.

Open Discussion:

Chairman Miano and Council members expressed their compliments to the program offices for all their hard work, especially with the stakeholders process -- it is obvious a lot of hard work has gone into the process in order to make their efforts more productive.

Bill Raney asked a question relating to the "More or Less" Stringency statement that appears on the front of some DEP rules, but not on others, and voiced his concern if DEP is paying close attention to this, or if the same statement is appearing with all proposed rules. Carrie Chambers from the Director's Office explained that statement was once required to be included in the "General" section of each rule; however, it is now placed in the briefing document that is attached to each rule, and required by the Secretary of State's Office and the

Legislative Rule-Making Review Committee, before it is filed. She went on to explain that with the rush to get draft copies of the rules to Council members as soon as possible, some of the Briefing Documents had not been completed, but would be attached to all DEP rules before they are filed for public hearing. Chairman Miano went on to say it is his belief that all program offices are carefully scrutinizing each rule before that decision is made.

Chairman Miano thanked Council for taking time from their busy schedules to review the extensive list of DEP's proposed rules. He informed the Council that the minutes would be left open for comment until Wednesday, June 16, at which time the minutes will be attached to the rules and filed with the Secretary of State's Office and the Legislative Rule-Making Review Committee for notice of public hearing/comment period.

Before adjourning the meeting, the Council informed Chairman Miano that they would prefer beginning future meetings at 10:00 a.m., instead of the usual time of 1:00 p.m. The meeting was then adjourned at 3:30 p.m.

APPENDIX B

FISCAL NOTE FOR PROPOSED RULES

Rule Title: 45CSR34 "Emission Standards for Hazardous Air Pollutants Pursuant to 40 CFR Part 63"

Type of Rule: X Legislative Interpretive Procedural

Agency: Office of Air Quality

Address: 1558 Washington Street, East
 Charleston, WV 25311-2599

1. Effect of Proposed Rule	Annual		Fiscal Year		
	Increase	Decrease	Current	Next	There-after
Estimated Total Cost	\$ 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: Costs anticipated to be incurred in the implementation of federal rules promulgated under 40 CFR Part 63 as of June 1, 1999 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 16, 1995.

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: 6/11/99

Signature of Agency Head or Authorized Representative

Karen G. Watson
Karen G. Watson, Attorney

JUN 16 9 37 AM '99

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

OFFICE OF THE ATTORNEY GENERAL
SECRETARY OF STATE

SERIES 34
EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS
PURSUANT TO 40 CFR PART 63

§45-34-1. General.

1.1. Scope. -- This rule establishes general provisions for national emission standards for hazardous air pollutants (NESHAPS) and other regulatory requirements pursuant to section 112 of the federal Clean Air Act as amended in 1990 (CAA). This rule codifies general procedures and criteria to implement emission standards for stationary sources that emit (or have the potential to emit) one or more of the substances listed as hazardous air pollutants (HAP) in or pursuant to section 112(b) of the 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 these standards.

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

1.3. Filing Date. -- ~~May 20, 1999.~~

1.4. Effective Date. -- ~~June 1, 1999.~~

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 63, effective July 1, 1997~~8~~, as amended by the Federal Register through June 1, 1998~~9~~.

1.6. Former Rules -- This legislative rule amends 45CSR34 "Emission Standards for

Hazardous Air Pollutants Pursuant to 40 CFR Part 63" which was filed May 20, 1999, and which became effective June 1, 1999.

§45-34-2. Requirements.

2.1. After the effective date of the state permit program under Title V of the CAA, no person may modify a major source of hazardous air pollutants, unless the Director determines that the maximum achievable control technology emission limitation under this rule for existing sources will be met.

2.2. After the effective date of the state permit program under Title V of the CAA, no person may construct or reconstruct any major source of hazardous air pollutants, unless the Director determines that the maximum achievable control technology emission limitation under this rule for new sources will be met.

2.3. After the effective date of the state permit program under Title V of the CAA, the Director shall determine and apply case-by-case maximum achievable control technology standards to existing sources categorized by the Administrator pursuant to Section 112(c)(1) of the CAA for which the Administrator has not promulgated emission standards in accordance with Section 112(d) and 112(e) of the CAA.

2.4. Prior to constructing, reconstructing or modifying any facility subject to this rule, the owner or operator shall obtain a permit in accordance with the applicable requirements of 45CSR13, 45CSR14, 45CSR30 and this rule.

§45-34-3. Definitions.

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

3.2. "Director" means the Director of the West Virginia 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.

3.3. "Hazardous air pollutant" means any air pollutant listed pursuant to §112(b) of the CAA as of June 1, 1998.

§45-34-4. Adoption of Standards.

4.1. The Director hereby adopts and incorporates by reference the provisions of 40 CFR Part 63 including any reference methods, performance specifications and other test methods which are appended to such standards and contained in 40 CFR Part 63 effective July 1, 1997~~8~~, as amended by the Federal Register through June 1, 1998~~9~~, for the purposes of implementing a program for national emission standards for hazardous air pollutants for source categories, except as follows:

4.1.a. Section 63.15 is amended to provide that information shall be available to the public in accordance with W.Va. Code §§22-5-1 et seq., §§29B-1-1 et seq., and 45CSR31.

4.1.b. Any provision related to section 112(r) of the CAA, notwithstanding any requirements of 45CSR30.

4.1.c. Subpart EEE of 40 CFR Part 63 shall be excluded.

§45-34-5. Director.

5.1. Any and all references in 40 CFR Part 63 to the "Administrator" are amended to be the

"Director" except as follows:

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

5.1.b. 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

5.1.c. where the context of the regulation clearly requires otherwise.

§45-34-6. Permits.

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

§45-34-7. Inconsistency Between Rules.

7.1. In the event of any inconsistency between this rule and any other existing rule of the West Virginia Division of Environmental Protection, 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, rule or regulation.

SUMMARY OF NESHAP ACTIONS
Federal Registers
June 2, 1998 - June 1, 1999

- Subject -	- Class -	- Summary -
<p>June 9, 1998</p> <p>NESHAP: Petroleum Refineries</p>	<p>Direct Final Rule</p>	<p>Vol. 63, No. 110</p> <p>This action revises the date by which an Implementation Plan for emissions averaging is to be submitted and also exempts specific streams associated with hydrogen plants from the requirements for process vents.</p>
<p>July 23, 1998</p> <p>NESHAP: Industrial Process Cooling Towers</p>	<p>Direct Final Rule</p>	<p>Vol. 63, No. 141</p> <p>This action revises the September 1994 final rule to clarify that the owner or operator of a source that ceases use of chromium-based chemicals may demonstrate compliance with the standard through recordkeeping.</p>
<p>August 7, 1998</p> <p>NESHAP: for Source Category: Pulp and Paper Production; Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards: Pulp, Paper, and Paperboard Category</p>	<p>Final Rule; Correction</p>	<p>Vol. 63, No. 152</p> <p>This action corrects minor errors in the national emission standards for hazardous air pollutants for the pulp and paper production category which appeared in the Federal Register on April 15, 1998.</p>

SUMMARY OF NESHAP ACTIONS
Federal Registers
June 2, 1998 - June 1, 1999

- Subject -	- Class -	- Summary -
August 18, 1998		Vol. 63, No. 159
NESHAP: Petroleum Refineries	Final Rule	This action revises monitoring, recordkeeping, and reporting requirements.
August 24, 1998		Vol. 63, No. 163
NESHAP: Secondary Lead Smelting	Direct Final Rule; Amendments	This action revises §63.544 to allow for pressurized seals on dryer transition pieces and also revises the total hydrocarbon emission limit for blast furnace charging hoods in §63.543(g).
September 1, 1998		Vol. 63, No. 169
NESHAP: Aerospace Manufacturing and Rework Facilities	Final Rule	This action finalizes changes involving definitions and coating limits.
September 16, 1998		Vol. 63, No. 179
NESHAP: Pulp and Paper Production	Final Rule; Interpretation & Technical Amendment	This action makes interpretive amendments to certain regulatory text regarding the applicability of a 10 percent excess emissions allowance for condensate treatment systems.

SUMMARY OF NESHAP ACTIONS
Federal Registers
June 2, 1998 - June 1, 1999

- Subject -	- Class -	- Summary -
September 21, 1998		Vol. 63, No. 182
NESHAP: Pharmaceuticals Production	Final Rule	This action promulgates national emission standards for hazardous air pollutants for new and existing facilities that manufacture pharmaceutical products.
October 7, 1998		Vol. 63, No. 194
NESHAP: Flexible Polyurethane Foam Production	Final Rule	This action promulgates national emission standards for hazardous air pollutants for new and existing plantsites that manufacture flexible polyurethane foam.
December 4, 1998		Vol. 63, No. 233
NESHAP: National Emissions Standards for Hazardous Air Pollutants for Ethylene Oxide Commercial Sterilization and Fumigation Operations	Interim Final Rule	This action suspends the National Emission Standards for Hazardous Air Pollutants for Ethylene Oxide Commercial Sterilization and Fumigation Operations (EO NESHAP) requirements for chamber exhaust and aeration room vents, allowing affected sources to defer compliance until December 6, 1999.

SUMMARY OF NESHAP ACTIONS
Federal Registers
June 2, 1998 - June 1, 1999

- Subject -	- Class -	- Summary -
<p>December 9, 1998</p> <p>NESHAP: Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry and Other Processes Subject to the Negotiated Regulation for Equipment Leaks</p>	<p>Final Rule; Correction</p>	<p>Vol. 63, No. 236</p> <p>This action takes final action on amendments proposed on August 22, 1997 concerning compliance demonstration procedures for biological treatment units, corrections to the definition of "enhanced biological treatment systems or enhanced biological treatment processes" and resulting revisions to appendix C of part 63.</p>
<p>December 11, 1998</p> <p>NESHAP: Halogenated Solvent Cleaning</p>	<p>Final Rule</p>	<p>Vol. 63, No. 238</p> <p>This action promulgates and extends the compliance extension until December 2, 1999 for certain continuous web cleaning machines.</p>
<p>December 28, 1998</p> <p>NESHAP: Wood Furniture Manufacturing Operations</p>	<p>Final Rule; Amendments</p>	<p>Vol. 63, No. 248</p> <p>This action promulgates amendments to the "National Emission Standards for Hazardous Air Pollutants; Final Standards for Hazardous Air Pollutant Emissions from Wood Furniture Manufacturing Operations", originally promulgated on December 7, 1995.</p>

SUMMARY OF NESHAP ACTIONS
Federal Registers
June 2, 1998 - June 1, 1999

- Subject -	- Class -	- Summary -
December 28, 1998		Vol. 63, No. 248
NESHAP: Pulp and Paper Production	Direct Final Rule	This action amends the interim NESHAP for chloroform emissions from mills which have enrolled in the Voluntary Advanced Technology Incentives Program.
January 29, 1999		Vol. 64, No. 19
NESHAP: Secondary Lead Smelting	Final Rule; Correction	This action corrects the compliance date to December 23, 1997 and a 5-year Title V permitting deferral for non-major sources is reinstated.
February 12, 1999		Vol. 64, No. 29
NESHAP: Recordkeeping and Reporting Burden Reduction	Final Amendments	This action finalizes changes to reduce unnecessary reporting and recordkeeping burdens.

SUMMARY OF NESHAP ACTIONS
Federal Registers
June 2, 1998 - June 1, 1999

- Subject -	- Class -	- Summary -
March 9, 1999 NESHAP: Polymer and Resin Production Facilities (Groups I and IV) and Volatile Organic Compound (VOC) Emissions From the Polymer Manufacturing Industry	Direct Final Rule	Vol. 64, No. 45 This action revises the promulgated rules by adding provisions, correcting errors, and making clarifications.
April 9, 1999 NESHAP: Magnetic Tape Manufacturing Operations	Direct Final Rule	Vol. 64, No. 68 This action gives facility owners a new compliance option.
April 12, 1999 NESHAP: Pulp and Paper Production	Final Rule; Interpretation and Technical Amendments	Vol. 64, No. 69 This action makes interpretive amendments to certain regulatory text in the 1998 pulp and paper NESHAP and corrects omissions and minor drafting errors.

SUMMARY OF NESHAP ACTIONS
Federal Registers
June 2, 1998 - June 1, 1999

- Subject -	- Class -	- Summary -
<p>April 26, 1999</p> <p>NESHAP: Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry and Other Processes Subject to the Negotiated Regulation for Equipment Leaks</p>	<p>Final Rule; Technical Amendments</p>	<p>Vol. 64, No. 79</p> <p>This action amends certain portions of the 1997 Hazardous Organic NESHAP (HON).</p>
<p>May 7, 1999</p> <p>NESHAP: Polymer and Resin Production Facilities (Groups I and IV) and Volatile Organic Compound (VOC) Emissions From the Polymer Manufacturing Industry</p>	<p>Withdrawal of Amendment in Direct Final Rulee</p>	<p>Vol. 64, No. 88</p> <p>This action withdraws an amendment from the March 9, 1999 direct final rule due to an adverse comment. It only affects sources from the Group I Polymers and Resins NESHAP.</p>
<p>May 14, 1999</p> <p>NESHAP: Amendment to Regulations Governing Equivalent Emission Limitations by Permit</p>	<p>Final Rule</p>	<p>Vol. 64, No. 93</p> <p>This action amends the rule implementing Clean Air Act section 112(j) to extend the permit application deadline for sources in 7 - year source categories until December 15, 1999.</p>

SUMMARY OF NESHAP ACTIONS
Federal Registers
June 2, 1998 - June 1, 1999

- Subject -	- Class -	- Summary -
May 20, 1999 NESHAP: Ferroalloys Production: Ferromanganese and Silicomanganese	Final Rule	Vol. 64, No. 97 This action finalizes national emission standards for hazardous air pollutants for ferroalloys production: ferromanganese and silicomanganese.
June 1, 1999 NESHAP: Mineral Wool Production	Final Rule	Vol. 64, No. 104 This action promulgates national emission standards for hazardous air pollutants for new and existing sources in mineral wool production facilities.
June 1, 1999 NESHAP: Polyether Polyols Production	Final Rule	Vol. 64, No. 104 This action promulgates national emission standards for hazardous air pollutants for new and existing plant sites that manufacture polyether polyols.

or if an emergency situation occurs. This temporary deviation is issued to allow for the replacement of the shim plates on the center locks and replacing the electric brake system with a new hydraulic system and additional maintenance as required.

DATES: This deviation is effective from 8:30 a.m. on June 8, 1998 through 3 p.m. on July 1, 1998.

FOR FURTHER INFORMATION CONTACT:

Mr. David Frank, Bridge Administration Branch, Commander (ob), Eighth Coast Guard District, 501 Magazine Street, New Orleans, LA, 70130-3396, telephone number 504-589-2965.

SUPPLEMENTARY INFORMATION: The US 90 bascule drawbridge across the Back Bay of Biloxi between Biloxi and Ocean Springs, Harrison and Jackson Counties, Mississippi has a vertical clearance of 35.9 feet above mean high water, elevation 1.8 feet Mean Sea Level, in the closed-to-navigation position and unlimited clearance in the open-to-navigation position. Navigation on the waterway consists of tugs with tows, fishing vessels, sailing vessels, and other recreational craft. Presently, as set out in 33 CFR 117.765, the draw opens on signal except that from 6:30 a.m. to 7:05 a.m., 7:20 a.m. to 8:05 a.m., 4 p.m. to 4:45 p.m., and 4:55 p.m. to 5:30 p.m. Monday through Friday except holidays, the draw need not open for the passage of vessels.

The Mississippi Department of Transportation requested a temporary deviation from the normal operation of the bridge in order to accommodate maintenance work. The maintenance work consists of replacing existing center span locks with new shim plates, replacing the electric brake system with a new hydraulic system, restoring the auxiliary drive system, realignment of the bridge, replacing worn oil seals and installation of new power supply conduit and cables. This work is essential for the continued operation of the draw span. The request was reviewed by the Marine Safety Office in Mobile, Alabama, and it does not appear that the requested deviation will have a major impact on local vessel traffic.

This District Commander has, therefore, issued a deviation from the regulations in 33 CFR 117.765 authorizing the bridge to remain closed from 8:30 a.m. until noon and from 12:30 p.m. until 3 p.m., Monday through Friday from June 8, until July 1, 1998. Additionally, the bridge will be closed to navigation daily from 12:01 a.m. to 5 a.m. from June 22, until June 26, 1998.

Dated: May 29, 1998.
A.L. Gerfin, Jr.,
Captain, U.S. Coast Guard, Acting
Commander, 8th Coast Guard Dist.
[FR Doc. 98-15282 Filed 6-8-98; 8:45 am]
BILLING CODE 4910-15-M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AD-FRL-6106-4]

RIN 2060-A100

National Emission Standards for Hazardous Air Pollutants: Petroleum Refineries

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: This action revises the "National Emission Standards for Hazardous Air Pollutants: Petroleum Refineries" which was issued as a final rule August 18, 1995. This rule is commonly known as the Petroleum Refineries national emission standards for hazardous air pollutants (NESHAP). This action revises the date by which an Implementation Plan for emissions averaging is to be submitted. Today's action also exempts specific streams associated with hydrogen plants from the requirements for process vents.

DATES: The direct final rule will be effective on August 18, 1998. The direct final rule will become effective without further notice unless the EPA receives relevant adverse comments on or before July 9, 1998. Should the EPA receive such comments, it will publish a timely document withdrawing this rule.

ADDRESSES: *Comments.* Comments should be submitted (in duplicate, if possible) to: Air and Radiation Docket and Information Center (6102), Attention Docket Number A-93-48 (see docket section below), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460. The EPA requests that a separate copy also be sent to the contact person listed below.

FOR FURTHER INFORMATION CONTACT: Mr. James Durham, Waste and Chemical Processes Group, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina, 27711, telephone number (919) 541-5672.

SUPPLEMENTARY INFORMATION: On August 18, 1995 EPA promulgated the "National Emission Standards for Hazardous Air Pollutants from

Petroleum Refineries" (the "Petroleum Refineries NESHAP"). The NESHAP regulates hazardous air pollutants (HAP) emitted from new and existing refineries that are major sources of HAP emissions. The regulated category and entities affected by this action include:

Category	Examples of regulated entities
Industry	Petroleum Refineries (Standard Industrial Classification Code 2911).

This table is not intended to be exhaustive but, rather, provides a guide for readers regarding entities likely to be interested in the revisions to the regulation affected by this action. To determine whether your facility is regulated by this action, you should carefully examine all of the applicability criteria in 40 CFR 63.640. If you have questions regarding the applicability of this action to a particular entity, consult the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

A companion proposal to this direct final rule is being published in today's **Federal Register** and is identical to this direct final rule. Any comments on the revisions to the Petroleum Refineries NESHAP should address that proposal. If relevant adverse comments are timely received by the date specified in the proposed rule, the EPA will publish a document informing the public that this rule did not take effect and the comments will be addressed in a subsequent final rule based on the proposed rule. If no relevant adverse comments on any provision of this direct final rule are timely filed then the entire direct final rule will become effective on August 18, 1998, and no further action will be taken on the companion proposal published today.

I. Description of Revisions

A. Revision of Submission Date for Plan to Implement Emissions Averaging

Today's action revises the requirement to submit an Implementation Plan, if using emissions averaging, no later than 18 months prior to the compliance date. The requirement is revised to allow the Implementation Plan to be submitted for approval at any time prior to initiation of emissions averaging. The EPA has determined that the requirement to submit the Implementation Plan 18 months prior to the compliance date is not desirable because it precludes existing sources from using emissions averaging if they decide to do so in the future.

B. Exemption of Specific Hydrogen Plant Vent Streams From Process Vents Requirements

At the time the Petroleum Refineries NESHAP was being developed, little information was available regarding hydrogen plant vent streams. Neither the petroleum refining industry nor the EPA had adequate information to accurately determine if hydrogen plant vents would be subject to the miscellaneous process vent provisions of the NESHAP. Recent information gathering efforts by the petroleum refining industry indicate that there are vent streams from hydrogen plants that meet the definition of Group 1 miscellaneous process vents. However, this information indicates that these vents, because they have no controls, are significantly different from the vents on which the miscellaneous process vent provisions are based. Consequently, it may not be appropriate or even possible to apply the miscellaneous process vent provisions to these hydrogen plant vents.

In hydrogen plants, steam and methane or other hydrocarbons are reacted to form a synthesis gas, which is a mixture of hydrogen and carbon dioxide. Once the hydrogen is formed it must be purified by removing the carbon dioxide. Two techniques are used for carbon dioxide removal: wet carbon dioxide absorption/desorption; and pressure swing absorption (PSA). Methanol is formed as a byproduct of the hydrogen-forming reactions. Absorption/desorption systems absorb some of the methanol along with the CO₂. In some instances, methanol is used as the absorption fluid. Heat or an inert gas such as nitrogen is subsequently used to desorb the absorption fluid. The desorbed gases contain CO₂, water vapor, nitrogen (for some processes), and small quantities of methanol. This is referred to as the CO₂ vent. A source of emissions for both the absorption/desorption and PSA systems can be steam that is condensed and removed at various points in the process. The steam contains condensed methanol and dissolved carbon dioxide. When the steam is deaerated to remove air and carbon dioxide before being recycled, some of the methanol is released to the atmosphere with the carbon dioxide and air. This is referred to as the deaerator vent.

The CO₂ vent and deaerator vent are significantly different from typical miscellaneous process vents considered in determining the requirements of the Petroleum Refineries NESHAP. Typical process vents are continuous streams of consistent composition with sufficient

heating value to sustain combustion. Incineration of these streams in boilers, process heaters or flares, which was determined to be the maximum achievable control technology, is not expected to cause operational upsets.

The hydrogen plant vents are of significant volume and have little heating value. They are primarily composed of water vapor and carbon dioxide. Methanol, the combustible element of the streams, has been determined to make up less than one percent of the deaerator vent and to be in the part per million range in the CO₂ vent. It is not likely that existing flares, boilers, or process heaters can accommodate the combustion of these vents due to their large volume and the additional auxiliary fuel that would be required to sustain combustion. None of these hydrogen plant vents are currently known to be controlled. New control devices would have to be built to achieve the destruction efficiency required by the NESHAP. The original analysis of the impact of the miscellaneous process vent provisions indicated that no major capital investments or significant operating costs would be required to comply. This would not be the case for the hydrogen plant vents. Cost analyses indicate that new control devices would require a capital investment ranging from \$250,000 to \$2,000,000. Capital costs are relatively high due to the large volume of the vents streams. The relative amount of methanol destroyed is low, due to the low concentrations in the vent streams. The resulting cost effectiveness is estimated to range from \$5,500 to \$55,000 per megagram of methanol destroyed.

Analysis of data currently available indicates that, unlike other process vents, these hydrogen plant CO₂ and deaerator vents are not being controlled. An analysis of the control technology in place at the best performing 12 percent of facilities would result in a determination that the maximum achievable control technology (MACT) floor is "no control" for hydrogen plant CO₂ and deaerator vents. Thus, requiring hydrogen plant CO₂ and deaerator vents to comply with the existing process vent requirements would constitute the imposition of an "above the floor" requirement. Due to significantly increased compliance costs, EPA does not believe that such an "above the floor" requirement is justified. Compliance with the existing process vents requirements cannot be achieved with the same cost effectiveness estimated for typical miscellaneous process vents. Potential controls for the hydrogen plant vents are

significantly more costly than those for typical process vents, mainly due to the fact that new control devices would be required. Because the MACT analysis and cost effectiveness analysis for miscellaneous process vents are not applicable to hydrogen plant vents, an exemption from the miscellaneous process vents provision is being provided for hydrogen plant CO₂ and deaerator vents.

II. Judicial Review

Under section 307(b)(1) of the Clean Air Act (Act), judicial review of the actions taken by the administrator in this final rule is available only on 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 action. Under section 307(b)(2) of the Act, the requirements set forth in today's final rule may not be challenged later in civil or criminal proceedings brought by EPA to enforce these requirements.

III. Administrative

A. Paperwork Reduction Act

The information collection requirements of the previously promulgated NESHAP were submitted to and approved by the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* A copy of this Information Collection Request (ICR) document (OMB Control Number 2060-0340) may be obtained from the Information Policy Branch (PY-223Y); U.S. Environmental Protection Agency; 401 M Street, SW; Washington, DC 20460 or by calling (202) 260-2740. The ICR is currently in the reinstatement process.

Today's changes to the NESHAP have no impact on the information collection burden estimates. The changes regarding emissions averaging consist of a revision to the date by which an Implementation Plan is to be submitted. Because the industry and the EPA were not aware of the hydrogen plant vent streams that may meet the current Group 1 miscellaneous process vent definition, information collection activities associated with these vents were not included in the burden estimate. Today's revisions do not increase or decrease the information collection burden on the regulated community or the EPA. Consequently, the ICR has not been revised.

B. 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

OMB review and the requirements of the Executive Order. The Order defines a "significant regulatory action" as one that is likely to result in a rule that may:

1. Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local or tribal governments or communities;

2. Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

3. Materially alter the budgetary impact of entitlements, grants, user fees, or land 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.

Today's action revises a submittal date for a report and provides an exemption for specific vent streams. Because today's action does not add any additional requirements, this rule was classified "non-significant" under Executive Order 12866 and, therefore was not reviewed by the Office of Management and Budget.

C. Regulatory Flexibility

The EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this final rule. The EPA has also determined that this rule will not have a significant negative economic impact on a substantial number of small entities. This direct final rule will not have a significant negative impact on a substantial number of small entities because it does not add any requirements to the Petroleum Refineries NESHAP. This rule revises a submittal date for a report and provides an exemption for specific vent streams.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to

identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

At the time of promulgation, EPA determined that the Petroleum Refineries NESHAP does not include a Federal mandate that may result in estimated costs of \$100 million or more to either State, local, or tribal governments in the aggregate or to the private sector. This determination is not altered by today's action, the purpose of which is to revise the submittal date for a report and provide an exemption for specific vent streams. Thus, today's rule is not subject to the requirements of sections 202 and 205 of the UMRA.

E. Executive Order 12875

To reduce the burden of Federal regulations on States and small governments, the President issued Executive Order 12875 entitled "Enhancing the Intergovernmental Partnership" on October 26, 1993. Executive Order 12875 prohibits the EPA, to the extent feasible and permitted by law, from promulgating any regulation that is not required by statute and that creates a mandate upon a State, local or tribal government unless: (i) the Federal Government provides the funds necessary to pay the direct costs incurred by the State, local or tribal government in complying with the mandate; or, (ii) EPA provides to the Office of Management and Budget a description of the extent of the EPA's prior consultation with representatives of affected State, local and tribal governments, the nature of those entities concerns, any written communications

submitted to EPA by such units of government and the EPA's position supporting the need to issue the regulation. Executive Order 12875 further requires the EPA to develop an effective process to permit 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." This rule does not create a mandate upon State, local or tribal governments.

F. Applicability of Executive Order 13045

Executive Order 13045 applies to any rule that EPA determines (1) "economically significant" as defined under Executive Order 12866, and (2) the environmental health or safety risk addressed by the rule has a disproportionate effect on children. If the regulatory action meets both criteria, the EPA must evaluate the environmental health or safety effects of the planned rule on children and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the EPA.

This direct final rule is not subject to E.O. 13045, entitled "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), because it is not an economically significant regulatory action as defined by Executive Order 12866, and it does not address an environmental health or safety risk that would have a disproportionate effect on children.

G. Submission to Congress and the Comptroller General

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

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous air pollutants, Petroleum refineries,

Reporting and recordkeeping requirements, Storage vessels.

Dated: May 28, 1998.

Carol M. Browner,
Administrator.

For reasons set out in the preamble, part 63 of title 40, chapter I, of the Code of Federal Regulations is amended as follows:

PART 63—[AMENDED]

1. The authority citation for part 63 continues to read as follows:

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

Subpart CC—National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries

2. Amend § 63.641 by revising paragraphs (11), (12), and (13) of and adding paragraph (14) to the definition of *miscellaneous process vent* to read as follows:

§ 63.641 Definitions.

* * * * *

Miscellaneous process vent * * *

(11) Coking unit vents associated with coke drum depressuring at or below a coke drum outlet pressure of 15 pounds per square inch gauge, deheading, draining, or decoking (coke cutting) or pressure testing after decoking;

(12) Vents from storage vessels;

(13) Emissions from wastewater collection and conveyance systems including, but not limited to, wastewater drains, sewer vents, and sump drains; and

(14) Hydrogen production plant vents through which carbon dioxide is removed from process streams or through which steam condensate produced or treated within the hydrogen plant is degassed or deaerated.

* * * * *

3. Amend § 63.653 by revising paragraph (d)(1) to read as follows:

§ 63.653 Monitoring, recordkeeping, and implementation plan for emission averaging.

* * * * *

(d) * * *

(1) The Implementation Plan shall be submitted to the Administrator and approved prior to implementing emissions averaging. This information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, in a Notification of Compliance Status Report, in a Periodic Report or in any combination of these documents. If an owner or operator submits the information specified in paragraph (d)(2) of this section at different times, and/or in different submittals, later submittals may refer to earlier submittals instead of duplicating the previously submitted information.

* * * * *

[FR Doc. 98-15005 Filed 6-8-98; 8:45 am]
BILLING CODE 6560-50-P

in Waukesha. The SIP revision was submitted by the Wisconsin Department of Natural Resources (WDNR) on February 21, 1997, and would exempt the facility from the volatile organic compound (VOC) emission limits applicable to miscellaneous metal coating operations. The EPA proposed to disapprove this request on April 28, 1998. No negative comments were submitted during the comment period.

DATES: This disapproval is effective August 24, 1998.

ADDRESSES: Copies of the documents relevant to this action are available for public inspection during normal business hours at the U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, Illinois 60604. (Please telephone Kathleen D'Agostino at (312) 886-1767 before visiting the Region 5 Office.)

FOR FURTHER INFORMATION CONTACT: Kathleen D'Agostino, Environmental Engineer, Regulation Development Section, Air Programs Branch (AR-18J), U.S. Environmental Protection Agency, Region 5, Chicago, Illinois 60604, (312) 886-1767.

SUPPLEMENTARY INFORMATION:

I. Background

On April 28, 1998, EPA proposed to disapprove the site-specific SIP revision for Amron Corporation (63 FR 23239). This proposed disapproval was based on numerous factors which are discussed in detail in the proposed disapproval. EPA received no negative comments during the public comment period. Therefore, EPA is finalizing the disapproval proposed on April 28, 1998.

II. Miscellaneous

A. Applicability to Future SIP Decisions

Nothing in this action should be construed as permitting, allowing or establishing a precedent for any future request for revision to any SIP. The EPA shall consider each request for revision to the SIP in light of specific technical, economic, and environmental factors and in relation to relevant statutory and regulatory requirements.

B. Executive Orders 12866 and 13045

The Office of Management and Budget has exempted this regulatory action from Executive Order (E.O.) 12866 review.

The final rule is not subject to E.O. 13045, entitled "Protection of Children from Environmental Health Risks and Safety Risks," because it is not an "economically significant" action under E.O. 12866.

C. Regulatory Flexibility

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions. This final rule will not have a significant impact on a substantial number of small entities because this disapproval only affects one source, Amron Corporation. Therefore, I certify that this action will not have a significant economic impact on a substantial number of small entities. Furthermore, as explained in this document, the request does not meet the requirements of the Clean Air Act and EPA cannot approve the request. EPA has no option but to disapprove the submittal.

EPA's disapproval of the State request under section 110 and subchapter I, part D of the Clean Air Act does not affect any existing requirements applicable to small entities. Any pre-existing Federal requirements remain in place after this disapproval. Federal disapproval of the State submittal does not affect State-enforceability. Moreover, EPA's disapproval of the submittal does not impose any new Federal requirements. Therefore, I certify that this action will not have a significant economic impact on a substantial number of small entities.

D. Unfunded Mandates

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

EPA has determined that this disapproval does not include a Federal mandate that may result in estimated costs of \$100 million or more to either State, local, or tribal governments in the aggregate, or to the private sector. This Federal disapproval action imposes no

new requirements. Accordingly, no additional costs to State, local, or tribal governments, or to the private sector, result.

E. Small Business Regulatory Enforcement Fairness Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. Section 804, however, exempts from section 891 the following types of rules: rules of particular applicability; rules relating to agency management or personnel; and rules of agency organization, procedure, or practice that do not substantially affect the rights or obligations of non-agency parties. 5 U.S.C. 804(3). EPA is not required to submit a rule report regarding this action under section 801 because this is a rule of particular applicability.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Intergovernmental relations, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

Authority: 42 U.S.C. 7401-7671q

Dated: July 9, 1998.

David A. Ullrich,

Acting Regional Administrator.

[FR Doc. 98-19656 Filed 7-22-98; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AD-FRL-6112-7]

National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: This action corrects and clarifies regulatory text of the "National Emission Standard for Hazardous Air Pollutants for Industrial Process Cooling Towers," which was issued as a final rule on September 8, 1994. The rule is being revised to clarify that the owner or operator of a source that ceases use of chromium-based chemicals may demonstrate compliance with the standard through recordkeeping.

Because the rule merely clarifies the intent and coverage of the September 8, 1994 final rule, it has no impact on the environment beyond that of the original rule.

DATES: Effective Date. The direct final rule will be effective October 21, 1998 if no timely adverse comments are received by September 21, 1998.

If a hearing is requested, the comment period will end October 6, 1998. Should the EPA receive such comments, it will publish a timely withdrawal of the Direct Final rule in the **Federal Register** and inform the public that the rule will not take effect.

Public Hearing. Anyone requesting a public hearing must contact EPA no later than August 3, 1998. If a hearing is held, it will take place on August 7, 1998.

ADDRESSES: Comments should be submitted (in duplicate, if possible) to: Air and Radiation Docket (6102), Attention Docket Number A-91-65, Room M-1500, U.S. Environmental Protection Agency, 401 M Street, SW Washington, DC 20460.

Public Hearing. If a public hearing is held, it will be held at the EPA's Office of Administration Auditorium, Research Triangle Park, North Carolina. Persons interested in attending the hearing or wishing to present oral testimony should notify Mr. Phil Mulrine, Metals Group, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, N.C. 27711, telephone (919) 541-5289.

FOR FURTHER INFORMATION CONTACT: Mr. Phil Mulrine, Metals Group, Emission Standards Division, (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone (919) 541-5289.

SUPPLEMENTARY INFORMATION:

I. Regulated Entities

Entities potentially regulated by this action include:

Category	Examples of regulated entities
Industry	Industrial Process Cooling Towers.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be interested in the revisions to the regulation contained in this action. This table lists the types of entities that EPA is now aware could potentially be regulated by this action. To determine whether your facility is affected by these revisions, you should carefully examine the language of section 63.404 of the title 40 of the Code of Federal

Regulations. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

II. Comments

If significant adverse comments are timely received on the direct final rule, all such comments will be addressed in a subsequent final rule based on the proposed rule contained in the Proposed Rules Section of this **Federal Register** that is identical to this direct final rule. The direct final rule will be withdrawn.

This rule will become effective without further notice unless the Agency receives relevant adverse comment within 60 days of the publication of this document. Should the Agency receive such comments, it will publish a timely withdrawal and inform the public that this rule will not take effect.

On September 8, 1994 (59 FR 46339), the Environmental Protection Agency (EPA) promulgated in the **Federal Register** national emission standards for hazardous air pollutants for industrial process cooling towers. These standards were promulgated as subpart Q in 40 CFR part 63.

Subpart Q limits the discharge of chromium from industrial process cooling towers (IPCTs) located at major sources by prohibiting the use of chromium-based water treatment chemicals in those IPCTs. As authorized by section 112(h) of the Clean Air Act (the Act) this standard is a work practice standard. The standard specifies that owners and operators may not use chromium-based water treatment chemicals in IPCTs and that on or after 3 months after the compliance date a cooling water sample residual hexavalent chromium concentration in excess of 0.5 ppm shall indicate a violation of the standard. This document contains amendments to clarify the applicability of the final standard.

III. Description of the Changes

Section 63.404 is being revised to clarify that compliance with the standard can be demonstrated either by cooling water sampling analysis or by recordkeeping which shows that the owner or operator has switched to a non-chromium water treatment method. At the time the final standard was promulgated in September of 1994, EPA believed that once an owner or operator ceased adding chromium-based chemicals to the IPCT water the residual chromium would fall below 0.5 ppm in all cases in less than 3 months. As a

result, § 63.404(b) was drafted to allow 3 months for sources to reach a residual chromium reading of less than 0.5 ppm. On or after 3 months after the compliance date the Administrator (or delegated authority) could require cooling water to be analyzed to determine whether the residual hexavalent chromium concentration exceeds 0.5 ppm by weight. A reading in excess of 0.5 ppm would indicate a violation of the standard.

Since promulgation of the final rule EPA has learned that there are some IPCTs for which residual chromium remains higher than 0.5 ppm beyond 3 months after chromium-based chemicals cease to be added to the IPCT water. EPA has therefore concluded that sampling of cooling water to measure residual chromium may not always be an accurate measure of whether an owner or operator has ceased using chromium-based chemicals. Today's revisions to the September 1994 final rule provide that an owner or operator may demonstrate through recordkeeping that the chemicals used in the IPCT are not chromium-based. This revision does not change the underlying standard contained in 40 CFR 63.402 which provides that "no owner or operator of an IPCT shall use chromium-based water treatment chemicals in any affected IPCT."

In addition, § 63.404(b) is revised to clarify that a cooling water sample showing residual hexavalent chromium of 0.5 parts per million by weight or less shall be considered compliance with the standard. This change does not alter the standard but rather rephrases it for clarity.

IV. Administrative

A. Paperwork Reduction Act

The information collection requirements in this rule will be submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1876.01) and a copy may be obtained from Sandy Farmer by mail at OPPE Regulatory Information Division; U.S. Environmental Protection Agency (2137); 401 M St., SW; Washington, DC 20460, by e-mail at farmer.sandy@epamail.epa.gov, or by calling (202) 260-2740. A copy may also be downloaded off the internet at <http://www.epa.gov/icr>. The information requirements are not effective until OMB approves them.

The information collected will be used as an alternative means of

compliance under § 63.404. Owners of IPCT's are required to maintain a cooling water concentration of residual hexavalent chromium equal to or less than 0.5 parts per million. The owners of IPCT's can choose to demonstrate compliance by maintaining records of chemical treatment purchases instead of measuring the cooling water hexavalent chromium concentration.

The recordkeeping burden is estimated to be 6 hours annually. The rule has no reporting requirements so there is no burden associated with reporting. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An Agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR Chapter 15.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, OPPE Regulatory Information Division; U.S. Environmental Protection Agency (2137); 401 M St., SW; Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th St., NW, Washington, DC 20503, marked "Attention: Desk Officer for EPA." Comments are requested by September 21, 1998. Include the ICR number in any correspondence.

B. Executive Order 12866

Under Executive Order 12866, the EPA must determine whether a regulatory action is "significant" and, therefore, subject to 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 in State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs 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.

The Industrial Process Cooling Towers rule was promulgated on September 8, 1994. The amendments issued today do not add any additional control requirements to the rule, but rather would clarify the rule and add an alternative means of compliance. It has been determined that these amendments are not a "significant regulatory action" under terms of Executive Order 12866 and, therefore, are not subject to review by the Office of Management and Budget.

C. Regulatory Flexibility

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 because it imposes no additional requirements, and adds compliance flexibility.

D. Unfunded Mandates Act

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

The EPA has determined that the action promulgated today does not include a Federal mandate that will

result in estimated costs of \$100 million or more to either State, local, or tribal governments in the aggregate, or to the private sector. Therefore, the requirements of the Unfunded Mandates Act do not apply to this action.

E. Submission to Congress and the General Accounting Office

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

F. Protection of Children From Environmental Health Risks and Safety Risks Under Executive Order 13045

The Executive Order 13045 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.

The direct final rule is not subject to Executive Order 13045, entitled Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997), because it does not involve decisions on environmental health risks or safety risks that may disproportionately affect children.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Industrial process cooling towers, Reporting and recordkeeping requirements.

Dated: June 12, 1998.

Carol M. Browner,
Administrator.

For the reasons set out in the preamble, title 40, chapter I, part 63,

subpart Q of the Code of Federal Regulations is amended as follows:

PART 63—[AMENDED]

1. The authority citation for part 63 continues to read as follows:

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

Subpart Q—National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers

2. Section 63.404 is amended by revising the introductory language and paragraph (b), and by adding new paragraphs (c) and (d) to read as follows:

§ 63.404 Compliance demonstrations.

No routine monitoring, sampling, or analysis is required. In accordance with section 114 of the Act, the Administrator or delegated authority can require cooling water sample analysis of an IPCT if there is information to indicate that the IPCT is not in compliance with the requirements of § 63.402 of this subpart. The owner or operator of an IPCT may demonstrate compliance through recordkeeping in accordance with paragraph (c) of this section in lieu of a water sample analysis. If cooling water sample analysis is required:

(a) * * *

(b) On or after 3 months after the compliance date, a cooling water sample residual hexavalent chromium concentration equal to or less than 0.5 parts per million by weight shall indicate compliance with § 63.402. Alternatively, an owner or operator may demonstrate compliance through record keeping in accordance with paragraph (c).

(c) To demonstrate compliance with § 63.402, in lieu of the water sample analysis provided for in paragraph (a) of this section, the owner or operator of each IPCT may maintain records of water treatment chemical purchases, including invoices and other documentation that includes invoices and other documentation that includes date(s) of purchase or shipment, trade name or other information to identify composition of the product, and quantity of the product.

(d) Following a request, by the Administrator or delegated authority, under paragraph (a) for a water sample analysis, failure to either meet the concentration level specified in paragraph (b) or provide the records specified in paragraph (c) shall indicate a violation of § 63.402.

[FR Doc. 98-19407 Filed 7-22-98; 8:45 am]
BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180

[OPP-300422A; FRL-5799-7]

RIN 2070-AB78

Capsaicin; Exemption from the Requirement of a Tolerance

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This document establishes an exemption from the requirement of a tolerance for residues of Capsaicin in or on all food commodities, when applied in accordance with approved product labeling and good agricultural practice. This exemption from requirement of a tolerance is being established by the Agency on its own initiative, under the Federal Food, Drug, and Cosmetic Act (FFDCA) as amended by the Food Quality Protection Act (FQPA) of 1996. **DATES:** This regulation becomes effective July 23, 1998. Written objections and requests for hearings must be received by September 21, 1998.

ADDRESSES: Written objections and hearing requests, identified by the docket control number [OPP-300422A], must be submitted to: Hearing Clerk (1900), Environmental Protection Agency, Rm. M3708, 401 M St., SW., Washington, DC 20460. Fees accompanying objections and hearing requests shall be labeled "Tolerance Petition Fees" and forwarded to: EPA Headquarters Accounting Operations Branch, OPP (Tolerance Fees), P.O. Box 360277M, Pittsburgh, PA 15251. A copy of any objections and hearing requests filed with the Hearing Clerk identified by the docket control number, [OPP-300422A], must also be submitted to: Public Information and Records Integrity Branch, Information Resources and Services Division (7502C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. In person, bring a copy of objections and hearing requests to Rm. 119, CM #2, 1921 Jefferson Davis Hwy., Arlington, VA.

A copy of objections and hearing requests filed with the Hearing Clerk may be submitted electronically by sending electronic mail (e-mail) to: opp-docket@epamail.epa.gov. Copies of electronic objections and hearing requests must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. Copies of electronic objections and hearing requests will also be accepted

on disks in WordPerfect 5.1/6.1 or ASCII file format. All copies of electronic objections and hearing requests must be identified by the docket number [OPP-300422A]. No Confidential Business Information (CBI) should be submitted through e-mail. Copies of electronic objections and hearing requests on this rule may be filed online at many Federal Depository Libraries.

FOR FURTHER INFORMATION CONTACT: By mail: Richard W. King, Biopesticides and Pollution Prevention Division (7511W), Office of Pesticide Programs, Environmental Protection Agency, 401 M St. SW., Washington, DC 20460. Office location, telephone number, and e-mail address: 9th Floor (902W38), CM #2, 1921 Jefferson Davis Hwy., Arlington, VA; (703) 308-8052, e-mail: king.richard@epamail.epa.gov. **SUPPLEMENTARY INFORMATION:** In the *Federal Register* of May 1, 1996 (61 FR 19233) [OPP-300422; FRL-5362-9], EPA proposed, pursuant to section 408(e) of the FFDCA, 21 U.S.C. 346a(d) to amend 40 CFR part 180 by establishing an exemption from the requirement of a tolerance for Capsaicin in or on all food commodities, when applied in accordance with approved product labeling and with good agricultural practice. There were no comments received in response to the proposed rule. Since the date of this proposal, FFDCA section 408 has been significantly amended by the Food Quality Protection Act of 1996 (FQPA). The FQPA amended the safety standard that applies to both tolerances and exemptions from the requirement for tolerance. Nonetheless, the legislative history indicates that the same rigorous safety standard EPA had always imposed as to tolerance exemptions should be the Agency's guide in implementing the new provision. On this specific point, the House Commerce Committee Report states:

The Committee understands that EPA currently issues exemptions only for the pesticide chemical residues that do not pose a dietary risk under reasonably foreseeable circumstances. The Committee intends that EPA retain its current practice. H.Rep. 104-669 part 2, 104th Cong., 2d Sess. 45 (1996). Capsaicin clearly meets this standard. Capsaicin and related capsaicinoids are the ingredients that produce the "hotness" in certain species of peppers in the Genus *Capsicum*. As noted in the proposal, there are no known toxicological concerns from the ingestion of capsaicin and related capsaicinoids. Residues of capsaicin on food will not pose a dietary risk. Thus, EPA concludes that, consistent with the amended section 408, exempting

List of Subjects in 40 CFR Part 62

Environmental protection, Administrative practice and procedure, Air pollution control, Intergovernmental relations, Methane, Municipal solid waste landfills, Nonmethane organic compounds, Reporting and recordkeeping requirements.

Dated: July 24, 1998.

David A. Ullrich,

Acting Regional Administrator, Region V.

40 CFR part 62 is amended as follows:

PART 62—[AMENDED]

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

Authority: 42 U.S.C. 7401-7671q.

Subpart KK—Ohio

2. Subpart KK is amended by adding a new center heading and §§ 62.8870, 62.8871, and 62.8872 to read as follows:

Landfill Gas Emissions From Existing Municipal Solid Waste Landfills**§ 62.8870 Identification of plan.**

The Ohio State Implementation Plan for implementing the Federal Municipal Solid Waste Landfill Emission Guidelines including Ohio Administrative Code (OAC) Rules 3745-76-01 through 3745-76-15 was submitted on March 30, 1998.

§ 62.8871 Identification of sources.

The plan applies to all existing municipal solid waste landfills for which construction, reconstruction or modification was commenced before May 30, 1991 that accepted waste at any time since November 8, 1987 or that have additional capacity available for future waste deposition, as described in 40 CFR part 60, subpart Cc.

§ 62.8872 Effective date.

The effective date of the plan for municipal solid waste landfills is October 6, 1998.

[FR Doc. 98-21030 Filed 8-6-98; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Parts 63 and 430**

[FRL-6132-6]

RIN 2040-AB53

National Emission Standards for Hazardous Air Pollutants for Source Category: Pulp and Paper Production; Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards: Pulp, Paper, and Paperboard Category; Correction

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; correction.

SUMMARY: EPA is correcting minor errors in the effluent limitations guidelines and standards promulgated under the Clean Water Act for a portion of the pulp, paper and paperboard industry and the national emission standards for hazardous air pollutants promulgated under the Clean Air Act for the pulp and paper production category, which appeared in the **Federal Register** on April 15, 1998 (63 FR 18504).

DATES: Effective on August 7, 1998.

FOR FURTHER INFORMATION CONTACT: Mr. Troy Swackhammer by voice on (202) 260-7128 or by e-mail at swackhammer.j-troy@epa.gov.

SUPPLEMENTARY INFORMATION:**Overview**

The EPA published a document in the April 15, 1998 **Federal Register** (63 FR 18504-18751) promulgating the effluent limitations guidelines and standards under the Clean Water Act (CWA) for a portion of the pulp, paper and paperboard industry and national emission standards for hazardous air pollutants (NESHAP) under the Clean Air Act (CAA) as amended in 1990 for the pulp and paper production source category. The final rules promulgated in the April 15, 1998 **Federal Register** contained some minor errors that are discussed briefly below and are corrected by this notice.

Administrative Requirements and Related Government Acts**A. The Administrative Procedure Act**

Consistent with section 553(b) of the Administrative Procedure Act (APA), EPA has found for good cause that notice and an opportunity to comment on these technical corrections is unnecessary because this rule merely corrects typographical errors and clerical oversights and would not

benefit from public comment. In addition, EPA has found good cause under APA section 553(d)(3) for waiving the APA's 30-day delay in effectiveness as to these final rules. It is important that these minor technical corrections become effective immediately because they correct or clarify certain regulatory requirements that are currently applicable to facilities within the affected subcategories.

B. Executive Order 12866 and OMB Review

EPA has determined that these corrections do not constitute "significant regulatory action" that would trigger review by the Office of Management and Budget.

C. The Regulatory Flexibility Act

EPA has determined that these corrections will not have a significant economic impact on a substantial number of small entities within the meaning of the Regulatory Flexibility Act, 5 U.S.C. 605. With respect to the underlying regulations that this rule corrects, EPA incorporates herein the findings set forth in 63 FR 18504.

D. Paperwork Reduction Act

EPA has determined that these regulations do not contain any information collection requirements that require the approval of the Office of Management and Budget pursuant to the Paperwork Reduction Act, 44 U.S.C. chapter 35. With respect to the underlying regulations that these rules correct, EPA incorporates herein the discussion set forth in 63 FR 18504.

E. Unfunded Mandates Reform Act

EPA incorporates herein the discussion set forth in 63 FR 18504.

F. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. However, section 808 provides that any rule for which the issuing agency for good cause finds (and incorporates the finding and a brief statement of reasons therefore in the rule) that notice and public procedure thereon are impracticable, unnecessary or contrary to the public interest, shall take effect at such time as the agency promulgating the rule determines. 5 U.S.C. 808(2). As stated previously, EPA has made such a good cause finding.

including the reasons therefore, and established an effective date of August 7, 1998. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. This rule is not a major rule as defined by 5 U.S.C. 804(2).

G. Other Applicable Executive Orders and Statutes

EPA incorporates herein the discussion of the Executive Orders and statutes presented in 63 FR 18504. This technical corrections rule is not a "major rule" as defined by 5 U.S.C. 804(2); therefore, it is not subject to the 60-day delay in effectiveness specified under the Small Business Regulatory Enforcement Fairness Act of 1996.

H. Protection of Children from Environmental Health Risks and Safety Risks

This final rule is not subject to E.O. 13045, entitled "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), because "this is not an economically significant regulatory action as defined by E.O. 12866."

Dated: July 24, 1998.

Robert Perciasepe,

Assistant Administrator for Air and Radiation.

J. Charles Fox,

Acting Assistant Administrator for Water.

The following corrections are made in FRL-5924-8, National Emission Standards for Hazardous Air Pollutants for Source Category: Pulp and Paper Production; Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards: Pulp, Paper, and Paperboard Category, which was published in the **Federal Register** on April 15, 1998 (63 FR 18504).

§ 63.446 [Corrected]

1. On page 18621, second column, in § 63.446, paragraph (i) is corrected to read:

* * * * *

(i) For the purposes of meeting the requirements in paragraphs (c)(3), (e)(4), or (e)(5) of this section at mills producing both bleached and unbleached pulp products, owners and operators may meet a prorated mass standard that is calculated by prorating the applicable mass standards (kilograms of total HAP per megagram of ODP) for bleached and unbleached pulp products specified in paragraphs (c)(3), (e)(4), or (e)(5) of this section by the

ratio of annual megagrams of bleached and unbleached ODP.

* * * * *

§ 63.447 [Corrected]

2. On page 18621, third column, in § 63.447, paragraph (d)(1) is corrected to read:

* * * * *

(d) * * *

(1) Process and air pollution control equipment installed and operating on December 17, 1993, and.

* * * * *

§ 430.01 [Corrected]

3. On page 18637, third column, § 430.01 (i), the second sentence is corrected to read, "The following minimum levels apply to pollutants in this part:"

4. On page 18639, second column, in § 430.01, paragraph (p) is corrected to read:

* * * * *

(p) TCDF, 2,3,7,8-tetrachlorodibenzofuran.

* * * * *

§ 430.24 [Corrected]

5. On page 18654, in § 430.24 (b)(4)(i) in the table entitled "Ultimate Voluntary Advanced Technology Incentives Program BAT Limitations," in the sixth column, the third line under "Annual average" is corrected to read "0.05"; in note b, the second sentence is corrected to read, "Under Tier I, this includes all filtrates up to the point where kappa number is measured"; and in note d, the second sentence is corrected to read, "N/A means "not applicable.""

6. On page 18654, first column, in § 430.24, paragraph (b)(4)(ii)(A) is corrected to read:

* * * * *

(b) * * *

(4) * * *

(ii) * * *

(A) A discharger enrolled in Tier I of the Voluntary Advanced Technology Incentives Program must achieve the Tier I limitations in paragraph (b)(4)(i) of this section by April 15, 2004.

* * * * *

7. On page 18654, third column, in § 430.24 (d), the second sentence is corrected to read, "Also, for non-continuous dischargers, concentration limitations (mg/l) shall apply."

§ 430.24 [Corrected]

8. On page 18657, in § 430.25(b) in the table entitled "Subpart B," in the first column, the first line is corrected to read, "AOX"; the second line is corrected to read, "BOD5"; and the third

line is corrected to read, "TSS". In the second column, the second line is corrected to read "4.52d" and third line is corrected to read "8.47d".

§ 430.26 [Corrected]

9. On page 18658, third column, in § 430.26, the last four lines of the introductory text are corrected to read, "pollutants into a publicly owned treatment works must comply with 40 CFR part 403 and must achieve the following pretreatment standards for existing sources (PSES)."

10. On page 18659, in § 430.26, paragraph (a)(2) introductory text is corrected to read:

* * * * *

(a) * * *

(2) The following pretreatment standards apply with respect to each fiber line operated by an indirect discharger subject to this section if the indirect discharger discloses to the pretreatment control authority in a report submitted under 40 CFR 403.12(b), (d), or (e) that it uses exclusively TCF bleaching processes at that fiber line. These pretreatment standards must be attained on or before April 16, 2001:

* * * * *

§ 430.27 [Corrected]

11. On pages 18659 and 18660, in the third and first columns, in § 430.27 the introductory text is corrected to read:

Except as provided in 40 CFR 403.7, any new source subject to this subpart that introduces pollutants into a publicly owned treatment works must comply with 40 CFR part 403 and must achieve the following pretreatment standards for new sources (PSNS).

* * * * *

12. On page 18660, in § 430.27, paragraph (a)(2) is corrected to read:

* * * * *

(a) * * *

(2) The following pretreatment standards apply with respect to each new source fiber line operated by an indirect discharger subject to this section if the indirect discharger discloses to the pretreatment control authority in a report submitted under 40 CFR 403.12(b), (d), or (e) that it uses exclusively TCF bleaching processes at that fiber line:

* * * * *

13. On page 18683, third column, in § 430.56, the last four lines of the introductory text are corrected to read "treatment works must comply with 40 CFR part 403 and must achieve the following pretreatment standards for existing sources (PSES)."

§ 430.56 [Corrected]

14. On page 18683, in § 430.56(a)(1) in the table entitled "SUBPART E [Production of Calcium-, Magnesium-, or Sodium-based Sulfite Pulps]," in the second column, the first entry is corrected to read "<MLa".

15. On page 18684, in § 430.56(a)(2)(ii) in the table entitled "SUBPART E-PRODUCTION OF AMMONIUM-BASED SULFITE PULPS," the title in the second column is corrected to read "PSES (TCF)".

16. On page 18684, second column, in § 430.56(a)(3)(ii), the reference to "40 CFR 403.12(b)" is corrected to read, "40 CFR 403.12(b), (d), or (e)".

§ 430.57 [Corrected]

17. On page 18685, in § 430.57, paragraph (a)(2)(ii) is corrected to read:

* * * * *

(a) * * *

(2) * * *

(ii) The following pretreatment standards apply with respect to each new source fiber line operated by an indirect discharger producing ammonium-based sulfite pulps if the indirect discharger discloses to the pretreatment control authority in a report submitted under 40 CFR 403.12(b), (d), or (e) that it uses exclusively TCF bleaching processes at that fiber line:

* * * * *

18. On page 18686, in § 430.57, paragraph (a)(3)(ii) introductory text is corrected to read:

* * * * *

(a) * * *

(3) * * *

(ii) The following pretreatment standards apply with respect to each new source fiber line operated by an indirect discharger producing specialty grade sulfite pulps if the indirect discharger discloses to the pretreatment control authority in a report submitted under 40 CFR 403.12(b), (d), or (e) that it uses exclusively TCF bleaching processes at that fiber line:

* * * * *

[FR Doc. 98-20413 Filed 8-6-98; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 180**

[OPP-300686; FRL-6018-1]

RIN 2070-AB78

Carfentrazone-ethyl; Temporary Pesticide Tolerance

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This regulation extends a temporary tolerance for combined residues of the herbicide carfentrazone-ethyl (fluorobenzenepropanoic acid) in or on wheat raw agricultural commodities: 0.2 ppm in or on wheat hay, 0.2 ppm in or on wheat straw, 0.2 ppm in or on wheat grain; and establishing tolerance for combined residues of the herbicide carfentrazone-ethyl (ethyl-alpha-2-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluorobenzene-propanoate) and its two major corn metabolites: carfentrazone-ethyl chloropropionic acid (alpha, 2-dichloro-5-[4-difluoromethyl]-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluorobenzene-propanoic acid), and 3-desmethyl-FF8426 chloropropionic acid (alpha,2-dichloro-5-[4-difluoromethyl]-4,5-dihydro-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluorobenzene-propanoic acid) in or on corn raw agricultural commodities: 0.15 ppm in or on corn forage, 0.15 ppm in or on corn fodder, 0.15 ppm in or on corn grain. FMC requested this tolerance under the Federal Food, Drug, and Cosmetic Act, as amended by the Food Quality Protection Act of 1996 (Pub. L. 104-170). The tolerance will expire on May 8, 1999.

DATES: This regulation is effective August 7, 1998. Objections and requests for hearings must be received by EPA on or before October 6, 1998.

ADDRESSES: Written objections and hearing requests, identified by the docket control number, [OPP-300686], must be submitted to: Hearing Clerk (1900), Environmental Protection Agency, Rm. M3708, 401 M St., SW., Washington, DC 20460. Fees accompanying objections and hearing requests shall be labeled "Tolerance Petition Fees" and forwarded to: EPA Headquarters Accounting Operations Branch, OPP (Tolerance Fees), P.O. Box 360277M, Pittsburgh, PA 15251. A copy of any objections and hearing requests filed with the Hearing Clerk identified by the docket control number, [OPP-300686], must also be submitted to:

Public Information and Records Integrity Branch, Information Resources and Services Division (7502C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. In person, bring a copy of objections and hearing requests to Rm. 119, CM #2, 1921 Jefferson Davis Hwy., Arlington, VA.

A copy of objections and hearing requests filed with the Hearing Clerk may also be submitted electronically by sending electronic mail (e-mail) to: opp-docket@epamail.epa.gov. Copies of objections and hearing requests must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. Copies of objections and hearing requests will also be accepted on disks in WordPerfect 5.1/6.1 file format or ASCII file format. All copies of objections and hearing requests in electronic form must be identified by the docket control number [OPP-300686]. No Confidential Business Information (CBI) should be submitted through e-mail. Electronic copies of objections and hearing requests on this rule may be filed online at many Federal Depository Libraries.

FOR FURTHER INFORMATION CONTACT: By mail: Joanne I. Miller, Product Manager PM-23, Registration Division (7505C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Office location, telephone number, and e-mail address: Crystal Mall #2, 1921 Jefferson Davis Hwy., Arlington, VA. (703) 305-6224, e-mail: miller.joanne@epamail.epa.gov.

SUPPLEMENTARY INFORMATION: In the *Federal Register* of June 10, 1998 (63 FR 31769) (FRL-5793-1), EPA, issued a notice pursuant to section 408 of the Federal Food, Drug, and Cosmetic Act (FFDCA), 21 U.S.C. 346a(e) announcing the filing of a pesticide petition (PP 6G4615) for a tolerance by FMC Corporation, 1735 Market St., Philadelphia, PA 19103. This notice included a summary of the petition prepared by FMC Corporation, the registrant. There were no comments received in response to the notice of filing.

The petition requested that 40 CFR part 180 be amended by extending a temporary tolerance for combined residues of the herbicide carfentrazone-ethyl (ethyl-alpha-2-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluorobenzene-propanoate), and its metabolite, in or on field corn forage, fodder, and grain at 0.15 parts per million (ppm); and for wheat hay, straw,

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, the Administrator certifies 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 flexibility analysis would constitute Federal inquiry into the economic reasonableness of state action. The Clean Air Act forbids EPA to base its actions concerning SIPs on such grounds. *Union Electric Co. v. U.S. EPA*, 427 U.S. 246, 255-66 (1976); 42 U.S.C. 7410(a)(2).

C. Unfunded Mandates

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

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

D. Submission to Congress and the General Accounting Office

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate,

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

E. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by October 19, 1998. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

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

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

Date Signed: July 28, 1998.

Nora L. McGee,

Acting Regional Administrator, Region 9.

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

PART 52—[AMENDED]

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

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

Subpart F—California

2. Section 52.220 is amended by adding paragraphs (c)(240)(i)(A)(5) and (c)(244)(i)(C) to read as follows:

§ 52.220 Identification of plan.

* * * * *

(c) * * *
(240) * * *
(i) * * *

(A) * * *
(5) Rule 1136 adopted on September 16, 1983 and amended on June 14, 1996.

* * * * *

(c) * * *
(244) * * *
(i) * * *

(C) Mojave Desert Air Quality Management District.

(1) Rule 1114 adopted on March 2, 1992 and amended on November 25, 1996.

* * * * *

[FR Doc. 98-21896 Filed 8-17-98; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AD-FRL-6145-5]

RIN 2060-AI00

National Emission Standards for Hazardous Air Pollutants: Petroleum Refineries

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule amendments.

SUMMARY: This action revises monitoring, recordkeeping, and reporting requirements of the "National Emission Standards for Hazardous Air Pollutants: Petroleum Refineries" which was issued as a final rule August 18, 1995. This rule is commonly known as the Petroleum Refineries NESHAP.

EFFECTIVE DATE: August 18, 1998.

FOR FURTHER INFORMATION CONTACT: Mr. James Durham, Waste and Chemical Processes Group, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina, 27711, telephone number (919) 541-5672.

SUPPLEMENTARY INFORMATION: On August 18, 1995, the EPA promulgated the "National Emission Standards for Hazardous Air Pollutants: Petroleum Refineries" (the "Petroleum Refineries NESHAP"). The NESHAP regulates hazardous air pollutants (HAP) emitted from new and existing refineries that are major sources of HAP emissions. The regulated category and entities affected by this action include:

Category	Examples of regulated entities
Industry ...	Petroleum Refineries (Standard Industrial Classification Code 2911)

This table is not intended to be exhaustive but, rather, provides a guide for readers regarding entities likely to be interested in the revisions to the regulation affected by this action. To determine whether your facility is regulated by this action, you should carefully examine all of the applicability criteria in 40 CFR 63.640. If you have questions regarding the applicability of this action to a particular entity, consult

the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

I. Background

On August 18, 1995 (60 FR 43243), EPA promulgated in the **Federal Register** national emission standards for hazardous air pollutants (NESHAP) for petroleum refineries. These regulations were promulgated as subpart CC of 40 CFR part 63. As stated in the preamble to the promulgated rule, EPA pledged to continue working with industry to reduce the recordkeeping and reporting burden associated with the Petroleum Refineries NESHAP while maintaining enforceability. The petroleum refining industry submitted suggestions for revisions to monitoring, recordkeeping, and reporting requirements. The EPA reviewed these suggestions and determined those to be included in a proposed rule (63 FR 13587-13589) and a direct final rule (63 FR 13533-13541) published on March 20, 1998. Adverse comments were received regarding the direct final rule which was subsequently withdrawn on May 18, 1998 (63 FR 27212). This action addresses comments on the proposed rule and promulgates revisions to the Petroleum Refineries NESHAP.

II. Summary of Comments on the Proposed Rule Amendments and Changes from the Proposed Amendments

Comments on the proposed revisions to the rule (63 FR 13587) were received from four commenters (see Docket No. A-93-48). Commenters included representatives of the petroleum refining industry, the chemical manufacturing industry and environmental groups. The majority of commenters expressed support for the proposed revisions. One commenter expressed opposition to revisions that remove existing requirements for refineries to report data and other information to EPA. The commenter contended that removal of such requirements would make it impossible for citizens to gain access to this information and assist EPA in ensuring compliance. EPA agrees; this kind of assistance from citizens is an important component of enforcing the Clean Air Act against excess pollution.

The revisions included in the proposed rule are therefore not in today's action. Specifically, the revisions not in today's action include: removal of the requirement to report actions that are consistent with a startup, shutdown, and malfunction plan; removal of the requirement to report when a continuous monitoring

system experiences a routine or otherwise predictable failure and is repaired immediately; removal of the requirement to include identification of Group 2 process vents and storage vessels in the initial Notification of Compliance Status report; and removal of requirements to report raw data and calculations for external floating roof storage vessels when seal gap requirements are not met. All other revisions included in the proposed rule, for which no adverse comments were received, are included in today's action.

Today's action also includes corrections to equations in the miscellaneous process vent provisions of the rule and corrections to typographical errors in references to Subpart Y National Emission Standards for Marine Tank Vessel Loading Operations.

III. Revisions to Rule

The revisions described in this section are being made to the final rule. These changes are consistent with the proposal (63 FR 13587). The EPA received no adverse comments relevant to the revisions described in this section.

A. Startup, Shutdown and Malfunction Plans (SSMP) for Wastewater

As requirements for wastewater stream management units, the Petroleum Refineries NESHAP references the Benzene Waste Operation NESHAP, which does not contain a requirement for a startup, shutdown and malfunction plan (SSMP). The Petroleum Refineries NESHAP also references the general provisions requirement for a refinery SSMP. Revisions included in today's action clarify that a SSMP is optional for wastewater operations. The EPA did not intend to add additional requirements for wastewater beyond the Benzene NESHAP. However, owners and operators may wish to prepare a SSMP because it may reduce reporting when malfunctions occur. If there is a SSMP and it is followed in periods of startup, shutdown and malfunction, the incident is not required to be reported.

Today's action includes a revision that will allow owners and operators with wastewater stream management units that are subject to both subpart CC and subpart G to comply with only subpart G. Subpart G requires a SSMP for wastewater stream management units. Today's action does not alter the requirement for a SSMP to be prepared for wastewater stream management units complying with subpart G.

B. Overlap of Subpart FF and Subpart G for Wastewater Stream Management Units

Currently, when a wastewater stream management unit receives streams subject to 40 CFR part 63, subpart CC (Petroleum Refineries NESHAP) and 40 CFR part 63, subpart G (the HON), the equipment is to be in compliance with the provisions of § 63.133 through § 63.137 of the HON, the requirements of § 63.143 and § 63.148 of the HON for monitoring, inspections, recordkeeping and reporting and all of the requirements of 40 CFR part 61, subpart FF National Emission Standards for Benzene Waste Operations except for § 61.355 and § 61.357, which include reporting and recordkeeping requirements.

The EPA recognizes that there is significant overlap between subparts FF and G. This issue was recently reviewed in revising parts of subpart G. It was determined that it is not possible to require only compliance with subpart FF as subpart FF was developed to control benzene emissions and compliance with subpart FF would not guarantee control of other HAPs. The selected alternative is to allow owners and operators the option to comply only with the requirements of subpart G. Requirements of subpart G were developed to control all HAP emissions and are as stringent as, if not more stringent than requirements of subpart FF. By today's action, the same approach is adopted for petroleum refineries. Today's action gives owners and operators of wastewater stream management units subject to the Petroleum Refineries NESHAP and subpart G the option to comply with only the requirements of subpart G.

C. Notification Requirements for Failure to Follow SSMP

Currently, refineries are required to report an action taken that is inconsistent with the startup, shutdown and malfunction plan (SSMP) to the Administrator within 2 days of commencing the action and within 7 days of completing the action. In addition to this requirement, refineries are to revise the SSMP if it is found to not address or inadequately address a startup, shutdown or malfunction. The revised SSMP is to be completed within 45 days of the event. The EPA has determined that it is not necessary for refineries to notify the Administrator of actions that are inconsistent with the SSMP within 2 days of commencing the action and within 7 days of completing the action for the Administrator to be able to evaluate the SSMP and request

revisions if needed. Today's action deletes the requirement to notify the Administrator within 2 days of commencing an action that is inconsistent with the SSMP and within 7 days of completing that action and replaces it with a requirement to report actions taken that are inconsistent with the SSMP in the next periodic report.

D. Clarification of Requirements for Installation and Calibration of Continuous Monitoring Systems (CMS)

According to the current Petroleum Refineries NESHAP, a continuous monitoring system (CMS) is to be installed and calibrated according to the manufacturer's specifications. Industry representatives have provided and EPA agrees that it is not always possible or desirable to install or calibrate equipment in exact accordance with the manufacturer's specifications. Minor adjustments must be made for most applications. Additionally, it may not be necessary to adhere to all the specifications provided by the manufacturer to ensure correct installation or calibration. By today's action, the directions for installing and calibrating CMS will be expanded to allow for procedures to be followed other than those specified by the manufacturer.

E. Requirement to Record the Signature of Owner or Operator When Equipment Leak Repairs Are Delayed

Under the promulgated petroleum refineries NESHAP, when an equipment leak is detected and it is determined that the leak cannot be repaired within 15 days, the facility is to record that the repair was delayed, the reason for the delay and the signature of the owner or operator (or designate) whose decision it was that the repair could not be affected without a process unit shutdown. By today's action, the requirement to record the signature of the owner or operator is revised to require the name of the person making the decision to be recorded. This revision will make the requirement compatible with electronic recordkeeping systems while maintaining the ability of the requirement to establish accountability.

F. Exemption of Secondary Seal From Requirements During Primary Seal Gap Measurements

The petroleum refineries NESHAP references a provision of the HON that allows secondary seals on external floating roof storage vessels to be exempt from seal gap requirements while the seal is temporarily pulled back during primary seal gap measurements. Subpart Kb of 40 CFR

part 60 does not include such a provision. Today's action extends the provision exempting secondary seals from seal gap requirements during primary seal gap measurements to storage vessels subject to the Petroleum Refineries NESHAP that are to comply with subpart Kb. The EPA has determined the provision provides a necessary clarification that was not considered in development of subpart Kb. Today's action does not alter the stringency of control requirements of subpart Kb.

G. Documentation of Compliance

The Petroleum Refineries NESHAP requires that documentation of having achieved compliance be submitted in the Notification of Compliance Status (NCS) report, due within 150 days of the compliance date. A potential source of confusion is the lack of specific instructions regarding the NCS and gasoline loading racks. Refineries with co-located gasoline loading racks that are subject to the Petroleum Refineries NESHAP (subpart CC) are generally required by subpart CC to comply with the requirements of the Gasoline Distribution MACT. The Gasoline Distribution MACT references notification requirements of the General Provisions. It is not clear when the notification is required for gasoline loading racks at petroleum refineries. By today's action, it is clarified that any notifications of compliance status required by the Gasoline Distribution MACT for gasoline loading racks co-located at refineries is to be submitted within 150 days of the Petroleum Refinery NESHAP compliance date.

H. Revision of Notification of Compliance Status (NCS) Report Requirement for New Group 1 Emission Point

In the promulgated Petroleum Refineries NESHAP, facilities are required to provide a NCS report for a new Group 1 emission point within 150 days of the change or addition of that point. By today's action, the reporting requirements are amended to allow the NCS report to be provided in the periodic report for the reporting period in which the Group 1 emission point is added. Today's action will reduce the burden of reporting through consolidating reports.

Periodic reports are due semiannually, within 60 days of the end of each 6-month reporting period. Through this amendment, it will be possible for a NCS report to be submitted more than 150 days after the addition of a Group 1 emission point. At most, if a change or addition is made at

the beginning of a reporting period, the NCS may not be provided for eight months, approximately three months more than if the requirement to provide the report within 150 days was retained unchanged. Alternately, this revision may require an owner or operator to submit an NCS in less than 150 days. If an addition or change is made at the end of a reporting period, the NCS must be submitted with the next periodic report no more than 60 days after the end of the reporting period. This amendment does not change the amount of time in which a Group 1 emission point must be in compliance with the standards of the Petroleum Refineries NESHAP.

I. Semiannual Reporting of Inspection Results

For storage vessels complying with the reporting requirements of the Petroleum Refineries NESHAP, if a failure is detected during an inspection, it is required to be reported in the next periodic report. For storage vessels complying with subpart Kb or subpart Ka, if a failure is detected during an inspection, a report is to be provided to the Administrator within 30 days or 60 days, respectively. By today's action, when a failure is detected during an inspection of a storage vessel subject to the Petroleum Refineries NESHAP that is to comply with subpart Kb or subpart Ka, the failure is to be reported in the next periodic report. This revision provides consistency for reporting requirements between storage vessels that are to comply with the NESHAP and storage vessels that are to comply with subpart Kb and subpart Ka, without altering the control requirements of subparts Kb or Ka.

J. Extensions for EFR Seal Gap Measurements

As discussed previously, storage vessels subject to the Petroleum Refineries NESHAP and a new source performance standard (40 CFR part 60, subpart K, Ka or Kb) are only required to comply with one of the standards. Procedures are specified for external floating roof storage vessels that must comply with the refinery MACT to allow seal gap measurements to be delayed if it is determined that it is unsafe to perform the measurement. Provisions allow the gap measurements to be delayed for 30 days while the unsafe conditions are corrected. If the unsafe conditions cannot be corrected within that time period, the vessel is to be emptied within 45 days of the determination that the roof is unsafe. The owner or operator may use up to two extensions of 30 days each to empty

the tank. There are no such provisions in subparts Ka or Kb.

Today's action extends the provision to allow seal gap measurements to be delayed due to unsafe conditions to storage vessels subject to the Petroleum Refineries NESHAP that are to comply with subparts Ka and Kb. The EPA has determined that the extension provision provides necessary guidance for owners and operators in circumstances that were not considered in the development of subparts Ka and Kb. Today's action does not alter the stringency of control requirements of subparts Ka or Kb.

K. Extensions for Storage Vessel Repairs

In the Petroleum Refineries NESHAP, when an internal floating roof is discovered to not meet the requirements of the standard, it must be repaired or the associated storage vessel taken out of service and emptied within 45 days. If a storage vessel cannot be emptied or repaired within 45 days, the owner or operator may use up to two extensions of 30 days each. If an extension is utilized, the owner or operator must, in the next periodic report, identify the vessel, provide a description of the failure, document that alternate storage capacity is unavailable, and specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as possible. Subpart Kb does not include provisions to be followed in the event that a failure is detected during an inspection of a storage vessel control device and the storage vessel cannot be repaired or emptied within 45 days.

Today's action extends the provision to allow for delays in repairing or emptying a storage vessel found to be out of compliance to storage vessels subject to the Petroleum Refineries NESHAP that are to comply with subpart Kb. The EPA has determined that the provision provides necessary guidance for owners and operators in circumstances that were not considered in the development of subpart Kb. Today's action does not alter the stringency of control requirements of subpart Kb.

L. Definition of Gasoline

In the current Petroleum Refineries NESHAP, no definition is provided for gasoline although gasoline loading racks at affected facilities are subject to subpart CC. By today's action, a definition for gasoline is added to the definitions in subpart CC. The definition is taken from 40 CFR part 60, subpart XX Standards of Performance for Bulk Gasoline Terminals.

M. Report of Determination of Applicability for Flexible Operation Units and for Distillation Columns and Storage Vessels for Which Use Varies

The Petroleum Refineries NESHAP requires a report of the determination of the applicability of subpart CC to process units designed and operated as flexible operation units, and storage vessels and distillation units for which use varies from year to year. For existing units, this report is to be submitted no later than 18 months prior to the compliance date. With the exception of reports required for emission points included in emissions averaging, no other reports are required prior to the compliance date. By today's action, the requirement is revised to allow applicability determinations for flexible operation units and distillation columns and storage vessels for which use varies to be reported in the initial Notification of Compliance Status report. This revision provides consistency between reporting requirements and reduces burden by consolidating reports. This revision does not alter the date by which existing units must be in compliance with the Petroleum Refineries NESHAP.

N. Compliance of Agitators With Equipment Leaks Provisions

Currently, owners and operators of refineries can comply with the equipment leaks provisions of the NESHAP by complying with the equipment leaks provisions of subpart H. Some of the referenced provisions of subpart H refer to agitators in heavy liquid service. As stated on page 8-3 of the background information document for the final rule (EPA-453/R-95-015b), the provisions of the Petroleum Refineries NESHAP are not intended to apply to agitators. It is possible that, due to the references to agitators in subpart H, subpart CC could be interpreted as applying to agitators. Today's action revises the Petroleum Refineries NESHAP to specifically state that owners and operators of facilities subject to subpart CC are not required to comply with subpart H for agitators in heavy liquid service.

O. Overlap of Subparts XX and R for Gasoline Loading Racks

The current Petroleum Refineries NESHAP requires gasoline loading racks located at refineries to be in compliance with the control requirements of 40 CFR part 63, subpart R National Emission Standards for Gasoline Distribution Facilities. New gasoline loading racks are also subject to 40 CFR part 60, subpart XX, the New Source

Performance Standard (NSPS) for bulk gasoline terminals. It is currently possible for a gasoline loading rack at a petroleum refinery to be subject to both subparts R and XX. Today's action revises the Petroleum Refineries NESHAP to require petroleum refineries with gasoline loading racks subject to both subparts R and XX to comply with the control requirements of subpart R. This revision does not alter the stringency of the rule as the control requirements of subpart R are more stringent than the control requirements of subpart XX.

P. Corrections to Miscellaneous Process Vent Equations

Following promulgation of the Petroleum Refineries NESHAP, two errors were discovered in two equations to be used to calculate kilograms per day of volatile organic compounds (VOC) in miscellaneous process vent streams. If used as currently presented, the equations will cause facilities to underestimate kilograms per day of VOC by a factor of 24 or 1,000. Today's action corrects these equations. These corrections do not alter the monitoring, recordkeeping, or reporting requirements or control requirements of the rule as originally intended.

Q. Revision of Notification of Compliance Status Report Requirement for Existing Group 1 Storage Vessels Brought Into Compliance After August 18, 1998

The Petroleum Refineries NESHAP allows floating roof storage vessels to be brought into compliance up to 10 years after August 18, 1998, the compliance date for other emission points. A Notification of Compliance Status (NCS) report is required to be submitted when these vessels are brought into compliance. Currently, it is not clear when the NCS report is to be submitted.

Today's revision will require a NCS report to be submitted for storage vessels brought into compliance after August 18, 1998 with the periodic report for the reporting period in which the vessel was brought into compliance. The report will include a list of Group 1 storage vessels and either the actual or anticipated date of compliance for each vessel.

This revision provides needed clarification and allows for the consolidation of reports.

IV. Reduction in Burden

The revisions included in today's action are expected to reduce the annual recordkeeping and reporting burden associated with this NESHAP by 50

technical hours per refinery and 8,250 technical hours nationwide.

V. Judicial Review

Under section 307(b)(1) of the Clean Air Act (CAA), judicial review of the actions taken by this final rule is available only on 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 action. Under section 307(b)(2) of the CAA, the requirements that are subject to today's notice may not be challenged later in civil or criminal proceedings brought by EPA to enforce these requirements.

VI. Administrative

A. Paperwork Reduction Act

The information collection requirements of the previously promulgated Petroleum Refineries NESHAP rule were submitted to and approved by the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* A copy of this Information Collection Request (ICR) document (OMB Control Number 2060-0340) may be obtained from the Information Policy Branch (PY-223Y); U.S. Environmental Protection Agency; 401 M Street, SW; Washington, DC 20460 or by calling (202) 260-2740. The information collection request is currently in the reinstatement process.

The information collection request has been revised to reflect the revisions to monitoring, recordkeeping and reporting requirements made by today's action. The collection of information has an estimated annual reporting and recordkeeping burden averaging 3,000 hours per respondent. This estimate includes time for reviewing instructions; developing, acquiring, installing, and utilizing technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjusting existing ways to comply with any previously applicable instructions and requirements; completing and reviewing the collection of information; and transmitting or otherwise disclosing the information.

The burden estimate reflects an annual reduction of 8,250 technical hours, as compared to the estimate at promulgation, resulting from the revisions made by today's action.

B. Executive Order 12866 Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993) the Agency

must determine whether the regulatory action is "significant" and therefore subject to OMB review and the requirements of the Executive Order. The Order defines a "significant regulatory action" as one that is likely to result in a rule that may:

1. Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local or tribal governments or communities;
2. Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
3. Materially alter the budgetary impact of entitlements, grants, user fees, or land 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.

Because today's action decreases the burden of the Petroleum Refineries NESHAP without altering the stringency, applicability, or schedule of the NESHAP or other rules, this rule was classified "non-significant" under Executive Order 12866 and, therefore was not reviewed by the Office of Management and Budget.

C. Regulatory Flexibility

The EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this final rule. The EPA has also determined that this rule will not have a significant negative economic impact on a substantial number of small entities. This final rule will not have a significant negative impact on a substantial number of small entities because it revises monitoring, recordkeeping, and reporting requirements and reduces the associated burden for all affected facilities, including small entities.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Pub. L. 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before

promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

At the time of promulgation, EPA determined that the Petroleum Refineries NESHAP does not include a Federal mandate that may result in estimated costs of \$100 million or more to either State, local, or tribal governments in the aggregate or to the private sector. This determination is not altered by today's action, the purpose of which is to reduce the burden associated with monitoring, recordkeeping, and reporting requirements. Thus, today's rule is not subject to the requirements of sections 202 and 205 of the UMRA.

E. Executive Order 12875

To reduce the burden of Federal regulations on States and small governments, the President issued Executive Order 12875 entitled "Enhancing the Intergovernmental Partnership" on October 26, 1993. Executive Order 12875 prohibits EPA, to the extent feasible and permitted by law, from promulgating any regulation that is not required by statute and that creates a mandate upon a State, local or tribal government unless: (i) the Federal Government provides the funds necessary to pay the direct costs incurred by the State, local or tribal government in complying with the mandate; or (ii) EPA provides 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 those entities concerns, any written communications submitted to EPA by such units of government and EPA's position supporting the need to issue the regulation. Executive Order 12875 further requires EPA to develop an effective process to permit 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." This rule does not create a mandate upon State, local or tribal governments.

F. Applicability of Executive Order 13045

Executive Order 13045 applies to any rule that EPA determines (1) "economically significant" as defined under Executive Order 12866, and (2) the environmental health or safety risk addressed by the rule has a disproportionate effect on children. If the regulatory action meets both criteria, EPA must evaluate the environmental health or safety effects of the planned rule on children and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by EPA.

This final rule is not subject to E.O. 13045, entitled "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), because it is not an economically significant regulatory action as defined by Executive Order 12866, and it does not address an environmental health or safety risk that would have a disproportionate effect on children.

G. Submission to Congress

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

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous air

pollutants, Petroleum refineries, Reporting and recordkeeping requirements, Storage vessels.

Dated: August 11, 1998.

Carol M. Browner,
Administrator.

For reasons set out in the preamble, part 63 of title 40, chapter I, of the Code of Federal Regulations is amended as follows:

PART 63—[AMENDED]

1. The authority citation for part 63 continues to read as follows:

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

Subpart CC—National Emission Standards for Hazardous Air Pollutants: Petroleum Refineries

2. Amend § 63.640 by revising paragraphs (k)(2)(vii), (n)(1), (n)(3), and (n)(6); by adding paragraphs (n)(8) and (n)(9); and by revising paragraph (o)(2) and adding paragraph (r) to read as follows:

§ 63.640 Applicability and designation of affected source.

* * * * *

(k) * * *
(2) * * *

(vii) Reports and notifications required by §§ 63.565 and 63.567 of subpart Y of this part. These requirements are summarized in table 5 of this subpart.

* * * * *

(n) * * *

(1) After the compliance dates specified in paragraph (h) of this section, a Group 1 or Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR part 60, subpart Kb, is required to comply only with the requirements of 40 CFR part 60, subpart Kb, except as provided in paragraph (n)(8) of this section.

* * * * *

(3) After the compliance dates specified in paragraph (h) of this section, a Group 2 storage vessel that is part of a new source and is subject to the control requirements in § 60.112b of 40 CFR part 60, subpart Kb is required to comply only with 40 CFR part 60, subpart Kb except as provided in paragraph (n)(8) of this section.

* * * * *

(6) After compliance dates specified in paragraph (h) of this section, a Group 2 storage vessel that is subject to the control requirements of 40 CFR part 60, subparts K or Ka is required to comply only with the provisions of 40 CFR part

60, subparts K or Ka except as provided for in paragraph (n)(9) of this section.

* * * * *

(8) Storage vessels described by paragraphs (n)(1) and (n)(3) of this section are to comply with 40 CFR part 60, subpart Kb except as provided for in paragraphs (n)(8)(i) through (n)(8)(vi) of this section.

(i) Storage vessels that are to comply with § 60.112b(a)(2) of subpart Kb are exempt from the secondary seal requirements of § 60.112b(a)(2)(i)(B) during the gap measurements for the primary seal required by § 60.113b(b) of subpart Kb.

(ii) If the owner or operator determines that it is unsafe to perform the seal gap measurements required in § 60.113b(b) of subpart Kb or to inspect the vessel to determine compliance with § 60.113b(a) of subpart Kb because the roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the owner or operator shall comply with the requirements in either § 63.120(b)(7)(i) or § 63.120(b)(7)(ii) of subpart C.

(iii) If a failure is detected during the inspections required by § 60.113b(a)(2) or during the seal gap measurements required by § 60.113b(b)(1), and the vessel cannot be repaired within 45 days and the vessel cannot be emptied within 45 days, the owner or operator may utilize up to two extensions of up to 30 additional calendar days each. The owner or operator is not required to provide a request for the extension to the Administrator.

(iv) If an extension is utilized in accordance with paragraph (n)(8)(iii) of this section, the owner or operator shall, in the next periodic report, identify the vessel, provide the information listed in § 60.113b(a)(2) or § 60.113b(b)(4)(iii), and describe the nature and date of the repair made or provide the date the storage vessel was emptied.

(v) Owners and operators of storage vessels complying with subpart Kb of part 60 may submit the inspection reports required by §§ 60.115b(a)(3), (a)(4), and (b)(4) of subpart Kb as part of the periodic reports required by this subpart, rather than within the 30-day period specified in §§ 60.115b(a)(3), (a)(4), and (b)(4) of subpart Kb.

(vi) The reports of rim seal inspections specified in § 60.115b(b)(2) are not required if none of the measured gaps or calculated gap areas exceed the limitations specified in § 60.113b(b)(4). Documentation of the inspections shall be recorded as specified in § 60.115b(b)(3).

(9) Storage vessels described by paragraph (n)(6) of this section that are

to comply with 40 CFR part 60, subpart Ka, are to comply with only subpart Ka except as provided for in paragraphs (n)(9)(i) through (n)(9)(iv) of this section.

(i) If the owner or operator determines that it is unsafe to perform the seal gap measurements required in § 60.113a(a)(1) of subpart Ka because the floating roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the owner or operator shall comply with the requirements in either § 63.120(b)(7)(i) or § 63.120(b)(7)(ii) of subpart G.

(ii) If a failure is detected during the seal gap measurements required by § 60.113a(a)(1) of subpart Ka, and the vessel cannot be repaired within 45 days and the vessel cannot be emptied within 45 days, the owner or operator may utilize up to 2 extensions of up to 30 additional calendar days each.

(iii) If an extension is utilized in accordance with paragraph (n)(9)(ii) of this section, the owner or operator shall, in the next periodic report, identify the vessel, describe the nature and date of the repair made or provide the date the storage vessel was emptied. The owner or operator shall also provide documentation of the decision to utilize an extension including a description of the failure, documentation that alternate storage capacity is unavailable, and a schedule of actions that will ensure that the control equipment will be repaired or the vessel emptied as soon as possible.

(iv) Owners and operators of storage vessels complying with subpart Ka of part 60 may submit the inspection reports required by § 60.113a(a)(1)(i)(E) of subpart Ka as part of the periodic reports required by this subpart, rather than within the 60-day period specified in § 60.113a(a)(1)(i)(E) of subpart Ka.

(o) * * *

(2) After the compliance dates specified in paragraph (h) of this section a Group 1 or Group 2 wastewater stream that is conveyed, stored, or treated in a wastewater stream management unit that also receives streams subject to the provisions of §§ 63.133 through 63.147 of subpart G wastewater provisions of this part shall comply as specified in paragraph (o)(2)(i) or (o)(2)(ii) of this section. Compliance with the provisions of paragraph (o)(2) of this section shall constitute compliance with the requirements of this subpart for that wastewater stream.

(i) Comply with paragraphs (o)(2)(i)(A) through (o)(2)(i)(C) of this section.

(A) The provisions in §§ 63.133 through 63.140 of subpart G for all equipment used in the storage and

conveyance of the Group 1 or Group 2 wastewater stream.

(B) The provisions in both 40 CFR part 61, subpart FF and in §§ 63.138 and 63.139 of subpart G for the treatment and control of the Group 1 or Group 2 wastewater stream.

(C) The provisions in §§ 63.143 through 63.148 of subpart G for monitoring and inspections of equipment and for recordkeeping and reporting requirements. The owner or operator is not required to comply with the monitoring, recordkeeping, and reporting requirements associated with the treatment and control requirements in 40 CFR part 61, subpart FF, §§ 61.355 through 61.357.

(ii) Comply with paragraphs (o)(2)(i)(A) and (o)(2)(ii)(B) of this section.

(A) Comply with the provisions of §§ 63.133 through 63.148 and §§ 63.151 and 63.152 of subpart G.

(B) For any Group 2 wastewater stream or organic stream whose benzene emissions are subject to control through the use of one or more treatment processes or waste management units under the provisions of 40 CFR part 61, subpart FF on or after December 31, 1992, comply with the requirements of § 63.133 through § 63.147 of subpart G for Group 1 wastewater streams.

* * * * *

(r) Overlap of subpart CC with other regulations for gasoline loading racks. After the compliance dates specified in paragraph (h) of this section, a Group 1 gasoline loading rack that is part of a source subject to subpart CC and also is subject to the provisions of 40 CFR part 60, subpart XX is required to comply only with this subpart.

3. Amend § 63.641 by adding in alphabetical order a definition for "gasoline" to read as follows

§ 63.641 Definitions.

* * * * *

Gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater that is used as a fuel for internal combustion engines.

* * * * *

4. Amend § 63.644 by revising the last sentence of paragraph (a) to read as follows:

§ 63.644 Monitoring provisions for miscellaneous process vents.

(a) * * * All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide

adequate assurance that the equipment will monitor accurately.

* * * * *

5. Amend § 63.645 by revising the definition of "K₂" in paragraph (f)(4) and revising paragraph (f)(5) to read as follows:

§ 63.645 Test methods and procedures for miscellaneous process vents.

* * * * *

(f) * * *

(4) * * *

K₂ = Constant, 5.986 × 10⁻⁵ (parts per million)⁻¹ (gram-mole per standard cubic meter) (kilogram per gram) (minute per day), where the standard temperature (standard cubic meter) is at 20 °C.

* * * * *

(5) If Method 25A is used, the emission rate of TOC (E_{TOC}) shall be calculated using the following equation:

$$E_{TOC} = K_2 C_{TOC} M Q_s$$

where:

E_{TOC} = Emission rate of TOC (minus methane and ethane) in the sample, kilograms per day.

K₂ = Constant, 5.986 × 10⁻⁵ (parts per million)⁻¹ (gram-mole per standard cubic meter) (kilogram per gram) (minute per day), where the standard temperature (standard cubic meter) is at 20 °C.

C_{TOC} = Concentration of TOC on a dry basis in parts per million volume as measured by Method 25A of 40 CFR part 60, appendix A, as indicated in paragraph (f)(3) of this section.

M = Molecular weight of organic compound used to express units of C_{TOC}, gram per gram-mole.

Q_s = Vent stream flow rate, dry standard cubic meters per minute, at a temperature of 20 °C.

* * * * *

6. Amend § 63.648 by revising paragraph (e) to read as follows:

§ 63.648 Equipment leak standards.

* * * * *

(e) For reciprocating pumps in heavy liquid service and agitators in heavy liquid service, owners and operators are not required to comply with the requirements in § 63.169 of subpart H of this part.

* * * * *

7. Amend § 63.654 by revising the first sentence of paragraph (a); revising paragraphs (d)(1), (f) introductory text, and (f)(1)(i)(A); adding paragraph (f)(6); and revising the first two sentences of paragraph (h)(6) to read as follows:

§ 63.654 Reporting and recordkeeping requirements.

(a) Each owner or operator subject to the wastewater provisions in § 63.647

shall comply with the recordkeeping and reporting provisions in §§ 61.356 and 61.357 of 40 CFR part 61, subpart FF unless they are complying with the wastewater provisions specified in paragraph (o)(2)(ii) of § 63.640. * * *

* * * * *

(d) * * *
 (1) Sections 60.486 and 60.487 of subpart VV of part 60 except as specified in paragraph (d)(1)(i) of this section; or §§ 63.181 and 63.182 of subpart H of this part except for §§ 63.182(b), (c)(2), and (c)(4).

(i) The signature of the owner or operator (or designate) whose decision it was that a repair could not be effected without a process shutdown is not required to be recorded. Instead, the name of the person whose decision it was that a repair could not be effected without a process shutdown shall be recorded and retained for 2 years.

(ii) [Reserved]
 * * * * *

(f) Each owner or operator of a source subject to this subpart shall submit a Notification of Compliance Status report within 150 days after the compliance dates specified in § 63.640(h) with the exception of Notification of Compliance Status reports submitted to comply with § 63.640(l)(3) and for storage vessels subject to the compliance schedule specified in § 63.640(h)(4). Notification of Compliance Status reports required by § 63.640(l)(3) and for storage vessels subject to the compliance dates specified in § 63.640(h)(4) shall be submitted according to paragraph (f)(6) of this section. This information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination of the three. If the required information has been submitted before the date 150 days after the compliance date specified in § 63.640(h), a separate Notification of Compliance Status report is not required within 150 days after the compliance dates specified in § 63.640(h). If an owner or operator

submits the information specified in paragraphs (f)(1) through (f)(5) of this section at different times, and/or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the previously submitted information. Each owner or operator of a gasoline loading rack classified under Standard Industrial Classification Code 2911 located within a contiguous area and under common control with a petroleum refinery subject to the standards of this subpart shall submit the Notification of Compliance Status report required by subpart R of this part within 150 days after the compliance dates specified in § 63.640(h) of this subpart.

(1) * * *
 (i) * * *

(A) Identification of each storage vessel subject to this subpart, and for each Group 1 storage vessel subject to this subpart, the information specified in paragraphs (f)(1)(i)(A)(1) through (f)(1)(i)(A)(3) of this section. This information is to be revised each time a Notification of Compliance Status report is submitted for a storage vessel subject to the compliance schedule specified in § 63.640(h)(4) or to comply with § 63.640(l)(3).

(1) For each Group 1 storage vessel complying with § 63.646 that is not included in an emissions average, the method of compliance (i.e., internal floating roof, external floating roof, or closed vent system and control device).

(2) For storage vessels subject to the compliance schedule specified in § 63.640(h)(4) that are not complying with § 63.646, the anticipated compliance date.

(3) For storage vessels subject to the compliance schedule specified in § 63.640(h)(4) that are complying with § 63.646 and the Group 1 storage vessels described in § 63.640(l), the actual compliance date.

(6) Notification of Compliance Status reports required by § 63.640(l)(3) and for storage vessels subject to the

compliance dates specified in § 63.640(h)(4) shall be submitted no later than 60 days after the end of the 6-month period during which the change or addition was made that resulted in the Group 1 emission point or the existing Group 1 storage vessel was brought into compliance, and may be combined with the periodic report. Six-month periods shall be the same 6-month periods specified in paragraph (g) of this section. The Notification of Compliance Status report shall include the information specified in paragraphs (f)(1) through (f)(5) of this section. This information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, as part of the periodic report, or in any combination of these four. If the required information has been submitted before the date 60 days after the end of the 6-month period in which the addition of the Group 1 emission point took place, a separate Notification of Compliance Status report is not required within 60 days after the end of the 6-month period. If an owner or operator submits the information specified in paragraphs (f)(1) through (f)(5) of this section at different times, and/or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the previously submitted information.

* * * * *

(h) * * *

(6) The owner or operator shall submit the information specified in paragraphs (h)(6)(i) through (h)(6)(iii) of this section, as applicable. For existing sources, this information shall be submitted in the initial Notification of Compliance Status report. * * *

* * * * *

8. In table 5 in the appendix of subpart CC of this part, remove the entries for "63.566(a)" and "63.566(b)" and add two entries, in numerical order, to read as follows:

TABLE 5.—MARINE VESSEL LOADING AND UNLOADING OPERATIONS RECORDKEEPING AND REPORTING REQUIREMENTS^a

Reference (section of subpart Y of this part)	Description	Comment
63.565(a)	Performance test/site test plan.	The information required under this paragraph is to be submitted with the notification of compliance status report required under 40 CFR part 63, subpart CC.
63.565(b)	Performance test data requirements.	

^aThis table does not include all the requirements delineated under the referenced Sections. See referenced Sections for specific requirements.

9. In table 6 in the appendix of subpart CC of this part, revise the

entries for "63.6(e)," "63.8(c)(3)," and "63.10(d)(5)(ii)" to read as follows:

TABLE 6.—GENERAL PROVISIONS APPLICABILITY TO SUBPART CC^a

Reference	Applies to subpart CC	Comment
§ 63.6(e)	Yes	Does not apply to Group 2 emission points. ^b The startup, shutdown, and malfunction plan specified in § 63.6(e)(3) is not required for wastewater operations that are not subject to subpart G of this part. Except that actions taken during a startup, shutdown, or malfunction that are not consistent with the startup, shutdown, and malfunction plan do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but must be included in the next periodic report.
§ 63.8(c)(3)	Yes	Except that verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment would monitor accurately.
§ 63.10(d)(5)(ii)	Yes	Except that actions taken during a startup, shutdown, or malfunction that are not consistent with the startup, shutdown, and malfunction plan do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but must be included in the next periodic report.

^aWherever subpart A specifies "postmark" dates submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by specified dates, but a postmark is not required.

^bThe plan, and any records or reports of startup, shutdown, and malfunction do not apply to Group 2 emission points.

[FR Doc. 98-22093 Filed 8-17-98; 8:45 am]
BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 81

[KY 99-1-9820a; FRL-6142-7]

Designation of Areas for Air Quality Planning Purposes—Kentucky: Redesignation of the Muhlenberg County Sulfur Dioxide Secondary Nonattainment Area to Attainment

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: On November 21, 1997, the Commonwealth of Kentucky submitted, through the Natural Resources and Environmental Protection Cabinet (the Cabinet), a request for redesignation of Muhlenberg County, Kentucky, to attainment for the secondary sulfur dioxide (SO₂) National Ambient Air Quality Standard (NAAQS). The secondary nonattainment designation for SO₂ was based on the fact that the Tennessee Valley Authority (TVA) Paradise Steam Plant was out of compliance with its allowable emission limit. The Cabinet submitted air dispersion modeling which demonstrates that the secondary

(NAAQS) for SO₂ are now being maintained. The EPA is approving the request for redesignation.

DATES: This direct final rule is effective on October 19, 1998 without further notice, unless EPA receives adverse comment by September 17, 1998. If EPA receives adverse comment, we will publish a timely withdrawal of the direct final rule in the *Federal Register* and inform the public that the rule will not take effect.

ADDRESSES: Written comments should be addressed to: Scott M. Martin, Regulatory Planning Section, Air Planning Branch, Air, Pesticides & Toxics Management Division, Region 4 Environmental Protection Agency, 61 Forsyth Street, Atlanta, Georgia 30303.

Copies of the documents relative to this action are available for public inspection during normal business hours at the following locations. The interested persons wanting to examine these documents should make an appointment with the appropriate office at least 24 hours before the visiting day.

Environmental Protection Agency, Region 4 Air Planning Branch, 61 Forsyth Street, Atlanta, Georgia 30303.

Mr. John E. Hornback, Director, Division of Air Quality, Department for Environmental Protection, Natural Resources and Environmental

Protection Cabinet, 803 Schenkel Lane, Frankfort, Kentucky 40601.

FOR FURTHER INFORMATION CONTACT:

Scott M. Martin, Regulatory Planning Section, Air Planning Branch, Air, Pesticides & Toxics Management Division, Region 4 Environmental Protection Agency, 61 Forsyth Street, Atlanta, Georgia 30303. The telephone number is 404-562-9036.

SUPPLEMENTARY INFORMATION: In a *Federal Register* document published March 3, 1978, (see 43 FR 8962) Muhlenberg County was originally designated nonattainment for the primary and secondary SO₂ NAAQS. The nonattainment designation was due to noncompliance of the TVA Paradise Plant and the Kentucky Utilities' Green River Plant. In a June 24, 1983, *Federal Register* (see 48 FR 28988) EPA approved a redesignation request for Muhlenberg County from nonattainment to attainment for the SO₂ primary NAAQS. The redesignation request for attainment of the primary standard was approved based on the fact that the Kentucky Utilities' Green River Plant had already achieved final compliance with its modeled SO₂ emission limit of 3.5 lbs/MMBTU in 1980 and that the TVA Paradise Plant had achieved compliance with its modeled SO₂ emission limit of 5.2 lbs/MMBTU. Both of these emission limitations were determined by modeling to be adequate

component of the training or services VA provided or authorized.

(e) *Department employees and facilities.* (1) A *Department employee* is an individual—

(i) Who is appointed by the Department in the civil service under title 38, United States Code, or title 5, United States Code, as an employee as defined in 5 U.S.C. 2105;

(ii) Who is engaged in furnishing hospital care, medical or surgical treatment, or examinations under authority of law; and

(iii) Whose day-to-day activities are subject to supervision by the Secretary of Veterans Affairs.

(2) A *Department facility* is a facility over which the Secretary of Veterans Affairs has direct jurisdiction.

(f) *Activities which are not hospital care, medical or surgical treatment, or examination furnished by a Department employee or in a Department facility.* The following are not hospital care, medical or surgical treatment, or examination furnished by a Department employee or in a Department facility within the meaning of 38 U.S.C. 1151(a):

(1) Hospital care or medical services furnished under a contract made under 38 U.S.C. 1703.

(2) Nursing home care furnished under 38 U.S.C. 1720.

(3) Hospital care or medical services, including examination, provided under 38 U.S.C. 8153 in a facility over which the Secretary does not have direct jurisdiction.

(g) *Benefits payable under 38 U.S.C. 1151 for a veteran's death.* (1) *Death before January 1, 1957.* The benefit payable under 38 U.S.C. 1151(a) to an eligible survivor for a veteran's death occurring before January 1, 1957, is death compensation. See §§ 3.5(b)(2) and 3.702 for the right to elect dependency and indemnity compensation.

(2) *Death after December 31, 1956.* The benefit payable under 38 U.S.C. 1151(a) to an eligible survivor for a veteran's death occurring after December 31, 1956, is dependency and indemnity compensation.

(Authority: 38 U.S.C. 1151)

4. Section 3.362 is added to read as follows:

§ 3.362 Offsets under 38 U.S.C. 1151(b) of benefits awarded under 38 U.S.C. 1151(a).

(a) *Claims subject to this section.* This section applies to claims received by VA on or after October 1, 1997. This includes original claims and claims to reopen, revise, reconsider, or otherwise readjudicate a previous claim for benefits under 38 U.S.C. 1151 or its predecessors.

(b) *Offset of veterans' awards of compensation.* If a veteran's disability is the basis of a judgment under 28 U.S.C. 1346(b) awarded, or a settlement or compromise under 28 U.S.C. 2672 or 2677 entered, on or after December 1, 1962, the amount to be offset under 38 U.S.C. 1151(b) from any compensation awarded under 38 U.S.C. 1151(a) is the entire amount of the veteran's share of the judgment, settlement, or compromise, including the veteran's proportional share of attorney fees.

(c) *Offset of survivors' awards of dependency and indemnity compensation.* If a veteran's death is the basis of a judgment under 28 U.S.C. 1346(b) awarded, or a settlement or compromise under 28 U.S.C. 2672 or 2677 entered, on or after December 1, 1962, the amount to be offset under 38 U.S.C. 1151(b) from any dependency and indemnity compensation awarded under 38 U.S.C. 1151(a) to a survivor is only the amount of the judgment, settlement, or compromise representing damages for the veteran's death the survivor receives in an individual capacity or as distribution from the decedent veteran's estate of sums included in the judgment, settlement, or compromise to compensate for harm suffered by the survivor, plus the survivor's proportional share of attorney fees.

(d) *Offset of structured settlements.* This paragraph applies if a veteran's disability or death is the basis of a structured settlement or structured compromise under 28 U.S.C. 2672 or 2677 entered on or after December 1, 1962.

(1) *The amount to be offset.* The amount to be offset under 38 U.S.C. 1151(b) from benefits awarded under 38 U.S.C. 1151(a) is the veteran's or survivor's proportional share of the cost of the settlement or compromise to the United States, including the veteran's or survivor's proportional share of attorney fees.

(2) *When the offset begins.* The offset of benefits awarded under 38 U.S.C. 1151(a) begins the first month after the structured settlement or structured compromise has become final that such benefits would otherwise be paid.

(Authority: 38 U.S.C. 1151)

5. Section 3.363 is added to read as follows:

§ 3.363 Bar to benefits under 38 U.S.C. 1151.

(a) *Claims subject to this section.* This section applies to claims received by VA on or after October 1, 1997. This includes original claims and claims to reopen, revise, reconsider, or otherwise

readjudicate a previous claim for benefits under 38 U.S.C. 1151 or its predecessors.

(b) *Administrative awards, compromises, or settlements, or judgments that bar benefits under 38 U.S.C. 1151.* If a veteran's disability or death was the basis of an administrative award under 28 U.S.C. 1346(b) made, or a settlement or compromise under 28 U.S.C. 2672 or 2677 finalized, before December 1, 1962, VA may not award benefits under 38 U.S.C. 1151 for any period after such award, settlement, or compromise was made or became final. If a veteran's disability or death was the basis of a judgment that became final before December 1, 1962, VA may award benefits under 38 U.S.C. 1151 for the disability or death unless the terms of the judgment provide otherwise.

(Authority: 38 U.S.C. 1151)

6. Section 3.800 is amended by adding introductory text to read as follows:

§ 3.800 Disability or death due to hospitalization, etc.

This section applies to claims received by VA before October 1, 1997. For claims received by VA on or after October 1, 1997, see §§ 3.362 and 3.363.

* * * * *

[FR Doc. 98-22486 Filed 8-21-98; 8:45 am]

BILLING CODE 8320-01-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AD-FRL-6145-6]

RIN 2060-AE04

National Emission Standards for Hazardous Air Pollutants From Secondary Lead Smelting

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule: amendments to rule.

SUMMARY: This action amends the national emission standards for hazardous air pollutants (NESHAP) for new and existing secondary lead smelters. Changes to the NESHAP are being made to address comments received following promulgation of the final rule. Four changes are being made. Two are minor typographical corrections, while two are substantive corrections. The EPA is making these amendments as a direct final rule without prior proposal because the Agency views this as a noncontroversial

amendment and anticipates no significant adverse comments. The EPA is also proposing these amendments in the Proposed Rules section of this **Federal Register**. This rule will become effective without further notice unless the Agency receives relevant adverse comment on the parallel notice of proposed rulemaking within 30 days of today's document. Should the Agency receive such comments, it will publish a document informing the public that this rule did not take effect. The EPA will not institute a second comment period on the proposal. Any parties interested in commenting on the amendments should do so at this time.

DATES: Effective Date. This action will be effective October 13, 1998 unless significant adverse comments on this action are received by September 23, 1998. If significant adverse comments are received, the EPA will publish a timely withdrawal in the **Federal Register** informing the public that this rule will not take effect.

Judicial Review. Under section 307(b)(1) of the Act, judicial review of a NESHAP 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 notice may not be challenged later in civil or criminal proceedings brought by the EPA to enforce these requirements.

ADDRESSES: Docket. Docket No. A-92-43, containing information considered by the EPA in development of this action, is available for public inspection and copying between 8:00 a.m. and 5:30 p.m., Monday through Friday except for Federal holidays, at the following address: U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center (MC-6102), 401 M Street, SW, Washington, DC 20460; telephone (202) 260-7548. The docket is located at the above address in Room M-1500, Waterside Mall (ground floor). A reasonable fee may be charged for copying.

Comments. Written comments should be submitted to: Docket A-92-43, U.S. EPA, Air & Radiation Docket & Information Center, 401 M Street, SW., Room 1500, Washington, DC 20460.

FOR FURTHER INFORMATION CONTACT: Mr. Kevin Cavender, Metals Group, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone (919) 541-2364.

SUPPLEMENTARY INFORMATION:

The information presented in this preamble is organized as follows:

- I. Background
- II. Summary of Changes
- III. Rationale for Changes
 - A. Dryer Transition Pieces
 - B. Blast Furnace Charging Hood THC Emission Limit
- IV. Administrative Requirements
 - A. Docket
 - B. Executive Order 12866
 - C. Unfunded Mandates Act
 - D. Paperwork Reduction Act
 - E. Regulatory Flexibility Act
 - F. Submission to Congress and the General Accounting Office
 - G. National Technology Transfer and Advancement Act
 - H. Protection of Children from Environmental Health Risks and Safety Risk Under Executive Order 13045
 - I. Enhancing the Intergovernmental Partnership Under Executive Order 12875

I. Background

The NESHAP for secondary lead smelting (40 CFR part 63, subpart X) was proposed in the **Federal Register** on June 9, 1994 (59 FR 29750). The EPA received 31 letters commenting on the proposed rule and proposed area source listing. After considering fully the comments received, the EPA promulgated this NESHAP in the **Federal Register** on June 23, 1995 (60 FR 32587).

Following publication of the final rule, the EPA received three petitions for reconsideration pursuant to section 307(d)(7)(B) of the act from secondary lead smelter owners and operators, and the Association of Battery Recyclers, an industry trade association that represents the majority of the secondary lead smelters in the United States. The EPA concurred with several of the objections, and revised the final rule. The revised rule was published in the **Federal Register** on June 13, 1997 (62 FR 32209). In addition, the EPA extended the compliance date and the dates for the submittal of standard operating procedures (SOP) manuals for fugitive dust control and baghouse inspection and maintenance by 6 months, in order to allow affected sources time to address the changes being made to the final rule. The extension was published in the **Federal Register** on December 12, 1996 (61 FR 65334).

Following publication of the final rule revision, the EPA became aware of two typographical errors in the revised rule. This amendment corrects those errors. In addition, two secondary lead smelter operators have contacted the EPA regarding two aspects of the final rule. The East Penn Company which operates a smelter in Reading, Pennsylvania,

submitted a request on October 6, 1997, for permission to operate under an alternative emission standard for dryer transition pieces, as provided for in section 63.6(g) of the General Provisions. The GNB Company which operates a smelter in Frisco, Texas, reported that it was unable to meet the emission rate emission limit for total hydrocarbons from a blast furnace charging hood, and requested that the EPA amend the emission standard from a mass rate limit to a concentration limit. This amendment addresses the comments received from the two companies.

II. Summary of Changes

Two typographical corrections are being made. The EPA is correcting the reference to (a)(9) in § 63.548(e) to (c)(9) as follows:

"(e) The bag leak detection system required by paragraph (c)(9) of this section. * * *"

The EPA is correcting § 63.546(a) to read as revised in the extension published in the **Federal Register** on December 12, 1996 (61 FR 65334):

"(a) Each owner or operator of an existing secondary lead smelter shall achieve compliance with the requirements of this subpart no later than December 23, 1997. Existing sources wishing to apply for an extension of compliance pursuant to § 63.6(i) of this part must do so no later than June 23, 1997."

The more substantive changes are as follows. The EPA is proposing to revise § 63.544 to allow for pressurized seals on dryer transition pieces as an alternative to enclosure hoods and ventilation. Alternative monitoring requirements specific to pressurized seals are also being proposed.

The EPA is also proposing to revise the total hydrocarbon (THC) emission limit for blast furnace charging hoods, § 63.543(g). The existing THC emission limit is 0.20 kilograms per hour (0.44 pounds per hour) as propane. The EPA is proposing to revise the THC emission limit to a concentration of 20 parts per million by volume on a dry basis (ppmvd) as propane.

III. Rationale for Changes

A. Dryer Transition Pieces

Most secondary lead smelters use a rotary dryer to dry feed material prior to charging to a reverberatory furnace. A dryer transition piece is the junction between a dryer and the charge hopper or conveyor, or the junction between the dryer and the smelting furnace feed chute or hopper located at the ends of the dryer. Gaps at these transition points can release gases containing HAP emissions to the atmosphere.

Subpart X as codified sets equipment and operational standards for the control of HAP emissions from dryer transition pieces. Section 63.544(b) requires that dryer transition pieces be equipped with an enclosure hood and ventilated to achieve a minimum face velocity of 110 meters per minute (360 feet per minute). Section 63.544(c) requires that the enclosure hood be ventilated to a control device, and that the controlled exhaust not contain more than 2.0 milligrams per dry standard cubic meter (mg/dscm) of lead. While greatly reducing HAP emissions, the equipment and operational standards specified in the final rule do not totally eliminate HAP emissions from dryer transition pieces.

The East Penn facility has what is believed to be a unique pressurized breaching seal system installed on the transition pieces of their dryer. A fixed cylindrical seal support keeps two cylindrical rubber seals in contact with the dryer shell at both the feed and the discharge ends of the dryer. The resultant annulus at each dryer end is sealed to the breaching around the feed and the discharged openings. A blower supplies air to both the feed and the discharge breaching to pressurize the seals. The blower provides positive pressure to ensure that no dryer exhaust gases leak through the breaching seals. As a result, no air emissions are generated at these locations.

The East Penn Company submitted a request to the EPA on October 6, 1997 (Docket ID No. IV-D-54), for permission to operate under an alternative emission standard for dryer transition pieces, as provided for in section 63.6(b) of the General Provisions. Section 63.6(g) specifies that if " * * * an alternative means of emission limitation will achieve a reduction in emissions of a hazardous air pollutant * * * at least equivalent to the reduction in emissions of that pollutant from that source achieved under any design, equipment, work practice, or combination thereof, established under this part * * * the Administrator will publish in the *Federal Register* a notice permitting the use of the alternative emission standard * * * "

Since the pressurized breaching seal precludes emissions from the dryer transition piece it achieves as much or more HAP emission reduction than the equipment and operational standards specified in the final rule. Therefore, the EPA is adding pressurized breaching seals as an alternative emission standard for dryer transition pieces. The EPA is also adding monitoring requirements for pressurized breaching seals to ensure their proper operation. Specifically, the

owner or operator of a secondary lead smelter who uses pressurized dryer breaching seals shall equip each seal with an alarm that will be set off if the pressurized dryer breaching seal malfunctions.

B. Blast Furnace Charging Hood THC Emission Limit

Under the current rule, if a facility with a blast furnace does not combine the blast furnace charging hood exhaust with the blast furnace process emissions (main exhaust), section 63.543(g) limits THC emissions from the blast furnace charging hood to 0.20 kilograms per hour (0.44 pounds per hour).

The EPA added the blast furnace charging hood emission limit after testing on a secondary lead blast furnace indicated substantial amounts of THC and possibly organic HAP could be emitted from the blast furnace charging hood (Docket ID No. IV-A-11). Based on the emissions data collected, average THC emissions from the blast furnace charging hood were estimated at 200-300 ppm, corresponding to approximately 30 kilograms per hour (70 pounds per hour) of THC as propane. The blast furnace was equipped with a unique rotary charging drum that was intended to prevent the furnace exhaust from escaping through the charging hood. However, based on visual observations, the seal was not effective at preventing leakage. Significant amounts of smoke could be seen passing through the charging location, and into the charging hood. Plant personnel also indicated that the main blast furnace exhaust duct was partially plugged resulting in insufficient furnace draft.

The EPA's intent was to set the THC emission limit at a level which would force facilities to either demonstrate that they operate their furnace at an adequate draft to prevent leakage to furnace exhaust into the blast furnace charging hood, or combine the blast furnace charge hood exhaust with the furnace exhaust prior to treatment. The EPA set the current emission limit based on emission testing performed on the blast furnace charge hood at the GNB secondary lead smelter located in Columbus, Georgia (Docket ID No. II-A-6). THC measurements at the GNB-Columbus smelter found THC concentrations ranging from 9 to 16 parts per million by volume on a dry basis (ppmvd) as propane, corresponding to emission rates between 0.1 and 0.2 kilograms per hour (0.23 and 0.44 pound per hour) of THC as propane. The blast furnace charging hood THC emission limit was set at 0.20

kilograms per hour (0.44 pounds per hour) based on these results.

GNB contacted the EPA (Docket ID No. IV-D-53) and requested that the emission standard for THC from blast furnace charging hoods be changed from a mass rate emission limit to a concentration based emission limit. Through emissions testing, GNB determined that the GNB smelter in Frisco, Texas would not be able to comply with the existing mass rate limit. Test data obtained showed an average concentration of 4.4 ppm as propane, equivalent to approximately 0.7 kilograms per hour (1.5 pounds per hour).

In their comment, GNB points out that the GNB-Frisco facility has an ongoing operational program to ensure adequate furnace draft is maintained. Once per shift, an inspection and any necessary maintenance is conducted on the primary potential plugging point (an exhaust stream "upcomer"). Weekly inspection and maintenance of other potential plug points is also conducted. In addition, a TV camera monitors the top of the blast furnace. The display monitor alerts the operator to any "puffing" from the charging location. Such puffing could indicate back pressure or plugging in the primary exhaust. If the operator observes puffing, he/she would then inspect for plugging and perform any necessary maintenance. Based on the information provided by GNB, the EPA believes that the GNB-Frisco facility charging system is representative of the technology used as the basis for the MACT emission limit and that GNB is operating the equipment properly. As such, the EPA is concerned that the current emission limit may not be achievable in all cases.

In GNB's request for the EPA to revise the emission limit, they questioned the representativeness of the GNB-Columbus blast furnace and the appropriateness of a mass rate emission limit. GNB pointed out that the GNB-Frisco blast furnace is much larger than the GNB-Columbus blast furnace (90 tons of lead per day versus 38 tons per day). The EPA in most cases sets emission limits in a format that takes into account facility size. A larger facility generally emits more than a smaller facility. The EPA concurs that a mass rate emission limit is inappropriate since it does not take into account facility size.

Based on the discussion above, the EPA concurs that the current emission limit should be revised. In addition, the EPA concurs that a concentration based emission limit should be set since a concentration based emission limit will account for facility size. Based on the

available data, THC emissions from the blast furnace charging hoods with proper furnace draft can range from 1 to 20 ppmv. The EPA is amending the emission limit for THC emissions from blast furnace charging hoods to 20 ppmv based on the available data.

IV. Administrative Requirements

A. Docket

The docket is an organized and complete file of all the information considered by the EPA in the development of this rulemaking. The docket is a dynamic file, since material is added throughout the rulemaking development. The docket system is intended to allow members of the public and affected industries to readily identify and locate documents so that they can effectively participate in the rulemaking process. Along with the background information documents (BIDs) and preambles to the proposed and promulgated standards, the contents of the docket will serve as the official record in case of judicial review (section 307(d)(7)(A) of the Act).

B. Executive Order 12866

The Agency must determine whether a regulatory action is "significant" and therefore subject to OMB review and the requirements of the E.O. 12866, (58 FR 51735, October 4, 1993). The Executive Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, 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.

It has been determined that this amendment to the final rule is not a "significant regulatory action" under the terms of the Executive Order and is therefore not subject to OMB review.

C. Unfunded Mandates Act

Section 202 of the Unfunded Mandates Reform Act of 1995 ("Unfunded Mandates Act") 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 1 year. 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.

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 final rule is estimated to result in the expenditure by State, local, and tribal governments or the private sector of significantly less than \$100 million in any 1 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.

D. Paperwork Reduction Act

Under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*, the EPA must consider the paperwork burden imposed by any information collection request in a proposed or final rule. This amendment to the rule will not impose any new information collection requirements.

E. Regulatory Flexibility Act

The Regulatory Flexibility Act (or RFA, Public Law 96-354, September 19, 1980) requires Federal agencies to give special consideration to the impact of regulation on small businesses. The RFA specifies that a regulatory flexibility analysis must be prepared if a screening analysis indicates a regulation will have a significant economic impact on a substantial number of small entities. This amendment will not have a significant economic impact on a substantial number of small entities.

F. Submission to Congress and the General Accounting Office

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

G. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA) directs all federal agencies to use voluntary consensus standards instead of government-unique standards in their regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., material specifications, test methods, sampling and analytical procedures, business practices, etc.) that are developed or adopted by one or more voluntary consensus standards bodies. Examples of organizations generally regarded as voluntary consensus standards bodies include the American Society for Testing and Materials (ASTM), the National Fire Protection Association (NFPA), and the Society of Automotive Engineers (SAE). The NTTAA requires federal agencies like EPA to provide Congress, through OMB, with explanations when an agency decides not to use available and applicable voluntary consensus standards. This action does not involve the proposal of any new technical standards, or incorporate by reference existing technical standards.

H. Protection of Children From Environmental Health Risks and Safety Risk Under Executive Order 13045

The Executive Order 13045 applies to any rule that (1) OMB determines is "economically significant" as defined under Executive Order 12865, 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.

This action is not subject to Executive Order 13045, entitled Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997), because it does not involve decisions on environmental health risks or safety risks that may disproportionately affect children.

I. Enhancing the Intergovernmental Partnership Under Executive Order 12875

Under the executive order EPA must consult with representatives of affected State, local, and Tribal governments. The EPA consulted with State and local governments at the time of promulgation of subpart X (60 FR 32587), and no tribal governments are believed to be affected by this action. Today's changes are minor and will not impose costs on governments entities or the private sector. Consequently, the EPA has not consulted with State, local, and Tribal governments on this amendment.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Reporting and recordkeeping requirements, Secondary lead smelters.

Dated: August 11, 1998.

Carol M. Browner,
Administrator.

For the reasons set out in the preamble, title 40, chapter I, of the Code of Federal Regulations is amended as follows:

PART 63—[AMENDED]

1. Section 63.542 is amended by adding a definition for pressurized dryer breaching seal as follows:

§ 63.542 Definitions.

* * * * *

Pressurized dryer breaching seal means a seal system connecting the dryer transition pieces which is maintained at a higher pressure than the inside of the dryer.

* * * * *

2. Section 63.543 is amended by revising paragraph (g) as follows:

§ 63.543 Standards for process sources.

* * * * *

(g) If the owner or operator of a blast furnace or a collocated blast furnace and reverberatory furnace does not combine the blast furnace charging process

fugitive emissions with the blast furnace process emissions and discharges such emissions to the atmosphere through separate emission points, then exhaust shall not contain total hydrocarbons in excess of 20 parts per million by volume, expressed as propane.

* * * * *

3. Section 63.544 is amended by redesignating paragraph (g) as paragraph (h) and adding a new paragraph (g) as follows:

§ 63.544 Standards for process fugitive sources.

* * * * *

(g) As an alternative to paragraph (a)(5) of this section, an owner or operator may elect to control the process fugitive emissions from dryer transition pieces by installing and operating pressurized dryer breaching seals at each transition piece.

* * * * *

4. Section 63.546 is amended by revising paragraph (a) as follows:

§ 63.546 Compliance dates.

(a) Each owner or operator of an existing secondary lead smelter shall achieve compliance with the requirements of this subpart no later than June 23, 1998.

* * * * *

5. Section 63.547 is amended by revising paragraph (b) as follows:

§ 63.547 Test methods.

* * * * *

(b) The following tests methods in appendix A of part 60 listed in paragraphs (b)(1) through (b)(4) of this section shall be used, as specified, to determine compliance with the emission standards for total hydrocarbons § 63.543(c), (d), (e), and (g).

(1) Method 1 shall be used to select the sampling port location to determine compliance under § 63.543(c), (d), (e), and (g).

(2) The Single Point Integrated Sampling and Analytical Procedure of Method 3B shall be used to measure the carbon dioxide content of the stack gases to determine compliance under § 63.543(c), (d), and (e).

(3) Method 4 shall be used to measure moisture content of the stack gases to determine compliance under § 63.543(c), (d), (e), and (g).

(4) Method 25A shall be used to measure total hydrocarbon emissions to determine compliance under § 63.543(c), (d), (e), and (g). The minimum sampling time shall be 1 hour for each run. A minimum of three runs shall be performed. A 1-hour average total hydrocarbon concentration shall be

determined for each run and the average of the three 1-hour averages shall be used to determine compliance. The total hydrocarbon emissions concentrations for determining compliance under § 63.543(c), (d), and (e) shall be expressed as propane and shall be corrected to 4 percent carbon dioxide, as described in paragraph (c) of this section.

* * * * *

6. Section 63.548 is amended by revising paragraph (e) introductory text and adding paragraph (k) as follows:

§ 63.548 Monitoring requirements.

* * * * *

(e) The bag leak detection system required by paragraph (c)(9) of this section, shall meet the specification and requirements of paragraphs (e)(1) through (e)(8) of this section.

* * * * *

(k) The owner or operator of a secondary lead smelter who uses pressurized dryer breaching seals in order to comply with the requirements of § 63.544(g) shall equip each seal with an alarm that will "sound" or "go off" if the pressurized dryer breaching seal malfunctions.

[FR Doc. 98-22648 Filed 8-21-98; 8:45 am]

BILLING CODE 6560-50-M

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[MM Docket No. 94-155; RM-8468 and RM-8802]

Radio Broadcasting Services; Big Pine Key, Clewiston, Ft. Myers Villas, Indiantown, Jupiter, Key Colony Beach, Naples and Tice, FL

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: Action in this document substitutes Channel 276C1 for Channel 276C2 at Indiantown, Florida, Station WPBZ, at coordinates 26-56-22 and 80-07-04; substitutes Channel 284C3 for Channel 276C3 at Naples, Florida, Station WSGI, at coordinates 26-07-33 and 81-43-17; substitutes Channel 281C1 for Channel 284C at Big Pine Key, Florida, Station WWUS, at coordinates 24-39-38 and 81-25-10; substitutes Channel 267C2 for Channel 280C2 at Key Colony Beach, Florida, Station WKKB, at coordinates 24-42-25 and 81-06-67; substitutes Channel 292C2 for Channel 292A at Ft. Myers Villas, Florida, Station WROC, at

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63
 [AD-FRL-6154-1]
 RIN 2060-AE02

National Emission Standards for Hazardous Air Pollutants Aerospace Manufacturing and Rework Facilities

AGENCY: Environmental Protection Agency (EPA).
ACTION: Final rule.

SUMMARY: This action finalizes amendments to the national emission standards for hazardous air pollutants (NESHAP) for aerospace manufacturing and rework facilities proposed in the **Federal Register** on March 27, 1998. Today's final changes involve new definitions for general aviation and general aviation rework facility, separate coating limits for primers and topcoats used at general aviation rework facilities, and additional changes resulting from public comments on previously proposed (October 29, 1996) amendments to the final rule.

EFFECTIVE DATE: September 1, 1998.

ADDRESSES: *Docket.* The docket for this rulemaking containing the information considered by the EPA in development of the final rule is Docket No. A-92-20.

This docket is available for public inspection between 8 a.m. and 4 p.m., Monday through Friday except for Federal holidays, at the following address: U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center (6102), 401 M Street SW., Washington, DC 20460; telephone: (202) 260-7548. The docket is located at the above address in Room M-1500, Waterside Mall (ground floor). A reasonable fee may be charged for copying.

An electronic version of documents from the Office of Air and Radiation (OAR) is available through EPA's OAR Technology Transfer Network Web site (TTNWeb). The TTNWeb is a collection of related Web sites containing information about many areas of air pollution science, technology, regulation, measurement, and prevention. The TTNWeb is directly accessible from the Internet via the World Wide Web at the following address, "http://www.epa.gov/ttn". Electronic versions of this preamble and these amendments are located under the OAR Policy and Guidance Information Website, "http://www.epa.gov/ttn/oarpg/", under the Recently Signed Rules section. There is also an aerospace site on the Unified Air Toxics Website at, "http://www.epa.gov/ttn/uatw/aerosp/aeropg.html". If more

information on the TTNWeb is needed, contact the Systems Operator at (919) 541-5384.

FOR FURTHER INFORMATION CONTACT: For information concerning the changes to the standards, contact Ms. Barbara Driscoll, Policy Planning and Standards Group, Emission Standards Division (MD-13), U. S. Environmental Protection Agency, Research Triangle Park, NC 27711; telephone (919) 541-0164. For implementation issues (guidance documents), contact Ms. Ingrid Ward, Program Review Group, Information Transfer and Program Integration Division (MD-12), U. S. Environmental Protection Agency, Research Triangle Park, NC 27711, telephone number (919) 541-0300. For information concerning applicability and rule determinations, contact your State or local representative or the appropriate EPA regional representative.

SUPPLEMENTARY INFORMATION:

Regulated Entities

Entities potentially regulated by this action are owners or operators of facilities that are engaged, either in part or in whole, in the manufacturing or rework of commercial, civil, or military aerospace vehicles or components and that are major sources as defined in § 63.2. Regulated categories include:

Category	Examples of regulated entities
Industry	Facilities which are major sources of hazardous air pollutants and manufacture, rework, or repair aircraft such as airplanes, helicopters, missiles, rockets, and space vehicles.
Federal Government	Federal facilities which are major sources of hazardous air pollutants and manufacture, rework, or repair aircraft such as airplanes, helicopters, missiles, rockets, and space vehicles.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities that EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your facility [company, business, organization, etc.] is regulated by this action, you should carefully examine the applicability criteria in § 63.741 of the NESHAP for aerospace manufacturing and rework facilities promulgated in the **Federal Register** on September 1, 1995 (60 FR 45948) and amended on March 27, 1998 (63 FR 15005). If you have questions regarding the applicability of this action to a particular entity, contact your State or local representative or the appropriate EPA regional representative.

The information presented below is organized as follows:

I. Background

- A. Public Comment on the March 27, 1998 Proposal
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- II. Summary of Major Comments and Changes to the Proposed Amendments to the Rule
 - A. Definitions
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 - E. Exemption for Cleaning of Automated Spray Equipment Nozzle Tips
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- I. Submission to Congress and the General Accounting Office
- J. National Technology Transfer and Advancement Act

I. Background

National emission standards for hazardous air pollutants for aerospace manufacturing and rework facilities were proposed in the **Federal Register** on June 6, 1994 (59 FR 29216). Public comments were received regarding the standards and the final NESHAP was promulgated in the **Federal Register** on September 1, 1995 (60 FR 45948). Amendments to the final rule were promulgated on March 27, 1998 (63 FR 15005). These additional amendments were proposed on that same date (63 FR

15034). This action finalizes these additional amendments to §§ 63.741, 63.742, 63.744, 63.745, 63.746, 63.750, 63.751, 63.752 and 63.753 of subpart GG of 40 CFR part 63 and Method 319 of appendix A to part 63—TEST METHODS. These sections deal with applicability, definitions, cleaning operations, topcoat and primer application operations, depainting operations, monitoring requirements, recordkeeping requirements, and reporting requirements.

The Agency set these standards for aerospace manufacturing and rework facilities to address organic and inorganic HAP emissions. As stated in the preamble to the rule as originally promulgated (60 FR 45952, September 1995), nationwide emissions of HAP from at least 2,869 major source aerospace manufacturing and rework facilities will be reduced by approximately 112,600 Mg (123,700 tons). These changes to the NESHAP will not result in any significant changes to the emission reductions or cost impacts because (1) only a small number of general aviation (GA) rework facilities will be considered major sources and therefore subject to the NESHAP requirements and (2) only one or two known aerospace facilities utilize pumpless waterwash systems for controlling particulate emissions.

A. Public Comment on the March 27, 1998 Proposal

Eighteen comment letters were received on the March 27, 1998 Federal Register document that proposed changes to the rule. The proposed changes covered a variety of issues and many of the comment letters were supportive of the amendments. The significant issues raised by the commenters and the changes to the proposed amendments are summarized in the following sections of this preamble. More detailed responses are provided in an addendum to the background information document (BID) volume II which can be found in Docket A-92-20, document No. EPA 453/R-97-003b.

B. Judicial Review

Under section 307(b)(1) of the Act, judicial review of today's amendments to the NESHAP for aerospace manufacturing and rework facilities is available only on 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 final rule. Under section 307(b)(2) of the CAA, the requirements that are subject to today's notice may not be challenged later in civil or criminal

proceedings brought by the EPA to enforce these requirements.

II. Summary of Major Comments and Changes to the Proposed Rule

A. Definitions

Based on the proposed and final alternative coating limits for general aviation rework facilities (see paragraph II. B.), the EPA proposed adding definitions for "general aviation" and "general aviation rework facility" to § 63.742. Two commenters supported the proposed definition for "general aviation" and there were no comments on the proposed definition of "general aviation rework facility." However, a group of eight commenters recommended the following revised definition for "general aviation" based on another EPA document (Reference: EPA Air Transportation Industry Sector Notebook; EPA/310-R-97-001):

General aviation (GA) means that segment of civil aviation that encompasses all facets of aviation except air carriers, commuters, and military. General aviation includes charter and corporate-executive transportation, instruction, rental, aerial application, aerial observation, business, pleasure, and other special uses.

The Agency decided to change the definition of "general aviation" as suggested by the commenters and has included the revised definition in today's final amendments. The revised definition still accurately describes the segment of the aerospace industry involving smaller aircraft for which the alternative primer and topcoat standards are intended. The revised definition also has the advantage (as noted by the commenters) of being consistent with another recent EPA document addressing and describing this same segment of the aerospace industry. The Agency is promulgating the definition of "general aviation rework facility" as proposed (with the addition of the words "general aviation" in the definition to describe the types of aerospace vehicles or components.)

B. Standards for Primers and Topcoats

The Agency proposed alternative emission limits for topcoat and primer applications on general aviation aircraft based on previous comments made by GA aerospace rework industry representatives. Seven commenters supported the alternative limits claiming that the alternative limits will "lift the restraints of the existing coating limitations." Furthermore, the commenters stated that the higher HAP/VOC limits are acceptable and encourage paint manufacturers to provide quality primers and topcoats

that give a quality finish acceptable to the owners and operators of the GA aircraft. One commenter noted that the higher HAP/VOC limits will have a minimal effect on the total emissions from a GA facility, but will have a dramatic effect on the final aircraft topcoat finish.

As noted by the Agency in the preamble to the proposed amendments of March 27, 1998, many GA rework facilities would be area sources emitting less than 10 tons per year (tons/yr) of any single HAP, and less than 25 tons/yr of combined HAP. Nevertheless, GA rework facilities do exist which are major sources. The Agency finds that the coating (primer and topcoat) application operations are different for GA rework facilities than those for commercial and military facilities due to the variability in the types of coatings used and types of aircraft serviced. Accordingly, the Agency decided to subcategorize GA rework facilities and determined a separate MACT floor for primer and topcoat application conducted at such facilities. The data from the GA rework facilities in the Agency's data base resulted in the MACT floor represented by the best five facilities having an overall facility weighted average HAP and VOC content of 540 grams per liter (g/L) [4.5 pounds per gallon (lb/gal)] for both primers and topcoats.

Most, if not all, of the GA rework facilities that will have to comply with the NESHAP limits are competing for business with facilities that are nonmajor (area) sources. The NESHAP does not impact area sources and allows them to continue their current painting and depainting operations to meet customer requirements and expectations. The Agency developed a separate MACT floor for GA rework facility painting operations because of the differences between GA and commercial/military facilities involving the number and variety of coatings used, and customer requirements. Rework operations for commercial and military aircraft are primarily a captive market within their own market segments. These operations are more likely to involve "standardized" coating schemes (e.g., military specifications or individual airline colors/design) and are conducted on a "routine" basis compared to the GA rework operations. Commercial paint systems are designed to last 5 to 7 years and because of the additional weight/cost impacts are intentionally made as thin (e.g., 3 to 5 mils) as possible while still meeting the quality requirements. The GA industry is typically more concerned with the final finish of the coating system and

with corporate aircraft, a typical coating thickness of 6 to 18 mils may be needed to obtain the required gloss and texture. The Agency decided to set MACT at the floor because of the potential business impacts that could put the major source GA facilities at a competitive disadvantage with nonmajor and foreign GA facilities. The Agency is therefore finalizing the MACT floor limits for primer and topcoat application for GA rework facilities in § 63.745(c)(1) through (c)(4). The HAP limits for both primers and topcoats (including self-priming topcoats) are equivalent: less than or equal to 540 g/L (4.5 lb/gal) of coating (less water) as applied. The VOC limits for both primers and topcoats are also equivalent: less than or equal to 540 g/L (4.5 lb/gal) of coating (less water and exempt solvents) as applied.

Another group of commenters agreed with the increased HAP/VOC limits for GA rework facilities but also suggested that these limits be extended to GA manufacturers as well. The commenters argued that manufacturers have the same need for high quality finish and may be put at a competitive disadvantage without the benefit of the higher limits. In reviewing these comments, the Agency was not compelled by any technical arguments or justifications to extend the alternative primer and topcoat limits beyond what was proposed for GA rework facilities.

In comparing GA manufacturing and GA rework painting operations, the Agency found that manufacturing facilities typically deal with fewer types of coatings and fewer types of aircraft. One of the commenters stated there are less than 10 GA manufacturers in total and some of those will qualify as area sources. Each manufacturer produces a limited subset of the planes on the market. The GA manufacturers generally perform rework only on planes that they manufacture; GA rework facilities, in contrast, may work on planes from a variety of manufacturers. Thus, unlike GA rework facilities, GA manufacturing facilities have fairly predictable coating needs. This allows them to be more proficient in coating application and minimizes the variability of coating-related issues in their day-to-day operations. Because of these factors, GA manufacturers are better able than GA rework facilities to comply with the coating limits in the NESHAP as originally promulgated. Therefore, the Agency does not agree that the alternative coating limits for GA rework facilities will create an unfair business advantage/climate between GA rework and manufacturing operations. In fact, the data collected from the GA manufacturers during the past 2 years

indicated that some sources that will be subject to the NESHAP coating limits are already using compliant coatings exclusively as part of their coating operations.

C. Clarification of Relationship Between NESHAP and Federal Aviation Administration (FAA) Regulations

Several commenters raised the issue of potentially conflicting requirements between EPA and FAA regulations. The commenters suggested that chemicals containing HAP that are required to be used by an FAA Airworthiness Directive (AD) should be exempted from the NESHAP requirements. Some of the commenters stated that the long-term impact of alternative chemical usage on various aircraft structures is not consistent across various products and manufacturers. The EPA has continued to work closely with the FAA during the development of the final NESHAP and the amendments to the NESHAP for the aerospace manufacturing and rework source category. Both agencies recognize the importance of continuing airworthiness and the safety of the flying public as repair facilities modify their procedures to comply with the NESHAP. The EPA is committed to minimizing the impact on airworthiness while maximizing the reduction of HAP emissions under the NESHAP.

Since promulgation of the NESHAP on September 1, 1995, many of the aircraft manufacturers (principally those manufacturing transport category aircraft) have made the necessary revisions to their maintenance manuals to provide for non-HAP materials (chemical strippers) to be used for depainting. Those revisions have been FAA approved or will be submitted for FAA approval, when required. For the other manufacturers (principally General Aviation manufacturers), once the necessary information (revised/updated maintenance manuals, service bulletins, and/or advisory circulars) is approved by the FAA and is distributed to the regulated community, the potential regulatory conflict should be at a minimum, and aerospace rework facilities will be able to use various products to comply with most EPA and FAA requirements. The EPA and FAA have determined that the potential problems and issues raised by the commenters can be and, in many cases already have been, resolved through the procedures established in the existing regulations, and no further changes are needed to the NESHAP.

Because of the small numbers of aircraft affected and the considerable expense of testing alternative materials for use on antique aircraft (those over 30

years old), the March 27, 1998 amendments to the final rule (NESHAP) contain an exemption for the rework of these aircraft. For the same reason, these final amendments to the NESHAP extend that exemption to rework of aircraft and aircraft components whose manufacturers are out of business. There were no comments on this specific issue. Therefore, the EPA is exempting rework of aircraft whose manufacturers are out of business by adding the following to § 63.741(f):

These requirements do not apply to the rework of aircraft or aircraft components if the holder of the Federal Aviation Administration (FAA) design approval, or that holder's licensee, is not actively manufacturing the aircraft or aircraft components.

The FAA certifies that an aircraft, engine, propeller, or part design meets certain airworthiness requirements, and issues to the designer of that product a type certificate (TC), supplemental type certificate (STC), Technical Standard Order Authorization (TSOA), or Parts Manufacturer Approval (PMA). The procedures for issuing TC's, STC's, TSOA's, and PMA's are contained in FAA regulations at 14 CFR, part 21. The holder of one of these is a "design approval holder."

Should any manufacturers still in business not revise their maintenance instructions to allow use of NESHAP-compliant materials, the FAA has committed to issue an advisory circular publicizing the process by which repair facilities can request approval for alternatives. In addition, many existing Airworthiness Directives (AD's), issued under part 39 of Title 14 of the CFR, specify the use of HAP. (AD's are regulations addressing safety of flight, and compliance with them is mandatory.) However, most AD's contain a provision for requesting an alternative means of compliance. The FAA Notice N8100.13, "Alternative Means of Compliance (AMOC) for Airworthiness Directives that Require the Use of Volatile Organic Compounds and/or Hazardous Air Pollutants," (dated January 26, 1998), addresses the process by which repair stations, mechanics and operators can obtain alternative means of compliance for other AD's for the purpose of approving substitution of non-HAP materials.

D. Hand-Wipe Cleaning: Removal of References to Section 112(l) and Equivalent Volume Reduction Demonstration

Section 63.744(b)(3) of the amended NESHAP (requirements for hand-wipe cleaning) refers to requirements of section 112(l) of the Clean Air Act.

Based on comments received on the October 29, 1996 proposed amendments to the final rule, the Agency proposed to remove the references to section 112(l) of the Clean Air Act. Requiring submittal and approval of each individual alternative plan under section 112(l) is unwarranted and contrary to the intent of section 112(l). Since there were no comments on this issue, the final (amended) requirements of § 63.744(b)(3) no longer include the reference to "section 112(l) of the Act."

Similarly, there were no comments regarding § 63.744(b)(3) and the proposed new language on calculating the baseline volume (levels) of hand-wipe cleaning solvents used in cleaning operations. The requirement for demonstrating that the 60 percent volume reduction provides emission reductions equivalent to the solvent composition or vapor pressure compliance options was deleted. The Agency is finalizing the new language in § 63.744(b)(3) regarding approval of baseline levels.

E. Exemption for Cleaning of Automated Spray Equipment Nozzle Tips

The Agency proposed an exemption for cleaning of automated spray equipment nozzle tips because floor sources included in the development of the applicable requirements do not use any of the techniques in § 63.744(c) for cleaning of these devices. This exemption was based on similar language included in other State rules covering the aerospace industry (e.g., California Rule 1124) and was referenced by the original commenters.

One commenter agreed with the proposed exemption for owners or operators of aerospace cleaning operations from requirements for a closed container when cleaning the nozzle tips of automated spray equipment systems. The commenter states that, under the present NESHAP language, owners or operators are forced to disassemble the equipment for cleaning, which is economically unreasonable. The Agency decided to finalize the amendment to § 63.744(c) as follows:

(5) Cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that can be programmed to spray into a closed container, shall be exempt from the requirements of paragraph (c) of this section.

F. Monitoring Parameters for Pumpless Waterwash Systems

The Agency proposed several amendatory revisions to the NESHAP (definitions, primer and topcoat application operations, monitoring

requirements, recordkeeping requirements, and reporting requirements) involving pumpless waterwash systems. Based on earlier comments, the Agency learned that there are at least two types of pumpless waterwash systems currently being used by aerospace facilities. While a conventional waterwash system uses a pump to transfer the water to the top of the water curtain, a pumpless waterwash system uses a centrifugal fan to lift the mixture of water and paint laden air (from the exhaust stream) up through a series of entrainment ducts (baffles) separating air from the paint particles and from water droplets. There is no readily identifiable operating parameter that is common to both types of systems. Therefore, the Agency decided to use the "generic" approach as suggested by one of the commenters to include language such as "monitor or measure and record a booth parameter recommended by the booth manufacturer."

In the proposed amendments, changes to several sections of the final rule were proposed to allow pumpless waterwash systems to be used for controlling particulate emissions from painting and depainting operations. The Agency also specified that the parameter(s) to be monitored on such systems are to be recommended by the booth operator (i.e., manometer or air gap). Since waterwash systems were included as part of the MACT floor requirements for controlling inorganic HAP emissions in the promulgated rule, this is not a technical change to the standard, but a clarification of the discussion of pumpless systems and the associated monitoring requirements.

The only commenter that commented on this issue supported the proposed amendments involving the monitoring requirements for pumpless waterwash particulate control systems. The commenter stated that it would be impossible for pumpless waterwash systems to comply with the monitoring requirements as originally promulgated. The commenter fully supported EPA's efforts to address the unique challenges presented by pumpless waterwash systems. The Agency is therefore finalizing the changes associated with pumpless waterwash systems in: §§ 63.742 (definition of "waterwash system"); 63.745(g)(2)(v); 63.751(c)(2); 63.751(d); 63.752(d)(2) and (3); 63.752(e)(7); 63.753(c)(1)(vi); and 63.753(d)(1)(vii).

G. Exclusion of Charged Media Certification Using Test Method 319

In regard to the proposed exclusion of charged media from certification under

Test Method 319, two commenters concurred with the proposed exclusion, two commenters opposed the exclusion, and one commenter suggested the Agency re-visit the issue and consider adding a new mechanism within Method 319 to evaluate paint arrestor performance after loading (and over a given time period).

The Agency has decided that the proposed amendment to exclude electrostatically-charged filter media from Method 319 testing (based on the possibility that their efficiency in use will drop below that measured in Method 319 testing) will not be promulgated based on the fact that there are insufficient data at this time to warrant this exclusion. No data were submitted illustrating that electrostatically charged filter media will actually drop in efficiency during use in aerospace painting and depainting facilities. Furthermore, no data were submitted showing that, even if such drops in efficiency do occur, similar drops would not also occur in uncharged media (i.e., the drop in efficiency may not be solely due to a loss of electrostatic enhancement but may also be due to other physical changes in the media, which occur over time). The Agency recognizes that this is an area of current, active, and ongoing research. The Agency is also aware of studies conducted on electrostatically-charged filters used in general ventilation that do, for some charged-fiber filters under certain operating/exposure conditions, show drops in efficiency for electrostatically-charged media. However, the relevance of these findings to arrestors used in aerospace painting and depainting facilities is uncertain and is, therefore, insufficient to exclude, as a category of arrestors, electrostatically-charged media from Method 319 testing.

Two commenters suggested expanding Method 319 to include not only the initial efficiency, but also one or more steps of paint loading followed by a repeated filtration efficiency measurement after each step; by doing so, changes in electrostatically charged filtration efficiencies, if present, would be measured. One of the commenters recommended that Method 319 be expanded to include standard dust loading efficiency tests, or an additional fractional efficiency test using actual paint. These type of tests would need to account for the replacement frequency of the various stages in a multi-stage system, and load the filter with representative paint oversprays, as well as depainting-generated aerosols and ambient aerosols which may be drawn into a spray booth, perhaps with some

level of prefiltration. There are no standardized methods that adequately address these issues relative to conditioning or aerosol-loading of multi-staged arrestors for the purposes of quantifying potential changes in fractional efficiency with use. In light of the Aerospace NESHAP compliance date of September 1, 1998, it is beyond the scope of this project at this time to continue modifications to Method 319. Thus, use of Method 319, as stated in the final amendments to the aerospace rule published in the **Federal Register** on March 27, 1998 is retained.

H. Technical and Miscellaneous Corrections

The following amendments are corrections that were not part of the March 27, 1998 proposal. These changes are being made as part of today's action as a matter of efficiency in rulemaking. Furthermore, these changes are noncontroversial and correct errors in the rule or clarify the Agency's intention. By promulgating these corrections directly as a final rule, the EPA is foregoing an opportunity for public comment on a notice of proposed rulemaking. Section 553(b) of title V of the United States Code and section 307(d) of the CAA permit an agency to forego notice and comment when "the agency for good cause finds (and incorporates the finding and a brief statement of reasons therefore in the rules issued) that notice and public procedure thereon are impracticable, unnecessary, or contrary to the public interest." The EPA finds that notice and comment regarding these corrections are unnecessary due to their noncontroversial nature. The EPA finds that this constitutes good cause under 5 U.S.C. § 553(b) for a determination that the issuance of a notice of proposed rulemaking is unnecessary.

1. Correction of § 63.741 (i)

The listing of exempted requirements in § 63.741 (i) for compliant waterborne coatings should read "§ 63.750(k)-(n), § 63.751" instead of "§ 63.750(k)-(m), § 63.751" as published in the March 27, 1998 final amendments.

2. Clarification of Antique Aerospace Vehicle Exemption

The final amendments published in the **Federal Register** on March 27, 1998 included new language in § 63.741 (j) exempting antique aerospace vehicles or components from the requirements of the rule. Clarifying language is being added stating that regulated activities associated with antique aerospace vehicles or components are exempt from the NESHAP requirements.

3. Clarification of the Composition Requirements for Approved Cleaning Solvents in Table 1 of § 63.744

The composition requirements for hydrocarbon-based cleaning solvents in Table 1 of § 63.744 were clarified to state "§ 63.744 composed of photochemically reactive hydrocarbons and/or oxygenated hydrocarbons" instead of "§ 63.744 composed of photochemically reactive hydrocarbons and oxygenated hydrocarbons". Table 1 was not properly designated in the final amendments published in the **Federal Register** on March 27, 1998. Today's final amendments also include proper designation of Table 1 of § 63.744.

4. Clarification of Inorganic HAP Requirements in § 63.746

Several questions have been raised regarding the applicability of the alternative inorganic HAP emission requirements (added to § 63.745(g)(2)(iii) in the March 27, 1998 final amendments) to the depainting requirements in § 63.746. As noted in the preamble discussion of the October 29, 1996 proposed amendments (61 FR 55842), the Agency intended to make the alternative inorganic HAP requirements applicable to both painting and depainting operations because both types of operations are often conducted in the same spray booth or controlled area.

The preamble language was very specific (see 61 FR 55850) to address this unique situation and stated "§ 63.746 the Agency has provided these owners and operators of aerospace manufacturing or rework operations who have commenced construction or reconstruction of new spray booth or hanger for depainting operations, primer or topcoat operations, in which any of the coatings contain inorganic HAP's, prior to October 29, 1996 the flexibility to meet either the requirements of the promulgated regulation or the proposed amendments to the final regulation" [61 FR 55850 (October 29, 1996)]. When those amendments were finalized [63 FR 15006 (March 27, 1998)], only the language in § 63.745 (primer and topcoat application operations) was changed. As part of today's final amendments, language was added in § 63.746(b)(4)(ii)(C) to clarify that owners or operators of new sources that commenced construction or reconstruction after June 6, 1994 but prior to October 29, 1996 may comply with the particulate (e.g., inorganic HAP) control requirements that were proposed on June 6, 1994.

5. Correction of Equation To Determine the Composite Vapor Pressure in § 63.750(b)(2)

In the March 27, 1998 final amendments, a summation sign was added in front of the second term of the denominator (involving "W_c") of the equation used to determine the composite vapor pressure of hand-wipe cleaning solvents. The summation sign should be in front of the second term, instead of being placed with the numerator of the second term as published in the **Federal Register**.

6. Correction of Emission Reduction Equation in § 63.750(l)(2)(iv)

The term "E₃" should be "E_a."

7. Clarification of Monitoring Requirements in § 63.751(b)(6)(iii)(D)

Additional language was added to the alternative monitoring requirements for nonregenerative carbon adsorbers in § 63.751(b)(6)(iii)(D) to resolve the alternative/overlapping monitoring requirements. As a result, § 63.751(b)(6)(iv) is being redesignated (e.g., renumbered) as § 63.751(b)(6)(v). The new language states that the owner or operator may monitor the VOC or HAP concentration of the adsorber exhaust daily, or at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater, or at a frequency determined by the owner or operator and approved by the Administrator. Clarifying language was also added in the new § 63.751(b)(6)(iv) involving a site-specific operating parameter for the carbon replacement time interval.

8. Correction of Equation to Determine the 100 Percent Penetration Value (P₁₀₀) in Method 319 of Appendix A to Part 63—Test Methods

The symbol for sigma "p" was incorrectly printed as "o" in the explanation of the terms used in the P₁₀₀ equation in Method 319. The language should read:

ρ = sample standard deviation
CV = coefficient of variation = ρ/mean.

III. Control Techniques Guidelines

Notice of final issuance of the control techniques guidelines (CTG) for coating operations at aerospace manufacturing and rework operations was published in the **Federal Register** on March 27, 1998. There was no mention of the relevant "effective dates" for States to use in developing their VOC rules. The following language is provided to clarify the adoption and implementation dates for the coating category VOC limits, application techniques, and equipment

requirements identified as reasonably available control technology (RACT) in the CTG.

The CTG for control of VOC emissions from coating operations in the aerospace industry is available to assist States in analyzing and determining RACT for aerospace manufacturing and rework operations located within ozone national ambient air quality standards nonattainment areas. Any State with a moderate or above nonattainment area that has not adopted a RACT regulation for the source category addressed by the aerospace CTG must submit a RACT regulation for these sources not later than March 27, 1999. For any State with a moderate or above nonattainment area that has adopted a RACT regulation for the source category addressed by the aerospace CTG, Section 182(b)(2) of the Clean Air Act (CAA) requires these States to submit a revision to the applicable implementation plan, to include provisions consistent with the CTG. This revision shall be submitted to the EPA not later than March 27, 1999. Furthermore, as specified in the CTG, the RACT regulations must require sources to implement the required limitations and work practices not later than September 1, 1999.

IV. Administrative Requirements

A. Docket

The docket is an organized and complete file of all of the information submitted to or otherwise considered by the EPA in the development of this rulemaking. The docket is a dynamic file, since material is added throughout the rulemaking development. The docketing system is intended to allow members of the public and the industries involved to readily identify and locate documents so that they can effectively participate in the rulemaking process. Along with the statement of basis and purpose of the proposed and promulgated standards and the EPA responses to significant comments, the content of the docket will serve as the record in case of judicial review (except for interagency review materials) (§ 307(d)(7)(A) of the Act).

B. Paperwork Reduction Act

The amendments do not impose any new information collection requirements and result in no change to the currently approved collection. The Office of Management and Budget (OMB) has approved the information collection requirements contained in the NESHAP for aerospace manufacturing and rework facilities under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*, and has

assigned OMB control number 2060-0314. (EPA ICR No. 1687.03).

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15. Today's amendments should have no impact on the information collection burden estimates made previously. Today's action does not impose any additional information collection requirements. Consequently, the ICR has not been revised for purposes of today's action.

C. Executive Order 12866

Under Executive Order (E.O.) 12866 (58 FR 51735 [October 4, 1993]), the EPA is required to determine whether a regulation is "significant" and therefore subject to OMB review and the requirements of this E.O. The E.O. defines "significant regulatory action" as one that is likely to result in a rule that may (1) have an annual effect on the economy of \$100 million or more, or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs 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 E.O.

Pursuant to the terms of Executive Order 12866, it has been determined that this action is not a "significant

regulatory action" within the meaning of the E.O.

D. Executive Order 12875: Enhancing Intergovernmental Partnerships

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. If the mandate is unfunded, EPA must 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 does not create a mandate on State, local or tribal governments. The rule does not impose any enforceable duties on these entities. Accordingly, the requirements of section 1(a) of Executive Order 12875 do not apply to this rule.

E. Executive Order 13084: Consultation and Coordination With Indian Tribal Governments

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

significantly or uniquely affect their communities." Today's rule does not significantly or uniquely affect the communities of Indian tribal governments. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

F. Executive Order 13045

Executive Order 13045 applies to any rule that EPA determines: (1) "economically significant" as defined under Executive Order 12866, and (2) the environmental health or safety risk addressed by the rule has a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This final rule is not subject to Executive Order 13045, entitled "Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997), because it does not involve decisions on environmental health risks or safety risks that may disproportionately affect children.

G. Regulatory Flexibility Act

The EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this final rule. The EPA has also determined that this rule will not have a significant impact on a substantial number of small entities. These final rule amendments will not have a significant impact on a substantial number of small entities because the overall impact of these amendments is a net decrease in requirements on all entities including small entities.

H. Unfunded Mandates Reform 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 1 year. 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 a proposed intergovernmental mandate. Section 204 requires the Agency to

develop a process to allow elected State, local, and Tribal government officials to provide input in the development of any proposal containing a significant Federal intergovernmental mandate.

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. The EPA has determined that these amendments do not include 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 1 year. Small governments will not be uniquely impacted by these amendments. Therefore, the requirements of the Unfunded Mandates Act do not apply to this action.

I. Submission to Congress and the General Accounting Office

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The 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 the publication of the rule in the **Federal Register**. This rule is not a "major rule" as defined by 5 U.S.C. 804(2). This rule will be effective September 1, 1998.

J. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Pub. L. No. 104-113, § 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., material specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to

provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This action does not involve technical standards. Therefore, EPA did not consider the use of any voluntary consensus standards.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Reporting and recordkeeping requirements.

Dated: August 25, 1998.

Carol M. Browner,
Administrator.

For reasons set out in the preamble, part 63 of title 40, chapter I, of the Code of Federal Regulations is amended as follows:

PART 63—[AMENDED]

1. The authority citation for part 63 continues to read as follows:

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

Subpart GG—[Amended]

2. In § 63.741 paragraph (f) is amended by adding a new sentence after the second sentence and revising the first sentence of paragraph (i) and paragraph (j) to read as follows:

§ 63.741 Applicability and designation of affected sources.

* * * * *

(f) * * * These requirements do not apply to the rework of aircraft or aircraft components if the holder of the Federal Aviation Administration (FAA) design approval, or the holder's licensee, is not actively manufacturing the aircraft or aircraft components. * * *

* * * * *

(i) Any waterborne coating for which the manufacturer's supplied data demonstrate that organic HAP and VOC contents are less than or equal to the organic HAP and VOC content limits for its coating type, as specified in §§ 63.745(c) and 63.747(c), is exempt from the following requirements of this subpart: §§ 63.745(d) and (e), 63.747(d) and (e), 63.749(d) and (h), 63.750(c) through (h) and (k) through (n), 63.752(c) and (f), and 63.753(c) and (e). * * *

* * * * *

(j) Regulated activities associated with the rework of antique aerospace vehicles or components are exempt from the requirements of this subpart.

3. Section 63.742 is amended by revising the definition for "waterwash system" and adding in alphabetical order definitions for "general aviation"

and "general aviation rework facility" to read as follows:

§ 63.742 Definitions.

General aviation (GA) means that segment of civil aviation that encompasses all facets of aviation except air carriers, commuters, and military. General aviation includes charter and corporate-executive transportation, instruction, rental, aerial application, aerial observation, business, pleasure, and other special uses.

General aviation rework facility means any aerospace facility with the majority of its revenues resulting from the reconstruction, repair, maintenance, repainting, conversion, or alteration of

general aviation aerospace vehicles or components.

Waterwash system means a control system that utilizes flowing water (i.e., a conventional waterwash system) or a pumpless system to remove particulate emissions from the exhaust air stream in spray coating application or dry media blast depainting operations.

4. Section 63.744 is amended by removing the last sentence in paragraph (b)(3) and adding three sentences in its place, adding paragraph (c)(5), and revising Table 1 to read as follows:

§ 63.744 Standards: Cleaning operations.

- (b) * * *
- (3) * * * Demonstrate that the volume of hand-wipe cleaning solvents

used in cleaning operations has been reduced by at least 60 percent from a baseline adjusted for production. The baseline shall be calculated using data from 1996 and 1997, or as otherwise agreed upon by the Administrator or delegated State Authority. The baseline shall be approved by the Administrator or delegated State Authority and shall be included as part of the facility's title V or part 70 permit.

- (c) * * *
- (5) Cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that can be programmed to spray into a closed container, shall be exempt from the requirements of paragraph (c) of this section.

TABLE 1.—COMPOSITION REQUIREMENTS FOR APPROVED CLEANING SOLVENTS

Cleaning solvent type	Composition requirements
Aqueous	Cleaning solvents in which water is the primary ingredient (≥80 percent of cleaning solvent solution as applied must be water). Detergents, surfactants, and bioenzyme mixtures and nutrients may be combined with the water along with a variety of additives, such as organic solvents (e.g., high boiling point alcohols), builders, saponifiers, inhibitors, emulsifiers, pH buffers, and antifoaming agents. Aqueous solutions must have a flash point greater than 93° C (200° F) (as reported by the manufacturer), and the solution must be miscible with water.
Hydrocarbon-based	Cleaners that are composed of photochemically reactive hydrocarbons and/or oxygenated hydrocarbons and have a maximum vapor pressure of 7 mm Hg at 20° C (3.75 in. H ₂ O and 68° F). These cleaners also contain no HAP.

5. Section 63.745 is amended by revising paragraphs (c)(1), (c)(2), (c)(3), (c)(4), and (g)(2)(v) to read as follows:

§ 63.745 Standards: Primer and topcoat application operations.

- (c) * * *
- (1) Organic HAP emissions from primers shall be limited to an organic HAP content level of no more than: 350 g/L (2.9 lb/gal) of primer (less water) as applied or 540 g/L (4.5 lb/gal) of primer (less water) as applied for general aviation rework facilities.
- (2) VOC emissions from primers shall be limited to a VOC content level of no more than: 350 g/L (2.9 lb/gal) of primer (less water and exempt solvents) as applied or 540 g/L (4.5 lb/gal) of primer (less water and exempt solvents) as applied for general aviation rework facilities.
- (3) Organic HAP emissions from topcoats shall be limited to an organic HAP content level of no more than: 420 g/L (3.5 lb/gal) of coating (less water) as applied or 540 g/L (4.5 lb/gal) of coating (less water) as applied for general aviation rework facilities. Organic HAP emissions from self-priming topcoats shall be limited to an organic HAP

content level of no more than: 420 g/L (3.5 lb/gal) of self-priming topcoat (less water) as applied or 540 g/L (4.5 lb/gal) of self-priming topcoat (less water) as applied for general aviation rework facilities.

(4) VOC emissions from topcoats shall be limited to a VOC content level of no more than: 420 g/L (3.5 lb/gal) of coating (less water and exempt solvents) as applied or 540 g/L (4.5 lb/gal) of coating (less water and exempt solvents) as applied for general aviation rework facilities. VOC emissions from self-priming topcoats shall be limited to a VOC content level of no more than: 420 g/L (3.5 lb/gal) of self-priming topcoat (less water and exempt solvents) as applied or 540 g/L (4.5 lb/gal) of self-priming topcoat (less water) as applied for general aviation rework facilities.

- (g) * * *
- (2) * * *
- (v) If a conventional waterwash system is used, continuously monitor the water flow rate and read and record the water flow rate once per shift. If a pumpless system is used, continuously monitor the booth parameter(s) that indicate performance of the booth per

the manufacturer's recommendations to maintain the booth within the acceptable operating efficiency range and read and record the parameters once per shift.

6. Section 63.746 is amended by adding paragraph (b)(4)(ii)(C) to read as follows:

§ 63.746 Standards: Depainting operations.

- (b) * * *
- (4) * * *
- (ii) * * *
- (c) Owners or operators of new sources that have commenced construction or reconstruction after June 6, 1994 but prior to October 29, 1996 may comply with the following requirements in lieu of the requirements in paragraph (b)(4)(ii)(B) of this section:
 - (1) Pass the air stream through either a two-stage dry particulate filter system or a waterwash system before exhausting it to the atmosphere.
 - (2) If the coating being removed contains chromium or cadmium, control shall consist of a HEPA filter system, three-stage filter system, or other control system equivalent to the three-stage

filter system as approved by the permitting agency.
* * * * *

7. Section 63.750 is amended by revising the equation in paragraph (b)(2) and equation 19 in paragraph (i)(2)(iv) to read as follows:

§ 63.750 Test methods and procedures.

* * * * *
(b) * * *
(2) * * *

$$PP_c = \sum_{i=1}^n \frac{(W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \sum_{e=1}^n \frac{W_e}{MW_e} + \sum_{i=1}^n \frac{W_i}{MW_i}}$$

* * * * *
(i) * * *
(2) * * *

(iv) * * *

$$P = \frac{E_b - E_a}{E_b} \times 100 \quad \text{Eq. 19}$$

* * * * *
8. Section 63.751 is amended by redesignating paragraph (b)(6)(iv) as (b)(6)(v) and revising paragraphs (b)(6)(iii)(D), (c)(2), (d), and adding a new paragraph (b)(6)(iv) to read as follows:

§ 63.751 Monitoring requirements.

* * * * *
(b) * * *
(6) * * *
(iii) * * *

(D) If complying with § 63.745(d), § 63.746(c), or § 63.747(d) through the use of a nonregenerative carbon adsorber, in lieu of the requirements of paragraph (b)(6)(iii)(B) or (C) of this section, the owner or operator may monitor the VOC or HAP concentration of the adsorber exhaust daily, at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater, or at a frequency as determined by the owner or operator and approved by the Administrator.

(iv) Owners or operators complying with § 63.745(d), § 63.746(c), or § 63.747(d) through the use of a nonregenerative carbon adsorber and establishing a site-specific operating parameter for the carbon replacement time interval in accordance with paragraph (b)(2) shall replace the carbon in the carbon adsorber system with fresh carbon at the predetermined time interval as determined in the design evaluation.

* * * * *
(c) * * *

(2) Each owner or operator using a conventional waterwash system to meet the requirements of § 63.745(g)(2) shall, while primer or topcoat application operations are occurring, continuously monitor the water flow rate through the system and read and record the water

flow rate once per shift following the recordkeeping requirements of § 63.752(d). Each owner or operator using a pumpless waterwash system to meet the requirements of § 63.745(g)(2) shall, while primer and topcoat application operations are occurring, measure and record the parameter(s) recommended by the booth manufacturer that indicate booth performance once per shift, following the recordkeeping requirements of § 63.752(d).

(d) *Particulate filters and waterwash booths—depainting operations.* Each owner or operator using a dry particulate filter or a conventional waterwash system in accordance with the requirements of § 63.746(b)(4) shall, while depainting operations are occurring, continuously monitor the pressure drop across the particulate filters or the water flow rate through the conventional waterwash system and read and record the pressure drop or the water flow rate once per shift following the recordkeeping requirements of § 63.752(e). Each owner or operator using a pumpless waterwash system to meet the requirements of § 63.746(b)(4) shall, while depainting operations are occurring, measure and record the parameter(s) recommended by the booth manufacturer that indicate booth performance once per shift, following the recordkeeping requirements of § 63.752(e).

* * * * *

9. Section 63.752 is amended by revising paragraphs (c)(2) introductory text, (d)(2), (d)(3), and (e)(7) to read as follows:

§ 63.752 Recordkeeping requirements.

* * * * *
(c) * * *

(2) For uncontrolled primers and topcoats that meet the organic HAP and VOC content limits in § 63.745(c)(1) through (c)(4) without averaging:

* * * * *

(d) * * *
(2) Each owner or operator complying with § 63.745(g) through the use of a conventional waterwash system shall record the water flow rate through the operating system once each shift during which coating operations occur. Each owner or operator complying with § 63.745(g) through the use of a pumpless waterwash system shall record the parameter(s) recommended by the booth manufacturer that indicate the performance of the booth once each shift during which coating operations occur.

(3) This log shall include the acceptable limit(s) of pressure drop, water flow rate, or for the pumpless waterwash booth, the booth manufacturer recommended parameter(s) that indicate the booth performance, as applicable, as specified by the filter or booth manufacturer or in locally prepared operating procedures.

* * * * *

(e) * * *
(7) *Inorganic HAP emissions.* Each owner or operator shall record the actual pressure drop across the particulate filters or the visual continuity of the water curtain and water flow rate for conventional waterwash systems once each shift in which the depainting process is in operation. For pumpless waterwash systems, the owner or operator shall record the parameter(s) recommended by the booth manufacturer that indicate the performance of the booth once per shift in which the depainting process is in operation. This log shall include the acceptable limit(s) of the pressure drop

as specified by the filter manufacturer, the visual continuity of the water curtain and the water flow rate for conventional waterwash systems, or the recommended parameter(s) that indicate the booth performance for pumpless systems as specified by the booth manufacturer or in locally prepared operating procedures.

* * * * *

10. Section 63.753 is amended by revising paragraphs (c)(1)(vi) and (d)(1)(vii) to read as follows:

§ 63.753 Reporting requirements.

* * * * *

(c) * * *

(1) * * *

(vi) All times when a primer or topcoat application operation was not immediately shut down when the pressure drop across a dry particulate

filter or HEPA filter system, the water flow rate through a conventional waterwash system, or the recommended parameter(s) that indicate the booth performance for pumpless systems, as appropriate, was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures;

* * * * *

(d) * * *

(1) * * *

(vii) All periods where a nonchemical depainting operation subject to § 63.746(b)(2) and (b)(4) for the control of inorganic HAP emissions was not immediately shut down when the pressure drop, water flow rate, or recommended booth parameter(s) was outside the limit(s) specified by the

filter or booth manufacturer or in locally prepared operational procedures;

* * * * *

11. In appendix A to part 63, Method 319 is amended by revising the equation terms "p" and "CV" in section 12.2.1 to read as follows:

Appendix A to Part 63—Test Methods

* * * * *

Method 319: DETERMINATION OF FILTRATION EFFICIENCY FOR PAINT OVERSPRAY ARRESTORS

* * * * *

12.0 * * *

12.2 * * *

12.2.1 * * *

p = sample standard deviation

CV = coefficient of variation = p/mean

* * * * *

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BILLING CODE 6560-50-P

contain nitrogen oxides (expressed as NO₂) in excess of the following emission limits:

* * * * *

(b) Except as provided under paragraphs (k) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under § 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts mixtures of coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides in excess of a limit determined by the use of the following formula:

* * * * *

(c) Except as provided under paragraph (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under § 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts coal or oil, or a mixture of these fuels with natural gas, and wood, municipal-type solid waste, or any other fuel shall cause to be discharged into the atmosphere any gases that contain nitrogen oxides in excess of the emission limit for the coal or oil, or mixtures of these fuels with natural gas combusted in the affected facility, as determined pursuant to paragraph (a) or (b) of this section, unless the affected facility has an annual capacity factor for coal or oil, or mixture of these fuels with natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the affected facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, or a mixture of these fuels with natural gas.

* * * * *

(e) Except as provided under paragraph (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under § 60.8 of this part, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts coal, oil, or natural gas with byproduct/waste shall cause to be discharged into the atmosphere any gases that contain nitrogen oxides in excess of the emission limit determined by the following formula unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the affected facility to an

annual capacity factor of 10 percent (0.10) or less:

* * * * *

(l) On and after the date on which the initial performance test is completed or is required to be completed under § 60.8 of this part, whichever date comes first, no owner or operator of an affected facility which commenced construction, modification, or reconstruction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO₂) in excess of the following limits:

(1) If the affected facility combusts coal, oil, or natural gas, or a mixture of these fuels, or with any other fuels: A limit of 86 ng/J_I (0.20 lb/million Btu) heat input unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, and natural gas; or

(2) If the affected facility has a low heat release rate and combusts natural gas or distillate oil in excess of 30 percent of the heat input from the combustion of all fuels, a limit determined by use of the following formula:

$$E_n = [(0.10 * H_{go}) + (0.20 * H_r)] / (H_{go} + H_r)$$

Where:

E_n is the NO_x emission limit, (lb/million Btu),

H_{go} is the heat input from combustion of natural gas or distillate oil, and

H_r is the heat input from combustion of any other fuel.

10. Section 60.48b is amended by revising paragraph (b) to read as follows:

§ 60.48b Emission monitoring for particulate matter and nitrogen oxides.

* * * * *

(b) Except as provided under paragraphs (g), (h), and (i) of this section, the owner or operator of an affected facility shall comply with either paragraphs (b)(1) or (b)(2) of this section.

(1) Install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring nitrogen oxides emissions discharged to the atmosphere; or

(2) If the owner or operator has installed a nitrogen oxides emission rate continuous emission monitoring system (CEMS) to meet the requirements of part 75 of this chapter and is continuing to meet the ongoing requirements of part 75 of this chapter, that CEMS may be used to meet the requirements of this

section, except that the owner or operator shall also meet the requirements of § 60.49b. Data reported to meet the requirements of § 60.49b shall not include data substituted using the missing data procedures in subpart D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter.

* * * * *

11. Section 60.49b is amended by adding paragraph (v) to read as follows:

§ 60.49b Reporting and recordkeeping requirements.

* * * * *

(v) The owner or operator of an affected facility may submit electronic quarterly reports for SO₂ and/or NO_x and/or opacity in lieu of submitting the written reports required under paragraphs (b), (i), (j), (k) or (l) of this section. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format.

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[FRL-6157-1]

RIN 2060-AH74

National Emission Standards for Hazardous Air Pollutants for Source Category: Pulp and Paper Production

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; interpretation and technical amendment.

SUMMARY: Under the authority of the Clean Air Act, the EPA has promulgated standards at 40 CFR part 63, subpart S (63 FR 18504, April 15, 1998) to reduce hazardous air pollutant (HAP) emissions from the pulp and paper production source category. This rule is known as

the Pulp and Paper national emission standards for hazardous air pollutants (NESHAP) and is the air component of the integrated air and water rules for the pulp and paper industry, commonly known as the Pulp and Paper Cluster Rules.

Today's action makes interpretive amendments to certain regulatory text in the NESHAP regarding the applicability of a 10 percent excess emissions allowance for condensate treatment systems. The EPA is making these amendments in response to inquiries received since publication of the final standards on April 15, 1998.

DATES: These amendments are effective September 16, 1998.

ADDRESSES: *Air Docket.* Docket A-92-40, containing the supporting information for the original NESHAP and this action, is available for public inspection and copying between 8 a.m. and 5:30 p.m., Monday through Friday except for Federal holidays, at the following address: U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center (MC-6102), 401 M Street SW., Washington, DC 20460, or by calling (202) 260-7548. The docket is located at the above address in Room M-1500, Waterside Mall (ground floor). A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Mr. Stephen Shedd, Emissions Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711, telephone number (919) 541-5397. For questions on compliance and applicability determinations, contact Mr. Seth Heminway, Office of Enforcement and Compliance Assurance (2223A), U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460, telephone number (202) 564-7017.

SUPPLEMENTARY INFORMATION:

Regulated Entities

The entities potentially affected by this action include:

Category	Examples of regulated entities
Industry	Pulp mills and integrated mills (mills that manufacture pulp and paper/paperboard) that chemically pulp wood fiber using the kraft process.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be interested in the amendments to the regulation affected by this action. To determine whether your facility is regulated by this action, you should carefully examine the applicability

criteria in 63, subparts A and S of Title 40 of the Code of Federal Regulations.

Informational Contacts

If you have questions regarding the applicability of this action to a particular situation, or questions about compliance approaches, permitting, enforcement and rule determinations, please contact the appropriate regional representative below:

Region I:

Greg Roscoe, Chief, Air Pesticides & Toxics Enforcement Office, Office of Environmental Stewardship, U.S. EPA, Region I, JFK Federal Building (SEA), Boston, MA 02203, (617) 565-3221 Technical Contact for Applicability Determination, Susan Lancey, (617) 565-3587, (617) 565-4940 Fax

Region II:

Mosey Ghaffari, Air Compliance Branch, U.S. EPA, Region II, 290 Broadway, New York, NY 10007-1866, (212) 637-3925, (212) 637-3998 Fax

Region III:

Makeba Morris, U.S. EPA, Region III, 3AT10, 841 Chestnut Building, Philadelphia, PA 19107, (215) 566-2187

Region IV:

Lee Page, U.S. EPA, Region IV, Atlanta Federal Center, 100 Alabama Street, Atlanta, GA 30303, (404) 562-9131

Region V:

Christina Prasinis (AE-17J), U.S. EPA, Region V, 77 West Jackson Street, Chicago, IL 60604-3590, (312) 886-6819 (312) 353-8289

Region VI:

Michelle Kelly, Air Enforcement Branch (6EN-AA), U.S. EPA, Region VI, Suite 1200, 1445 Ross Avenue, Dallas, TX 75202-2733 (214) 665-7580, (214) 665-7446 Fax

Region VII:

Gary Schlicht, Air Permits and Compliance Branch, U.S. EPA, Region VII, ARTD/APCO, 726 Minnesota Avenue, Kansas City, KS 66101, (913) 551-7097

Region VIII:

Tami Thomas-Burton, Air Toxics Coordinator, U.S. EPA, Region VIII, Suite 500, 999 18th Street, Denver, CO 80202-2466 (303) 312-6581, (303) 312-6064 Fax

Region IX:

Ken Bigos, U.S. EPA, Region IX, A-5, 75 Hawthorne Street, San Francisco, CA (415) 744-1240

Region X:

Andrea Wallenweber, Office of Air Quality, U.S. EPA, Region X, OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101, (206) 553-8760, (206) 553-0404 Fax

Technology Transfer Network

The Technology Transfer Network (TTN) is one of EPA's electronic bulletin boards. The TTN provides information and technology exchange in various areas of air pollution control. New air regulations are now being posted on the TTN through the world wide web at "http://www.epa.gov/ttn." For more information on the TTN, call the HELP line at (919) 591-5384.

Outline

The information presented in this preamble is organized as follows:

- I. Description of Amendments and Interpretations
- II. Administrative
- III. Legal Authority

I. Description of Amendments and Interpretations

In today's action, the EPA is amending § 63.446(g) to make clear the EPA's original intent regarding the applicability of the 10 percent excess emissions allowance to control devices used to treat kraft pulp mill condensates to comply with the requirements of § 63.446(e)(3) through (e)(5). The EPA made clear in the April 15, 1998 preamble at 63 FR 18529-30 that based on data submitted by the pulp and paper industry, EPA has concluded that some allowance for excess emissions is part of the maximum achievable control technology (MACT) floor level of control. EPA did not qualify this statement by saying that only particular technologies would require some type of allowance for excess emissions.

The EPA had previously shown (61 FR 9390-91, March 8, 1996) that the MACT floor level of control for pulping condensates at both bleached and unbleached kraft mills is treating the condensate streams to remove 92 percent of the HAP content (measured as methanol), or equivalently, to achieve an outlet concentration of less than 330 and 210 parts per million by weight (ppmw) measured as methanol or remove 9.2 and 5.9 pounds of methanol per air dried ton of pulp (10.2 and 6.6 pounds of methanol per oven dried ton of pulp (ODP) basis in the final rule) across the control device, respectively

for bleached and unbleached wastewater streams. The MACT floor control technology basis for these treatment options is steam stripping. Since steam stripping is the MACT floor control technology basis for the treatment requirements, the EPA also based the excess emissions allowance on steam stripping and determined that to be 10 percent. Therefore, the MACT floor-level of control is a combination of treatment requirements and an excess emissions allowance. The discussion in the March 8, 1996 supplemental notice at 61 FR 9390 further states that "The rule would allow mills to: (1) Choose any wastewater treatment device as long as the device achieves one of the three parameters . . ." (percent removal, ppmw outlet concentration, or mass per ODP removal).

The April 15, 1998 preamble and the March 8, 1996 supplemental notice clearly show that the EPA's intent was to provide mills flexibility in what control technology is used and what treatment option (set out at § 63.446(e)(3) through (e)(5)) is selected to comply with the MACT requirements for condensate treatment. Since the MACT requirements are a combination of treatment requirements and a downtime allowance, it is reasonable to interpret that any control device meeting the MACT requirements would be permissible—and this in fact is what EPA intended. However, the rule language is at variance with this preamble language because it limits the availability of the 10 percent excess emissions allowance to steam strippers complying only with the 92 percent methanol removal option. Since this rule language does not reflect EPA's intent (as shown in the preambles, as just discussed), EPA is correcting the rule language in today's notice.

The preamble to the final NESHAP at 63 FR 18529–30 describes excess emission allowances to include periods when the control device is inoperable and when the operating parameter values established during the initial performance test cannot be maintained at the appropriate level. The preamble further explains that the 10 percent excess emissions for condensate treatment includes periods of startup, shutdown, and malfunction allowances of the General Provisions to part 63. Since the MACT floor (both the treatment level and the excess emissions allowance) was based on steam stripping, the EPA discussed in the preamble likely problems that would necessitate an excess emissions allowance in the context of steam stripping operations. These were given as steam stripper downtime as a result

of damage to the steam stripping system and loss of treatment efficiency resulting primarily from contamination of condensate with carryover of fiber or black liquor, steam supply downtime, and combustion control device downtime. (Control device downtime is a factor because the steam stripper should not be operated during periods when the stripper system vents cannot be routed to a control device). The EPA believes that these types of problems would necessitate this same downtime allowance, even with control devices other than steam strippers. An exception to this is where a mill elects to treat the condensate by discharging it below the liquid surface of a biological treatment system (see § 63.446(e)(2)) that is part of their wastewater treatment plant. These types of biological treatment systems are different than steam strippers and other control devices in terms of their excess emissions allowance needs for several reasons. First, steam strippers and most other control devices are typically located in or near the process, and treat primarily, and usually exclusively, condensates. All of these factors make the control device vulnerable to downtime periods, even at the best operating mills. A similar concept of downtime does not translate to biological wastewater treatment systems, which accept wastewaters from all over the mill and must be up and running at all times to comply with National Pollutant Discharge Elimination System (NPDES) requirements under the Clean Water Act. Second, at steam strippers and other in-process type condensate control devices, periods when the operating parameter values (established during the initial performance test) cannot be maintained at the appropriate level count toward the 10 percent excess emissions allowance; however, for reasons set forth in the preamble at 63 FR 18523–24, biological wastewater treatment units are provided a unique set of parameter excursion provisions at § 63.453(p). Therefore, since the reasons for providing the 10 percent excess emissions allowance do not fit the biological wastewater treatment scenario and since the rule sets forth separate operating parameter excursion provisions for biological wastewater treatment, the EPA believes that it is reasonable to interpret the rule such that the 10 percent excess emissions allowance does not apply to biological wastewater treatment and is correcting the rule in today's action to reflect this interpretation.

Finally, since promulgation of the NESHAP, the EPA has become aware that there is some confusion over what is meant in the rule by the term "biological treatment" since the industry uses the term to refer to two different types of units. Today's action provides guidance but no rule changes to clarify how the rule applies to these two types of units. The issue has been raised by companies considering anaerobic biological treatment systems instead of steam strippers to comply with the condensate treatment requirements. The term, as used in the rule (see §§ 63.446(e)(2); 63.453(j) and (p); and 63.457(l)), refers to systems installed as part of the mill's wastewater treatment system primarily for purposes of complying with NPDES requirements under the Clean Water Act. The units are characteristically open to the atmosphere, require modeling in lieu of direct air emissions measurement during the initial performance test, and handle all of the mill's wastewater. These biological treatment systems are different than in-process type biological treatment systems, such as enclosed anaerobic treatment systems that can be directly measured for air emissions during the initial performance test and that would be installed primarily to treat condensate streams subject to the final pulp and paper NESHAP. This type of anaerobic system would be used instead of a steam stripper to comply with the treatment requirements at § 63.446(e)(3) through (e)(5) and thus, the excess emissions allowance at § 63.446(g) would apply, but (correspondingly) the operating parameter excursion provisions for biological wastewater treatment systems at § 63.453(p) would not apply. Also, it is important to note that since this anaerobic treatment system is serving the same function as a steam stripper (i.e. treatment of pulping condensates), it meets the rule definition of low volume high concentration system equipment and is thus subject to all of the pulping system requirements at § 63.443.

II. Administrative Requirements

A. Paperwork Reduction Act

The information requirements of the previously promulgated NESHAP were submitted for approval to the Office of Management and Budget (OMB) on April 27, 1998 under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1657.03), and a copy may be obtained from Sandy Farmer, OPPE Regulatory Information Division; U.S.

Environmental Protection Agency (2137); 401 M St., SW.; Washington, DC 20460 or by calling (202) 260-2740. The information requirements are not effective until OMB approves them.

Today's amendments to the NESHAP will have no impact on the information collection burden estimates made previously. The changes are interpretations of requirements and are not additional requirements. Consequently, the ICR has not been revised.

B. Executive Order 12866

Under Executive Order 12866, the EPA must determine whether the proposed 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 in State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, 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.

The NESHAP subpart S rule published on April 15, 1998, was considered significant under Executive Order 12866, and a regulatory impact analysis (RIA) was prepared. The amendments published today interpret the rule. The OMB has evaluated this action, and determined it to be nonsignificant; thus it did not require their review.

C. Regulatory Flexibility

Today's action is not subject to notice and comment rulemaking requirements and therefore is not subject to the Regulatory Flexibility Act. However, for the reasons discussed in the April 15, 1998 *Federal Register* (63 FR 18611-12), this rule does not have a significant impact on a substantial number of small entities. The changes to the rule in today's action do not add new control requirements to the April 15, 1998 rule.

D. Unfunded Mandates Reform Act

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

The EPA has determined that the action promulgated today does not include a Federal mandate that may result in estimated costs of \$100 million or more to either State, local, or tribal governments in the aggregate or to the private sector. Therefore, the requirements of the Unfunded Mandates Act do not apply to this action.

E. Executive Order 12875: Enhancing Intergovernmental Partnerships

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. If the mandate is unfunded, EPA must 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."

While the final rule published on April 15, 1998 does not create mandates upon State, local, or tribal governments, EPA involved State and local governments in its development. Because the final regulation imposes costs to the private sector in excess of \$100 million, the EPA pursued the preparation of an unfunded mandates

statement and the other requirements of the Unfunded Mandates Reform Act. Because today's action interprets the requirements of the final rule, today's action does not create a mandate on State, local, or tribal governments. Today's action does not impose any enforceable duties on these entities. Accordingly, the requirements of section 1(a) of Executive Order 12875 do not apply to today's action.

F. Applicability of Executive Order 13045

The Executive Order 13045 applies to any rule that EPA determines (1) economically significant as defined under Executive Order 12866, and (2) the environmental health or safety risk addressed by the rule has a disproportionate effect on children. If the regulatory action meets both criteria, the EPA must evaluate the environmental health or safety effects of the planned rule on children; and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the EPA.

Today's action is not subject to E.O. 13045, entitled Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997), because it does not involve decisions on environmental health risks or safety risks that may disproportionately affect children.

G. 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. If the mandate is unfunded, EPA must provide to the Office of Management and Budget, in a separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected and other representatives of Indian tribal governments "to provide meaningful and timely input in the development of regulatory policies on matters that

significantly or uniquely affect their communities."

Today's action does not significantly or uniquely affect the communities of Indian tribal governments. The final rule published on April 15, 1998 does not create mandates upon tribal governments. Because today's action interprets the requirements of the final rule, today's action does not create a mandate on tribal governments. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this action.

H. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA) directs all Federal agencies to use voluntary consensus standards instead of government-unique standards in their regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., material specifications, test methods, sampling and analytical procedures, business practices, etc.) that are developed or adopted by one or more voluntary consensus standards bodies. Examples of organizations generally regarded as voluntary consensus standards bodies include the American Society for Testing and Materials (ASTM), the National Fire Protection Association (NFPA), and the Society of Automotive Engineers (SAE). The NTTAA requires Federal agencies like EPA to provide Congress, through OMB, with explanations when an agency decides not to use available and applicable voluntary consensus standards.

This action does not involve any new technical standards or the incorporation by reference of existing technical standards. Therefore, consideration of voluntary consensus standards is not relevant to this action.

I. Immediate Effective Date

The EPA is making today's action effective immediately. The EPA has determined that the rule changes being made in today's action are interpretive rules which are not subject to notice and comment requirements. In addition, the rule change is a type of technical correction, since it amends the rule to be consistent with EPA's intentions stated in the rule's preamble. Notice and opportunity for comment is not required for such technical corrections. The EPA has also determined that this rule may be made effective in less than 30 days because it is interpretive, and relieves

restrictions. See 5 U.S.C. 553 (d)(1) and (2).

J. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. However, section 808 provides that any rule for which the issuing agency for good cause finds (and incorporates the finding and a brief statement of reasons therefor in the rule) that notice and public procedure thereon are impracticable, unnecessary or contrary to the public interest, shall take effect at such time as the agency promulgating the rule determines. 5 U.S.C. 808(2). As stated previously, EPA has made such a good cause finding, including the reasons therefor, and established an effective date of September 16, 1998. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the *Federal Register*. This rule is not a "major rule" as defined by 5 U.S.C. 804(2).

III. Legal Authority

These regulations are amended under the authority of sections 112, 114, and 301 of the Clean Air Act, as amended (42 U.S.C. sections 7412, 7414, and 7601).

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Pulp mills, Cluster Rules.

Dated: September 6, 1998.

Robert Perciasepe,

Assistant Administrator for Air and Radiation.

For the reasons set out in the preamble, title 40, Chapter I of the Code of Federal Regulations is amended as follows:

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

1. The authority citation for part 63 continues to read as follows:

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

Subpart S—National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry

2. Section 63.446 is amended by revising paragraph (g) to read as follows:

§ 263.446 Standards for kraft pulping process condensates.

* * * * *

(g) For each control device (e.g. steam stripper system or other equipment serving the same function) used to treat pulping process condensates to comply with the requirements specified in paragraphs (e)(3) through (e)(5) of this section, periods of excess emissions reported under § 63.455 shall not be a violation of paragraphs (d), (e)(3) through (e)(5), and (f) of this section provided that the time of excess emissions (including periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed 10 percent. The 10 percent excess emissions allowance does not apply to treatment of pulping process condensates according to paragraph (e)(2) of this section (e.g. the biological wastewater treatment system used to treat multiple (primarily non-condensate) wastewater streams to comply with the Clean Water Act).

* * * * *

[FR Doc. 98-24837 Filed 9-15-98; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 69 and 80

[FRL-6159-1]

State of Alaska Petition for Exemption From Diesel Fuel Sulfur Requirement

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: On December 12, 1995, the Governor of Alaska petitioned EPA to permanently exempt the areas of Alaska served by the Federal Aid Highway System from the requirements of EPA's low-sulfur diesel fuel program for motor vehicles. On August 19, 1996, EPA extended the existing temporary exemption until October 1, 1998, and on April 28, 1998, EPA proposed to grant a permanent exemption (63 FR 23241). EPA has received significant public comments and new information concerning EPA's proposal and needs additional time to further evaluate the issues concerning a permanent exemption. Consequently, EPA is

Federal Register

Monday
September 21, 1998

Part II

**Environmental
Protection Agency**

40 CFR Parts 9 and 63
National Emission Standards for
Hazardous Air Pollutants for Source
Categories: Pharmaceuticals Production;
Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 9 and 63

[AD-FRL-6135-6]

RIN-2060-AE83

National Emission Standards for Hazardous Air Pollutants for Source Categories: Pharmaceuticals Production

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action promulgates national emission standards for hazardous air pollutants (NESHAP) to reduce air emissions of hazardous air pollutants (HAP) from existing and new facilities that manufacture pharmaceutical products. The Agency intends that this promulgated rule will have a common technology basis with a rule promulgated this date under the Clean Water Act (CWA) and published elsewhere in this issue of the **Federal Register**: this will allow coordinated and cost effective compliance planning by the industry. The standards implement section 112 of the Clean Air Act (CAA) as amended in 1990. The standards apply to major source facilities which produce pharmaceutical products.

The major HAP emitted by facilities covered by this final rule include methylene chloride, methanol, toluene, and hydrogen chloride. Methylene chloride is considered to be a probable

human carcinogen and the other pollutants can cause noncancer health effects in humans. The promulgated rule is estimated to reduce HAP emissions from existing facilities by 22,000 megagrams per year (Mg/yr) (24,000 tons per year [tons/yr]). It also reduces volatile organic compound (VOC) emissions.

DATES: This regulation is effective on September 21, 1998. The incorporation by reference of certain publications listed in the regulation is approved by the Director of the Office of the Federal Register as of September 21, 1998. See the **SUPPLEMENTARY INFORMATION** section concerning judicial review.

ADDRESSES: *Docket.* Docket No. A-96-03, containing supporting information used in developing the standards, is available for public inspection and copying between 8:30 a.m. and 3:30 p.m., Monday through Friday, at EPA's Air Docket Section, Waterside Mall, Room 1500, 1st Floor, 401 M Street SW., Washington, DC 20460. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: For information concerning the final CAA standard, contact Mr. Randy McDonald at (919) 541-5402, Organic Chemicals Group, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711. For further information concerning the CWA effluent limitation guidelines pretreatment standards and new source performance standards, contact Dr. Frank H. Hund, at (202) 260-7786, Engineering and Analysis

Division (4303), U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460. For information concerning applicability and rule determinations, contact your State or local representative or the appropriate EPA regional representatives. For a listing of EPA regional contacts, see the following **SUPPLEMENTARY INFORMATION** section.

SUPPLEMENTARY INFORMATION: An electronic version of documents from the Office of Air and Radiation (OAR) are available through EPA's OAR Technology Transfer Network Web site (TTNWeb). The TTNWeb is a collection of related Web sites containing information about many areas of air pollution science, technology, regulation, measurement, and prevention. The TTNWeb is directly accessible from the Internet via the World Wide Web at the following address, "http://www.epa.gov/ttn". Electronic versions of this preamble and rule are located under the OAR Policy and Guidance Information Web site, "http://www.epa.gov/ttn/oarpg/", under the **Federal Register** Notices section. If more information on the TTNWeb is needed, contact the Systems Operator at (919) 541-5384.

Regulated entities. Entities potentially regulated are those which produce pharmaceutical products and intermediates and are located at facilities that are major sources as defined in section 112 of the CAA. Regulated categories and entities include:

Category	Regulated entities
Industry	<ul style="list-style-type: none"> • Facilities described by the SIC codes 2833 and 2834 and NAICS codes 32541 and 325412. • Producers of finished dosage forms of drugs, for example, tablets, capsules, solutions, that contain an active ingredient generally, but not necessarily, in association with inactive ingredients. • Producers of components whose intended primary use is to furnish pharmacological activity or other direct effect in the diagnosis, cure, mitigation, treatment, or prevention of disease, or to affect the structure or any function of the body of humans or other animals.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your facility, company, business, organization, etc., is regulated by this action, you should carefully examine the applicability criteria in § 63.1250 of the rule. If you have questions regarding the applicability of this action to a particular entity, contact the appropriate Regional representative:

Region I

NESHAP (MACT) Coordinator, U.S. EPA Region I, John F. Kennedy Federal Building, One Congress Street, Boston, MA 02203-001, (617) 565-3438

Region II

Umesh Dholakia, U.S. EPA Region II, 290 Broadway Street, New York, NY 10007-1866, (212) 637-4023 (Umesh), (212) 637-4065 (Yue-On)

Region III

Bernard Turlinski, U.S. EPA Region III, 841 Chestnut Building, Philadelphia, PA 19107, (215) 566-2150

Region IV

Lee Page, U.S. EPA Region IV, Atlanta Federal Center, 61 Forsyth Street SW, Atlanta, GA 30303-3104, (404) 562-9131

Region V

Bruce Varner, U.S. EPA Region V, 77 West Jackson Boulevard, Chicago, IL 60604-3507, (312) 886-6793

Region VI

Robert Todd, U.S. EPA Region VI, First Interstate Bank Tower @ Fountain Place, 1445 Ross Avenue, 12th Floor, Suite 1200, Dallas, TX 75202-2733, (214) 665-2156

Region VII

Richard Tripp, U.S. EPA Region VII, Air Toxics Coordinator, 726 Minnesota Avenue, Kansas City, KS 66101, (913) 551-7566

Region VIII

Ann Marie Patrie, U.S. EPA Region VIII, Air Toxics Coordinator, 999 18th Street, Suite 500, Denver, CO 80202-2466, (303) 312-6524

Region IX

Nahid Zoueshtiagh, U.S. EPA Region IX, Air Division-6, 75 Hawthorne Street, San Francisco, CA 94105, (415) 744-1261

Region X

Andrea Wullenweber, U.S. EPA Region X, Air Toxics Coordinator, 1200 Sixth Avenue, Seattle, WA 98101, (206) 553-8760

Judicial review. Under section 307(b)(1) of the Act, judicial review of NESHAP 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 notice may not be challenged later in civil or criminal proceedings brought by the EPA to enforce these requirements. The information presented in this preamble is organized as follows:

- I. List of Source Categories
- II. Background
 - A. Summary of Considerations Made in Developing These Standards
 - B. Regulatory Background
 - C. Regulation of the Pharmaceutical Manufacturing Industry Under the Clean Water Act
- III. Authority for National Emission Standards for Hazardous Air Pollutants (NESHAP) Decision Process
 - A. Source of Authority for NESHAP Development
 - B. Criteria for Development of NESHAP
- IV. Summary of Promulgated Standards
 - A. Source Categories to be Regulated
 - B. Pollutants to be Regulated and Associated Environmental and Health Benefits
 - C. Affected Sources
 - D. Storage Tank Provisions
 - E. Process Vent Provisions
 - F. Wastewater Provisions
 - G. Equipment Leaks
 - H. Pollution Prevention Alternative
 - I. Heat Exchange Provisions
 - J. Emissions Averaging Provisions
 - K. Alternative Standard
 - L. Test Methods and Compliance Procedures
 - M. Monitoring Requirements

- N. Recordkeeping and Reporting Requirements
- V. Summary of Environmental, Energy, Cost, and Economic Impacts
 - A. Air Impacts
 - B. Water and Solid Waste Impacts
 - C. Energy Impacts
 - D. Cost Impacts
 - E. Economic Impacts
- VI. Major Comments and Changes to the Proposed Standards
 - A. Applicability Provisions and Definitions
 - B. Storage Tank Provisions
 - C. Process Vent Provisions
 - D. Wastewater Provisions
 - E. Equipment Leak Provisions
 - F. Pollution Prevention Alternative
 - G. Alternative Standard
 - H. Testing Provisions and Compliance Demonstrations
- I. Equations
 - J. Monitoring Requirements
 - K. Recordkeeping and Reporting Requirements
 - L. Management of Change
- VII. Technical Amendment to 40 CFR Part 9
- VIII. Administrative Requirements
 - A. Docket
 - B. Executive Order 12866
 - C. Enhancing the Intergovernmental Partnership Under Executive Order 12875
 - D. Paperwork Reduction Act
 - E. Regulatory Flexibility Act
 - F. Unfunded Mandates
 - G. Submission to Congress and the Comptroller General Office
 - H. National Technology Transfer and Advancement Act
 - I. Executive Order 13045

I. List of Source Categories

Section 112 of the amended Act requires that EPA evaluate and control emissions of HAP. The control of HAP is achieved through promulgation of emission standards under sections 112(d) and 112(f) and work practice and equipment standards under section 112(h) for categories of sources that emit HAP. On July 16, 1992, EPA published an initial list of major and area source categories to be regulated (57 FR 31576). Included on that list were major sources emitting HAP from pharmaceuticals production.

Production methods used in the manufacture of pharmaceutical products include both batch and continuous operations, although batch operations make up a majority of the processes. The sizes of the facilities range from those that make one product at the rate of several hundred kilograms per year (kg/yr) to those that produce numerous pharmaceutical products on the scale of thousands of kilograms (megagrams [Mg]) per year. Air emissions of HAP compounds originate from breathing and withdrawal losses from storage tanks, venting of process vessels, leaks from piping and equipment used to transfer HAP compounds (equipment

leaks), and volatilization of HAP from wastewater streams. Pollutants emitted from the production processes include a range of organic compounds, including VOC and several specific HAP. Among the most prevalent are methylene chloride and methanol, which account for nearly 70 percent of all HAP emissions from this industry. Detailed information describing manufacturing processes and emissions can be found in the basis and purpose document located in Docket A-96-03, Item No. III-B-01.

As of 1992, over 80 U.S. companies at 270 facilities were producing pharmaceutical products. Manufacturing operations covered by this NESHAP include chemical synthesis, formulation, fermentation, and extraction processes and are generally classified under standard industrial classification 283. An estimated 101 facilities are considered to be major sources according to the CAA criterion of having the potential to emit 10 tons/yr of any one HAP or 25 tons/yr of combined HAP, based on 1992 emissions data. Today's final standard applies to all major sources that produce pharmaceutical products. Area sources are not subject to this standard.

II. Background**A. Summary of Considerations Made in Developing These Standards**

This regulation reduces emissions of many of the HAP listed in section 112(b)(1) of the CAAA. The alternatives considered in the development of this regulation, including those alternatives selected as standards for new and existing sources, are based on process and emissions data received from the existing facilities known by the EPA to be in operation.

Regulatory alternatives more stringent than the maximum achievable control technology (MACT) floor (minimum control level) were selected when they were judged to be reasonable, considering cost, nonair impacts, and energy requirements.

Today's final rule gives existing affected sources 3 years from the date of promulgation to comply. This is the maximum amount of time allowed by the Act. New affected sources are required to comply with the standard upon startup.

Included in today's final rule are methods for determining initial compliance as well as monitoring, recordkeeping, and reporting requirements. All of these components are necessary to ensure that affected sources comply with the standards both initially and over time. However, the

EPA has made every effort to simplify the requirements in the final rule. In addition, EPA has significantly reduced the amount of cross-referencing to other rules included in today's final standards at the request of facilities affected by these standards.

In addition, this rule contains an important and innovative pollution prevention alternative for the pharmaceutical industry that provides an option to reduce HAP emissions through reductions in HAP solvent consumption as opposed to installing end-of-pipe controls. The EPA has developed a regulation that provides a pollution prevention compliance alternative to the traditional control requirements, and the EPA encourages the pharmaceutical industry to meet the CAA requirements through its use. This alternative demonstrates EPA's commitment to developing regulations that are cost effective and flexible, and that reduce monitoring, recordkeeping, and reporting burdens.

Representatives from other interested EPA offices and programs, including State and regional environmental agency personnel, and representatives from industry participated in the regulatory development process as MACT partnership members. For example, Region II, acting as the lead, worked closely with the States of New York and New Jersey as well as the pharmaceutical industry in developing the pollution prevention alternative. The partnership members were given opportunities to review and comment on the regulation prior to proposal and had the opportunity to comment on the proposed standards and to provide additional information during the public comment period that followed proposal.

The standards were proposed in the *Federal Register* on April 2, 1997 [62 FR 15754]. The preamble to the proposed standards and the basis and purpose document (Docket Item III-B-01) described the rationale for the proposed standards. Public comments were solicited at the time of proposal. To provide interested persons the opportunity for oral presentation of data, views, or arguments concerning the proposed standards, a public hearing was offered at proposal. However, the public did not request a hearing and, therefore, one was not held. The public comment period was from April 2, 1997 to July 2, 1997. More than 40 letters were received during the comment period. Commenters included industry representatives and State agencies. The comments were carefully considered, and changes were made in the proposed standards when

determined by the EPA to be appropriate. A detailed discussion of these comments and responses can be found in the promulgation background information document (BID) which is located in Docket No. A-96-03, Item V-B-01, which is referenced in the ADDRESSES section of this preamble. The promulgation BID (summary of comments and responses document) serves as the basis for the revisions that have been made to the standards between proposal and promulgation. Section VI of this preamble discusses these major changes.

B. Regulatory Background

Today's final rule implements section 112(d) of the Clean Air Act (CAA) amendments of 1990, which require the Administrator to regulate emissions of HAP listed in section 112(b) of the CAA. The intent of this rule is to protect the public health by requiring new and existing major sources to reduce generation of emissions by using pollution prevention strategies or to control emissions to the level achievable by the maximum achievable control technology (MACT), taking into consideration the cost of achieving such emission reductions, any nonair quality and other air quality related health and environmental impacts, and energy requirements.

In 1978, EPA published a control techniques document entitled "Control of Volatile Organic Emissions from Manufacture of Synthesized Pharmaceutical Products," EPA-450/2-78-029. The control technique guidelines document (CTG) contains a presumptive norm for reasonably available control technology (RACT) for the manufacturing operations covered under SIC Codes 2833 and 2834. Today's final rule does not affect the presumptive RACT guidelines, although a portion of emissions sources are covered by both today's final regulation and the CTG document.

In 1994, EPA promulgated National Emission Standards for Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks. Pharmaceutical processes, defined as processes that synthesize pharmaceutical intermediates or final products using carbon tetrachloride or methylene chloride as a reactant or process solvent, are subject to this rule. Today's final rule requires control of leaking components that are currently not subject to the Negotiated Regulation for Equipment Leaks, but that contain and/or transport HAP and are associated with processes in this source category. Today's rule also allows sources subject

to the Negotiated Regulation to comply with the LDAR provisions of this rule.

C. Regulation of the Pharmaceutical Manufacturing Industry Under the Clean Water Act

The Clean Water Act (CWA) and a recent settlement agreement (see 59 FR 25869) require EPA to develop effluent limitations guidelines and standards regulations for the pharmaceutical manufacturing industry.

On May 2, 1995 at 60 FR 21592, the EPA proposed best available technology (BAT) economically achievable and new source performance standards (NSPS) regulations for 53 volatile and semivolatile organic pollutants of which 17 are HAP. The Agency also proposed pretreatment standards for existing sources (PSES) and performance standards for new sources (PSNS) for 45 volatile organic pollutants of which 16 are HAP. The technology basis for the volatile organic limitations were based on steam stripping and advanced biological treatment. The proposed NSPS and PSNS differed from BAT and PSES, respectively, in that they were based on steam stripping plus distillation.

In the April 2, 1997 proposal EPA indicated that it was considering changing the BAT technology basis to advanced biological treatment only. The EPA also described three options under consideration for setting PSES and PSNS to address HAP and non-HAP wastewater pollutant discharges not controlled by the MACT standards. Under the first option compliance with the MACT standards would constitute compliance with PSES and PSNS. Option 2 involved compliance with the MACT standards plus additional PSES based on the performance data base for the 1995 proposed PSES for all volatile organic pollutants except alcohols and related pollutants, and Option 3 was the same as Option 2 except the additional pollutants included alcohols and related pollutants.

On August 8, 1997, at 62 FR 42720, the EPA published a Notice of Availability (NOA) to allow public comment on the data received since the May 2, 1995 CWA proposal and to further develop and revise options for the control of volatile organic pollutant discharges presented in the April 2, 1997 MACT proposal. The EPA provided the results of an EPA sampling study designed to provide information concerning the pass-through analysis for water soluble organic pollutants such as methanol and provided a discussion thereafter of the final pass-through analysis that EPA would be performing with respect to these and other

pollutants. The EPA also presented revisions to the pretreatment options (Options 2 and 3) which were first suggested in the CWA section of the April 2, 1997 MACT proposal.

Elsewhere in today's **Federal Register** EPA is publishing final effluent limitation guideline and standards under the Clean Water Act for the pharmaceutical manufacturing point source category.

III. Authority for National Emission Standards for Hazardous Air Pollutants (NESHAP) Decision Process

A. Source of Authority for NESHAP Development

Section 112 of the Clean Air Act gives the EPA the authority to establish national standards to reduce air emissions from sources that emit one or more HAP. Section 112(b) contains a list of HAP to be regulated by NESHAP. Section 112(c) directs the Agency to use this pollutant list to develop and publish a list of source categories for which NESHAP will be developed; this list was published in the **Federal Register** on July 16, 1992 (57 FR 31576). The Agency must list all known categories and subcategories of "major sources" that emit one or more of the listed HAP. A major source is defined in section 112(a) as any stationary source or group of stationary sources located

within a contiguous area and under common control that emits or has the potential to emit in the aggregate, considering controls, 10 tons/yr or more of any one HAP or 25 tons/yr or more of any combination of HAP.

B. Criteria for Development of NESHAP

The NESHAP are to be developed to control HAP emissions from both new and existing sources according to the statutory directives set out in section 112(d) of the Act. The statute requires the standards to reflect the maximum degree of reduction in emissions of HAP that is achievable for new or existing sources. This control level is referred to as the "maximum achievable control technology" (MACT). The selection of MACT must reflect consideration of the cost of achieving the emission reduction, any nonair quality health and environmental impacts, and energy requirements for control levels more stringent than the floor (described below).

The MACT floor is the least stringent level for MACT standards. For new sources, the standards for a source category or subcategory "shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator" [section 112(d)(3)]. Existing source standards should be no less stringent than the

average emission limitation achieved by the best performing 12 percent of the existing sources for categories and subcategories with 30 or more sources or the average emission limitation achieved by the best performing 5 sources for categories or subcategories with fewer than 30 sources [section 112(d)(3)]. The determination of the MACT floor for existing sources under today's rule is that the average emission limitation achieved by the best performing sources is based on a measure of central tendency, such as the arithmetic mean, median, or mode. The determination of percentage reduction in the production-indexed consumption factors used in the pollution prevention alternative is based on the criteria that the alternative must achieve emissions reductions equivalent to what would have been achieved by complying with the MACT.

IV. Summary of Promulgated Standards

A. Source Categories to be Regulated

Today's final rule regulates HAP emissions from pharmaceutical production facilities that are determined to be major sources. These standards apply to existing sources as well as new sources. The final standards for existing and new source are summarized in Table 1.

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TABLE 1.—STANDARDS FOR NEW AND EXISTING SOURCES

Emission point	New or existing?	Applicability		Requirement
		Applicability Level	Cutoff	
Process vents ...	New	Processes	>400 lb HAP/yr uncontrolled.	98 percent control or 20 ppmv TOC and 20 ppmv hydrogen halide and halogen outlet limit.
	Existing	Processes	≥2,000 lb HAP/yr controlled.	93 percent control or 2,000 lb HAP/yr or 20 ppmv TOC and 20 ppmv hydrogen halide and halogen outlet limit (if there are any vents in a process not manifolded to the control device, process must still meet 93 percent control); and 98 percent* for individual vents (within a process) meeting cutoff based on flow and emissions or 20 ppmv TOC and 20 ppmv hydrogen halide and halogen outlet limit.
Storage tanks ...	New and existing.	≥10,000 gal and <20,000 gal.	≥1.9 psia vapor pressure of liquid stored.	90 percent control or 20 ppmv TOC and 20 ppmv hydrogen halide and halogen outlet limit.
		≥20,000 gal	≥1.9 psia vapor pressure of liquid stored.	95 percent control or 20 ppmv TOC and 20 ppmv hydrogen halide and halogen outlet limit**
Wastewater	New and existing.	>Mg/yr total HAP load from all POD from PMPU.	≥1,300 ppm at POD of Table 2 HAP.	99 percent reduction of Table 2 HAP.
			≥5,200 ppmw at POD of total HAP load.	99 percent reduction of Table 2 HAP. 90 percent reduction of Table 3 HAP.
	New	>1 Mg/yr total HAP load from facility. >1 Mg/yr total HAP load from all POD from PMPU.	≥10,000 ppmw at POD of total HAP load. ≥110,000 ppmw at POD of Table 3 HAP.	95 percent reduction of total HAP using biotreatment. 99 percent reduction of Table 2 HAP. 90 percent reduction of Table 3 HAP. 95 percent reduction of total HAP using biotreatment. 99 percent reduction of Table 3 HAP and existing source requirements.

TABLE 1.—STANDARDS FOR NEW AND EXISTING SOURCES—Continued

Emission point	New or existing?	Applicability		Requirement
		Applicability Level	Cutoff	
Equipment leaks	New and existing.	All components in HAP service.		LDAR program.

*For process vents controlled to 93 percent prior to April 2, 1997, no additional control is required.

**For tanks controlled to 90 percent prior to April 2, 1997, no additional control is required.

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B. Pollutants to be Regulated and Associated Environmental and Health Benefits

Pharmaceutical production facilities emit an estimated 34,000 Mg/yr of organic and inorganic HAP. Organic HAP include methylene chloride, methanol, toluene, dimethylformamide, and hexane as well as other HAP. Hydrogen chloride is an inorganic HAP emitted by this industry. Today's final rule reduces HAP emissions from pharmaceutical facilities by 65 percent. Some of these pollutants are considered to be carcinogenic, and all can cause toxic health effects following exposure, including nausea, headaches, and possible reproductive effects. The EPA does recognize that the degree of adverse effects to human health can range from mild to severe. The extent and degree to which the human health effects may be experienced is dependent upon (1) the ambient concentration observed in the area (e.g., as influenced by emission rates, meteorological conditions, and terrain); (2) the frequency of and duration of exposures; (3) characteristics of exposed individuals (e.g., genetics, age, pre-existing health conditions, and lifestyle) which vary significantly with the population; and (4) pollutant specific characteristics (toxicity, half-life in the environment, bioaccumulation, and persistence).

Most of the organic HAP emitted from this industry are classified as VOC. The emission controls for HAP will reduce non-HAP VOC emissions as well. Emissions of VOC have been associated with a variety of health and welfare impacts. Volatile organic compound emissions, together with nitrogen oxides, are precursors to the formation of tropospheric ozone. Exposure to ambient ozone is responsible for a series of public health impacts, such as alterations in lung capacity; eye, nose, and throat irritation; nausea; and aggravation of existing respiratory disease. The welfare impacts from exposure to ambient ozone include damage to selected commercial timber

species and economic losses for commercially valuable crops such as soybeans and cotton.

Hydrogen chloride is listed under section 112(r) of the CAA. The intent of section 112(r), Prevention of Accidental Releases, is to focus on chemicals that would pose a significant hazard to the community in the event of an accident, to prevent their accidental release, and to minimize consequences should a release occur. Hydrogen chloride, along with the other substances listed under section 112(r)(3), is listed because it is known to cause, or may be reasonably anticipated to cause death, injury, or serious adverse effects to human health or the environment (see 59 FR 4478, January 31, 1994). Sources that handle hydrogen chloride in greater quantities than the established threshold quantity under section 112(r)(5) are subject to the risk management program requirements under section 112(r)(7) (see 58 FR 54190, October 20, 1993).

In essence, the MACT standards mandated by the CAA will ensure that all major sources of air toxic emissions achieve the level of control already being achieved by the better controlled and lower emitting sources in each category. This approach provides assurance to citizens that each major source of toxic air pollution will be required to effectively control its emissions. In addition, the emission reductions achieved by today's final standards, when combined with the reductions achieved by other MACT standards, will contribute to achieving the primary goal of the CAA, which is to "protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population" (the CAA, section 101(b)(1)).

C. Affected Sources

Emission points identified from pharmaceuticals production include process vents, equipment leaks, storage tanks, wastewater collection and treatment systems, and heat exchange systems. The affected source subject to this subpart is any pharmaceutical

manufacturing operation, as defined in § 63.1251 of today's final rule, that meets the following criteria: (1) it manufactures a pharmaceutical product, as defined in § 63.1251; (2) it is located at a plant site that is a major source as defined in section 112(a) of the Act; and (3) it processes, uses, or produces HAP. Based on this definition of affected source, new sources are created by reconstructing existing sources, constructing new "greenfield" facilities, or constructing an addition to an existing source which is a dedicated pharmaceutical manufacturing process unit (PMPU) and exceeds 10 tons/yr of an individual HAP or 25 tons/yr of combined HAP. Reconfigurations of existing equipment do not constitute "construction" and therefore NSM would not be triggered under this circumstance. Therefore, a new affected source subject to this subpart is any affected source for which construction or reconstruction commenced after April 2, 1997, and the standard was applicable at the time of construction or reconstruction, or any PMPU that is dedicated to manufacturing a single product that has the potential to emit 10 tons per year of any one HAP or 25 tons per year of combined HAP, for which construction commenced after April 2, 1997.

The PMPU is defined according to the equipment used to make a pharmaceutical product. The PMPU also includes storage tanks that are associated with the process.

D. Storage Tank Provisions

Today's final standards require existing and new sources to control emissions from storage tanks having volumes greater than or equal to 38 cubic meters (m³) (10,000 gallons), and storing material with a vapor pressure of greater than or equal to 13.1 kPa (1.9 psi). The final standards require that emissions from storage tanks with capacities greater than or equal to 38 m³ (10,000 gallons) and less than 75 m³ (20,000 gallons) be reduced by 90 percent. Emissions from storage tanks greater than or equal to 75 m³ (20,000 gallons) must be reduced by 95 percent.

One of the following control systems can be applied to meet these requirements:

1. An internal floating roof with specified seals and fittings;
2. An external floating roof with specified seals and fittings;
3. An external floating roof converted to an internal floating roof with specified seals and fittings; or
4. A closed vent system with the appropriate 90 or 95 percent efficient control device.

The final rule also includes an alternative standard for any storage tank vents that are routed to an add-on control device. Under the alternative standard, an owner or operator may choose to comply with a total organic compound (TOC) and hydrogen halide and halogen limit of 20 ppmv or less, measured prior to dilution and at the outlet of the control device. The alternative standard is discussed in more detail in sections IV.K and VI.G of this preamble and is included in § 63.1253(d) of the final rule. Today's final rule does not provide for vapor balancing systems to be used as an alternative means of control for storage tanks.

E. Process Vent Provisions

The MACT standard for most existing process vents was set at the floor level of control, which was determined to be 93 percent control. The final standards require existing sources to reduce emissions from the sum of all vents within a process to 900 kg/yr (2,000 pounds per year (lb/yr)), considering control, or meet an overall process control level of 93 percent. The 2,000 lb/yr compliance option is limited to seven processes per year per facility. Additionally, a regulatory alternative beyond the floor was selected that requires 98 percent control of some large emission vents. Individual process vents (manifolded or nonmanifolded) meeting the annual emissions and flow rate criteria are required to achieve 98 percent control, independent of the overall 93 percent requirement. (Those process vents achieving 93 percent control prior to April 2, 1997 are not required to meet the 98 percent control requirement.) The MACT standard for process vents at new sources was set at the floor level of control. The MACT floor was determined from the best controlled similar source and is based on the most stringent control level achieved for both chemical synthesis and formulation type processes. Today's final standards for new sources require 98 percent control of vents in a process that has uncontrolled emissions greater than 182 kg/yr (400 lb/yr).

An alternative standard for process vents was added to the final rule [see § 63.1254(c)]. Under the alternative standard, an owner or operator may choose to comply with a TOC and hydrogen halide and halogen limit of 20 ppmv or less, measured prior to dilution and at the outlet of the control device. If only a portion of the process vents associated with a process comply with the alternative standard, then the remaining process vents must be controlled to the levels required by the standards (e.g., 93 percent for the sum of remaining vents and/or 98 percent control of some individual vents for existing sources and 98 percent control of the sum of remaining vents for new sources).

The process vent and storage tank standards also contain provisions for complying in essentially the same manner as is described by the alternative standard—by routing streams to control devices achieving an outlet concentration of TOC and hydrogen halide and halogen limit of 20 ppmv or less, measured prior to dilution. These provisions differ from those described under the Alternative standard only in the monitoring options available.

F. Wastewater Provisions

The MACT floor for wastewater at existing sources was determined to be 54 percent control of HAP emissions from wastewater. The EPA calculated HAP concentration cutoffs for wastewater streams, above which steam stripping of wastewater streams would result in a level of control as stringent as the floor. This approach is similar to the hazardous organic NESHAP (HON) and allows for the control of those wastewater streams containing the most significant amount of HAP. The final standards require existing sources to control wastewater with the following characteristics at the point of determination (POD):

1. Streams having partially soluble HAP compound concentrations of 1,300 ppmw or greater and a total PMPU HAP load of 1 Mg/yr or greater;
2. Streams having a combined total HAP concentration of 5,200 ppmw or greater and a total PMPU load of 1 Mg/yr or greater;
3. Streams having a total HAP concentration of 10,000 ppmw with a total facility HAP load of 1 Mg/yr or greater; or

The final standards require that air emissions from wastewater collection systems be suppressed and that wastewater is treated. Compliance is demonstrated by one of the following methods:

1. Using an enhanced biotreatment system for soluble HAP;
2. Demonstrating removals achieving 99 percent by weight of partially soluble HAP compounds, and 90 percent by weight of soluble HAP compounds, from treatment systems; or
3. Demonstrating a removal of 95 percent by weight of total organic HAP from treatment systems.

For new sources, the MACT floor for wastewater is based on a facility that currently incinerates a significant percentage of wastewater containing HAP in an incinerator combusting a mixture of wastes. The final standards require the same applicability and control requirements described above for existing sources and an increased removal of solubles (from 90 to 99 percent) for streams having a soluble HAP concentration of 110,000 ppmw at any of the load criteria (1 Mg/yr total HAP from the PMPU, or facility).

A de minimis HAP concentration and flow rate exemption was added to today's final rule. Streams containing less than 5 ppmw of partially soluble and/or soluble HAP and a total yearly load of 0.05 kg/yr of partially soluble and/or soluble HAP are not considered wastewater, and thus, are exempted from the wastewater provisions in today's final rule.

G. Equipment Leaks

Today's final rule contains revisions to the proposed equipment leak requirements that were originally based on subpart H (of the HON rule). The final rule primarily contains changes to the standards for valves and connectors in gas/vapor service and light liquid service. The standards for valves in gas/vapor service and in light liquid service were changed as follows: the requirement to implement a quality improvement program and all references to § 63.175 have been removed; an allowance for monitoring every 2 years for those processes with less than 0.25 percent leaking valves has been added; an allowance for valve subgrouping was also added; the equation used to determine the percent of leaking valves in a process was changed to eliminate the optional credit for valves removed. Vc; and the rolling average of leaking valves was revised so that it is calculated as an average of the last 3 monitoring periods for annual or biannual monitoring programs. The monitoring schedule for connectors in gas/vapor service and light liquid service was revised to allow for decreased monitoring for those components with the lowest leak rates. For leak rates less than 0.25, the monitoring frequency for connectors is

now once every 8 years. Finally, the equipment leak provisions were removed from appendix GGGA to Section 63.1255.

H. Pollution Prevention Alternative

Today's final standards include a pollution prevention (P2) alternative standard that meets the MACT floor for existing sources and can be implemented in lieu of meeting the requirements for existing process vents, storage tanks, wastewater streams and equipment leaks. The P2 alternative only applies to existing sources and includes two options which are shown in Table 2. Under option 1, owners or operators can satisfy the requirements for all emission source types associated with each pharmaceutical manufacturing process unit (PMPU) by demonstrating that the production-indexed consumption of HAP has decreased by at least 75 percent from a baseline set no earlier than the 1987 calendar year. The production indexed HAP consumption factor is expressed as kg HAP consumed/kg product produced. Under the second P2 option, owners or operators must demonstrate at least a 50 percent reduction in the production indexed HAP consumption factor, plus an additional amount of reduction in HAP emissions through the use of add-on controls, such that the overall reduction in HAP emissions is at least 75 percent from the baseline period.

TABLE 2.—ALTERNATIVE P2 STANDARD

Option	Description of P2 option
1	Demonstrate at least a 75 percent reduction in the kg consumption/kg production factor from a baseline period.
2	Demonstrate at least a 50 percent reduction in the kg/kg factor, plus an additional reduction from add-on control equivalent to at least a 75 percent overall reduction in the kg/kg factor from baseline.

The following restrictions also apply to the pollution prevention standards in today's final rule. For any reduction in the production-indexed HAP consumption factor that is achieved by reducing a HAP that is also a VOC, an equivalent reduction in the production-indexed VOC consumption factor is required. For any reduction in the production-indexed HAP consumption factor that is achieved by reducing a HAP that is not a VOC, the production-indexed VOC consumption factor may not be increased. Also, the final rule allows owners or operators of PMPU's

that generate HAP emissions to qualify for the pollution prevention alternative, provided that the HAP emissions generated in the PMPU are reduced to the required levels for process vents, storage tanks, wastewater streams and equipment leaks specified in §§ 63.1252 through 63.1256 of today's final standards. The baseline production-indexed HAP and VOC consumption factors must be based on consumption and production values averaged over the time period from startup of the process until the present time (assuming the process has been in operation at least 1 full year), or the first 3 years of operation (beginning no earlier than 1987), whichever is the lesser time period. Processes that began operation after April 2, 1997 are not eligible for the P2 alternative.

Today's final standards also require owners and operators complying with the P2 standard to submit a P2 Demonstration Summary as part of the Precompliance Notification Report that describes how the P2 alternative will be applied at their facilities. The minimum data requirements for the P2 Demonstration Summary are listed in § 63.1257(f) of today's final rule.

I. Heat Exchange Provisions

Today's final standards for heat exchange systems are unchanged from proposal. Owners or operators must comply with the heat exchange provisions listed in the HON at § 63.104 with two exceptions: (1) the monitoring frequency shall be no less than quarterly, and (2) owners or operators of heat exchange systems that meet current good manufacturing practice (CGMP) requirements at 21 CFR part 211 may elect to use the physical integrity of the reactor as the surrogate indicator of heat exchange system around reactors.

J. Emissions Averaging Provisions

The emissions averaging provisions in today's final rule are unchanged from proposal. The final rule allows emissions averaging among process vents and among storage tanks at existing sources. Restrictions on the use of emissions averaging are listed in § 63.1252(d) of today's final rule and are essentially the same as those contained in the HON. The alternative standard (see following section K) is not to be included in the emissions averaging provisions and/or calculations.

K. Alternative Standard

For owners or operators of affected sources that treat emissions with an add-on control device, an alternative standard has been added under §§ 63.1253(d) (storage tanks) and

63.1254(c) (process vents). To comply with today's alternative standard(s), the control device must achieve an outlet, undiluted TOC concentration, as calibrated based on methane or the predominant HAP, of 20 ppmv or less and a hydrogen halide and halogen concentration of 20 ppmv or less, as demonstrated through the test methods and procedures in § 63.1257 and monitoring provisions in § 63.1258. The applicability level is the control unit and all sources vented to the control unit which is considered one regulated entity. Because the applicability of this standard is focused on the control device, this scenario is considered one regulated entity with regard to the number of violations that would apply if there is an exceedance of the 20 ppmv TOC and 20 ppmv hydrogen halide and halogen outlet concentration limit(s). The remaining process vents within a process not controlled by the alternative standard must be controlled to the percent reduction required by the standards.

L. Test Methods and Compliance Procedures

To determine compliance with the percent reduction requirement for pharmaceutical process vents, uncontrolled and controlled emissions from all process vents within the process shall be quantified to demonstrate the appropriate overall reduction requirements (93 percent or 98 percent). For process vents controlled by devices handling less than 10 tons/yr, the owner or operator can either test or use calculational methodologies to determine the uncontrolled and controlled emission rates from individual process vents. For process vents controlled by devices handling more than 10 tons/yr, tests are required to determine the reduction efficiency of each device. Performance test provisions require testing under worst-case conditions, but the final rule provides flexibility in determining these worst-case conditions. Control devices that have previously been tested under conditions required by this standard and condensers are exempt from emissions testing. Testing is not required for devices used to control emission streams from storage or wastewater sources exclusively. However, if testing is conducted, then the same methods apply.

M. Monitoring Requirements

Monitoring is required in the final rule to determine whether a source is in compliance on an ongoing basis. This monitoring is done either by continuously measuring emission

reductions directly or by continuously measuring a site-specific operating parameter, the value of which is established by the owner or operator during the initial compliance determination. The operating parameter value is defined as a single point at either a minimum or maximum value established for a control device that, if achieved on a daily average or block average by itself or in combination with one or more other operating parameter values, determines that an owner or operator is complying with the applicable operating limits. These parameters are required to be monitored at 15-minute intervals throughout the operation of the control device for devices controlling greater than 1 tons/yr. For devices controlling streams totaling less than 1 ton/yr, only a site-specific periodic verification that the devices are operating as designed is required to demonstrate continuous compliance. Owners and operators must determine the most appropriate method of verification and propose this method to the Agency for approval in the precompliance report, which is due 6 months prior to the compliance date of the standard. The monitoring requirements apply to all control devices, even those used exclusively for storage tanks or wastewater sources.

N. Recordkeeping and Reporting Requirements

Table 1 to subpart GGG was revised to clarify the specific requirements of the final rule and the referenced requirements in the General Provisions. A summary column describing the requirements of each part of the General Provisions has been added to Table 1 and additional comments address wording issues and exceptions to the General Provisions language.

V. Summary of Environmental, Energy, Cost, and Economic Impacts

These NESHAP would affect pharmaceutical production facilities that are major sources in themselves, or constitute a portion of a major source. There are 270 existing facilities manufacturing pharmaceuticals, 101 of which were assumed to be major sources for the purpose of developing these standards and calculating impacts. The expected rate of growth for the pharmaceutical industry is expected to be 2.4 percent per year through 1998.

A. Air Impacts

Today's final standards will reduce HAP emissions from existing sources by 22,000 Mg/yr (24,000 tons/yr) from the baseline level, a reduction of 65 percent from baseline, and 75 percent from

uncontrolled. These reductions also will occur if facilities elect to implement the alternative pollution prevention standard. Since many of the HAP emitted by the pharmaceutical industry are also VOC, today's final standards also will reduce VOC emissions.

B. Water and Solid Waste Impacts

Much of the steam stripping operations will result in recoverable material. However, the new source requirement for very rich, soluble HAP-containing wastewater is expected to generate solid waste. The EPA estimates that an average of 900 tons of solid waste per year per facility will be generated as a result of today's final standards. However, biological treatment is a possible means of compliance.

C. Energy Impacts

Today's final standards for the pharmaceuticals source category will require an additional energy usage of $2,400 \times 10^9$ British thermal units per year (Btu/yr).

D. Cost Impacts

The emission reductions required by this regulation can be achieved using one or more of several different techniques. To determine costs, certain control scenarios were assumed. The scenarios used in costing were judged to be the most feasible scenarios possible for meeting the requirements of the standards from a technical and cost standpoint. The total control cost includes the capital cost to install the control device, the costs involved in operating the control device, and costs associated with monitoring the device to ensure compliance. Monitoring costs include the cost to purchase and operate monitoring devices, as well as reporting and recordkeeping costs required to demonstrate compliance. Nationwide, the total annual cost of this standard to the industry for existing and new sources is approximately \$64 million and \$11 million, respectively (1998 dollars). To estimate these annual costs, capital costs were annualized over 10 years (with no delay for installation). (The annual costs presented in the preamble to the effluent limitations guidelines and standards are lower than the above costs because they are based on a longer annualization period. Costs for the effluent guidelines limitations and standards are annualized over 16 years (a 1-year installation period plus a 15-year project life). As a result, annual costs for existing sources in the preamble to the effluent limitations guidelines and standards (referred to as pretax annualized costs for the MACT

standards rule for all facilities) are reported at \$58.4 million.) The EPA believes that monitoring, reporting, and recordkeeping costs will be substantially reduced for those facilities that choose to comply with today's final rule through either the P2 option or the alternative standard of 20 ppm TOC and 20 ppm hydrogen halides and halogens.

E. Economic Impacts

The economic impact analysis of this standard shows that the estimated price increase from compliance with the recommended standards for process vents, storage tanks, and wastewater is 1.1 percent. Estimated reduction in market output is 1.9 percent.

No plant closures are expected from compliance with this set of alternatives. For more information, consult the economic impact report entitled "Economic Analysis of Air Pollution Regulation Regulations: Pharmaceutical Industry, August 1996."

VI. Major Comments and Changes to the Proposed Standards

In response to comments received on the proposed standards, changes have been made to the final standards. While some of these changes are clarifications designed to make EPA's intent clearer, many of them are significant changes to the requirements of the proposed standards. A summary of the substantive comments and/or changes made since proposal are described in the following sections. Detailed responses to public comments are included in the promulgation BID: Summary of Public Comments and Responses (Docket Item No. V-B-01). Additional information on the final standards is contained in the docket for this rulemaking (see ADDRESSES section of this preamble).

A. Applicability Provisions and Definitions

1. General Applicability: Definition of Pharmaceutical Product

At proposal, pharmaceutical product was defined as "any material described by the Standard Industrial Classification (SIC) Code 283, or any other fermentation, biological or natural extraction, or chemical synthesis product regulated by the Food and Drug Administration, including components (excluding excipients) of pharmaceutical formulations, or intermediates used in the production of a pharmaceutical product." Many commenters stated that, based on the proposed definition of pharmaceutical product, the general applicability of the standard is too broad, ambiguous, and

appears to overlap with other MACT standards that cover the chemical industry. Comments on the definition of pharmaceutical product focused on the following four areas: (1) the use of Standard Industrial Classification (SIC) codes, (2) the scope of products regulated by the FDA, (3) the meaning of the term "intermediates," and (4) the exclusion of specific products/processes.

Many commenters suggested that instead of referencing SIC code 283, the definition of pharmaceutical product should be narrowed to include only SIC codes 2833 and 2834 because facilities classified under these two SIC codes produce pharmaceuticals as their primary product, and were the source of information and data that formed the basis for the proposed rule. Two other commenters stated that the use of SIC codes or the new North American Industrial Classification System (NAICS) codes in defining pharmaceutical products was inappropriate because of the ambiguous nature of SIC and NAICS code applicability, and that instead of using SIC or NAICS codes, the definition should clearly describe the characteristics of the processes that are subject to the rule. One of the commenters also provided a recommended definition of pharmaceutical product based upon the definition of "drug product" already established by the Food and Drug Administration at 21 CFR 210.3 (Current Good Manufacturing Practice in Manufacturing, Processing, Packing, or Holding of Drugs).

Many commenters stated that the inclusion of the phrase, "regulated by the Food and Drug Administration" should be deleted from the definition of pharmaceutical products because many nondrug products such as cosmetics, food additives, plastics (food contact films) and dietary supplements, are regulated by the FDA and could be interpreted as being pharmaceutical products based on the proposed definition of pharmaceutical product. However, another commenter requested that EPA expand the definition of pharmaceutical products to include products regulated by the U.S. Department of Agriculture (USDA) as well as the FDA because the pharmaceutical industry produces animal biologics using the same processes used to produce human biologics, and therefore, HAP emitted from the production of animal biologics also should be regulated as part of the pharmaceutical NESHAP.

Many commenters stated that the use of the term "intermediates" in the

definition of pharmaceutical product was confusing and brings many unintended chemicals and processes into the pharmaceutical NESHAP; and therefore, the term should be either clarified or deleted from the definition of pharmaceutical product. One commenter stated that inclusion of the term, "intermediate," in the definition of pharmaceutical product makes it unclear how far back in the manufacturing chain a regulated entity must look when determining applicability. Many commenters stated that operations that manufacture raw materials (such as acids and solvents) that are not precursors to active ingredients in pharmaceutical products should not be regulated as part of the pharmaceutical NESHAP. Several commenters stated that the rule should only apply to processes which produce materials which exclusively or primarily are used to make drug active ingredients. Another commenter stated that EPA needs to clarify that intermediates already regulated by the HON are excluded from the pharmaceutical NESHAP.

Four commenters requested that EPA specifically exclude certain "nonpharmaceutical products" from the definition of pharmaceutical product. One commenter expressed concern that due to the inclusion of SIC code 2835 and the phrase, "regulated by the FDA," in the pharmaceutical product definition, equipment used to manufacture medical devices or substances used in the manufacture of medical devices could be subject to the pharmaceutical NESHAP instead of the miscellaneous organic NESHAP (MON). Therefore, the commenter requested that "medical devices" be specifically excluded from the definition of pharmaceutical product. A second commenter stated that the rule should not apply to specialty chemical manufacturers who occasionally engage in tolling a pharmaceutical intermediate. The commenter further stated that tolling of pharmaceutical intermediates could be driven overseas if U.S. specialty chemical operations require long lead times to identify MACT requirements, develop compliance systems, and amend title V requirements. A third commenter suggested that EPA exclude contract manufacturing from the pharmaceutical rule, and allow it to be covered by the MON. The fourth commenter requested that EPA specifically exclude "color additives and other inactive ingredients" from the definition of pharmaceutical product because the commenter interpreted EPA's exclusion

of excipients from the definition of pharmaceutical product to mean that the pharmaceutical NESHAP was only intended to cover active ingredients. The fourth commenter also provided a definition of excipients developed by the International Pharmaceutical Excipients Council.

The EPA considered all of the above comments and revised the definition of pharmaceutical product based on these and other considerations. The rationale for the revised definition is presented below.

The EPA agrees with the commenters that SIC codes may be ambiguous, were not developed with environmental regulation in mind, and may not reflect individual processes within a facility, and therefore, that the use of SIC codes to define pharmaceutical product may introduce unintended ambiguity into applicability determinations. Also, EPA believes that the use of the newer NAICS codes in defining applicability would result in the same problems with ambiguity and intended use. However, based on industry survey responses, EPA recognizes that facilities primarily claiming SIC codes 2833 and 2834 and/or NAICS codes 325411 and 325412 produce medicinals and pharmaceuticals as their primary products. Therefore, for the sake of clarity and consistent with the survey responses, EPA has retained the SIC Codes and added the NAICS codes in the definition of pharmaceutical product.

The EPA also agrees that the term "regulated by FDA" is also ambiguous. As noted by one commenter, in 21 CFR section 207.10(e), FDA exempts from registration and drug listing, "manufacturers of harmless inactive ingredients that are excipients, coloring, flavorings, emulsifiers, lubricants, preservatives, or solvents that become components of drugs, and who otherwise would not be required to register under this part." The EPA agrees that some of the processes used to manufacture such substances were not intended for coverage by this rule, and that was the intent of including the phrase "regulated by FDA" in the definition of pharmaceutical product in the proposed rule. Based on the comments, EPA believes that a less ambiguous way to define pharmaceutical product would be to base it on definitions contained in 21 CFR 210.3 (Current Good Manufacturing Practice in Manufacturing, Processing, or Holding of Drugs: General) for drug product or active ingredient. These definitions capture formulation products as well as pharmaceutical active ingredients and their precursors.

The proposed rule also was intended to cover intermediates that are manufactured prior to the final processing steps in which a compound becomes a pharmaceutical product. However, EPA recognizes the difficulty associated with defining an intermediate, especially the point at which a chemical becomes associated with pharmaceutical manufacturing. Because the pharmaceutical industry is characterized by numerous processes that may be conducted prior to the actual synthesis and isolation of active ingredients, EPA rejects the notion that, in order to simplify applicability, only those processes yielding active ingredients should be covered by the rule. Rather, EPA agrees with the suggestion that the rule be based on the primary intended use of the materials manufactured. By defining applicability according to primary use as pharmaceutical products or as their precursors, intermediates that are further processed to become active ingredients or drug components are covered. Therefore, in order to clarify the boundaries of the coverage of such precursors or intermediates, the definition of process was changed in the final rule to clarify that the provisions of the subpart apply to materials whose "primary use" is as a pharmaceutical product or precursor.

The "primary use" approach also addresses the comment regarding the exclusion of contract manufacturing from the pharmaceutical rule. Simply put, contract manufacturers will be subject to this standard during periods when they manufacture a pharmaceutical product. To simplify the determination of applicability for facilities that conduct contract manufacturing, some commenters suggested that the rule apply to processes whose primary product is a pharmaceutical active ingredient. The concept of primary product has been used in past regulations (e.g., HON, P&R IV, etc.) and was not considered in the proposed rule because there was a conscious effort to disengage production equipment from products manufactured. Because the standards are process-based, the intent of the proposal was to cover the production of pharmaceutical products, regardless of what pieces of equipment were used to manufacture them in the course of a year. Conceptually, the primary product definition makes sense for process lines that can be used to manufacture more than one product. In the pharmaceutical manufacturing industry, however, process equipment is reconfigured such that the same pieces of equipment may

not always be part of the same process line. Under the current concept of primary product that appears in other rules, it would still be difficult to determine the primary product of a nondedicated process, because not all the same equipment would be associated with the "process." However, by reverting back to the concept of "primary use," owners and operators can clearly delineate applicability based on the intended use of materials they manufacture, and not the equipment they are manufactured in.

The revised definition for pharmaceutical product in today's final rule borrows heavily from definitions contained in 21 CFR 210.3 (Current Good Manufacturing Practice in Manufacturing, Processing, or Holding of Drugs; General). The revised definition of pharmaceutical product and a new definition for primary use are shown below. Also, definitions for "active ingredient," "component," and "excipient" have been included in today's final rule.

Pharmaceutical product means: (1) any material described by the standard industrial classification (SIC) code 2833 or 2834; (2) any material whose manufacturing process is described by the north american industrial classification system (NAICS) code 325411 or 325412; (3) a finished dosage form of a drug, for example, a tablet, capsule, solution, etc., that contains an active ingredient generally, but not necessarily, in association with inactive ingredients; or (4) any component whose intended primary use is to furnish pharmacological activity or other direct effect in the diagnosis, cure, mitigation, treatment, or prevention of disease, or to affect the structure or any function of the body of man or other animals (the term does not include excipients, but includes drug components such as raw starting materials or precursors that undergo chemical change or processing before they become active ingredients).

Primary use means the single largest use of a material.

For reasons described above and in response to related comments, the applicability language in § 63.1250(a) also has been changed in the final rule such that the rule only applies to those pharmaceutical manufacturing operations that meet the following criteria: (1) they manufacture a pharmaceutical product, as defined in section 63.1251, (2) they are located at a plant site that is a major source as defined in section 112(a) of the Act, and (3) they process, use, or produce HAP. The third criterion was included in response to one commenter's concern

that, while the rule covers all processes at a facility which is determined to be major source, some processes at those major sources do not emit HAP. The commenter also stated that although this situation may not pose a significant compliance problem, the lack of an exclusion for these non-HAP emitting processes posed an unwarranted regulatory burden. The EPA agreed with the commenter, and modified the applicability of the rule as described above.

2. Definition of PMPU and Pharmaceutical Manufacturing Operations

The EPA received several comments on the proposed definitions of PMPU and pharmaceutical manufacturing operations. At proposal, PMPU was defined as "any processing equipment assembled to process materials and manufacture a pharmaceutical product and associated storage tanks, wastewater management units, or components such as pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems that are used in the manufacturing of a pharmaceutical product." Pharmaceutical manufacturing operations were defined to "include PMPU's and other processes and operations as well as associated equipment such as heat exchange systems that are located at a facility for the purpose of manufacturing pharmaceuticals."

One commenter stated that having both "pharmaceutical manufacturing operation" and PMPU in the proposed rule was confusing and redundant. The commenter stated that by having both terms, the rule implies that the definition of PMPU does not cover all of the equipment to be regulated by subpart GGG. The commenter further stated that the inclusion of the phrase "associated equipment" in the pharmaceutical manufacturing operations definition was unclear because the definition of PMPU already covers "associated" equipment. The commenter also stated that heat exchangers were given as an example of "associated equipment" under the definition of pharmaceutical manufacturing operation, but not included as an example in the definition of PMPU. For these reasons, the commenter suggested that the definition of pharmaceutical manufacturing operation be deleted entirely, and that heat exchangers be added to the list of examples of "associated equipment" in the PMPU definition.

Two commenters stated that wastewater management units should not be included in the definition of PMPU. One commenter stated that wastewater management units are not subject to the standard, but instead are used to comply with the standard. This commenter also pointed out that neither the HON's definition of chemical manufacturing process unit (CMPU) nor the Polymers and Resin I NESHAP definition of elastomer product process unit (EPPU) includes wastewater management units. The commenter further stated that including wastewater management units in the definition of PMPU could be interpreted to require new source MACT at an existing wastewater management unit if a new, major, dedicated PMPU is built that will contribute wastewaters to that unit. Another commenter stated that packaging operations (e.g., "placement of dose forms, such as tablets, into containers, and assembly, closure, and labeling of these containers") are not pharmaceutical manufacturing operations, and thus, should be explicitly excluded from the definition of pharmaceutical manufacturing operations.

Many commenters stated that the definition of PMPU should be modified to make it clear that a PMPU is a group of equipment. These commenters were concerned that, as written, the definition of PMPU could be interpreted to mean that an individual piece of equipment constitutes a PMPU, and thus, the addition of a single piece of equipment to an existing dedicated process line could trigger new source MACT.

Many commenters stated that a PMPU should be identified by its primary product and suggested adding language to the definition that makes it clear that PMPU's manufacture pharmaceutical products as their primary product.

After consideration of the above comments on the definitions of pharmaceutical manufacturing operations and PMPU, EPA has decided to retain both terms, but with some modifications. The terms "Pharmaceutical Manufacturing Operations" and "Pharmaceutical Manufacturing Process Unit (PMPU)" were not intended in the proposed rule to refer to the same sources entirely. While the term "Pharmaceutical Manufacturing Operations" is the broadest term used in the rule and covers all emission sources within a given facility that are the direct or indirect result of pharmaceutical manufacturing, the term "PMPU" was intended to encompass each process unit within the facility and its

associated equipment. Therefore, the pharmaceutical manufacturing operations encompass all PMPU's at a given facility as well as equipment that is not included in individual PMPU's. In the proposed rule, the PMPU was used exclusively to define new source applicability in § 63.1250(c). In today's final rule, PMPU's also have replaced "processes" in the pollution prevention standard, and therefore, PMPU's serve several functions in the final rule. The PMPU also serves as the basis of the wastewater cutoffs for the standard, at 1 Mg/yr applicability HAP load per PMPU. The EPA believes that the broader term for pharmaceutical manufacturing operations is necessary to include sources that cannot be associated with single PMPU's.

By including wastewater management units in the definition of PMPU at proposal, EPA intended that all wastewater streams and residuals would be considered part of the PMPU. The EPA reviewed the definition of process and PMPU for consistency with the HON and other MACT standards. Wastewater management units are subject to the standard, but manage wastewater from several PMPU. However, wastewater generated in a PMPU is not specifically defined as part of the PMPU, but rather can be associated with it. This convention is analogous to process vent emissions; although they are not specifically identified as part of the PMPU, a PMPU may generate process vent emissions. In deciding whether the PMPU has the potential to emit 10 or 25 tons of HAP, all emissions from all sources associated with the PMPU, including process vents and wastewater, must be considered. Therefore, the definition of PMPU was modified to not specify wastewater streams, residuals, and wastewater management units, as part of the PMPU.

Although EPA recognizes that rarely will one piece of equipment comprise a PMPU, the Agency disagrees with the commenters that a PMPU must always be defined as a group of equipment. The definition of PMPU in today's final rule, however, includes the term, "process" which is defined as a "logical grouping of processing equipment which collectively function to produce a pharmaceutical product" and "may consist of one or more unit operations." However, a PMPU is not always associated with specific groupings of equipment associated with a given process. (See also section VI.A.3 of this preamble and § 63.1252 of the final rule for a complete definition of process.)

In response to suggestions that EPA define a PMPU by its primary product, the EPA has included a primary use

concept in the definition of pharmaceutical product in the final rule as discussed previously in section VI.A.1, above. Based on the comments discussed above and related comments, the definitions of PMPU and pharmaceutical manufacturing operations in today's final rule are as follows:

Pharmaceutical manufacturing process unit (PMPU) means the process, as defined in this subpart, and any associated storage tanks, equipment identified in § 63.1252(f), and components such as pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems that are used in the manufacturing of a pharmaceutical product.

Pharmaceutical manufacturing operations means the facility-wide collection of PMPU's and any other equipment such as heat exchanger systems or cooling towers, that are not associated with an individual PMPU, but that are located at a facility for the purpose of manufacturing pharmaceutical products and are under common control.

3. Definition of Process

The EPA received a number of comments on the proposed definition of process. At proposal, process was defined as "a logical grouping of processing equipment which collectively function to produce a pharmaceutical product or isolated intermediate. A process may consist of one or more unit operations. For the purposes of this subpart, process includes all or a combination of reaction, recovery, separation, purification, or other activity, operation, manufacture, or treatment which are used to produce a product or isolated intermediate. The physical boundaries of a process are flexible, providing a process ends with a product or isolated intermediate, or with cessation of onsite processing. Nondedicated solvent recovery and nondedicated formulation operations are considered single processes that are used to recover or formulate numerous materials and/or products."

Many commenters requested that the definition of process be clarified to indicate that Quality Assurance and Quality Control (QA/QC) laboratories are not considered part of the process. These commenters were concerned that, although it may be clear that QA/QC labs are not "processing equipment" or "an activity or an operation used to produce a product," the words, "or

other activity, operation," may lead to confusion as to whether QA/QC labs are part of the process. The commenters suggested that EPA explicitly exclude QA/QC labs from the definition of process because QA/QC laboratories emit insignificant quantities of HAP, and therefore, time-consuming nonapplicability demonstrations could be avoided.

Several commenters recommended that EPA include storage tanks in the definition of process so that sources that choose to comply using the pollution prevention alternative are not exempted from the storage tank requirements in § 63.1252(b) of the proposed rule. The commenters stated that emissions from storage tanks may be significant, and that sources should be required to comply with the storage tank standards under all circumstances.

Many commenters requested that EPA modify the definition of process to clarify how the process vent provisions will apply to formulation facilities. These commenters were concerned that the use of the term "nondedicated" in reference to formulation facilities results in confusion as to how to apply the standard. The commenters pointed out that, unlike equipment used in pharmaceutical chemical synthesis facilities, equipment in a formulation facility are only used to formulate products, and therefore, formulation facilities are "dedicated" to formulation operations. However, the commenters also pointed out that the equipment at the formulation facility is used to produce many different products, and therefore, is "nondedicated." For these reasons, the commenters recommended that, for formulation operations, the term, "nondedicated," be applied to the equipment within the facility and not the facility itself. The commenters also requested that for formulation operations, EPA limit the definition of process to formulation activities *within a contiguous area* (such as a formulation building or a contiguous area within a multipurpose building in which formulation takes place). The commenters cited examples where separate formulation operations are located at the same plant site, but are physically separate, and thus would require separate emission control systems.

Another commenter was concerned that use of the term "nondedicated" could be interpreted as including solvent recovery or formulation operations that process small quantities of pharmaceutical-related materials, but whose primary use is for a process subject to another MACT rule. The commenter recommended that this issue

be resolved by (1) deleting the term "nondedicated" from the proposed definition of process, and (2) adding the phrase, "whose primary use is associated with the manufacture of pharmaceutical products" after the word "operations" in the last sentence of the proposed definition of process.

One commenter suggested that the phrase "or isolated intermediate" (used throughout the definition) be deleted because "processes produce products," but "portions of processes produce intermediates." The commenter further explained that although the product of one process may be used as a raw material in another process, the product serving as the raw material is not typically thought of as an intermediate.

The EPA has modified the definition of process in the final rule in response to the comments described above. The EPA agrees with the commenters that QA/QC laboratories are not part of the process, and the definition of process in the final rule excludes QA/QC laboratories.

To clarify EPA's intention that storage tanks be included as part of the pollution prevention alternative, and in response to the comments regarding the perceived exclusion of storage tanks from the P2 alternative, today's final rule includes storage tanks in the definition of PMPU and refers to PMPU's instead of "processes" in the pollution prevention provisions (see also section V.A.2 of this preamble—Definition of PMPU and Pharmaceutical Manufacturing Operations, and section VI.F—Pollution Prevention Alternative).

The EPA disagrees with the commenters who believe that the term, "nondedicated," as applied to formulation facilities, should be applied to the equipment within the facility and not to the facility itself. As explained in section VI.A.1 of this preamble, the pharmaceutical NESHAP regulates processes, not equipment, and the concept of primary use is applied to the pharmaceutical product, not to the equipment used to manufacture the product. However, today's final rule clarifies the intent of the proposed rule with regard to formulation and solvent recovery operations: those operations occurring within a contiguous area are to be considered as single processes, regardless of the final product of that formulation or recovery operation.

The EPA agrees with the suggestions provided by one commenter to delete all references to "isolated intermediate" and has incorporated these comments into the definition of process in the final rule. Also, the definition of pharmaceutical product in the final rule (see section VI.A.1—General

Applicability: Definition of Pharmaceutical Product) states that pharmaceutical product "includes drug components such as raw starting materials or precursors that undergo chemical change or processing before they become active ingredients." Therefore, drug components such as raw materials and precursors, which are themselves products of processes, are defined as products, rather than "intermediates," thus eliminating the need for the concept of "intermediates" (see also section VI.A.6—Definition of Isolated Intermediate).

For the reasons stated above, the definition of "process" in today's final rule is as follows:

Process means all equipment which collectively function to produce a pharmaceutical product. A process may consist of one or more unit operations. For the purposes of this subpart, process includes all or a combination of reaction, recovery, separation, purification, or other activity, operation, manufacture, or treatment which are used to produce a pharmaceutical product. Cleaning operations are considered part of the process. The holding of the pharmaceutical product in tanks or other holding equipment for more than 30 consecutive days, or transfer of the pharmaceutical product to containers for shipment, marks the end of a process, and the tanks are considered part of the PMPU that produced the stored material. When material from one unit operation is used as the feedstock for the production of two or more different pharmaceutical products, the unit operation is considered the endpoint of the process that produced the material, and the unit operations into which the material is routed mark the beginning of the other processes. Nondedicated recovery devices located within a contiguous area within the affected source are considered single processes. Nondedicated formulation operations occurring within a contiguous area are considered single processes. Quality Assurance and Quality Control laboratories are not considered part of any process.

The revised definition of process provided above clarifies when a process ends. The EPA selected 30 days as a reasonable period of time, beyond which, if a material has not been further processed or reacted, a process can be considered complete for the purposes of this subpart. Applicability determinations and control requirements would be more difficult without such a time frame. The definition of process is a key element of the rule because most of the

applicability and compliance determinations are based on the process, as a unit. Because of concerns that processes could be artificially divided into smaller portions of processes in order to meet the 2,000 lb/yr limit, EPA limited the number of processes per facility that can comply with the 2,000 lb/yr limit to seven per year. However, EPA also added that processes with very low emissions (less than 100 lb/yr HAP, uncontrolled) would not be counted as part of the seven process limit. These limitations and exemptions are currently under review and may be revised at a later time.

4. Definition of Process Vent

The EPA received several comments on the proposed definition of process vent, primarily related to the following two issues: (1) the establishment of a de minimis level or cutoff below which controls would not be required and (2) how the rule applies to process vents that are manifolded together. At proposal, process vent was defined as "a vent from a unit operation through which a HAP-containing gas stream is, or has the potential to be, released to the atmosphere. Examples of process vents include, but are not limited to, vents on condensers used for product recovery, bottom receivers, surge control vessels, reactors, filters, centrifuges, and process tanks. Process vents do not include vents on storage tanks regulated under § 63.1252(b), vents on wastewater emission sources regulated under § 63.1252(d), or pieces of equipment regulated under § 63.1252(e)."

Many commenters requested that EPA modify the definition of process vent to exempt any vent that contains a gas stream with less than 50 ppmv HAP averaged over the unit operation. These commenters cited 40 CFR part 63.113(g) of the HON, which exempts vents with less than 50 ppmv from monitoring or any other provisions of sections 63.114 through 63.118. One of these commenters provided a cost analysis, using EPA's recently released biofilter cost model, for an existing fermentation operation, the emissions from which typically contain less than 50 ppmv methanol. The cost effectiveness of biofiltration for this scenario was estimated to be \$27,000/Mg, with a percent control of 60 percent (i.e., from 50 ppmv to 20 ppmv, EPA's established practical limit of control), a value that the commenter stated was "clearly unreasonable." The commenter further stated that for fermenter and fermenter preparation vents, a cutoff of 100 to 200 ppmv could be justified (as opposed to 50 ppmv) and requested that EPA consider such a cutoff.

Two commenters stated that the proposed definition of process vent implies that every process vent is connected to a single piece of unit operations equipment, which often is not the case at multiproduct, multibatch facilities. One of the commenters suggested that the definition include a statement indicating that "multiproduct facilities having multiple production trains may have large numbers of process vents, which could discharge directly to the atmosphere; discharge through a dedicated control equipment; or which can be manifolded from many process units into a common header leading to a common control equipment." The other commenter stated that compliance with the process vent standards would be more difficult and expensive if the definition of process vent included the combined or commingled vents from several pieces of unit operations equipment, rather than just one piece of equipment. This commenter also questioned if standard industrial hygiene type exhaust pickups and general room ventilation exhaust points are meant to be included in the definition of process vents. The commenter pointed out that those types of systems may exhaust through a stack, which may be interpreted as being an emission point, but noted that some states do not consider these emission points for the purposes of Title V permits. The commenter stated that, if these emission points were not considered in developing the MACT floors, they should not be included as process vents, and requested clarification from EPA.

As explained in section VI.C of this preamble, the definition of process vent in today's final rule includes a de minimis cutoff for uncontrolled and undiluted vent streams of 50 ppmv HAP. Regarding multiple vents (from the same process) being manifolded together into a common header, the Agency considers the common header in this rule to be a single process vent, and has revised the definition of process vent to reflect this view. In response to one commenter's question about whether or not industrial hygiene exhausts and general room ventilation exhausts would meet the definition of process vent, these sources would not be considered process vents if they are under the 50 ppmv HAP cutoff. Based on the changes discussed above, the definition of process vent in the final rule is as follows:

Process vent means a vent from a unit operation or vents from multiple unit operations within a process that are manifolded together into a common header, through which a HAP-

containing gas stream is, or has the potential to be, released to the atmosphere. Examples of process vents include, but are not limited to, vents on condensers used for product recovery, bottom receivers, surge control vessels, reactors, filters, centrifuges, and process tanks. Emission streams that are undiluted and uncontrolled containing less than 50 ppmv HAP, as determined through process knowledge, test data using Methods 18 of 40 CFR part 60, appendix A, or any other test method that has been validated according to the procedures in Method 301 or appendix A of this part, are not considered process vents. Process vents do not include vents on storage tanks regulated under § 63.1253, vents on wastewater emission sources regulated under § 63.1256, or pieces of equipment regulated under § 63.1255.

5. Definition of Process Condenser

The EPA received numerous comments on the proposed definition of process condenser. These comments primarily dealt with the dual role of condensers as both process condensers and air pollution control devices, and in which category recirculating condensation systems should be classified. At proposal, process condenser was defined as "a condenser whose primary purpose is to recover material as an integral part of a unit operation. The condenser must support vapor-to-liquid phase change for periods of source equipment operation that are above the boiling or bubble point of substances(s). Examples of process condensers include distillation condensers, reflux condensers, process condensers in line prior to the vacuum source, and process condensers used in stripping or flashing operations."

Many commenters took issue with the phrase "integral part of a unit operation" and "process condensers in line prior to the vacuum source." These commenters cited examples where it could be concluded that a condenser is not integral to a process because it does not perform any necessary process function. The commenters also stated that if there were two condensers in series prior to a vacuum source, and the first condenser effected a phase change, then the second condenser should be considered an air pollution control device, even though it is located "prior to a vacuum source."

Three commenters suggested that the intended use be considered when determining whether a condenser is a process condenser or an air pollution control device. Two of these commenters stated that, "if the condenser is acting as a control unit, so

that its presence is intended to prevent chemicals from reaching the uncontrolled environment; if the materials collected are led towards management and disposal systems; and if the collected materials are in no way used, reused, nor sold for fuel value, then the condenser is serving as a control unit regardless of the fact that the bubble point is met or not at the source." The other commenter disagreed with the condition that to be a process condenser, the condenser must support a vapor-to-liquid phase change for periods of source equipment operation that are above the boiling or bubble point of the substance(s). This commenter pointed out that under the proposed definition, the same condenser will sometimes be a process condenser and sometimes an air pollution control device, and tracking when the condenser switches from one to the other would be burdensome. Therefore, the commenter recommended that the facility which operates the condenser (and knows the process best) be allowed to determine whether it is a process condenser or an air pollution control device.

Another commenter suggested that EPA distinguish between process condensers and condensers serving as air pollution control devices by including a specific temperature limit (i.e., 20°C) such that condensers that lower the temperature of the exit gas stream to a colder temperature would be considered air pollution control devices instead of process condensers.

Many commenters requested that EPA specifically address process condensers that belong to recirculating drying systems. Most commenters stated that condensers in recirculating drying systems should be considered pollution control devices. However, one commenter stated that recirculating condensation systems should be defined as neither process condensers nor air pollution control devices, but defined separately, with "management systems to account for their pollution prevention effects to be worked out at a later date for the promulgated standard." The major concern of all of these commenters, however, was that under the proposed definition, the recirculating condensation systems would be considered process condensers, and thus, the uncontrolled emissions and resulting emissions reductions would be considerably lower than if the condenser was considered an air pollution control device. Even though these systems generate considerably lower emissions as compared to once-through systems, owners and operators could not take

advantage of the high emission reductions in the process vent standard that requires 93 percent control or 2,000 lb/yr after control from the entire process.

The EPA disagrees with the suggestion that the owner or operator should be allowed to determine whether a condenser is a process condenser or an air pollution control device based on "intended use." Because one of the formats of the process vent standard requires that a reduction from uncontrolled emissions be applied across a process (i.e., achieve a 93 percent reduction in emissions from the process), EPA is concerned about the opportunity for crediting reductions achieved by condensing boiling streams on other sources in the process. In fact, in requesting data from industry (which was later used to set the MACT floor), the MACT partnership specifically confirmed from responders that the data reported was based on the definition of process condenser as described in the proposed rule. Therefore, EPA has retained the intent of the proposed definition, but has made clarifying changes. The definition of process condenser in the final rule is as follows:

Process condenser means a condenser whose primary purpose is to recover material as an integral part of a process. The condenser must support a vapor-to-liquid phase change for periods of source equipment operation that are at or above the boiling or bubble point of substance(s) at the liquid surface. Examples of process condensers include distillation condensers, reflux condensers, and condensers used in stripping or flashing operations. In a series of condensers, all condensers up to and including the first condenser with an exit gas temperature below the boiling or bubble point of the substance(s) at the liquid surface are considered to be process condensers. All condensers in line prior to a vacuum source are included in this definition.

The EPA also rejects the suggestion to use 20°C as a temperature cutoff in determining whether a condenser is a process condenser or an air pollution control device. Because of the differences in the chemical and physical properties of substances used in the manufacture of pharmaceutical products, one temperature cannot be used to represent all processes; in some cases, a condenser operating at 20°C could actually be an air pollution control device and not a process condenser. Finally, EPA disagrees with the requests that condensers in recirculating drying systems be considered as pollution control devices or defined separately. Emissions from

the recirculating drying systems only occur during periodic depressurizations, and these uncontrolled emissions may be low enough such that the process may be under the 2,000 lb/yr cutoff. Processes with recirculating drying systems also may be able to take advantage of the pollution prevention standard.

6. Definition of Isolated Intermediate

At proposal, isolated intermediate was defined as "any intermediate that is removed from the process equipment for temporary or permanent storage or transferred to shipping containers." The concept of an intermediate was also included in the proposed definition of pharmaceutical product which contained a reference to "intermediates used in the production of pharmaceutical products (see section VI.A.1 of this preamble). One commenter on the proposed rule stated that EPA should not use or define the term, "isolated intermediate," in the pharmaceutical NESHAP. (The same commenter also stated that the term, "isolated intermediate," should be removed from the definition of process [see also section VI.A.3—Definition of Process].) The commenter pointed out that the term is "peculiar to the Toxic Substances Control Act (TSCA), where a long history of interpretation has been developed," and if EPA uses this same term in the pharmaceutical NESHAP, "inconsistencies in interpretation will be inevitable."

Many other commenters suggested that the definition of isolated intermediate be modified so that the physical removal of an intermediate from the process equipment is not required as a condition for meeting the definition of isolated intermediate. These commenters pointed out that, in some cases, an intermediate may remain in a storage tank or other retention equipment prior to being used in a different process step, and without ever being removed from either set of process equipment. The commenters further stated that the fact that retention tanks are used as separation lines as an alternative to storing the material in drums or separate containers "is a matter of convenience." Therefore, the commenters recommended the following modified definition of isolated intermediate:

Isolated intermediate means any intermediate that is stored in storage tanks or other holding equipment for later use, or that is transferred to containers for shipment or storage.

After considering these and other related comments (see section VI.A.3 of this preamble), EPA has deleted the

term, "isolated intermediate," from the definition of process to avoid confusion and emphasize that products are the end result of processes. Therefore, isolated intermediates are no longer defined or referred to in today's final rule. Also, the definition of process in the final rule incorporates the commenters' suggestion above regarding the fact that physical removal of the "product" from the process equipment should not be a required condition for meeting the definition of "product." In addition, the definition of process in the final rule specifies when a process "ends."

7. Research and Development Facilities

Many commenters expressed support for the proposed definition of research and development facilities because it draws a clear distinction between activities related to manufacturing (which are covered under today's final pharmaceutical production NESHAP) and those related to research and development (which are not covered by today's final rule). The commenters further stated that such a clear distinction is necessary because pharmaceutical manufacturing operations and research and development activities are often located at the same site. Many commenters requested that EPA make it clear that pilot plants are not subject to the proposed pharmaceutical standards if they meet the definition of "research and development facility." In determining whether an operation of facility constitutes a research and development facility, it is EPA's intention that owners and operators and implementing agencies should refer to the definition of research and development facility which appears in Section 112(c)(7) of the Clean Air Act, rather than relying on existing company designations or facility names. For example, if a pilot plant is collocated with pharmaceutical manufacturing operations that are subject to this subpart, and the pilot plant meets the criteria outlined in the definition of research and development facility, then the pilot plant would not be subject to this subpart.

Two commenters were concerned that the term "de minimis," as it is used in the definition of research and development facility, was not defined in the proposed rule. One of the commenters stated that, without clarification (of de minimis) the definition will lead to exhaustive and potentially contentious negotiations between sources and regulatory agencies, and may result in inequitable exemption decisions at similar facilities located in different jurisdictions. The

commenter also pointed out that some States have included more specific provisions, such as limiting the number of products produced, establishing maximum daily emission rates, or requiring segregation of the R&D activities from the production areas. Although EPA recognizes the concerns of the commenters, today's final rule does not establish a de minimis level for research and development facilities. The EPA does not have sufficient data to establish a de minimis level, and therefore, such determinations will have to be made by the applicable permitting authorities. Also, EPA is in the process of collecting background information on the various segments of research and development facilities nationwide and is considering development of a NESHAP for one or more of these segments in the future.

8. Consistency With Other Rules

The EPA received numerous comments regarding the potential for overlapping regulations. Commenters were strongly opposed to the idea of the same sources being subject to multiple regulations and asked EPA to clarify which regulations applied to pharmaceutical manufacturing operations.

The EPA has identified several potential areas in which today's final standards, the RCRA standards (subpart AA or CC), and/or subpart I of 40 CFR part 63 could apply to the same situation. To avoid inconsistent requirements, the EPA has tried to make the regulatory language as specific as possible as to which regulation(s) the owner or operator must comply with to satisfy the requirements of all regulatory programs. For example, if an air pollution control device is subject to the pharmaceuticals production NESHAP and RCRA requirements, § 63.1250(h)(2) of today's final rule states that the owner or operator may elect to comply with the monitoring, recordkeeping and reporting requirements of either rule, as long as they identify which rule's requirements they have selected in the Notification of Compliance Status report. However, if the owner/operator elects to go with RCRA requirements, there may be additional (minimal) reporting requirements.

Similarly, §§ 63.1250(h)(1), (3) and (h)(4) address overlap with other MACT standards, subpart Kb (the NSPS for organic liquid storage tanks), and subpart I (the negotiated regulation for equipment leaks). After the compliance date for today's final rule for pharmaceuticals production, an affected source subject to Subpart I is required to comply only with the provisions of

today's final rule. For sources subject to other MACT standards and NSPS Kb, reporting requirements may be streamlined to the extent that the rules are consistent.

B. Storage Tank Provisions

The proposed and final standards for storage tanks with capacities greater than 20,000 gallons (i.e., reduce HAP emissions by at least 95 percent) represent a control level that is beyond the MACT floor. In deciding to go beyond the MACT floor, EPA determined that floating roof technology was less costly than condensers (which represented the MACT floor technology and 90 percent control) and resulted in greater emission reductions. Many commenters stated that the proposed requirements for storage tanks with capacities greater than or equal to 20,000 gallons represent an increase in stringency (beyond the MACT floor) without precedent. These commenters suggested that 90 percent control of HAP emissions was more appropriate and consistent with the storage tank provisions of similar rules (e.g., the HON and 40 CFR 60, Subpart Kb). The commenters also questioned EPA's assumption that floating roof technology could and would be used to reduce emissions from storage tanks, given the general lack of storage tanks at pharmaceutical manufacturing facilities that are fitted with floating roofs and the use of horizontal storage tanks (which cannot be fitted with floating roofs) at some facilities.

In addition, commenters requested that EPA include in the final rule: (1) an exemption for storage tanks emitting less than 500 lb/yr of HAP (an alternative that was considered and then dropped during the regulatory review process), and (2) a provision that allows vapor balancing systems as an alternative means of control. The commenters reviewed what was gained by dropping the 500 lb/yr cutoff alternative and concluded that in the top 12 percent of storage tanks, the associated emissions that would not be controlled under the 500 lb/yr cutoff alternative are 2,710 lb/yr (or 150 lb/yr/tank). Based on an annualized cost of \$142,500/yr (to control the 2,710 lb/yr), the commenters determined that the cost effectiveness of controlling the emissions from storage tanks with emissions less than 500 lb/yr would be \$115,913/Mg. The commenters further stated that the EPA has authority under the law to establish de minimis provisions for exceptions from statutory directives when the benefits of regulation are significantly outweighed by the associated costs and other

burdens, and the 500 lb/yr cutoff alternative meets the criteria for establishing such a de minimis provision, especially considering the fact that the proposed storage tank provisions represent a control level above the MACT floor.

Many commenters stated that the rule should specify that vapor balancing systems meet the requirements of the storage tank provisions. The commenters stated that vapor balancing systems are effective, relatively easy to use, capable of achieving control efficiencies as high as 90 to 98 percent, and are accepted under other rules (both NSPS and NESHAP), and therefore, should be accepted in the pharmaceutical NESHAP. One commenter also pointed out that, when vapor balancing is used (i.e., the storage tank vapor space is routed to the truck), the source of pollution is the vapor content of the truck; however, when the storage tank is vented to a control device, there are two sources of pollution: the HAP vapor from the truck and secondary pollutants from the control device. The same commenter recommended that the State of New Jersey requirements for vapor control (7:27-16.4 VOC Transfer Operations, Other Than Gasoline) be incorporated into the storage tank provisions.

In response to the comments on the proposed storage tank provisions, today's final rule does not include provisions for vapor balancing of storage tanks. However, this issue will be addressed in the Organic Liquids distribution MACT standard. The MACT floor for storage tanks was determined to be 90 percent control of HAP from storage tanks and did not cover tank truck vapor. The EPA also considered the commenters' request for a 500 lb/yr cutoff, but rejected it because a sufficient number of small storage tanks in service at pharmaceutical manufacturing facilities are controlled, and the 500 lb/yr cutoff represents an alternative that is less stringent than the MACT floor, and thus, is not acceptable. The control level for storage tanks with capacities greater than or equal to 20,000 gallons in the final rule is the same as proposed level (i.e., 95 percent). As explained in the Basis and Purpose Document (see Docket A-96-03, Item No. III-B-01), EPA chose 95 percent control (as opposed to the MACT floor) for storage tanks greater than 20,000 gallons because floating roof technology has been demonstrated to achieve 95 percent control and is considerably less expensive than other technologies. Although floating roofs currently may not be in use on storage tanks in the pharmaceutical industry, EPA is not

aware of any technical obstacles to their use, except in the case of horizontal tanks. Also, owners or operators still have the option of using add-on controls instead of floating roofs.

C. Process Vent Provisions

The EPA received numerous comments on the proposed standards for process vents. Comments focused on the following areas: (1) establishment of a concentration-based applicability cutoff, (2) implementation of the 98 percent control requirement, (3) new source MACT for process vents, and (4) compliance periods.

1. Applicability Cutoff

Many commenters suggested that EPA establish a concentration threshold below which an emission stream would not be considered a process vent, and thus would be exempt from further applicability determinations, control or monitoring requirements. The commenters recommended a de minimis concentration of 50 ppmv or 50 ppmw for process vents.

After consideration of the above recommendations and comments related to the alternative standard (see section VI.G of this preamble), EPA decided to establish a de minimis cutoff for process vents equal to 50 ppmv HAP, based on uncontrolled, undiluted emissions. The de minimis cutoff is incorporated into the definition of process vent, which states that uncontrolled, undiluted emission streams containing less than 50 ppmv HAP are not considered process vents.

2. Implementation of the 98 Percent Control Requirement

Today's final rule requires facilities to apply an equation in § 63.1254(a)(3) to determine if emissions from the process vent must be controlled by 98 percent as opposed to 93 percent. The applicability equation uses two variables, vent flow and yearly uncontrolled HAP emissions, to calculate a flow rate. The calculated flow rate is then compared to the process vent's actual flow rate, and if the actual flow rate is less than or equal to the calculated flow rate, the process vent requires 98 percent control. A number of commenters believe that the 98 percent control applicability equation should be deleted because it will create a significant recordkeeping burden, will be practically impossible to implement, and will significantly hamper operational flexibility.

The major concern noted by the commenters was that the applicability equation, though fairly straight-forward for dedicated single-product processes,

is extremely difficult if not impossible to apply to multipurpose nondedicated processes. The commenters stated that, because nondedicated processes use individual pieces of equipment to make numerous products over the course of a year, the emission stream characteristics of the associated process vents will change depending on the product being manufactured, and thus, the recordkeeping requirements for a single process vent would be burdensome. The commenters also pointed out that a facility may have 200 to 300 individual process vents.

Another concern raised by the commenters was that a slight variance from forecasted production could result in a process vent previously required to control emissions by 93 percent to become subject to the 98 percent control requirement, and the affected facility would not have sufficient lead time to upgrade their control equipment from 93 to 98 percent. The commenters were concerned that such uncertainties will hamper operational flexibility because facilities will be forced to impose limitations on production to ensure that they will not trigger 98 percent control. The commenters also stated that applying the applicability equation to manifolded vents would further complicate matters because more sources emitted through the same vent will result in greater variability of vent stream characteristics.

The commenters also requested that if EPA retains the 98 percent control requirement for existing process vents in the final rule, that § 63.1252(c)(4) in the proposed rule be revised to clearly describe how to apply the 98 percent control applicability equation. Commenters noted that using the past actual annual HAP emissions versus projected annual HAP emissions in the applicability equation is an issue because the production of many products varies from year to year, and historical and forecasted annual HAP emission estimates may be very different. The commenters also were concerned that the proposed rule did not clearly establish how to determine the process vent's actual flow rate, which will be compared to the applicability equation's calculated flow rate. Finally, the commenters suggested that EPA specify that the applicability equation applies to individual pieces of equipment in a formulation facility. The commenters were concerned with how the applicability equation would be applied to nondedicated formulation facilities. The commenters pointed out that nondedicated formulation facilities often use multiple pieces of the same equipment to perform one operation

(e.g., six tray dryers), and not all of these pieces of equipment will be used to produce every product in the formulation facility (i.e., not all trays of the dryer are always used).

After considering the comments above, EPA decided to retain the 98 percent control requirement for existing process vents that meet the applicability criteria. (For those process vents already controlled to 93 percent prior to April 2, 1997, no additional control is necessary.) The applicability equation applies to individual process vents within a process; however today's final rule considers manifolded process vents within each process to constitute a single process vent. With the exception of formulation operations and recovery devices, the definition of process is based on the product manufactured, not the equipment used to manufacture it. Therefore, the determination of which vents require control to the 98 percent level for nondedicated process vents should be straightforward; namely, owners and operators need to anticipate the total uncontrolled HAP emissions per year from each vent from each process, and the average flow rate of the vent. The total uncontrolled emissions should be based on the potential number of batches per year that the facility can run for each process. Based on this projection, the owner or operator can decide whether to install or use an existing 98 percent control device or limit the number of batches to stay below the applicability threshold. Today's final rule also requires facilities to keep track of the number of batches of products they make each year to show that their number of batches is less than the number needed to trigger 98 percent.

In response to the commenters' request, the average flow rate has been clarified in the final rule to mean the weighted average flow rate of the emission events contributing to the process vent. For solvent recovery or formulation operations, the definition of process in today's final rule has been clarified to include all operations within a contiguous area; therefore, for these operations, a single process may be associated with several products. Like other processes, the application of the 98 percent control applicability equation should be based on individual process vents or manifolded vents. Thus, if each piece of equipment that is located at a formulation facility, considering processes by contiguous areas, has a separate vent, then the applicability equation is applied to each vent separately; however, if the vents from each piece of equipment are manifolded together, then they are

treated as one process vent and the equation is applied to the aggregated flow.

As part of the rationale for retaining the 98 percent requirement, EPA notes that this level of control is imposed only on vents that have the potential to emit 25 tons/yr or more, on an uncontrolled basis. Secondly, the applicability equation is indexed on cost-effectiveness. Streams that are too dilute for cost effective control would not, per the equation, be required to be controlled. Third, process vents already controlled to levels of 93 percent or greater prior to April 2, 1997, would be grandfathered and not required to increase controls to 98 percent. The EPA believes that after these considerations are made, only very large streams that are cost effective to control to 98 percent will trigger the 98 percent control requirement.

3. New Source MACT for Process Vents

At proposal, new source MACT for process vents was set at 98 percent control for process vents with uncontrolled emissions greater than or equal to 400 lb/yr. The rationale for the 400 lb/yr cutoff (uncontrolled) was that it represented the smallest controlled process considered to be a similar source. Many commenters stated that the standard for new process vents should include a 2,000 lb/yr controlled emissions compliance alternative, because it is unreasonable and unwarranted to require vents with low HAP emissions to achieve 98 percent control. The commenters agreed with EPA's conclusion that 98 percent control represents the best controls in practice for certain sources; however, the commenters believe that the applicability cutoff for new source MACT for process vents is legally flawed because the cutoff did not consider two of the four process types in the industry (fermentation and extraction). The commenters also stated that the process on which the 400 lb/yr cutoff is based is not representative of the industry's processes because the process emits primarily one HAP (methanol) and is controlled by a dedicated scrubber and appears to be only a portion of a process based on the EPA's definition of process in the proposed rule. Citing other rules that set new source MACT as the average level of control achieved by sources using new source MACT control technology, the commenters performed an analysis of the MACT floor data base and determined that the average level of controlled emissions from the best-performing 12 plants was approximately 1,400 lb/yr. The commenters excluded

two processes from their analysis that had uncontrolled emissions greater than 1 million lb/yr because these processes are much larger than the typical pharmaceutical manufacturing process and would skew the data. According to the commenters, if these two (larger) processes are included in the analysis, the average level of controlled emissions from the best-performing 12 plants would equal 6,400 lb/yr.

The EPA has reviewed the data used to set the MACT floor for process vents at new sources. Based on this review, the EPA has concluded that the data support the level of the proposed standard for new sources.

The EPA based the 98 percent control requirement on the 26 processes (under the proposed definition) at 7 plants in the data base that achieve or exceed this control level. These processes include dedicated and nondedicated formulation, chemical synthesis, and fermentation processes. The EPA has concluded that these processes are representative of the control challenges faced by the industry despite the fact that the data do not include an extraction process. The EPA has further concluded that the 98 percent control level achieved at the best controlled processes is applicable to all four process types.

The EPA does not believe that the variation in exhaust gas characteristics among the four types of processes in the industry is significant enough to warrant individual evaluation of achievable control levels. In any case, extraction processes are typically solvent-intensive, resulting in the highest average HAP concentration of the four types of processes. High HAP concentrations are conducive to high percent control levels.

The commenters suggested that the EPA adopt a 2,000 lb/yr actual emissions compliance alternative to account for variability within the industry. The commenters based this alternative on the average level of controlled emissions from 24 of the processes in the data base that achieve 98 percent control or greater. (The commenters excluded the other two processes in the data base because they were atypically large.) The EPA does not believe that the analysis presented by the commenters is an appropriate basis for a new source compliance alternative. First, while the commenters imply that the alternative is needed to account for variability in the control level that is achievable by the wide variety of pharmaceutical processes, the analysis does not address control efficiency at all. Because the commenters evaluated only processes that achieve at least 98

percent control, only variability in uncontrolled emissions truly figures into the analysis. Second, the alternative standard suggested by the commenters is not equivalent to the percent reduction standard and would result in greater total emissions of HAP from the industry. Finally, the EPA analyses cited as precedents address different situations and provide scant support for the commenters' analysis.

While the EPA has rejected the alternative standard suggested by the commenters, the final rule provides a 20 ppmv outlet concentration alternative to 98 percent control for process vents at new sources. This alternative addresses the primary impediment to achieving 98 percent control, i.e., low inlet concentration gas streams.

The EPA has based the proposed applicability cutoff for new source process vents on the smallest representative process in the data base that achieves 98 percent control or greater. The commenters questioned whether this operation actually qualifies as an entire process under the proposed definition of "process" and whether the operation is representative of processes in the industry. Although the EPA continues to believe that the formulation operation selected as the basis for the proposed cutoff is a process under the proposed definition, it may not qualify as a process under the final definition because nondedicated formulation operations occurring within a contiguous area are now considered single processes. Consequently, the EPA has reanalyzed the data based on the final definition of "process." In light of the new analysis, it is no longer relevant whether the process upon which the proposed cutoff was based is representative of the industry.

The new analysis was similar to the original analysis. After revising the data base of well-controlled sources to conform to the final definition of "process," the EPA identified the smallest processes that are controlled by 98 percent or more. As in the previous analysis, formulation and chemical synthesis processes are the smallest processes. Two chemical synthesis processes, one emitting 85 lb/yr uncontrolled and another emitting 304 lb/yr uncontrolled, were identified as achieving control of 98 percent. Although these processes were reported as individual (single) processes, EPA summed emissions from both, since the product name listed for each was very similar, and EPA wanted to be conservative. The total uncontrolled emissions from the sum of these two processes is 390 lb/yr, which is the same level of emissions as the proposed

cutoff. Therefore, the EPA has established in the final rule the new source process applicability cutoff of 400 lb/yr of uncontrolled HAP.

Despite the fact that no fermentation or extraction processes were among the smallest well-controlled processes, the EPA believes that the analysis is representative of the control capabilities of all process types. As discussed previously, the EPA has concluded that the gas streams generated by the four types of processes in this industry are similar enough that an individual analysis by process type is not warranted. Fermentation and extraction processes are typically much larger than formulation and chemical synthesis processes. Thus, the absence of fermentation and extraction processes in the list of the smallest well-controlled processes is the result of this size differential, not a difference in the control level that can be achieved. In fact, the average uncontrolled HAP concentration of fermentation and extraction process vents exceeds those of formulation and chemical synthesis process vents. Higher concentrations are more conducive to high percent control.

Practically speaking, new source MACT will apply to low HAP-emitting processes only at new facilities, where the minimum control requirement is 98 percent for all processes. (At existing sites, new source MACT will apply only to dedicated new PMPUs with a potential to emit 10 tons/yr of a single HAP or 25 tons/yr of all HAP combined.) Thus, sources will not be faced with the need to install 98 percent-efficient controls dedicated to small new processes, which could be very costly for a small amount of emission reduction. Instead, the EPA expects that sources will achieve the new source MACT standard using large control devices that treat multiple manifolded gas streams. Because this is the control situation most typically found for the small processes in EPA's data base of well-controlled sources, the EPA believes that the final rule's applicability cutoff accurately reflects what will be achievable at new sources in this industry.

4. Compliance Period

Several commenters stated that they support the proposed annual compliance period for process vents and noted the inconsistency with the daily continuous compliance provisions. If the final rule includes a shorter compliance period, the commenters have stated that either the standards must be adjusted to avoid an increase in stringency above the floor or a demonstration must be made that the

increased stringency (i.e., going above the floor) is justified according to the requirements of the Clean Air Act. The EPA, in the final rule, has clarified the compliance period of the standard to be either on a 24-hour basis, or on a batch cycle or "block" basis. Additionally, compliance periods for emissions averaging are on a quarterly basis, while compliance periods for the P2 standard are on an annual basis, as calculated on a monthly or 10-batch rolling average. An annual compliance period for the standards was determined by EPA to be too difficult to implement. The annual compliance period implies that owners and operators could control processes to varying degrees during the course of a year, as long as the yearly percent reduction target could be met. While this format would offer flexibility to owners and operators that would want to change control strategies to accommodate production scheduling and operational changes, EPA believes that the demonstration of compliance over such an extended time period would result in delayed compliance determinations and the possibility for extended periods of violations. The EPA notes that the final rule offers some flexibility to owners and operators in addressing variability within the processes themselves by providing numerous compliance options. Therefore, EPA does not believe that by clarifying the final rule to reflect a daily compliance period, the stringency of the standard was increased.

D. Wastewater Provisions

1. MACT Floor

The EPA estimated that 101 pharmaceuticals facilities would be major sources subject to the rule. The MACT floor is based on available information about control levels at all of these sources. One commenter asserted that the applicability section of the proposed rule covers more types of facilities than those in the original MACT floor analysis, and thus the MACT floor should be recalculated. The EPA did not recalculate the MACT floor because, as noted in section VI.A.1 of this preamble, the applicability in the final rule is clarified to eliminate the likelihood that the rule would apply to types of facilities other than those represented in the 101 in the initial analysis.

2. DeMinimis Cutoff in Definition of Wastewater

The final rule includes de minimis cutoffs for determining if a water stream is wastewater. One commenter requested that HAP concentration and

flow rate cutoffs be added, as in the HON. The commenter contended that the burden to characterize streams with very small HAP loadings would be excessive without such cutoffs. For the final rule, EPA revised the definition of wastewater to include de minimis HAP cutoffs of 5 ppmw and 0.05 kg/yr, which is consistent with the HON. Although the owner or operator is given some flexibility in the methods used to characterize these streams, the Administrator may require the owner or operator to validate this information through sampling and analysis or other appropriate means.

3. Cross-References to the HON

The wastewater provisions in the proposed rule contained numerous cross-references to the wastewater provisions in §§ 63.132 through 63.148 of the HON. Many commenters requested that the applicable provisions from the HON be included in the final rule because the extensive cross-referencing made the proposed rule hard to understand and would likely be hard to implement. Some comments also noted that many cross references were not consistent with the most current version of the HON. To address these concerns, EPA decided to incorporate the applicable provisions from the HON in the final rule. These provisions include the emission suppression requirements from §§ 63.133 through 63.137, the control device requirements from § 63.139, the general procedures for determining compliance from § 63.145, many of the compliance options for treatment systems and control devices from §§ 63.138 and 63.145 (additional information about compliance options is provided in section VI.D.4), the inspection and monitoring provisions from §§ 63.143 and 63.148, the requirements for certain liquid streams in open systems within a PMPU from § 63.149, and the tables that are referenced from all of these sections.

4. Additional Treatment Options for Demonstrating Compliance

Several commenters requested that the rule include additional treatment options for demonstrating compliance. Some comments requested that all of the options in the HON be added to the rule. Other comments specifically requested that the rule allow treatment in RCRA units and that a concentration limit be developed for soluble HAP. In response to the comments, EPA included additional treatment options in the final rule that are consistent with the standards. All of the RCRA options from the HON were added because

treatment in these units will meet the standards. A concentration option of 520 ppmw for soluble HAP was added because this level is consistent with the 90 percent reduction requirement for soluble HAP.

Four options from the HON were not added to the final rule. The design steam stripper option was not added because the available stripper designs that were used to estimate impacts have not been tested in the field. The percent mass removal/destruction option based on fraction removed (Fr) values was not added because the Fr values would be identical to the percent reduction option. The 1 Mg/yr option was not added because any facility with wastewater containing a load of total partially soluble and/or soluble HAP less than 1 Mg/yr would have no affected wastewater streams. The required mass removal options were not included because wastewater discharges from batch pharmaceutical processes are much more variable than those from continuous SOCOMI processes; therefore, the required mass removal is likely to be different at any given time, and is not likely to correlate well with the actual mass removal in the treatment unit at a given time.

5. General Compliance Procedures

The proposed rule cross-referenced the specific procedures in the HON for determining compliance with the standards when using various types of treatment units (i.e., noncombustion, combustion, or biological), but the general procedures used to determine compliance that are applicable to any performance test (or design evaluation) were not cross-referenced. Several commenters requested that these general procedures also be included in the rule. Specifically, the commenters requested that the rule specify that: (1) performance tests be conducted under representative operating conditions, (2) treatment may be conducted using a series of treatment devices, (3) treatment may be conducted offsite or in onsite treatment units not owned by the source, and (4) any biological units in compliance with the standards need not be covered and vented. Commenters also requested that the rule include: (1) procedures for the preparation and installation of testing equipment and (2) requirements for compounds that do not need to be considered in performance tests or design evaluations. The final rule includes all of these provisions; however, clarification of two points is provided below.

Clarification of the provision for testing under representative operating conditions is provided because the

commenters misinterpreted the meaning of this provision in the HON. This provision requires a facility to conduct a single performance test under representative operating conditions. If actual operating conditions vary, such that there are multiple representative operating conditions, the owner or operator must supplement the test results with modeling and/or engineering assessments to demonstrate that the standard is met over the entire range of operating conditions. Testing under representative operating conditions does not mean the standard is an average that may be exceeded under certain conditions.

A clarification of the provision that allows open biological treatment units to be uncovered is also provided. Except for enhanced biological treatment units used to treat certain wastewater streams, an owner or operator demonstrates compliance for open biological treatment units by conducting a performance test and following the procedures in appendix C of part 63. If these procedures show the fraction biodegraded meets or exceeds the applicable control level, the treatment unit need not be covered. An enhanced biological treatment unit that is used to treat wastewater containing soluble HAP and less than 50 ppmw of partially soluble HAP is exempt from the performance test requirements and need not be covered.

6. Default Biodegradation Rate for Methanol

One commenter urged EPA to revise the default methanol biodegradation rate constant that is used in Table 37 of subpart G of the HON because it cannot be scientifically supported with available data. Based on data from a number of studies, the commenter concluded that the rate in the proposed rule is low by a factor of 10 to 100. The commenter noted that the geometric mean of the rates from the available studies was 8.6 L/g MLVSS-hr, and the lower bound of the 90 percent confidence interval was 3.5 L/g MLVSS-hr. The commenter also cited data in the scientific literature that show hexachlorobenzene, chlorobenzene, nitrobenzene, and biphenol (other list 1 compounds) to be less biodegradable than methanol, whereas Table 37 of the HON shows methanol to be less biodegradable than the other compounds.

The data submitted by the commenter show considerable variability, but they also show the higher biodegradation rate constants tend to correspond with higher methanol concentrations in the wastewater. The EPA concluded that a

methanol biodegradation rate constant higher than the default is appropriate for pharmaceutical facilities that are direct dischargers because they tend to treat wastewater with higher methanol concentrations than indirect dischargers or facilities in other industries. The final rule allows these facilities to use a methanol biodegradation rate constant of 3.5 L/g MLVSS-hr, the lower bound of the 90 percent confidence interval; this is a conservative value that minimizes the likelihood that the biodegradation rate will be overestimated.

7. Maintenance Wastewater

The wastewater provisions apply to both process and maintenance wastewater. Commenters requested that maintenance wastewater provisions be less stringent than those for process wastewater, as in the HON. According to one commenter, the same conveyance systems and controls are not practical or cost effective for maintenance wastewater. The EPA did not change the maintenance wastewater provisions because maintenance wastewater is a potential source of significant emissions. Furthermore, procedures to estimate maintenance wastewater characteristics should be the same as those for most process wastewater because both consist of batch discharges.

8. Control Requirements for Wastewater Tanks

The rule requires that wastewater tanks have either a fixed roof or additional controls, depending on tank design and/or operating characteristics. A number of commenters expressed confusion over these provisions and offered their interpretations or preferences to clarify the provisions. Under the rule, wastewater tanks that have a capacity of less than 75 m³, a capacity between 75 and 151 m³ that contain material with a vapor pressure less than 13.1 kPa, or a capacity greater than or equal to 151 m³ that contain material with a vapor pressure less than 5.2 kPa are required to have a fixed roof unless the wastewater in the tank is heated, treated with an exothermic reaction, or sparged. If any of these three conditions is not satisfied, the owner or operator must install a floating roof or use control techniques that achieve equivalent emission reductions. These provisions match those in the HON. The proposed rule also included an additional provision that caused the confusion for the commenters. The intent of the provision was to exempt wastewater tanks from the additional control provisions, but not the fixed roof

requirement, if the owner or operator demonstrates that the total partially soluble and/or soluble HAP emissions from a fixed roof tank that is heated, treated with an exothermic reaction, or sparged are less than 5 percent higher than the emissions would be in the absence of these activities. This additional provision is rewritten in the final rule to improve clarity.

9. Compliance Requirements for Biological Treatment Units

The EPA received numerous comments on the initial compliance procedures and monitoring requirements for enhanced biological treatment units. Some commenters requested that compliance demonstrations be based on parameters related to soluble HAP removal, not general compliance with all NPDES permit limits; the commenters suggested monitoring for surrogate parameters like COD, BOD, and/or TSS. Some commenters stated that EPA's definition of significant noncompliance in appendix A of 40 CFR 123.45 should be used as the basis for defining acceptable enhanced biotreatment operation for both POTW's and direct dischargers. One commenter stated that compliance provisions should focus on the indirect discharger, not the POTW; for example, the indirect discharger should be in compliance with the pretreatment provisions in 40 CFR 403 and 439. Several commenters stated that the provision allowing discharge to an enhanced biological treatment unit at a POTW only if the indirect discharger demonstrates that less than 5 percent of the soluble HAP in the wastewater from the POD's is emitted from the municipal sewer system is unnecessary and burdensome.

The compliance procedures for biological treatment units are rewritten in the final rule for clarity, simplification, and as noted above, to eliminate cross-references to the HON. Because the changes are extensive, all of the compliance procedures and monitoring requirements for biological treatment units, not just the issues raised by the commenters, are summarized below.

Onsite or offsite biological treatment units may be used to comply with the standards for soluble HAP, and onsite biological treatment units may be used to comply with the standard for total soluble and partially soluble HAP. The compliance requirements vary depending on the concentration of partially soluble HAP in the wastewater, whether the treatment unit is open or closed, whether the biological treatment

unit is enhanced, and whether the wastewater is treated onsite or offsite.

If wastewater containing soluble HAP and any concentration of partially soluble HAP is treated in an open, onsite biological treatment unit that does not meet the definition of an enhanced biological treatment unit, the owner or operator must conduct an initial performance test to determine the fraction biodegraded (f_{bio}) in the unit; the f_{bio} for the compounds may be calculated using any of the procedures in appendix C to 40 CFR part 63, except procedure 3 (inlet and outlet concentration measurements). As noted in section VI.D.5, the treatment unit may remain open if the fraction biodegraded meets or exceeds the level of the standard. For a closed biological treatment system, the owner or operator may follow the same procedure; alternatively, the owner or operator of a closed biological treatment unit may conduct either a design evaluation using procedure 3 or a performance test to determine the mass reduction of soluble HAP (or total soluble and partially soluble HAP) in the unit. Under the proposed rule, the owner or operator of open and closed biological treatment units would have been required to specify appropriate monitoring parameters in the Notification of Compliance Status Report, subject to approval of the permitting authority. Based on consideration of the comments, EPA decided to specify continuous monitoring requirements for TSS and BOD in the final rule. To be in compliance, the TSS and BOD concentrations must not exceed the TSS and BOD criteria in 40 CFR 439 more frequently than, or by amounts greater than, allowed by the noncompliance reporting criteria in 40 CFR 123.45, appendix A.

If wastewater containing soluble HAP and more than 50 ppbw of partially soluble HAP is treated in an onsite, enhanced biological treatment system, the compliance procedures are the same as described above, except that the f_{bio} for soluble compounds may be calculated using either the default for first order biodegradation constants or any of the procedures in appendix C of 40 CFR part 63. As noted in section VI.D.6, the owner or operator may use a biodegradation rate constant of 3.5 L/g MLVSS-hr for methanol. The owner or operator also must monitor for TSS and BOD as described above. In addition, to demonstrate continuous compliance with the 1 kg/m³ level in the definition of enhanced biological treatment unit, the owner or operator must monitor the concentration of MLVSS.

If wastewater containing soluble HAP and less than 50 ppmw of partially soluble HAP is treated in an onsite, enhanced biological treatment unit, the owner or operator is exempt from the performance test requirement for the treatment unit. Monitoring for TSS, BOD, and biomass is required as described above.

Wastewater containing soluble HAP and less than 50 ppmw of partially soluble HAP may be transferred for offsite treatment or onsite treatment in a unit not owned by the source. Before the source may transfer such wastewater, the transferee must submit to EPA written certification that the transferee will manage and treat any affected wastewater or residuals in accordance with the requirements of the rule. The initial compliance procedures and monitoring requirements to show continuous compliance are the same as for similar onsite units treating the same wastewater. In response to the comments, EPA reexamined emissions from municipal sewer systems and determined that the major potential for emissions is from the headworks. Thus, if the wastewater is discharged to a POTW, the final rule requires the owner or operator to demonstrate that less than 5 percent of HAPs are lost. However, if the headworks at the POTW are covered, no such demonstration is required. The same emission suppression requirements apply if the wastewater is discharged for treatment in any other type of offsite treatment unit or onsite treatment unit not owned by the source.

10. Control Requirements for Individual Drain Systems

The rule requires emission suppression and control measures for all individual drain systems that manage affected wastewater or residuals onsite. Several commenters requested that EPA exempt individual drain systems from these requirements, and allow them to be vented to the atmosphere, if they either manage wastewater that contains only soluble HAP compounds and de minimis amounts of partially soluble HAP compounds or demonstrate that emissions from the individual drain system and associated wastewater tanks are less than 5 percent of the loading in the affected wastewater. The commenter's rationale for this request was that: (1) a PhRMA study of municipal sewers, which was submitted to EPA, showed the potential emissions from individual drain systems that manage wastewater containing primarily soluble HAP are low; (2) the control is not cost effective; and (3) emissions of combustion products

would increase because facilities would meet the requirement with steam strippers or incinerators.

For wastewater, EPA determined that MACT consists of hard-piping to a steam stripper. Because this configuration was determined to be a reasonable MACT floor requirement, any alternative must achieve equivalent emission reductions. As in the HON, a covered individual drain system is considered equivalent to hard piping. Thus, EPA did not change the requirements for individual drain systems in the final rule.

E. Equipment Leak Provisions

Several commenters raised a number of issues related to equipment leaks and EPA's proposed requirements for the LDAR program developed for the pharmaceutical manufacturing industry. The proposed general equipment leak requirements were based on subpart H (from the HON rule) and included slight changes tailored for the pharmaceutical industry. Some commenters were confused by the requirements and others were concerned that some facilities will be subject to two different LDAR programs because some pharmaceutical manufacturing operations are already subject to subpart I (which requires compliance with subpart H of the HON for components at pharmaceutical production processes that use carbon tetrachloride or methylene chloride). Today's final rule clarifies EPA's intent that affected sources that are subject to today's final rule and subpart I of 40 CFR part 63 will no longer be required to comply with subpart I after the compliance dates for today's final rule. Many commenters argued that EPA is bound by the subpart I regulatory negotiation and therefore, is not allowed to expand the LDAR requirements to include any HAP other than carbon tetrachloride and methylene chloride. The Clean Air Act requires that EPA regulate all major sources of HAP. The regulatory negotiations conducted in the development of subpart I included only a certain fraction of components from the industry because that was the extent of information that EPA had at the time the negotiations were conducted. The Agency does not agree that the negotiated rule for equipment leaks precludes further regulation of equipment leaks for pharmaceutical manufacturing operations.

Some of the changes and assumptions made in estimating the uncontrolled emissions for the industry used in determining the proposed LDAR requirements were questioned by the commenters. A group of commenters

disapproved of the Agency's revised method to estimate uncontrolled emissions using the uncontrolled SOCM average emission factors. The commenters argued that none of the studies used in developing the SOCM emission factors involved pharmaceutical manufacturing operations.

Commenters also questioned EPA's assumptions and data used in some of the LDAR cost calculations. In general, commenters stated that the actual cost-effectiveness value associated with the proposed LDAR program was much higher than EPA's estimate due to overestimated emission reductions and underestimated costs. In response to these comments, the Agency reviewed its cost analysis and recalculated the cost effectiveness of several LDAR programs. The most acceptable program, in terms of cost effectiveness, is based on requirements similar to those of other recent regulations for similar manufacturing industries and the provisions developed for the SOCM Consolidated Air Rule (CAR) which is yet to be proposed. The most significant difference between the CAR equipment leaks subpart and the proposed equipment leaks provisions is the innovative approach taken in the CAR to monitoring valves and connectors for leaks.

The CAR program significantly reduces the amount of burden associated with monitoring these types of equipment for leaks without increasing the emissions of regulated pollutants to the environment. In calculating the impacts of requiring an LDAR program meeting the requirements of the CAR, EPA calculated monitoring costs based on established guidance and calculated uncontrolled emissions using initial leak frequencies reported from the industry. The details of this analysis are included in the project docket (A-96-03) as Item No. IV-B-5. The EPA, in reassessing industry leak data, addressed many of the concerns of the commenters relative to the inclusion or exclusion of specific data.

Using as a starting point leak data that was confirmed as initial survey data by PhRMA, EPA reviewed the data base and further defined the pool of data. Some data from PhRMA's compilation was revised to reflect reported leak definitions, also, some data was excluded based on the facility's explanation of frequency of monitoring and calculated leak rates and the conclusion that the leak rates did not indeed reflect initial monitoring data. The resulting initial leak rate data was

1.45 percent for valves, 6.88 percent for pumps, and 1.5 percent for connectors.

The subsequent leak rates are a critical parameter in calculating the overall cost effectiveness of any LDAR program. Limited data were available to determine the leak rates at pharmaceutical manufacturing frequencies after the application of LDAR. Therefore, EPA assumed that the equipment leak frequency occurrence rate after implementation of LDAR was equal to the performance levels required in the draft CAR, that repairs were 100 percent effective, and that there were no recurrences of leaks. For the CAR rule, where several performance levels and corresponding monitoring schedules are available, occurrence rates were based on the best performance levels and longest monitoring intervals available. For flanges and valves, this performance level is 0.25 percent leakers. The corresponding monitoring interval for flanges is once every 8 years; for valves, it is once every 2 years. For light liquid pumps there is no performance level specified, therefore it was assumed that the leak occurrence rate was equal to 50 percent of the initial leak frequency. Subsequent leak frequencies for the revised EPA analysis were estimated to be 0.25 percent for valves, 3.44 percent for pumps, and 0.25 percent for connectors.

Emission reductions for the program were estimated to be the difference between the uncontrolled emission rate, as calculated using the mass emission rate, in kg/hr-source, calculated from the Average Leak Rate (ALR) equations and initial leak data, and the controlled emission rate, calculated using the ALR equations and assumed subsequent leak frequencies. The controlled emission rate was based on one-half of the occurrence rate. This assumption was necessary to account for the average leak frequency over the entire monitoring cycle.

The EPA, in the revised analysis, also addressed concerns of the commenters related to specific cost items. In general, capital and annualized costs for monitoring instruments, data management systems, and actual monitoring are not unreasonable and fall within the costs quoted by vendors and LDAR contract services, based on recent inquiries by EPA. Therefore, EPA did not revise significantly any cost items used in the model facility analysis.

Based on this revised analysis, the Agency found that the cost effectiveness of the CAR LDAR program was approximately \$1000/Mg HAP for a model pharmaceutical facility.

After consideration of the above comments, EPA revised the proposed leak detection and repair provisions to be consistent with the Agency's recent efforts toward consolidation of equipment leak requirements for air regulations, the increased focus on processes with leaking components, and a general lessening of monitoring and recordkeeping and reporting requirements for processes with nonleaking components. Most of the changes to the proposed rule involve the requirements for valves and connectors in gas/vapor service and in light liquid service. These changes include the addition of 2 year monitoring (instead of once every four quarters) for those processes with less than 0.25 percent leaking valves; extending the monitoring period for connectors with low leak rates; provisions for valve subgrouping; deletion of the quality improvement program implementation requirement and the credit for valves removed; and revisions to the calculations for determining the percentage of leaking valves. The Agency believes that the equipment leak requirements included in today's final rule greatly reduce the administrative burden associated with LDAR recordkeeping and reporting, and at the same time, result in a significant reduction in emissions.

F. Pollution Prevention Alternative

Many comments were received on the proposed pollution prevention alternative, primarily relating to the proposed restrictions to the use of this alternative and the lack of specific recordkeeping and reporting requirements. The following sections summarize the commenters' concerns regarding the proposed pollution prevention alternative, EPA's response to these concerns, and subsequent changes made in today's final rule.

1. Restrictions on the Pollution Prevention (P2) Alternative

At proposal, processes emitting HAP that are generated in the process were perceived by commenters as being prohibited from using the pollution prevention alternative. Many commenters stated that processes that generate HAP should be allowed to use the P2 alternative as long as these quantities were included in the analysis. These commenters also recommended that the rule provide a de minimis HAP generation cutoff below which facilities could use the P2 alternative. The EPA agrees with the commenters that PMPU's that generate HAP emissions should be eligible for the P2 standard, provided the HAP emissions generated

by the PMPU are controlled to the required levels. Therefore, today's final rule clarifies that processes that generate HAP can use the P2 alternative, provided that the HAP emissions generated in the PMPU are controlled to the required levels for storage tanks, process vents, wastewater and equipment leaks in §§ 63.1253 through 63.1256 of today's final, and the remaining requirements of the P2 alternative are met. Because the final rule requires sources to account for HAP generated in the process, a de minimis HAP generation cutoff is not needed.

No increase in the production-indexed VOC consumption factor was allowed as the result of compliance with the P2 alternative at proposal. One commenter stated that the stipulation in the P2 alternative that does not allow for an increase in the VOC consumption factor as a result of a decrease in use of HAP is unfair. According to the commenter, this restriction will eliminate many solvent replacement projects. The example that the commenter used was a 100 percent reduction in the use of methylene chloride (a non-VOC HAP) by replacing this solvent with a water-based solvent that contains trace amounts of some VOC. This trace amount of VOC would result in an increase in the VOC consumption factor. The commenter further explained that HAP solvents generally tend to have more aggressive solvent properties than non-HAP, and thus, when replacing a HAP solvent with a non-HAP solvent, the result is generally lower yields, more extensive processing, or higher quantities of solvent used. The commenter suggested that an upper limit could be set on the increase in VOC consumption, and gave a "conservative" limit of two times the baseline production-indexed VOC consumption factor.

In developing the pollution prevention alternative, EPA's intention was to recognize those processes that have reduced or will reduce the amount of HAP solvents used in the manufacture of pharmaceutical products as viable alternatives to add-on controls. By preventing affected sources from increasing the production-indexed VOC consumption factor, EPA intended to prevent solvent substitutions that merely swapped HAP for VOC. After reviewing the proposed pollution prevention standards in light of commenters concerns, EPA realized that the proposed standards gave an unfair advantage to affected sources that use VOC-HAP solvents as opposed to non-VOC HAP solvents. As proposed, the rule did not allow affected sources using non-VOC HAP solvents to switch to

low-VOC solvents and still qualify under the pollution prevention alternative because of the automatic increase in the production-indexed VOC consumption factor. However, affected sources that use VOC-HAP solvents could switch to low-VOC solvents as long as the production-indexed VOC consumption factor did not increase. The EPA's intention in the final rule is that pollution prevention be accomplished through reductions in solvent usage as opposed to solvent substitution. However, the EPA realized that the proposed rule gave an unfair advantage to sources using VOC-HAP solvents as opposed to non-HAP solvents because the rule did not allow affected sources using non-VOC HAP solvents to switch to VOC solvents and still qualify under the pollution prevention alternative. After consideration of this concern, EPA changed the final rule to require an equivalent reduction in the production-indexed VOC consumption factor, if the reduction in the production-indexed HAP consumption factor is achieved by reducing a HAP that is also a VOC. If the reduction in the production-indexed HAP consumption factor is achieved by reducing HAP that is not VOC, the consumption-indexed VOC factor may not be increased. In making these changes to the final rule, EPA essentially eliminated the possibility of receiving credit, through the pollution prevention alternative, for substituting VOC for HAP.

For example, a given PMPU has established its baseline production-indexed consumption factors of 10 kg/kg HAP and 20 kg/kg VOC. The 10 kg/kg HAP factor is made up of 4 kg/kg methanol and 6 kg/kg methylene chloride. The 20 kg/kg VOC factor is made up of 16 kg/kg ethanol and 4 kg/kg methanol. In order to comply with the P2 alternative, the owner/operator would be required to reduce their 10 kg/kg HAP factor to 2.5 kg/kg. This could be accomplished in a number of ways. Even if all the methanol were eliminated, a reduction of 3.5 kg/kg methylene chloride would still be required to yield 2.5 kg/kg. In this case, the production-indexed VOC consumption factor would also be decreased by the 4 kg/kg MeOH to 16 kg/kg VOC; however, no additional reductions of the ethanol would be required.

Today's final rule also changes the time period over which the baseline production-indexed HAP and VOC consumption factors are determined. At proposal, baseline production indexed consumption factors were determined based on the average values for the first

full year of operation (or the first year for which data are available). The final rule requires that the baseline production-indexed HAP and VOC consumption factors be determined based on consumption and production values that are averaged over the time period from startup of the process until the present time (assuming the process has been in operation at least 1 full year), or the first 3 years of operation, whichever is the lesser time period. The changes to the baseline averaging period were made to ensure the baseline production indexed HAP consumption factor reflected normal production.

Another restriction on the pollution prevention alternative that many commenters wanted removed was the exclusion of control devices that recycle material back to the process. A number of commenters stated that the proposed restrictions on the P2 alternative would exclude multiproduct (nondedicated) processes due to strict FDA and quality control restrictions on cross-contamination, which oppose attempts to reduce the amount of solvent consumed per kilogram of product. For this reason, the commenters suggested that the P2 alternative be modified to give multiple-product facilities greater opportunity to make use of this alternative. The specific modification suggested by the commenters includes allowing solvent that is "returned to the economy" to be considered as an alternative for multiproduct processes. The commenters noted that, for implementation purposes, the interested party (first user of the solvent) would need to demonstrate that the required fraction of solvent was transferred to another (second) user *as a raw material*, to be used *as is*, so that the second user will purchase that much less solvent. Under this approach, the consumption of HAP would be equivalent to the amount purchased minus the amount sold. Similarly, two commenters suggested that the P2 alternative should be revised to allow credit for in-process recycling in the calculation of HAP reduction from a process. Although EPA recognizes that multiple-product facilities may not be able to take advantage of the pollution prevention alternative, the type of program whereby one entity certifies the nature and amount of the recovered solvent usage by another entity would be difficult and burdensome to implement, and would require tracking and verifying the usage of the recovered solvent at the second entity. Also, when the recovered solvent is sold to the second entity, the first entity does not achieve any real emission reduction (i.e., reduction in

solvent usage), but instead, takes credit for the assumed emission reduction that would occur at the second entity. Also, the second entity may not be a pharmaceutical manufacturing facility which would result in emission reductions being moved across source categories. For these reasons, the final rule does not allow credit for sale of recovered solvents in the P2 standard. Also, EPA disagrees with the commenters that suggest credits be given for in-process recycling because giving a source "credit" for in-process recycling would result in "double-counting" of the emission reduction. By recycling solvents, the owner or operator already has reduced the amount of solvent entering the process (i.e., the more that is recycled, the less that is purchased), so further credits due to recycling are not necessary. For the reasons given above, the restrictions on solvent recycling in the proposed rule remain unchanged in today's final rule.

2. P2 Demonstration Summary

The proposed rule in § 63.1255(a)(4) would have required sources that comply with the P2 alternative to maintain records of rolling average values of kg HAP/kg production and kg VOC/kg production. The proposed rule also specified how production-indexed HAP and VOC consumption factors should be calculated (i.e., by dividing annual consumption of total HAP or VOC by the annual production rate, per process) but did not require the owner or operator to explain how the reductions in production-indexed HAP consumption factors are achieved. Several commenters stated that EPA should develop data requirements necessary to substantiate compliance with the pollution prevention alternative. Two commenters suggested that the final rule require facilities to submit a "P2 Demonstration Summary" that briefly describes the pollution prevention methods that were used to achieve the reduction in HAP consumption. The commenters stated that information on the facility's P2 activities was necessary to verify that (1) the HAP consumption data are directly related, on a per process basis, to each process that is complying with the P2 alternative; and (2) the reduction in HAP consumption was achieved via pollution prevention methods that meet the Agency's definition of pollution prevention. These commenters also noted that, in order to provide adequate incentive for facilities to choose the pollution prevention alternative, the EPA should ensure that data requirements are reasonable and protect confidential chemical formulation data.

In response to the above comments, today's final rule requires owners and operators seeking to comply with the P2 alternative to submit a P2 Demonstration Summary that describes how the P2 alternative will be applied at their facilities. The P2 Demonstration Summary must be included in the facility's Precompliance Report, which is submitted 6 months prior to the compliance date. The minimum requirements of the P2 Demonstration Summary are listed in § 63.1257(f) of today's final rule. These data requirements include descriptions of how each facility measures and records HAP consumption and pharmaceutical product production on a daily, monthly, and annual basis, and appropriate documentation such as operator log sheets, copies of daily, monthly, and annual inventories of materials and products, shipment and purchase records, tank-specific charts for converting tank-level measurements to volume (e.g., gallons) of HAP or product, and temperature/density charts for converting tank volume measurements into weight measurements. Also, if a facility complying with the P2 standard uses the same HAP in more than one process, the owner or operator will be required to modify existing methods of tracking HAP consumption at the plant, if necessary, to ensure that HAP consumption can be measured for each PMPU, as opposed to facility-wide.

G. Alternative Standard

Commenters requested that EPA consider an alternative standard for facilities that treat HAP emissions with add-on control devices. Industry commenters stated that an alternative standard would be especially useful for facilities that use a common control device to treat aggregated emission streams. The commenters further stated the use of common dedicated control systems should be encouraged rather than discouraged for the following reasons: (1) the use of common controls will ultimately result in a greater emission reduction because processes that are not required to reduce emissions under the rule would be controlled as well; (2) the use of common controls may facilitate the streamlining of monitoring, performance testing, and recordkeeping requirements and as a result reduce the resource burdens on both industry and the enforcement agencies; (3) the use of common controls may make it easier to assure and assess compliance; and (4) common controls may ultimately be more energy-efficient and result in lower emissions of secondary pollutants

since fewer control devices will be employed.

The Agency agrees with the commenters and decided for the above reasons to include an alternative standard for storage tanks and process vents that are equipped with add-on control devices in §§ 63.1253(d) and 63.1254(c), respectively. The Agency also agrees with the commenters' belief that there will be a number of facilities and State regulators that will benefit from a regulatory alternative that encourages aggregating and treating emissions with a state-of-the-art common control device. The alternative standard included in the final rule can be applied to individual process vents or storage tanks that have emissions that are controlled with add-on control devices or to storage tanks and/or process vents that are manifolded together prior to treatment in an end-of-line control device (or series of devices). The control device (or last control device in a series) must achieve an outlet, undiluted TOC concentration of 20 ppmv or less, as methane, or calibrated based on the predominant HAP. The control device must also achieve an outlet concentration of 20 ppmv or less hydrogen halides and halogens. The EPA considers this level of emissions the practical level of control for the technologies on which the standard is based. The requirement to correct for 3% O₂ if supplemental combustion air is used is currently under review. This requirement may be revised at a later time.

To simplify applicability of the alternative, all process vent and storage tank emissions that are manifolded to a common control device are considered as one regulated entity under the alternative standard. Nonmanifolded vents are regulated under the rule as otherwise specified without taking credit for the manifolded portion of the process.

H. Testing and Compliance Demonstrations

1. Worst-Case Conditions for Testing

Extensive comments were received on the provisions for absolute or hypothetical worst-case testing contained in the proposed rule. Many commenters stated that the provisions are not workable, especially in batch facilities where multiple streams are routed to common control devices. In these situations, owners and operators might be required to cease production in order to simulate a hypothetical worst-case test for a given device, or would have to artificially affect production in order to align emission events for testing

that would meet absolute worst-case conditions. Commenters emphasized that, in both situations, there are safety concerns associated with generating such conditions, as well as practical concerns.

One safety concern raised by the commenters related to both absolute and hypothetical worst-case testing is that the manifold systems designed to carry emission streams to control devices may not be sized to handle the absolute worst-case situation, which could lead to potentially explosive situations during absolute and hypothetical worst-case testing. Many commenters stated that sources often design and install manifold systems at a lower capacity than that of the control device itself to prevent such explosion potential.

The most common practical concern expressed was that the prediction of when worst-case conditions would be occurring would be very difficult, although many commenters stated that calculating the potential maximum inlet loading scenario for a control device used to control emissions from multiple batch processing vessels would be a difficult, but manageable, task. Many commenters suggested that fluctuations related to processing, including sudden changes in temperatures or operator, could shift the timing of emission events and render any predictions about the timing of specific events invalid. The commenters believe that, for devices controlling multiple streams from moderately complex facilities, absolute worst-case test conditions might never occur within the life of the facility, nor could they reasonably be predicted. Additionally, one commenter stated that an owner or operator might encounter difficulty in proving to a compliance inspector that the conditions of a test were, indeed, run at absolute worst case.

A practical concern with hypothetical worst case conditions raised by the commenters is that testing cannot be performed while an actual batch is being produced. Based on the commenters' past experiences, testing in some cases could result in a process shutdown for 2 weeks, resulting in serious production losses.

One commenter also stated that representative worst case will also result in timing uncertainties similar to those of the absolute worst-case situation, especially when the device is controlling a single process with numerous emission episodes.

For normal testing conditions, commenters believe that the restriction to operate within conditions that existed during the test should be dropped. They stated that, because the proposed

standards include an annual compliance period, the commenters argued that the control device will constantly see variably challenging conditions and therefore, should be allowed to operate under conditions that are outside the range of conditions encountered during testing. In order to alleviate the EPA's concerns that a test under normal conditions may not indicate a control device's performance under more challenging conditions, one commenter suggested that an additional requirement to provide a design evaluation under more challenging conditions be added. Many commenters also suggested that representative worst case should be revised to include all control devices, and should not be restricted to "the level for which it was designed." Additionally, one commenter believes that EPA did not mean to impose this limit on representative testing conditions and would like EPA to make the appropriate language changes to reflect their intent. Lastly, several commenters expressed approval of testing under worst-case conditions, but would like the conditions to be more clearly defined.

The Agency's intent in requiring testing under worst case conditions is to document the reduction efficiency of the control device under its most challenging conditions. Subsequent to the initial compliance test, continuous monitoring of operating parameters established during the initial test is a reasonable measure of continuous compliance with the efficiency requirement under all conditions. Presumably, the control device should function as well or better under conditions that are not as challenging.

Many of the comments regarding worst-case testing conditions are related to the restrictive language defining the worst case challenge and the difficulty associated with developing a time-dependent emissions profile to identify the appropriate test period. In an effort to provide more flexibility to owners and operators regarding the identification of the proper testing conditions, EPA has redefined the worst case "challenge" to include challenging conditions that are not based on high HAP load. These conditions include cases where efficiencies are dependent on other characteristics of emission streams, including the characteristics of components and the operating principles of the devices. For example, in situations in which non-HAP VOC's are present, where the efficiency of a device is most challenged by dilute steam characteristics or where specific characteristics of the compounds create limitations on control efficiency. In

sizing and estimating the regeneration requirement for a carbon adsorber, for example, all material in the emission stream entering the unit must be considered in estimating bed capacity. Likewise, a limiting factor in scrubber efficiency is the solubility or reactivity of components in the scrubbing liquor. These considerations must be made at the time of evaluation of the device for compliance with the rule.

For worst-case challenges that are based on loading of HAP, EPA has also expanded the language describing the development of the emission profile. The emissions profile can be developed based on the actual processing conditions at the facility, as proposed, in which all emission events that can contribute to the control device are identified and considered to determine the highest hourly HAP load from all events that can occur at the same time. However, in the final rule, other options for the emissions profile have been developed that consider the facility's limitations based on equipment or conveyance and capture systems. Owners and operators can develop emission profiles based on equipment, in which the highest hourly HAP-producing emission streams that possibly could enter the control device, considering the facility's available equipment and HAP materials, are identified as appropriate testing conditions. Also, owners and operators have the option to develop emission profiles based on limitations of the control device or conveyance system. For example, many manifolds are limited in flows and concentration limits by fans and LEL monitors. Conducting performance tests based on conditions approaching these limits is also an option provided in the rule.

The expanded language on emission profiles eliminates the need for allowing owners and operators to test at conditions that are less than the worst-case challenge. Therefore, language referring to testing under "representative" and "normal" conditions was deleted from the batch testing provisions. Additionally, the added flexibility associated describing worst case may alleviate commenter's concerns regarding loss of production time.

2. Expedited Test Methods

Many commenters stated that the test methods referenced in the proposal under § 63.1253(b) (1) through (6) will require modification, because the methods were developed for continuous processes. Based on the commenters' past experience, obtaining approval for modifications to test methods often

takes 6 to 12 months. Therefore, the industry commenters would like for EPA to consider adding explicit language in the rule allowing for the use of alternative test methods and providing some mechanism for expedited approval.

Specific suggestions from the above commenters for expediting approval were to eliminate EPA's validation Method 301 in favor of a less burdensome method and to explicitly state that approval of minor modifications do not require Method 301 validation, or that approval of alternative test methods should not trigger the need for a title V permit revision.

In response to the above comments, the Agency believes that the provisions in the final rule that require a site-specific test plan be submitted prior to any testing suffice in providing a mechanism for the presentation of, and approval of, proposed modifications to EPA test methods. In general, Method 301 should be used as a validation method for completely new and different testing procedures and instruments that have not previously been reviewed by EPA. It is not the Agency's intent to require the use of Method 301 for minor modifications to test methods such as the relocation of sampling probes.

3. Use of Method 25A

One commenter stated that Method 25A should be used only after an accurate response factor has been determined. The final rule specifies the following test methods:

1. Method 18 for control efficiency in all situations.
2. Method 25 for control efficiency determination in combustion devices.
3. Method 25A for the 20 ppmv outlet TOC concentration standard.
4. Method 25A in control efficiency determinations in the situations described in the introductory paragraphs of Part 60, Appendix A, Method 25 (when direct measurement by FID is appropriate).

The importance of calibrating a FID reading obtained using Method 25A with respect to a certain compound (adjustment by response factor) depends on how the Method will be used to demonstrate compliance with the standard. In general, the EPA believes that an accurate response factor is necessary in cases where Method 25A is used to demonstrate control efficiency across a device where the composition of the stream may change, or in situations where multiple components, including non-HAP VOC's, are present. Because the relative proportion of

organic compounds may change across the control device, appropriate response factors are needed to accurately quantify TOC at the inlet and outlet of a control device. In addition, the final rule allows owners and operators the opportunity to demonstrate compliance at the outlet of a control device by measuring 20 ppmv TOC or less. The EPA has allowed owners and operators to calibrate the FID using methane or the predominant HAP expected in the emission stream. The use of methane as a calibration gas for the 20 ppmv TOC alternative standard is based on the response factor of methane because it is similar to response factors of HAP that are predominant in this industry, such as methylene chloride and methanol. The EPA intends with this requirement to minimize the burden of recalibration for various HAP constituents that may actually change over a given period of time.

4. Emission Profiles

Many commenters requested clarification of the methodology for developing an emissions profile, which was contained in § 63.1253(b)(iii) of the proposed rule. The commenters stated that the definition of emissions profile implies that sources must prepare a graph of HAP emissions versus time. However, because EPA included the language "the average hourly HAP loading rate may be calculated by first dividing the HAP emissions from each episode by the duration of each episode, in hours, and selecting the highest average hourly block average", the commenters thought that EPA's intent was not to profile emissions versus time, but rather to simply list each batch episode and the average hourly HAP emissions loading from each episode. Additionally, some commenters stated that the emission profile method seemed very complicated, and that personnel with operating experience can quickly determine the worst-case conditions for a control device without producing the extensive information required by the emissions profile. One commenter suggested changing the language of § 63.1253(b)(7)(iii)(A) by eliminating the phrase "must include," so that sources can have the option of discussing an alternative means of determining appropriate test conditions with the permitting authority.

The Agency's intent, when requiring the development of an emissions profile, is to determine the maximum HAP loading to a control device over time. Therefore, the rule requires that the emissions to the device be evaluated by plotting HAP emissions versus time. The EPA has not, in the final rule,

changed the requirements for developing the emissions profile, although EPA did clarify the exact language in the final rule to address the commenter's concerns about the clarity of the requirement. Additionally, two other methods for developing the emission profile were provided in the final rule.

I. Equations

1. Use of Equations in 1978 CTG

As part of the procedure to demonstrate compliance with the emission reduction standard for process vents, the final rule requires the owner or operator to determine uncontrolled emissions from each vent. Equations to calculate emissions from certain unit operations are provided in the rule. Numerous commenters requested that the rule also allow the use of similar equations for the same unit operations that are presented in the 1978 CTG. The commenters stated that although the two procedures give different results, they are based on the same fundamental principles and neither gives better results. The commenters provided the following additional reasons for allowing use of the equations from the 1978 CTG: (1) the MACT floor was based on data from the industry, which were estimated using the procedures in the 1978 CTG, (2) sources are already using the procedures in the 1978 CTG to comply with other regulatory programs and would incur significant costs to invest in a program and data systems to develop and maintain a second method for estimating emissions, (3) maintaining two sets of emission estimates would make State review and compliance efforts complex and confusing, possibly leading to compliance actions for perceived violations of one estimate but not the other, and (4) the emission estimation equations in the rule are based on the 1994 ACT, which has not undergone public review and comment.

The EPA reevaluated the procedures for calculating uncontrolled emissions and concluded that except for two situations, the equations in both the 1978 CTG and the 1994 ACT documents give acceptable estimates of emissions for the purposes of this rule. Therefore, both sets of equations, except as noted below, are included in the final rule for existing sources. The two situations for which emission estimation procedures in the 1978 CTG are not acceptable for this rule are: (1) purging with streams that have high flow rates and (2) heating when the final temperature is higher than 10 K below the boiling point. The EPA believes this change mitigates the

commenters concerns because the two situations where the 1978 CTG procedures are not allowed affect a small number of streams. Owners and operators will have to redo calculations for existing processes under these two conditions. In addition, the owner or operator will have to calculate uncontrolled emissions for those events that the owners/operators have only controlled emission estimates. This is because the 1978 CTG uses condenser temperature instead of vessel temperature. Details about the equations for purging and heating are provided in sections VI.I.2.b and VI.I.3.

2. Procedures to Estimate Emissions from Purging

a. *Equation.* The equation for purging was changed in the final rule because the term that accounts for the increase in flow rate due to the volatilization of HAP was inadvertently left out of the equation in the proposed rule (i.e., the purge flow rate needs to be multiplied by the ratio of the total pressure to the partial pressure of noncondensables at saturation). The revised equation is identical to the equation in the 1994 ACT and gives the same results as the equation in the 1978 CTG as long as the total pressure is equal to 760 mmHg.

b. *Saturation level for large purge streams.* The rule requires an owner or operator to assume a purge stream greater than 100 scfm is 25 percent saturated. One commenter believes the assumption that the vapor phase is 25 percent saturated rather than 100 percent saturated is merely a different assumption and is not based on better information. The commenter also stated that assuming streams are 100 percent saturated is more conservative because it will overestimate emissions, whereas the 25 percent assumption will sometimes overestimate and sometimes underestimate emissions.

The assumptions that purge streams with flow rates less than or equal to 100 scfm are 100 percent saturated, and that purge streams with flow rates greater than 100 scfm are 25 percent saturated, are based on modeling analyses that are described in the 1994 ACT. In the 1994 ACT, the mass transfer (of toluene) from the liquid to the purge stream was estimated using various correlations and a range of design and operating parameters. The correlations showed the purge streams, especially purge streams with high flow rates, were well below saturation for all but the most agitated vessels or vessels with very shallow head space. Assuming these large streams are completely saturated would result in significantly overestimated uncontrolled emissions.

Overestimating uncontrolled emissions leads to at least two problems. First, for a condenser, overestimating uncontrolled emissions means the control efficiency of the condenser will be overstated (and the condenser will operate at a higher temperature than is actually needed to meet the standard). A second problem with overestimating the uncontrolled emissions is that even if the control efficiency is being met (say with an incinerator), the quantity of emissions reductions would also be overestimated, which, if this stream were used in emissions averaging, would result in overestimation of credits. To mitigate these problems, EPA reviewed the results of the modeling analyses and selected values that while still conservative greatly reduce the potential amount of overestimation. The correlations showed that under all types of conditions, the degree of saturation declines rapidly with increases in purge flow rate up to about 100 scfm, and then nearly levels off; the "knee" of the curve was at about 100 scfm for every scenario. For all modeled scenarios, purge flow rates greater than 100 scfm were always less than 25 percent of saturation. Based on these results, the EPA believes that assuming purge streams with flow rates greater than 100 scfm are 25 percent saturated rather than 100 percent saturated results in a better estimate of emissions, more accurate operating parameters, and reasonable credits for emissions averaging. Thus, the requirement to assume purge streams with flow rates greater than 100 scfm are 25 percent saturated was retained in the final rule; but an owner or operator also may conduct an engineering assessment to show that another value is more appropriate.

3. Procedures to Estimate Emissions from Heating

a. *Heatup temperature within 50 K of boiling.* When the contents of a vessel are heated to a temperature within 50 K of boiling, the proposed rule would require the owner or operator to calculate emissions in increments. One increment covered the range from the initial vessel temperature to the temperature 50 K below the boiling point. The procedure then required estimates for each 5 K temperature range up to the final heatup temperature. One commenter believes calculating over 5 K increments is overly conservative. Other commenters believe the approach is an error because it differs from the approach in the 1994 ACT.

As noted in section VI.I.1, EPA is changing the rule to include the

equations from the 1978 CTG and the 1994 ACT as well as the approach in the proposed rule for most heatup conditions at existing sources. In response to industry concerns, the EPA is also reducing the temperature cutoff from 50 to 10 K below the boiling point. The concept of a cap is retained because the procedures in the 1978 CTG and the 1994 ACT can greatly overestimate emissions when the final heatup temperature is close to the boiling point. The equation in the 1978 CTG estimates emissions assuming equilibrium at the temperature of a receiver (i.e., the equation uses a ratio of the condensables partial pressure to the noncondensables partial pressure at equilibrium). This procedure does not specify what equilibrium conditions should be used in the absence of a condenser. If the equilibrium partial pressures at the final heatup temperature are used, the equation overestimates emissions. The overestimate is most significant when the final heatup temperature is close to the boiling point because the partial pressures ratio (condensables to noncondensables) increases exponentially with increasing temperature, and goes to infinity as the temperature approaches the boiling point. Using the average of the ratios at the initial and final temperatures, as is done in the 1994 ACT, also can overestimate emissions. The EPA believes calculating emissions over the 5 K increments when the final heatup temperature is above the temperature 10 K below the boiling point is a reasonable compromise between the accuracy of the estimate and the effort needed to perform the calculation.

b. *Emissions From Process Condenser.* Under the proposed rule, if the contents of a vessel are heated to the boiling point and the vessel operates with a process condenser, the emissions would be calculated using both the heatup and displacement equations. One commenter noted that this procedure results in negative emissions. The EPA reevaluated this equation and determined that this result occurs only if the process condenser operates at a temperature lower than the initial temperature of the vessel. To correct this problem, the final rule states that either the heatup procedure in the 1978 CTG or a variation of this procedure is to be used. The variation allows the owner or operator to use a vapor-liquid equilibrium relationship other than Raoult's law and to use the actual system pressure rather than assuming the system is at atmospheric pressure. Both procedures are also applicable

when the condenser temperature is higher than the initial temperature of the vessel.

4. Vapor-Liquid Equilibrium Relationships for Multicomponent Systems

To estimate emissions, the rule specifies that owners and operators assume one of four vapor-liquid equilibrium (VLE) relationships apply, depending on the system conditions. These relationships are: (1) Raoult's law, (2) Henry's law, (3) a VLE relationship based on the use of activity coefficients (obtained experimentally or from models) to correct for nonideality in the liquid phase, and (4) the assumption that components of the system behave independently so that the sum of all HAP vapor pressures is equal to the total HAP partial pressure. Once the applicable VLE relationship is established, the HAP partial pressure(s) can be determined and used in the applicable equation to estimate the HAP emissions.

Two commenters expressed concern about some of the VLE relationships that the rule requires for estimating emissions from multicomponent systems. The commenters concur with EPA that Raoult's law is appropriate for miscible systems. The commenters also acknowledged that use of Henry's law is generally more accurate than Raoult's law in predicting vapor mole fraction for mixtures below the solubility limit, but they stated that this approach is excessively difficult and unworkable because Henry's law constants are not available for many of the solvents and reagents used in the pharmaceuticals industry. Therefore, the commenters would prefer to use Raoult's law for these mixtures. For multicomponent systems in which the compounds are not miscible or are only partially miscible, the commenters opposed the use of equilibrium relationships based on activity coefficients because developing activity coefficients is burdensome. As an alternative, the commenters recommended using an approach in which each liquid phase is treated independently, and emissions from each phase are calculated separately.

The final rule clarifies EPA's intent regarding the use of vapor-liquid equilibrium relationships. If the components are miscible in one another, Raoult's law may be used when it is applicable. However, if a miscible solution is not well characterized by Raoult's law, activity coefficients must be used. For dilute aqueous mixtures, Henry's law must be used. The EPA rejects the commenter's argument to use

Raoult's law due to the lack of Henry's law constants; Table I of appendix C in 40 CFR 63 contains Henry's law constants at 25°C and 100°C for 125 of the most common organic HAP compounds. For HAP compounds that are not on the list, the owner or operator must estimate the Henry's law constant. For systems with multiple liquid phases, the owner or operator may either use activity coefficients or, as suggested by the commenter, assume the components behave independently and assume the HAP vapor pressures and partial pressures are equal.

5. Emission Estimation Equations Versus Engineering Assessments

The rule lists two conditions under which an owner or operator may conduct an engineering assessment to show that equations in the rule are not appropriate: (1) if available test data and the results of calculations using an equation differ by more than 20 percent and (2) if the owner or operator can demonstrate through any other means that the emission estimation equations are not appropriate for a given batch emissions episode. Several commenters stated that both conditions should be deleted from the rule. The commenters' rationale for deleting the conditions shows the language in the proposed rule did not convey EPA's intent. As a result, the conditions are rewritten in the final rule for clarity, and additional clarification is provided in the following paragraphs of today's notice.

Batch emission episodes may be due to a unit operation that is described by an equation in the rule or to a unit operation that is not described by an equation in the rule. Estimating emissions using the applicable equation is always the standard approach for emissions episodes that are covered by an equation. However, an owner or operator also always has the opportunity to conduct an engineering assessment to demonstrate and get approval to use another emission estimation technique. The intent of the first condition is to indicate that an owner or operator could include such a discrepancy between test data and calculations in an engineering assessment and it would be considered evidence that the equation is not appropriate (provided, of course, that the permitting authority agrees that the test data were obtained under "representative conditions"). The purpose of the second condition is to indicate that other information may also be used in the design evaluation as evidence that an equation is not appropriate. Again, the permitting authority would have to approve the use

of any proposed alternative to the equation.

The conditions have nothing to do with estimating emissions for batch emissions episodes from unit operations that are not described by equations in the rule. For such emissions episodes, an owner or operator would be required to conduct an engineering assessment to show how emissions will be estimated.

6. Calculation of Controlled Emissions

Two commenters stated that the rule should allow the use of techniques in the 1978 CTG to calculate controlled emissions from a condenser. The commenters stated that the procedures in the proposed rule cannot be used because they specify the use of system temperature, whereas the correct technique, which is used in the 1978 CTG, is to use the exit gas temperature from the condenser. One commenter also stated that even when the equations in the rule and the 1978 CTG are identical, "implementation differences" cause the controlled emissions estimates to differ. To address the commenters' concerns, the final rule specifies both the applicable equation and any changes to the temperature or volume that are needed for calculating controlled emissions.

J. Monitoring Requirements

Many commenters objected to the use of monitoring parameters for the determination of a source's compliance status on a continuous basis. Their central issue, for many emission streams controlled in this industry (e.g., batch, nondedicated, possibly manifolded together and routed to common control), is that an exceedance of a parameter level, as measured on 15-minute intervals and averaged over a 24-hour basis, may not necessarily constitute a violation of the 93 percent control requirement for the process for the following reasons:

1. If the parameter is conservative, the device will operate above the required efficiency;
2. The loading on the control device may be less than the assumed loading used to set the parameter, so the device provides adequate control even though the parameter has not been attained;
3. The actual compounds in the emission streams may be easier to treat than those used to set the parameter; and
4. The excursion may occur when there are little or no HAP emissions from the process routed to the device.

The EPA had solicited comment on this issue, and at that time, had questioned why the industry couldn't set multiple parametric levels for

control devices to account for different operating scenarios. The commenters countered that, especially in the case of manifolded, end-of-line devices, it is not possible to predict with precision what conditions will exist at any point in time. Rather than establishing, up-front, a complex "grid" of parameters that will serve all potential combinations of operating scenarios, they would want to set conservative parametric levels as a screening mechanism for determining whether or not emission limits might have been exceeded, with an option to evaluate actual parameter excursions on a case-by-case basis after exceedances had occurred to determine whether an emission limit was actually exceeded.

The commenters recommended that the rule provide that a parameter exceedance must be reported to the permitting authority, with the opportunity to rebut the presumption that the emission limit(s) have been exceeded. Other commenters suggested that sources be treated in a manner consistent with the Compliance Assurance Monitoring (CAM) rule, which provides only that an excursion of a monitored parameter is an indication that an emission standard may have been exceeded, but makes no automatic finding of a violation of that emission standard.

In general, EPA recognizes two basic approaches to assuring that control devices used by the owner or operator to achieve compliance are properly operated and maintained so that the owner or operator continues to achieve compliance with applicable requirements. One method is to establish monitoring as a method for directly determining continuous compliance with the applicable requirements. The Agency has adopted this approach in part 63 standards, and is committed to following this approach whenever appropriate in future rulemakings. Another approach is to establish monitoring for the purposes of documenting continued operation of the control devices that are designed to provide a reasonable assurance of compliance, indicating excursion from these ranges, and correcting problems creating excursions. This second approach is outlined in the CAM rule, which applies to sources that are not currently subject to part 63 standards.

When determining appropriate monitoring options, EPA considers the availability and feasibility of the following monitoring strategies in a "top-down" fashion: (1) CEMS for the actual HAP emitted, (2) CEMS for HAP surrogates, (3) monitoring operating parameters, and (4) work practice standards. In evaluating the use of

CEMS in this standard, monitoring of individual HAP species was not found to be reasonable or technically feasible for many streams. However, in the case of continuous monitoring of surrogates, continuous TOC monitoring is considered a more viable monitoring option and is provided for some instances in the rule. (See discussion on alternative standard and on monitoring for carbon bed systems.) Monitoring of control device operating parameters is considered appropriate for many other emission sources, and therefore, most of the other monitoring options provided in the final rule are based on parametric monitoring.

The EPA has considered the commenters' argument that an exceedance of a monitoring parameter is not necessarily an exceedance of an emission limit, especially as described in the generic situations provided above. In the first three situations, EPA believes that as long as the source is given the flexibility to select operating parameters, including the option retained from the proposed rule to allow the owner or operator to set multiple parameter levels for different operating conditions, then the burden is on the source to remain within the parameter or parameter(s).

To address the potential disparity between parameter limit exceedances and emission limit exceedances, the final rule contains two different types of continuous compliance violations. Where a source is using a CEMS to monitor compliance with the 20 ppmv alternative standard, an exceedance is defined as a violation of the emission limit. Similarly, because the exit gas temperature of a condenser is so closely correlated with emissions, a condenser temperature exceedance is considered a violation of the emission limit. Exceedances of other types of parameter limits are defined as violations of an operating limit, rather than violations of the emission limit.

In response to industry's preference to evaluate parameter levels after an exceedance of a conservative parameter level to determine whether an emission limit was exceeded (thereby eliminating the need for a complex grid of preset parameter levels), EPA believes that the establishment of compliance levels *prior* to operation of the device or process is imperative; otherwise, the constant opportunity for rebutting a violation of the standard would render the standard unenforceable. While EPA is sensitive to industry's need to minimize its compliance burden, EPA believes that the burden placed on State agencies to consider the amount of information that

the rebuttable presumption option would encourage is not reasonable.

In response to the fourth generic situation described by industry, EPA has provided in the final rule, clarification of situations (no flow) when exceedances of preset parameters would not constitute a violation of the standard.

For reasons described above, EPA rejects the assertion that the parametric levels should not be used as a direct indicator of compliance. The EPA believes that conditions in the proposed rule which have been retained in the final rule including options for setting parameters, coupled with clarifying the averaging times for compliance determinations and establishing valid data criteria for monitored parameters should address concerns of commenters, while retaining the enforceability of the standard. The final rule provides options for presetting multiple parameter levels to account for variation in batch emission stream characteristics within emission sources (as proposed), and to account for variability in combined stream characteristics in manifolds.

The final rule provides owners and operators with the option of setting averaging times based on either a "block" of time suitable for the expected variations of emission stream characteristics from a batch process (determined by the owner or operator, with some restrictions), or a 24-hour basis (as proposed).

The final rule also provides owners and operators with an opportunity to verify compliance based on a review of operating logs during periods of exceedances. Exceedances will not constitute violations of subpart GGG during periods when a parameter has been set based on worst-case conditions, or other conditions that were not representative of the conditions in the device during the exceedance, if the owner or operator has predetermined other levels that ensure compliance with the standards for these representative periods. If predetermined levels were established, the owner or operator can also determine compliance for discrete streams in manifolds by referencing to these limits.

Additionally, monitored data obtained during periods in which no flow to the control device occur should not be considered valid; during such periods, the final rule allows for the exclusion of such data from the daily or block averages. The use of a flowmeter to identify and exclude such periods from compliance average is therefore required in the final rule, if they cannot otherwise be predicted.

K. Recordkeeping and Reporting Requirements

Issues related to the amount and type(s) of recordkeeping and reporting requirements that were included in the proposed rule were raised by commenters representing both industry and enforcement agencies. The pharmaceutical manufacturing industry involves a wide variety of processes, products, and resulting emissions. In order to demonstrate compliance with the necessary MACT requirements, detailed records are needed to have a reliable, documented record of how the source complied with the regulation. The EPA has made a concerted effort to reduce the recordkeeping requirements of the final pharmaceutical rule. The EPA recognizes that unnecessary recordkeeping and reporting requirements would burden both the affected source and EPA/State enforcement agencies and will continue to review requirements to identify and implement other possible streamlining measures.

The EPA has reviewed the recordkeeping and reporting requirements required by the proposed rule and has eliminated those areas where duplicative and inapplicable requirements were proposed. Most of these changes involved areas where the referenced General Provision requirements were not directly applicable to this industry. Clarifications and/or additional language have been added to tailor the recordkeeping and reporting requirements to the relevant data needs from pharmaceutical manufacturing operations. Table 1 in today's final regulation was modified to include a summary column describing the relevant information in each part of the General Provisions, and more information was added to better relate the requirements of the final rule and those in the General Provisions.

Comments on precompliance reporting were varied depending on the commenter's perspective and experience. Some commenters viewed the precompliance reporting requirements as burdensome and restrictive. One commenter stated that submittal dates for reports and notifications due prior to the compliance date are much too early, unnecessary, and can be counterproductive. Two commenters stated that the Precompliance Report should be due only 3 months prior to the compliance date. Other commenters argued that the "early" due date for the Precompliance Report is valuable because it provides a practical means of

ensuring that a source is aware of the upcoming deadline. One of the commenters also stated that the description of test conditions and limits of operation for control devices tested under normal conditions and the corresponding monitoring parameter values should be submitted as part of the Pretest Notification Report rather than with the Precompliance Report. In response, the Agency revised the submittal dates for the precompliance report and the emissions averaging implementation plan to 6 months prior to the compliance date. The Agency believes the final submittal dates and data requirements for the precompliance report are adequate to provide the enforcement agencies with sufficient time to review the information.

Some commenters also suggested that the use of alternative parameters be included in the precompliance report and that periodic testing be done to correlate actual emission rates to alternative parameters. The EPA response to this issue is addressed in section VI.L of this preamble.

One commenter suggested that sources be required to establish an effective environmental management system to eliminate much of the paperwork burden associated with the proposed recordkeeping and reporting requirements. The Agency believes an effective environmental management system can be used to comply with all the requirements of the final rule provided the system is based on meeting the MACT requirements in the final rule. Sources are free to submit an alternative compliance plan to the appropriate agency to review/approve in lieu of any or all recordkeeping or reporting requirements.

Commenters also raised issues related to data availability stating that the proposed requirements were unreasonable, impracticable, and more stringent than those for other industries. The Agency does not agree with these comments.

L. Permitting and Compliance Options/Change Management Strategy

1. Proposal Comments Received

In the April 1997 proposal, the EPA solicited comment on the interaction of this standard with the title V operating permits program, implemented at 40 CFR part 70. In addition, the Agency requested comment on an approach which would incorporate by reference the Notification of Compliance Status Report (NOCSR) into a pharmaceutical manufacturing facility's title V permit. The EPA also solicited comment on the types of operational changes that would

trigger revision of the operating permit under title V. However, in soliciting comment on these issues, the Agency did not propose to revise part 70 through the establishment or implementation of subpart GGG.

Commenters to the proposed subpart GGG raised several issues with respect to process changes at pharmaceutical facilities, which they claimed would result in a potentially unmanageable title V permit administrative process. The pharmaceutical industry produces a wide range of existing and new and/or improved products primarily through the use of nondedicated equipment operated in a batch production mode. Commenters were fearful that frequent changes in the use of existing equipment as well as the additions of new equipment at pharmaceutical facilities would require frequent revisions to the operating permits for these facilities. These commenters predicted that such permit revisions would result in delays in implementing process changes and cause significant new administrative burdens on the facility and permitting authority.

The preamble to the proposed rule described the NOCSR as the compliance "blueprint" for implementation of the standard, containing "[a]ll information regarding documentation of the facility's compliance status with regard to the standard. . . ." This information would include "process descriptions, emissions estimates from those processes, control device performance documentation, and continuous compliance demonstration strategies, including monitoring." The EPA solicited comment on whether the NOCSR could be initially incorporated by reference into the title V permit and whether the permit could be revised as necessary through quarterly update reports. The proposal posited that only changes requiring site-specific approval (such as the use of a monitoring parameter that was not identified in the standard) would trigger some significant review action under title V. The Agency expressed the view that this approach would allow enough flexibility for sources to make operational changes as necessary as well as changes to operating and compliance procedures without additional approval, if the changes were straightforward, and would assure that the compliance plan for the facility would always be reasonably current.

Most commenters did not support an ongoing implementation strategy based on permit revision for operational changes, even if it could be streamlined. Several industry commenters strongly reiterated concerns about the potentially

huge administrative problems associated with implementing subpart GGG within title V permits.

In particular, PHRMA recommended an approach under which facilities that have been issued a title V permit before subpart GGG is finalized would be required to apply for a minor permit modification (MPM) by the due date for the NOCSR. The suggested MPM application would include: (1) a list of applicable subpart GGG requirements that should be included in the permit itself (including a "menu" of applicable process vent, tank, and wastewater standards); (2) a requirement for the facility to submit a compliance plan that outlines the regulated entities within the affected source (such list should include the identification of regulated processes, process vents, tanks, and wastewater PODs; a determination as to which substantive standard applies to each; and a list of corresponding testing, monitoring, record keeping, and reporting requirements); (3) a requirement for the facility to update the plan when a compliance requirement changes; (4) a requirement to submit the plan to the permitting authority every 6 months; and (5) a requirement to operate in accordance with the plan. For facilities that have not been issued a title V permit until after subpart GGG is finalized, a facility's initial permit would be issued to include these five items. Facilities that trigger new source MACT would be required to apply for a significant permit modification (SPM) prior to implementing the triggering change. Under this approach, PHRMA believes that a source could make most changes at the affected facility without triggering a title V permit revision, provided the compliance plan was updated to indicate the new regulated entities and/or new requirements that would result from the change, thus avoiding delay while ensuring that the part 70 requirements are satisfied through timely recording of the requirements applicable to the source.

Title V requires operating permits to assure compliance with all applicable requirements at a source, including a section 112 standard such as subpart GGG. An existing source subject to subpart GGG must include in its operating permit by the time of the standard's compliance date—the latest date by which most provisions of the standard would become applicable requirements at existing affected sources—sufficient permit terms and conditions to assure compliance with the standard. If a source's initial title V permit does not include terms to assure compliance with subpart GGG by the

compliance date, the permit must be revised to incorporate the standard not later than 18 months after the standard's promulgation. See CAA section 502(b)(9). This will ensure that subpart GGG is reflected in title V permits for pharmaceutical facilities by the time of the compliance date and as required by statute, since the compliance date for subpart GGG is up to 36 months after the standard's promulgation (see section 63.1250(f)(1)). Consistent with section 502(b)(6) of the Act, however, if the standard is promulgated when fewer than 3 years remain on a major source's permit term, a permitting authority's program may reflect the option not to require revisions to the permit to incorporate the standard. The Act permits State programs to require revisions to the permit to incorporate the standard in such instances, however, so any sources with fewer than 3 years remaining on their permits upon the promulgation of today's action, should consult their State permitting program regulations to determine whether revision to their permits is necessary to incorporate subpart GGG.

The EPA does not believe that PHRMA's recommended permitting approach would ensure that operating permits for pharmaceutical facilities assure compliance with subpart GGG by the standard's compliance date and subsequently during the permit term. PHRMA recommends including basic permit content information—such as the identification of regulated emissions units and activities, and their associated compliance requirements—in an off-permit compliance plan, when such information is appropriately required in the permit. The proposal addressed this point by soliciting comment on the incorporation by reference into the facility's permit of the NOCSR. The EPA believes that it is possible to provide the flexibility sought by pharmaceutical manufacturers while maintaining Congress' intent that the title V permit contain all of the applicable Federal requirements. However, neither the proposal nor today's final rule purports to revise part 70 to accomplish this transfer of permit content from the permit to an off-permit compliance plan, and EPA does not believe that a MACT standard such as this is the appropriate vehicle to accomplish revisions to part 70. A separate rulemaking is currently underway to revise part 70, and features of today's approach may be adopted in that rulemaking.

Moreover, for facilities that have been issued a title V permit before the MACT is promulgated, PHRMA's

recommended approach would not meet the requirement that these permits assure compliance with subpart GGG by the standard's compliance date. In addition, the approach would not satisfy section 502(b)(9)'s requirement that such permits be revised not later than 18 months after the promulgation of subpart GGG. PHRMA recommended that facilities that have been issued a title V permit before the MACT is promulgated be required only to apply for a MPM by the due date for the NOCSR. The due date for the NOCSR under subpart GGG can fall as late as 150 days after the compliance date, see section 63.1260(f), and the compliance date for existing sources is within 3 years after the promulgation date of the standard, see section 63.1250(f)(1). Finally, under section 70.7(e)(2)(iv), a permitting authority may have up to 90 days following receipt of a MPM application to issue an actual MPM reflecting subpart GGG.

Therefore, PHRMA's recommended approach would allow existing sources with title V permits to delay revisions to their permits to incorporate subpart GGG as long as 44 months—36 months plus 5 months plus 3 months—after promulgation of the standard, when section 502(b)(9) requires such revisions to be accomplished not later than 18 months after promulgation of the standard. In addition, of course, PHRMA's approach would not ensure that existing sources subject to subpart GGG have permits that assure compliance with the standard by the time of the standard's compliance date. For these reasons, EPA declines to adopt PHRMA's recommended approach in its entirety. However, as stated above, EPA believes the Agency can meet the industry's needs while complying with statutory obligations and Congressional intent.

The EPA agrees that some types of pharmaceutical operational changes may be subject to frequent title V revisions. As a result, the EPA met with industry representatives to clarify industry comments received on the proposal. In response, EPA developed a recommended approach for managing changes involving reconfigurations of existing equipment and the additions of certain new equipment subject to the pharmaceutical MACT through title V permits. This change management strategy in general adopts aspects of both the EPA proposal (e.g., to incorporate the NOCSR into the title V permit) and of industry suggestions for managing change made subsequent to the NOCSR.

2. Description of Recommended Approach

a. *General strategy for change management.* This notice presents an interpretation of the current regulations at 40 CFR part 70, for purposes of an experimental permitting approach under which title V operating permits may be designed to implement subpart GGG and provide operational flexibility without frequent permit revision. This approach represents EPA's current views on these issues and, while it may include various statements that permitting authorities or sources may take certain actions, these statements are made pursuant to EPA's preliminary interpretations and, thus, are not binding on any party as a matter of law. Only if EPA makes its interpretations final through rulemaking will they be binding as a matter of law. This means that States are not required to follow this approach in implementing subpart GGG through their operating permit programs, and EPA will fully and fairly consider all comments and petitions calling upon the Agency to object to permits that rely upon the change management strategy.

Nonetheless, the Agency encourages States to use the flexibility described in this preamble wherever they believe that the change management strategy will assure compliance with subpart GGG, while implementing the MACT standard in an efficient, streamlined fashion. The EPA intends to use this strategy where requested by a pharmaceutical facility and where the Agency would to be the permitting authority of jurisdiction under 40 CFR part 71.

It should also be noted that the described change management strategy is only tailored toward meeting the requirements of subpart GGG. Additional strategies are likely to be needed to address the consequences of a particular change relative to other relevant applicable requirements [e.g., minor or major new source review (NSR)], particularly when the change would cause an increase in the type or amount of air pollutants released.

Under EPA's interpretation, the Agency envisions that all title V permits implementing the pharmaceutical MACT will contain two principal structures: the incorporated pharmaceutical MACT standard and a detailed description of the array of process equipment, control devices, and initial operating conditions at the subject facility. In addition, the title V permit may contain a third structure implementing the change management strategy through prior approval of

reasonably anticipated alternative operating scenarios [see section 70.6(a)(9)].

First, as it must under title V and part 70, the title V permit will contain permit terms and conditions that incorporate subpart GGG. These permit terms will include the requirements of the MACT rule applicable to PMPUs and other equipment that comprise pharmaceutical manufacturing operations, including all requirements for identifying affected emissions sources and applicable emission standards, calculating emissions, demonstrating compliance (e.g. requirements for the operation of control devices), and for testing, monitoring, record keeping and reporting.

The second permit structure, from the NOCSR submitted by the source owner, shows current operations and how the source is complying at that time with all the relevant requirements of subpart GGG (which were incorporated as the first permit feature). Named and described in the permit are the specific processes in operation at the time of the NOCSR and all those that will be run during the term of the permit; the PMPUs and other regulated emissions equipment and activities associated with the pharmaceutical manufacturing operations; the linkages between identified emissions points and control devices used for compliance with the standard; and the linkages between the identified emissions points and their associated compliance obligations under subpart GGG. The calculations demonstrating compliance must be submitted by the source in support of these linkages.

The third permit structure addresses the management of frequent changes at pharmaceutical facilities subject to subpart GGG. This structure generally will allow permit revisions at pharmaceutical facilities to be avoided without sacrificing compliance assurance, in instances where reasonably anticipated alternative operating scenarios can be established in title V permits and supported with detailed operating logs (onsite records). If a source owner or operator can reasonably anticipate the type of changes and operating scenarios relative to the current operations defined by the NOCSR (i.e. the baseline operating scenario) that will use the equipment identified in the permit and will occur over the life of a title V permit, part 70 provides for the permitting of such changes through alternative operating scenarios. However, because equipment configurations at pharmaceutical facilities can change frequently (and

without complete predictability) in response to product changeovers, new drug introductions, and process improvements, the allowed operating scenarios need to be constructed in the title V permit in a "menu" format.

Under the permit menu for subpart GGG, a pharmaceutical source will be able to vary its array of processes and control devices from the permitted baseline scenario without need for permit revision, provided that these ways have been preapproved as alternative operating scenarios. This could include shifting process equipment, adding replacement process equipment, eliminating equipment within the same process, or changing the type or amount of solvent in order to improve existing processes or to add new processes. These changes, however, must not exceed the capacity of the control and process equipment as set out in the permit, and must always comply with the permit and all applicable requirements. The Agency again notes that such changes occurring under the change management strategy are preapproved for subpart GGG purposes only and other actions and/or strategies are necessary where other applicable requirements are implicated by such changes.

The change management strategy also addresses the addition of new condensers and of new process equipment subject to subpart GGG. Condensers are the only new control devices currently that may be advanced and only in limited circumstances (see section VI.L.2.b. *Additional Considerations*). Bringing new process equipment into service may be accomplished in two situations as a reasonably anticipated alternative operating scenario for purposes of subpart GGG, provided that the new equipment is preapproved in the permit and otherwise meets the requirements below.

The first situation involves the like-kind replacement of permitted process equipment which is functionally equivalent to and provides no greater production capacity than the equipment being retired. The replacement transaction, and identification of the new process equipment, must be recorded in the OSIL along with other information necessary to reflect the changed operating scenario. Because the new process equipment is replacing the retired equipment that was specifically identified in the permit, the new process equipment need not be specifically identified in the initial permit in order to be preapproved. The preapproval approach does not allow the substitution of new process

equipment for permitted equipment that will remain in service elsewhere at the source.

The second situation involves the addition of process equipment which already exists on-site but is not in current service. In order to be approved for purposes of subpart GGG, this equipment must be specifically identified in the permit in terms of its type and capacity. The Agency notes that the authority to preapprove such process equipment in the permit is limited to equipment for which the owner or operator holds a reasonable expectation that the equipment will be called into service over the 5-year life of the title V permit. Because this category of equipment already exists at the facility, and will be specifically identified in the permit with its capacity and type listed for review by the permitting authority, EPA, and public, the Agency believes such equipment may not only replace permitted, retired equipment, but may also augment permitted equipment in service and thereby increase production capacity at the source.

In both of these situations, the additions of such equipment must meet all provisions of the permit governing their operation, including the requirement to stay within the approved capacity of the control device to which their emissions are routed. Other situations involving process equipment may not be preapproved and are subject to the notice procedures of section 70.4(b) or the permit revision procedures of section 70.7. Options under the current regulations are, however, expected to change (see section VI.L.3. *Legal Considerations* for discussion of anticipated treatment of subpart GGG requirements attaching to new emissions units under the upcoming part 70 revisions).

At the time a source wishes to undertake a change that could trigger different obligations under subpart GGG or its permit, the source will evaluate first whether the change is within the scope of an approved alternative operating scenario in the permit. If so, the source will select the appropriate compliance options from the alternatives approved in the permit and implement the change consistent with the terms of the permit governing such selection. The source would not be required by the permit to route emissions from specific process equipment only to the specific control devices that were linked to them in the initial detailed compliance baseline. Instead, the menu of alternative operating scenarios, described below, in conjunction with features of subpart

GGG will allow a source to shift to the compliance obligations governing the change and, where applicable, to select among the control devices at the facility that the permitting authority has approved as capable of achieving compliance.

The menu of alternative operating scenarios is a combination of the first permit structure discussed above (i.e., the requirements of subpart GGG) and some additional features. In particular, the menu consists of: (1) a description of the emissions sources (e.g., process vents, wastewater points of determination, storage tanks, and other regulated equipment components) subject to the pharmaceutical MACT; (2) the specific emission standard or standards that potentially apply to each source; (3) all control devices that have been approved by the permitting authority through performance tests or engineering analyses (as provided by subpart GGG) to comply with those standards; (4) the parameters to be monitored and data to be recorded specified for each control device, each process or equipment, as appropriate, as well as the monitored parameter values that indicate compliance (i.e., parameter trigger levels); and (5) the testing, record keeping and reporting provisions that are relevant to each type of process or emissions source.

Whether a change can be accommodated within a preapproved alternative operating scenario from the menu depends on certain boundary conditions governing such use. These boundaries primarily depend upon: (1) the performance capabilities and any capacity limitations on control devices as approved in the permit for compliance;¹ (2) whether subpart GGG's provisions governing that change are limited to replicable operating procedures (ROPs) for determining emissions and applicable emissions limits; (3) whether changed emissions fall within the performance limits of (1) above; and (4) whether the approved monitoring approach remains applicable. The ROPs must be capable of yielding the identical compliance assessment whether applied by the source, permitting authority, EPA or member of the public. That is, the results from using these procedures are the same regardless of who uses it and when. The ROPs must be scientifically credible and be based solely on

¹ Note that these limitations must include restrictions on the amount of HAPs and, where relevant, the type of HAPs which can be routed to the device. It may be necessary to include other restrictions, e.g., total organic compounds that define the capacity and the performance of the control device.

nondiscretionary steps and on objective data (where data are required). These ROPs are contained either in the standard itself or established during the title V permitting process. Where the applicable subpart GGG requirement is not already such a procedure, but one that can be established during the permit process (see later discussion as to which requirements are eligible), then the source would propose it and the permitting authority would specifically need to approve it, including any limits on its use, during a title V permit process that is subject to EPA and public review.

Where a permit would contain the change management structure, the source's on-site documentation, as required by subpart GGG (section 63.1259(b)(9)), will include an up-to-date operating log for alternative operating scenarios, [also required by section 70.6(a)(9)(i)]. The on-site implementation log (OSIL) must record sufficient information to show the compliance obligations of each specific operating scenario in advance of its operation. Accordingly, the OSIL must include for each process: (1) a description of the process and the type of process equipment used; (2) an identification of related process vents and their associated emissions episodes and durations, wastewater PODs, and tanks; (3) the applicable control requirements of this subpart, including the level of required control; (4) the control or treatment devices used, as applicable, including a description of operating and/or testing conditions for any associated control device; (5) the process vents, wastewater PODs, and tanks (including those from other processes) that are simultaneously routed to the control or treatment device(s); (6) the applicable monitoring requirements of this subpart and any parametric level that assures compliance for all emissions routed to the control or treatment device; (7) calculations and engineering analyses required to demonstrate compliance; and (8) a verification that the operating conditions for any associated control or treatment device have not been exceeded and that any required calculations and engineering analyses have been performed.

The OSIL, in conjunction with and the information contained in the permit, monitoring records, and any other available information and belief formed after reasonable inquiry, will provide the basis for making annual compliance certifications under section 70.5(d). Moreover, this information will allow an enforcement authority to verify when processes were being operated, to

identify which emissions points from each process were controlled and how, and to determine whether the control devices were operated at performance levels that assured compliance with subpart GGG. The permit would require the source to submit a quarterly report of the new operating scenarios contained in to the OSIL to the permitting authority and to certify to its truth, accuracy and completeness pursuant to section 70.5(d). For reporting purposes, a change to any of the elements defining an operating scenario (see above) which have not previously been reported, except for element (5) above, shall constitute a new operating scenario. The permit shall also require that monitoring data, including that relevant to the identified parameter trigger levels, be submitted semiannually (except that deviations must be reported promptly). The source or the permitting authorities would then make compliance information and the OSIL reports available to EPA or members of the public upon request, consistent with confidential business information protections.

In establishing alternative operating scenarios in a title V permit, the source would propose performance levels and operating limits for control devices to be used for compliance. Except for condensers (see section VI.L.2.b. *Additional Considerations*), sources would then demonstrate compliance using control devices operated to accommodate the range of anticipated emissions episodes [i.e., a worst-case scenario(s) as provided in section 63.1257(b)(8)(i)]. The source must provide to the permitting authority in the NOCSR control device testing information and results (or other prescribed documentation), and monitoring provisions with parameters to be monitored to show compliance with the rule. Establishing monitoring parameter levels correlated to the required emissions reduction (i.e., trigger levels for compliance) assures compliance for anticipated worst-case emissions. This provides a source with considerable flexibility since most, if not all, changes to the source are likely to fall within the permitted worst-case emissions boundary and would not trigger a permit revision.

In some situations, the source may wish to establish multiple trigger levels for the same monitored parameter within the normal operating range of an existing control device, each of which would assure compliance for different specifically defined emissions profiles. Thus, within the constraints of a control device's capacity, the title V permit may establish more than one enforceable

trigger level for an operating parameter to accommodate most common kinds of anticipated operations without the need for a permit revision. A ROP in the permit must be used to calculate the emissions profile of any proposed change and match the new emissions profile to the appropriate operating parameter trigger level that assures compliance with subpart GGG. For example, in a system with three separate trigger levels for the same parameter, which have been predetermined in the permit, assume that the projected emissions associated with a particular change would require the level of control corresponding to the second trigger level. As a result, the calculated emissions would exceed the emissions profile associated with the first cutoff (and its lower level of control), would correspond to the emissions profile covered by the second and meet its required parameter trigger level, and would not meet the emissions profile characteristics and not require the greater control associated with the third trigger level.

For sources employing the change management strategy, the permit shall provide that a violation of the ROPs, a violation of other conditions implementing the change management strategy, or a violation of the monitored parameter trigger levels (as applicable and recorded in the OSIL) would be a violation of the permit and of the control device trigger operating limit, and a violation of the emissions limit where specifically provided for by the standard (e.g., an exceedance of the outlet gas temperature for a condenser). The EPA notes that neither the change management strategy nor the OSIL can alter any obligations that the source has to comply with either the permit or the MACT standard itself. While permitting authorities may extend the permit shield in section 70.6(f) to the permit terms and conditions of each alternative operating scenario contained in the permit, assuming the State program has a permit shield provision, this permit shield may not be applied to the specific compliance-related changes which are only recorded by the source in its OSIL (see section VI.L.3. *Legal Considerations*). Like CAA section 502(b)(10) changes, most administrative permit amendments, and MPMs which do not undergo prior public review [see sections 70.4(b)(12)(i)(B), 70.7(d)(4) and 70.7(e)(2)(vi)], the part 70 permit shield may not extend to an OSIL or source determinations made pursuant to the change management approach that have failed to undergo prior EPA and public review. The source's compliance with

those parameter levels recorded in the OSIL will not shield the source against challenges to the source's compliance with subpart GGG.

To illustrate the change management permitting strategy, suppose a pharmaceutical source undertakes a process improvement project that replaces two steps in an existing pharmaceutical process with one new step. This project results in the elimination of two existing process vents from the process and the addition of a new vent. No new equipment is involved. Further, suppose that subpart GGG requires the existing process and the proposed process change to meet the 93 percent reduction requirement for process vents, and the source opts to meet that limit by ducting all vents from the process to an existing thermal oxidizer. As a first step, the source owner/operator must determine whether and to what extent the previously established baseline emissions profile for the process will change. To do this, the owner/operator will calculate the uncontrolled emissions from the new vent using the equations provided in the MACT rule (and incorporated into the permit). The new process step involves the following emissions-related activities: vapor displacement (Equation 8 in section 63.1257(d)(2)(i)(A) of the rule), heating (Equations 10-17), and depressurization (Equations 18-29). In calculating emissions, the owner/operator must supply the physical characteristics from the process batch production procedures as inputs to the required equations. This description is the material used and the procedures followed exactly by the source to perform the process each time the specific product is produced. The process batch description includes details such as: the amount and type of raw materials to be used in each batch, the mixing and heating cycle durations, the final temperature of the heated ingredients, reflux rates, and the temperature of the reflux condenser.

Once the emissions from the new process step are calculated, the owner/operator adds these emissions to the previously documented emissions from the process and subtracts the emissions from the two process steps that were eliminated to determine the total emissions to be routed to the thermal oxidizer. A revised emissions profile for the process is now established. Next, the owner/operator must evaluate whether the thermal oxidizer still assures compliance with the 93 percent reduction requirement. Under the source's title V permit, the owner/operator will have calculated and documented (and the permitting

authority would have approved) the worst-case emissions profile that could be accommodated by the thermal oxidizer. The owner/operator compares the emissions profile in the worst-case analysis with the improved process emissions. If the worst-case emissions profile will not be exceeded, the changed process will comply with the standard, and the existing title V permit does not have to be revised (unless required to assure compliance with applicable requirements other than those of subpart GGG). If a new worst-case scenario would be created by the change, a permit revision must be undertaken to determine whether the change can be made. In order to support the permit revision, the owner/operator will have to perform additional analysis or testing, as required by the MACT rule and/or the permitting authority, to show that the oxidizer has sufficient capacity to control the new scenario to meet subpart GGG. This may require a corresponding revision to the monitored parameter compliance trigger level in the permit as well.

As stated earlier, the owner/operator is required by the MACT rule to keep records of all calculations performed to support the process improvement change. Thus, the on-site records include results of calculations to determine emissions from the new process step and total emissions from the improved process, and the comparison of emissions from the improved process with the previously established worst-case emissions analysis. If the change can be made without permit revision, the owner/operator also is required to maintain records in the OSIL showing when the change was made and how the new vent is controlled. In addition, the permit must require that the source operate consistently with the calculations made for the operating scenario described in the OSIL. Such consistency, however, does not protect a source from violations of the standard, where the calculations are in error or otherwise fail to assure compliance with subpart GGG.

In the example presented above, the new process involves emissions-related activities that are covered by the ROPs contained in subpart GGG. However, some activities may not fall under operations for which equations have been provided in the standard. In many such cases, the change management strategy allows the source to submit for approval its proposed methodology for quantifying these emissions. Under this approach, the permitting authority would have the opportunity to evaluate the proposed methodology and, if

judged replicable, by the permitting authority—with EPA and public review, establish this methodology in the title V permit. The ROPs could be established in the permit only through the permit issuance, permit renewal, or significant permit modification process. Where they are approved and upon their incorporation into the permit, the source must then use these procedures, as applicable, to determine if subsequent changes qualify for advance approval without need for permit revision under the change management strategy. The EPA intends to issue additional guidance to inform the development, review, and approval of such ROPs during the permitting process.

For example, the MACT rule does not give exact procedures or formulae for calculating wastewater characteristics needed to determine control requirements. Instead, the rule states that HAP concentrations in wastewater are to be determined based on testing, knowledge of the wastewater stream (using a mass balance approach or one relying on published water solubility data), or bench-scale or pilot-scale testing (see section 63.1257(e)(1)). To explain the development of ROPs to address this requirement, a more specific situation must be described. Suppose that the process improvement project above includes an extraction that was not previously part of the process, resulting in a new wastewater stream which the owner/operator wishes to treat using an existing steam stripper. In order to create the necessary ROP for determining the wastewater characteristics of streams, the owner/operator must first establish a methodology to determine this for the baseline scenario. During the initial compliance demonstration/permitting process, the owner/operator in this example would do so by proposing to determine the concentration of a partially soluble HAP in the aqueous phase of an extraction when a single organic compound is present by assuming that the concentration will be at the maximum possible value based on the solubility value found in standard reference texts. This procedure, along with the batch description and the number of batches to be produced each year, provides a ROP for determining the characteristics of the extraction step wastewater stream (i.e., HAP concentration and annual HAP load). After approval by the permitting authority, the ROP can be used for new or modified extraction wastewater streams to characterize the stream and to determine whether the stream is

subject to treatment under the MACT standard per § 63.1256(a)(1)(i). [Note that this ROP would apply only when a single organic compound is present. A separate ROP would have to be developed and applied in other cases.]

In addition to this procedure, the owner/operator must also establish a replicable procedure to compare the wastewater characteristics associated with a change to the worst-case capabilities of the treatment unit. Accordingly, the appropriate operating parameter and the trigger level necessary to assure compliance with the standard must be established in the permit. The owner/operator may wish to establish more than one such trigger level to allow steam stripper operating parameters to be varied according to the ability of the treatment unit to treat different streams being routed to it. In this example, assume that an existing process at the facility uses methyl ethyl ketone (MEK) and generates an affected wastewater stream with 125,000 ppm MEK (based on the published solubility of MEK in water). Published data show that the Henry's Law Constant for MEK is 4.36×10^{-5} atm/gmole/m³. Assume further that the initial steam stripper compliance demonstration for MEK removal indicated that a liquid/vapor (L/V) ratio of 12.7 and an average steam feed of 2,900 pounds per hour (not to fall below an instantaneous minimum of 2,300 pounds per hour) are required to achieve compliance.

Next, assume that a second existing process at the facility uses N,N-Dimethylaniline (DMA) and generates an affected wastewater stream with 16,000 ppm (based on the published water solubility for DMA). Published data show that the Henry's Law Constant for DMA is 1.75×10^{-5} atm/gmole/m³. Assume further that the initial steam stripper compliance demonstration for DMA removal indicated that an L/V ratio of 10.0 and an average steam feed of 3,100 pounds per hour (not to fall below an instantaneous minimum of 2,400 pounds per hour) are required to achieve compliance.

The Henry's Law Constant is a measure of the partition of a compound between air and water (i.e., the "strippability" of the compound). Thus, based on the compliance demonstration results above, the owner/operator could propose, and the permitting authority approve, the conditions below for inclusion in the title V operating permit to assure compliance with subpart GGG for new and modified wastewater streams routed to the steam stripper. Note that these conditions would apply only to partially soluble HAPs with

Henry's Law Constants equal to or greater than that of DMA. Other provisions would have to be made for soluble HAPs and for partially soluble HAPs with lower Henry's Law Constants, or the source would have to undertake a permit revision to address new streams containing HAPs of these types.

1. When the steam stripping unit is receiving wastewater containing one or more partially soluble HAP (and no soluble HAPs) and the lowest Henry's Law Constant for any of the HAPs is greater than or equal to 1.75×10^{-5} atm/gmole/m³ but less than 4.36×10^{-5} atm/gmole/m³, the stripper will maintain a maximum L/V ratio of 10.0 and an average steam feed of 3,100 pounds per hour (not to fall below an instantaneous minimum of 2,400 pounds per hour).

2. When the steam stripping unit is receiving wastewater containing one or more partially soluble HAP (and no soluble HAPs) and the lowest Henry's Law Constant for any of the HAPs is greater than or equal to 4.36×10^{-5} atm/gmole/m³, the stripper will maintain a maximum L/V ratio of 12.7 and an average steam feed of 2,900 pounds per hour (not to fall below an instantaneous minimum 2,300 pounds per hour).

To illustrate the change management strategy for the wastewater requirements, assume in this example that a new extraction step will use methylene chloride which is listed as a partially soluble HAP in Table 2 of subpart GGG. Using the operating procedure already approved in the title V permit, the owner/operator determines that the new extraction step will generate a wastewater stream with 20,000 ppm methylene chloride (based on the published solubility of methylene chloride in water) and an annual load of more than 1 Megagram per year (based on the process "recipe" and maximum possible production rate or as limited by permit conditions). Thus, the new wastewater stream is subject to treatment under the MACT standard pursuant to section 63.1256(a)(1)(i)(A). Published data show that the Henry's Law Constant for methylene chloride is 2.68×10^{-3} atm/gmole/m³. Since the Henry's Law Constant is greater than 4.36×10^{-5} atm/gmole/m³, this stream can be discharged to the existing steam stripper provided the stripper is operated within the operating parameter trigger level established in the permit [i.e., maintaining a maximum L/V ratio of 12.7 and an average steam feed of 2,900 pounds per hour (not to fall below an instantaneous minimum of 2,300 pounds per hour)].

Based on this analysis, the new extraction step can be controlled by the steam stripper to assure compliance with the MACT standard and the change can be instituted without a permit revision. The owner/operator shall maintain in the on-site log records of all the procedures used (including the characterization of the new wastewater stream, the determination that the stream is subject to treatment under subpart GGG, and the comparison with the stripper's two-level Henry's Law Constant cutoffs) and the process and treatment unit parameters needed to verify ongoing compliance (including when the process change was instituted, when the modified process is in operation, how the wastewater stream is controlled, and the L/V ratio and average steam feed rate for the stripper). Moreover, the permit shall require the recordation in the log of additional applicability and compliance information, as necessary to assure compliance with subpart GGG.

b. *Additional considerations.* Additional options are available to permitting authorities designing flexible title V permits to accommodate, without permit revision, emissions changes controlled by a condenser. Instead of requiring that all changes affecting emissions must meet the MACT standard under constant operation of an existing condenser at worst-case conditions, a permitting authority may issue permits where the condenser may be operated at different temperatures correlated to actual emissions profiles. Permits (through their terms which incorporate subpart GGG) will already contain the replicable means to calculate emissions profiles for process changes and the condenser exit temperatures required to control them. The Agency may explore development of similar approaches for other control devices, but recognizes that any such approaches before being incorporated into the permit would have to: (1) be calibrated in the field for a particular site; (2) meet rigorous tests to demonstrate scientific credibility, replicability, and practical usage; (3) ultimately assure compliance with subpart GGG and all other relevant applicable requirements; and (4) be evaluated by EPA to determine whether such an approach is possible for other control devices.

New control devices are, in general, not preapproved and their operational limits must be the subject of a permit revision which incorporates this information into the title V permit. The Agency, based on its ongoing efforts to assure compliance, has found that the proposed new control devices must be

subject to a prior site-specific evaluation by a reviewing authority in order to assure that the control device is adequately sized and that reasonable assumptions were used related to its performance. This general limitation is not related to change management except where the addition of new productive capacity (e.g., a new process using new process equipment) would require control capacity beyond that previously approved in the permit. Currently, the only exception to this limitation under the change management strategy involves the preapproval of certain new condensers. Here the permitting authority may advance approve new condensers but only to the extent that they are like-kind replacements for those currently approved in the permit or are specifically identified from an inventory of preapproved, existing (but not currently in-service) devices at the facility.

With respect to Leak Detection and Repair (LDAR) work practice standards under subpart GGG, changing to a new process or modifying an existing one would not affect the content of the title V permit. These LDAR requirements apply broadly across a site as a work practice standard to the fugitive emissions of many types of equipment components at a facility. This equipment typically includes pumps, pressure relief devices, valves, and connectors, which typically number in the thousands at pharmaceutical facilities. The individual components subject to the LDAR requirements do not need to be specifically listed in a facility's title V permit.²

Instead, the title V permit shall contain a general identification in the title V permit of the equipment covered and the associated compliance obligations that will suffice to assure compliance with the LDAR requirements. Accordingly, a separate up-to-date list of affected equipment components must be maintained as

² The rule's LDAR provisions apply to significant numbers of emissions units, and typically do not involve different emissions control levels for equipment components subject to LDAR requirements. The LDAR requirements typically are written as a set of work practice standards that either apply to a piece of equipment or do not apply. To ensure that an affected source properly identifies those pieces of equipment subject to the LDAR requirements under subpart GGG, the regulation is including a requirement to maintain a separate list of affected equipment components within the LDAR recordkeeping provisions. For these reasons, and because the LDAR requirements apply to so many equipment components at pharmaceutical facilities, the Agency believes it is appropriate not to require the individual components to be specifically listed in the title V permit for these facilities.

required by the extensive LDAR record keeping provisions. Given that no specific list of components is required in the permit, and the permit shall comprehensively cover the equipment component types subject to LDAR requirements, the content of the permit will be unaffected by changes to such components that occur in the course of introducing a new process or modifying an existing one.

Finally, the promulgated rule features alternative standards for any process vent and storage tank emissions sources that are ducted to control devices. These alternative standards require achieving a specific total organic carbon (TOC) concentration of 20 ppmv and a concentration of hydrogen halides and halogens of 20 ppmv from the outlet of control devices. Sources using these alternative compliance options are likely to reduce significantly (particularly where a single control device services multiple processes using nondedicated equipment) the required record keeping and reporting and to simplify the change management strategy. For example, a source could specify processes (which do not emit hydrogen halides or halogens), each of which vents to a carbon adsorption bed documented to achieve 20 ppmv TOC. In this case, several of the permit elements implementing the previously described change management strategy could be eliminated (e.g., provisions related to the menu of compliance options and suitable control devices, and the monitoring of parameter values), and much of the record keeping could be reduced to tracking which processes are routed to the common control device and monitoring TOC outlet concentrations to show compliance with the 20 ppmv standard. However, other monitoring and record keeping requirements (e.g., flow rate maximum through the control equipment) may be needed in the permit to address periodic monitoring or compliance assurance monitoring and non-MACT applicable requirements (e.g., minor NSR) which limit the total atmospheric loading from the source.

3. Legal Considerations

The management of change strategies set forth in this preamble represent the Agency's effort to devise an innovative approach to deal with the frequent process changes that take place at pharmaceutical manufacturing facilities without the need for equally frequent revisions to their permits. The strategies rely upon a number of factors (see section VI.L.4. *Supporting Rationale for Recommended Strategy*) that, while perhaps not unique in this industry and

in subpart GGG, are specific to it, and the Agency is uncertain whether and to what extent they may have application in other contexts. These factors underlie the Agency's present belief that the change management strategy in its practical application will assure compliance with subpart GGG through title V permits, and satisfy the objectives of part 70 and title V of the Act.

This approach is frankly an experimental one. Although EPA believes that the legal interpretations upon which the Agency is relying are consistent with the Clean Air Act and existing regulations, some aspects of this approach strike out in new and untried directions. In effect, EPA is conducting a pilot program to demonstrate whether permits that allow changes under subpart GGG can be made: (1) without permit revision or 7-day advance notification under section 502(b)(10); (2) based on the source's application of clear, simple definitions and ROPs; and (3) while contemporaneously being recorded in detailed operating logs. The EPA will therefore be testing its belief that such an approach will be practicably enforceable, will assure compliance with the standard-obtaining the emissions reductions required by the standard, and will satisfy the objectives of title V of the Act.

The 40 CFR parts 70 and 71 provide for the establishment in title V operating permits of terms and conditions for reasonably anticipated operating scenarios at a source.³ A source may then preapprove alternative operating scenarios in its permit and switch among these scenarios in response to operational demands, without obtaining a permit revision to account for the previously approved new operating scenarios and their different applicable requirements. All title V permits, including those implementing alternative scenarios, must contain terms and conditions sufficient to assure that each operating scenario will comply with all applicable requirements and will meet the requirements of part 70. Pursuant to section 70.6(a)(9), the source must identify such scenarios in its permit application and the permitting authority must approve the scenarios for inclusion in the permit.

³ Because part 71 addresses alternative operating scenarios in the same fashion as part 70, the Agency believes that part 71 is equally amenable to the management of change approach described in this section. For ease of discussion, this section will refer to the relevant provisions of part 70 in discussing the management of change approach. The EPA intends, however, that the part 70 discussions in this section should have equal force and application to the corresponding provisions of part 71.

The permit terms and conditions necessary to implement the alternative operating scenarios must also require the source to record contemporaneously in an on-site log the scenario under which it is operating, upon changing from one scenario to another. The contemporaneous record of the present operating scenario that the source maintains on-site serves to document for important inspection and enforcement purposes that the source is in compliance with the source's permit terms and conditions.

The determination of when alternative scenarios are "reasonably anticipated" and would meet the requirements of section 70.6(a)(9) is not amenable to a rigid legal formula that can dictate through general guidance what types of permit terms and conditions will ensure that a source's future operations comply with these requirements. Instead, there must be legal and practical considerations that inform this determination within EPA's reasonably broad discretion to do so. The Agency has identified certain preliminary legal boundary considerations and conditions for implementing reasonably anticipated operating scenarios to meet subpart GGG, pending further experience with pilot projects and permits and further guidance or rulemaking on the subject.

The structure and nature of title V permitting will determine how permit terms and conditions may be developed to reasonably anticipate alternative operating scenarios. The part 70 regulations govern the content requirements for permit applications and permits in section 70.5 and 70.6, respectively, and these sections will govern how reasonably anticipated alternative operating scenarios must be addressed in permit applications and permits as well. For example, all part 70 permit applications must contain information "for each emissions unit at a part 70 source," which includes a description of the source's processes and products for each alternate scenario identified by the source [sections 70.5(c) and (c)(2)]. Section 70.6(a)(9) in turn makes clear that a source must identify in its application each reasonably anticipated operating scenario for which it intends to include permit terms and conditions.

Along the same lines, section 70.6 requires that all part 70 permits include emissions limitations and standards, monitoring, record keeping, reporting, compliance and other requirements to assure compliance with all applicable requirements. Section 70.6(a)(9) again makes clear that the permit terms and conditions governing alternative

scenarios must meet these requirements. Applicable requirements generally fix a source's compliance obligations on an emissions unit or activity, control equipment, process, or combination thereof. Permitting alternative scenarios requires the ability to reasonably anticipate future emissions units, future operational details, and the compliance obligations under each applicable requirement associated with each operational state, as necessary to assure compliance with each applicable requirement.

The permit terms and conditions governing each alternative operating scenario must assure compliance with all part 70 and applicable requirements at all times. This means that the permit terms and conditions must assure compliance with all relevant requirements at the time of initial permit issuance and at the time that changes to alternative operating scenarios are undertaken in the future. Upon a source's change from one operating scenario to another, the terms and conditions of the permit must continue to fully and accurately reflect the source's compliance obligations under all requirements applicable to the change. If a source changes to an operating scenario that was not provided for in its permit, or if a change undertaken by a source triggers compliance obligations that are not fully and accurately reflected in the permit, then the source would be subject to the permit revision, permit reopening, or section 70.4(b) notification provisions, as applicable, under the part 70 regulations prior to making the change.

The permitting of established operating scenarios at a part 70 source that are fully known, identified and expected is straightforward. Such situations are accounted for in part 70 permits through terms and conditions that specify the emissions units and activities, provide required citations to applicable requirements, and supply the additional range of permit provisions required in a complete title V permit. Reflecting current equipment and activities, existing operating configurations, and presently applicable regulatory requirements, these operating scenarios present no difficulty to incorporating into an operating permit sufficient terms to meet the permit content requirements of part 70.

The preapproval and permitting of reasonably anticipated alternative operating scenarios is somewhat different in that their associated emissions units and activities, operational configurations, and applicable requirements may not be known with the same specificity as

previously established operating scenarios. Nonetheless, in order to be included in the permit as alternative operating scenarios, the source must provide sufficient specificity for those scenarios to allow the permitting authority to determine the applicable requirement(s) and establish permit terms and conditions assuring compliance with those applicable requirements and the requirements of part 70. The EPA believes that it is a reasonable interpretation of section 70.6(a)(9) to require only that permit terms and conditions reasonably anticipate the emissions units and activities, operational configurations, compliance obligations, and other relevant information associated with each alternative operating scenario, so long as the permit terms and conditions assure compliance with relevant applicable requirements at all times. Conversely, there may be new or different requirements that attach to an operating scenario at the time that the source changes to that scenario, or other material differences from the permitted operating scenario may have arisen, such that the change and its regulatory requirements are not covered by the permit. If the permit does not reflect those requirements because they were not previously established, then the source, as provided for under the part 70 regulation, must account for all requirements applicable to that operating scenario, whether through a permit revision or advance notification or in response to a permit reopening.

The permit terms needed to approve alternative operating scenarios to assure compliance with all applicable requirements and to be reasonably anticipated may, in general, be expected to vary by source category, the different types of emissions units and operating scenarios present at sources, and the inherent uncertainty of predicting future operating conditions and market demands. In particular, the authorizing permit limits might vary based on several factors which primarily include, but are not necessarily limited to: the types and specific terms of the applicable requirement(s); the complexity of the facility; whether the type or quantity of emissions will change widely; whether different pollution control devices will be needed; the ability of the permitting authority to develop practicably enforceable permit terms for alternative scenarios and to define the limitations of the control and monitoring approaches; the potential for future technology advances (where such advances are linked to the nature of the

applicable requirements); and the presence of discretion in determining the applicability and/or the compliance status of the change. These factors are not always present, are often interdependent, and can range widely in their ability to affect whether compliance with the applicable requirements can be assured and whether operating scenarios can be reasonably anticipated.

Because permit terms and conditions for reasonably anticipated operating scenarios implementing subpart GGG will be based in part upon ROPs that are designed to yield site-specific compliance details at the time of a change, EPA believes these procedures must be capable of yielding the identical compliance details, such as compliance triggers for monitored control device parameters, whether applied by the source, permitting authority, EPA or member of the public. Thus, the permit terms and conditions which incorporate such procedures will produce predictable and certain compliance results at the time of a change.

The EPA is testing this approach to determine in practice the appropriateness of allowing pharmaceutical facilities to determine the specific compliance obligation(s) under subpart GGG that apply to a particular process change through reliance on the standard's ROPs and ROPs that gained earlier approval through the permitting process. The form of the ROPs in subpart GGG and the nature of pharmaceutical manufacturing operations, in conjunction with the other safeguards and features of the change management strategy, are central to the Agency's willingness to conduct this pilot strategy here.

A source's compliance with permit terms and conditions for reasonably anticipated operating scenarios based upon properly implementing ROPs derived from subpart GGG will be "deemed" compliance with the applicable requirement for section 70.6(f)'s permit shield only to the extent that the source applies the procedures correctly. While permitting authorities may extend the permit shield to the permit terms and conditions of each alternate operating scenario implementing subpart GGG, assuming the State program has a permit shield provision and assuming it is applied in the permit consistent with section 70.6(f), part 70's permit shield may not extend to on-site implementation logs required by section 70.6(a)(9)(i). Like section 502(b)(10) changes, most administrative permit amendments, and MPMs that do not undergo prior public

review [see sections 70.4(b)(12)(i)(B), 70.7(d)(4) and 70.7(e)(2)(vi)], the part 70 permit shield may not extend to an implementation log that has failed to undergo prior public review. Nor may the shield extend to the outcomes of ROP equations, applicability or nonapplicability determinations, or other compliance determinations recorded only in the OSIL. While a source will be required to use the implementation log to follow compliance triggers that implement the permit and one or more applicable requirements, the permit shield is not available to deem the source's compliance with those compliance triggers to be compliance with the permit or the applicable requirement.

In addition to permitting authority review, part 70 permits are subject to public and EPA review to ensure that the permit terms and conditions assure compliance with all applicable requirements and the requirements of part 70. An essential consideration in determining whether permit terms and conditions reasonably anticipate operating scenarios is whether the permit provides sufficient information and opportunity for the public and EPA to determine and comment in a meaningful fashion whether the terms and conditions of reasonably anticipated operating scenarios meet, and will continue to meet, all applicable requirements (including those of subpart GGG) and part 70 requirements.

Permit terms and conditions reflecting alternative operating scenarios, like all part 70 permit terms and conditions, are subject to the possibility of EPA objection and public petition under section 505(b) of the Act. In addition, operating permits are subject to the possibility of reopening by permitting authorities or EPA under sections 502(b)(5) and 505(e) of the Act. Permit terms and conditions of alternative operating scenarios that fail to reasonably anticipate future operating scenarios, emissions units and activities, and their associated compliance obligations may be subject to EPA objection, public petition, or reopening for cause. Failure by permitting authorities to submit information necessary for the public and EPA to review proposed permits adequately constitutes grounds for an EPA objection under section 70.8(c)(3)(ii), but information necessary for the review of alternative operating scenarios should be guided by the principle that permit terms and conditions must reasonably, but not perfectly, anticipate alternative operating scenarios. (Note, however, that the permit and any alternative

operating scenarios must fully and accurately govern changes that a source believes to be pre-approved at the time of the change, or else the part 70 permit revision, permit reopening, or 502(b)(10) notification provisions, as applicable, must be followed prior to making the change.)

Section 70.6(a)(9) affords permitting authorities the latitude to impose permit terms and conditions to assure that alternative operating scenarios meet all applicable requirements and the requirements of part 70. Such terms and conditions may go beyond compliance obligations strictly incorporated from applicable requirements being implemented pursuant to the alternative scenario. For example, in order to assure compliance with an applicable requirement or part 70, a permitting authority may determine that it is necessary to impose additional safeguards for alternative scenarios, such as requiring new emissions units or emissions units operating under different scenarios to be routed to a common, existing control device with preapproved capacities and operating parameter limitations. A permit might also require additional monitoring, record keeping, or reporting, or require that the source undertake a permit revision should future changes deviate materially from the reasonably anticipated scenarios in a manner that jeopardizes the permit's ability to meet all part 70 and applicable requirements. Finally, the permitting authority may require additional details and compliance information in the source's on-site log to ensure that the record of the source's current operating scenario, in conjunction with the permit terms and conditions, assures compliance with all requirements in a manner that serves important compliance, inspection, and enforcement purposes. If the permitting authority determines that these additional safeguards are necessary for an alternative operating scenario to assure compliance with one or more applicable requirements, the permitting authority need not approve the alternative scenario in the permit without such measures.

The preceding legal considerations apply in general to alternative operating scenarios implementing subpart GGG. It is also important to distinguish further among categories of alternative operating scenarios, on the basis of whether new versus existing process equipment or control devices are involved, and on the basis of the specificity of the equipment identification, operational configurations, and linkages to applicable requirements in the permit.

Of the three categories of alternative operating scenarios described below, the Agency is prepared to test the appropriateness of the second and third approaches under section 70.6(a)(9) for purposes of implementing subpart GGG.

First, there are alternative operating scenarios for existing emissions units and activities at a part 70 source, covering specifically identified operational states or configurations for specified emissions units. In its simplest form, this category is exemplified by an emissions unit such as a fossil fuel-fired boiler that has two fuel burning options, which are each subject to a different applicable requirement with different monitoring obligations. The task of reasonably anticipating the terms and conditions of an alternative operating scenario such as this is furthered by the relative ease of specifying the emissions unit and its activities, operational configurations and conditions, and associated applicable requirements. A source's past operating experience as well as future operational certainty, founded upon existing emissions units and activities, will make permitting of such alternative scenarios more like the task of permitting a source's current operating scenario.

The second category of alternative operating scenario, being tested to implement subpart GGG, covers the combination and reconfiguration of existing emissions units and control devices in alternative operational states and configurations that are not specifically identified in the permit. As described in greater detail in section VI.L.2.a *General Strategy for Change Management*, a permit menu of alternative operating scenarios may be constructed to govern only the subpart GGG compliance obligations of process equipment and control devices specifically identified in the permit. If a change to an alternative operating scenario preapproved in a permit menu involves only the reconfiguration of existing, permitted emissions units or control devices, and the change remains within the capacity of an approved control device to which it is routed; if subpart GGG's provisions governing that change are limited to ROPs; and if the other criteria of the change management strategy are satisfied (including the contemporaneous recordation of compliance information in the OSIL), then EPA is willing to test whether such an approach will assure compliance with subpart GGG through title V permitting. While this approach will not specify future applicability determinations and establish the specific compliance obligations of particular process configurations to the

same degree as the first category of alternative operating scenarios, EPA anticipates that the approach will nonetheless assure compliance with subpart GGG and otherwise meet the requirements of part 70.

The third category of alternative operating scenario, again tested in this pilot permitting approach to subpart GGG, covers new emissions units and condensers that are not in service at the time the operating scenario is established in the permit, but that may be preapproved (with respect to subpart GGG requirements) in two circumstances only. First, the permit may preapprove future like-kind emissions units or condensers that will replace retired emissions units or condensers without increasing permitted capacity. Second, the permit may preapprove specifically identified, on-site surplus processing equipment that may replace retired equipment or augment in-service equipment by increasing production capacity. The Agency believes that it is a viable interpretation of the existing section 70.6(a)(9) to allow alternative operating scenarios implementing today's standard to include permit terms and conditions approving in advance these categories and usages of new emissions units and condensers that will be subject to subpart GGG, if they meet the criteria discussed earlier in section L.2.a.

The EPA, in August 1994, proposed to allow use of the concept of alternative operating scenarios under section 70.6(a)(9) to provide advance approval to construct and operate new or modified units subject to NSR and section 112(g) (referred to as "advance NSR"). (59 FR 44460, 44472, Aug. 29, 1994). Under this proposal, advance NSR would have allowed permitting authorities to establish the applicable NSR or section 112(g) requirements before a reasonably anticipated project or class of projects was constructed or modified, and then include that project's requirements in the part 70 permit for the facility. As a result, the project would be "preapproved" by the permitting authority, without the need for a later part 70 permit revision since the part 70 permit would already contain the relevant construction and operation requirements for the project.

In August 1995, EPA further clarified its advance NSR proposal by proposing to add a definition of advance NSR to section 70.2, and by explaining that, in EPA's view, a change subject to an advance approval scenario would not be a change under section 502(b)(10) of the Act (60 FR 45530, 45544-45, Aug. 31, 1995). Rather, it would constitute a

switch to an alternative operating scenario under section 70.6(a)(9). As the 1995 preamble noted, this interpretation would have two advantages. First, it would allow the use of advance NSR for title I modifications, and avoid the limitation that changes made under section 502(b)(10) cannot be title I modifications. Second, and more important, the 7-day advance notification under section 502(b)(10) which attaches to each change made under that section would not apply to changes under the advance NSR approval. Consequently, where the State operating permit program allows for advance approval, and the permitting authority approves an alternative scenario containing advance approval, the part 70 permit could allow a source to make the approved change without an advance notice or a part 70 permit revision.

Although the Agency has not finalized revisions to the part 70 regulations to adopt the proposed amendments to sections 70.2 and 70.6(a)(9) discussed above, the Agency is prepared to interpret the existing part 70 regulations for purposes of the change management strategy for subpart GGG approach to enable alternative operating scenarios to encompass advance approvals in the limited manner described in this notice. In other words, for purposes of the approach described in this section, EPA believes that it is a reasonable interpretation of existing section 70.6(a)(9) to cover the advance approval of the categories of new process equipment and condensers described in this notice, within the scope of alternative operating scenarios that may be included in part 70 permits. The concept of "reasonably anticipated operating scenarios" is expansive enough to encompass not only existing equipment that may operate under a different operating scenario reasonably anticipated to occur, but also to encompass new equipment that replaces permitted equipment (without increasing permitted capacity), and new surplus equipment that is on-site and specifically identified and pre-approved in the permit.

The Agency is prepared to advance these interpretations under the current regulations prior to any final action on the part 70 revisions that might adopt the proposed amendments, for purposes of implementing subpart GGG through the pilot approach for the change management strategy described herein. This interpretation may not be relied upon for purposes of implementing applicable requirements other than subpart GGG through title V permits.

The EPA may extend this interpretation to other applicable requirements, however, in the context of an individual permitting pilot project in order to facilitate the development and evaluation of the change management strategy, along with other flexible permitting opportunities, for the pharmaceutical industry. The policies set forth in this section are intended solely as guidance for purposes of implementing subpart GGG, do not represent final Agency action, and cannot be relied upon to create any rights enforceable by any party.

Other changes that a pharmaceutical facility undertakes that implicate subpart GGG requirements and that are not preapproved in the permit through the change management strategy or ordinary alternative operating scenarios, must be accounted for through part 70's permit revision or section 70.4(b)(12) or (b)(14) notice procedures, as appropriate. Such changes would include, but are not necessarily limited to: changes among permitted, in-service equipment involving subpart GGG's provisions governing the change that are not limited to ROPs; changes that would exceed the performance capabilities or capacity limitations of approved control devices; changes involving the addition of new emissions units or control devices (including any control device other than condensers) that have not been approved pursuant to the categories discussed in section L.2.a; and other changes that are not otherwise preapproved in the permit. Finally, of course, changes that implicate applicable requirements other than or in addition to subpart GGG must be addressed in the manner required by the part 70 regulations.

In the proposed revisions to part 70 in August 1995, 60 FR 45530, EPA proposed an expeditious permit revision process for the incorporation of requirements that would not need source-specific tailoring. The process was referred to as "notice-and-go," since the source could operate the change as soon as it submitted a notice to the permitting authority, and would not need to wait for review or approval of the change by the permitting authority. The EPA further elaborated on the concept in a **Federal Register** notice announcing the availability of its May 14, 1997 draft final revisions to part 70, published on June 3, 1997, 62 FR 30289, where the process was called "notice-only."

As currently envisioned, the process would be available for changes that are: (1) subject to requirements taken directly from the applicable requirement; (2) where there is no

creation of any source-specific requirements; and (3) the permitting authority allows the change to take place without the need for its review or approval. For example, incorporation into the permit of a compliance option specified in a MACT standard would be eligible for notice-only procedures, but the establishment of source-specific parameter ranges for monitoring the performance of a control device would not be eligible. The installation of a degreasing unit subject to the halogenated solvent cleaning MACT standard under subpart T of Part 63 would also be eligible, if the facility elects to meet the standard through one or more of the compliance options specified in the MACT standard. This change would be eligible for the notice-only process because the permit terms that apply to the change would be taken straight from the underlying requirement, and there would be no need to add monitoring requirements.

In the May 1997 draft, EPA would have required the source to certify compliance in the notice with all applicable requirements that apply to the change (in the case of subpart GGG, for example, a new unit being added). This certification requirement helps offset the lack of review by the permit authority prior to operation of the change, since a source making a false certification would be subject to penalties, or to criminal fines in the case of a knowing violation. There would also be no permit shield available for "notice-only" changes, so if a source failed to identify one or more requirements that apply to a new unit, the requirements are nonetheless applicable, and the source would be liable for any violations of applicable requirements to which the change is subject.

The Agency anticipates that the notice-only category of the third tier of the part 70 revisions, if adopted as presently conceived, would accommodate the application of subpart GGG requirements to new process equipment and control devices through part 70 permit revisions. Part 70 permits implementing subpart GGG through the management of change approach described in today's notice likely will have established source-specific requirements for existing control devices in the initial permit. The purpose of the notice-only procedures would be to revise the permit so as to identify new process equipment or control devices being added at the source, and to match up relevant permit requirements that apply to the new units. As noted at the outset of this section, however, it still may be

necessary to address the consequences of a particular change relative to other relevant applicable requirements that may attach to that change. Thus, changes must be evaluated under the part 70 permit revisions to determine what level of permit revision might be required to address other regulatory consequences of the change.

4. Supporting Rationale for Recommended Strategy

a. *Overview.* The EPA has initiated this pilot permitting strategy for subpart GGG based upon a preliminary view that the recommended approach will satisfy section 70.6(a)(9)'s expectations for "reasonably anticipated" alternative operating scenarios, and comport with title V's mandate that operating permits assure compliance with applicable requirements. In general, the Agency believes the change management strategy meets these criteria by relying upon the basic design and provisions of subpart GGG; the additional requirements under the policy for permits to contain terms that assure the proper identification and compliance of all alternative operating scenarios covered by the strategy; and the title V permit issuance, significant permit modification, or renewal processes, along with quarterly reporting to permitting authorities, to afford meaningful opportunities for the permitting authority, EPA, and the public to review the strategy proposed by a source, and oversee its implementation, for a particular location.

Notwithstanding these provisions and protections, the Agency is recommending that permitting authorities use the change management strategy only on a trial basis, and only with respect to subpart GGG. The EPA notes that the need to match that changes in emissions correctly to their applicable subpart GGG requirements is central to the purpose of section 70.6(a)(9). As a critical first step, certain key definitions (e.g., process vent, process) and other rule provisions must be interpreted by EPA or the permitting authority in the permit process before applying the relevant ROPs. The ROPs then objectively size and sort emissions changes relative to their subpart GGG obligations and assure compliance in part by routing the new emissions, as appropriate, to a control device with sufficient capacity. Use of these definitions and regulatory provisions could be open to interpretive disputes and misapplication of the standard. However, due to several factors (including the homogeneity of process equipment in the industry, the high

accuracy with which emissions resulting from changes can be characterized, the existence of ROPs for determining emissions and the effects of emissions controls, and the validation of a source's use of the relevant definitions, regulatory provisions, and ROPs during the title V permit process), EPA believes that there is a sufficiently low probability that sources will make errors in applying these definitions and provisions during the implementation of the change management strategy. Accordingly, the Agency will determine on the basis of empirical results whether this strategy needs additional protections, whether it is an appropriate approach to permitting, and/or whether and on what basis it can be made available to a broader range of sources and standards.

b. *Detailed Rationale.* Subpart GGG is a process-based standard which has been carefully designed to provide the framework needed by the change management strategy to establish the preapproved family of alternative operating scenarios for reconfiguration of existing process equipment and to define the compliance obligations of operating scenarios involving the addition of certain new process equipment. This framework is defined primarily from three types of features found in subpart GGG. In total, these three features establish a means for demonstrating continuous compliance that must be repeatedly applied for process and operational changes at the source.

The first feature is comprised of requirements relating to the use of equations to estimate emissions from various pharmaceutical operations. These equations provide the ability to characterize a process or operational change's effect on emissions in a replicable and accurate fashion. The equations incorporate proven chemical and physical principles such as the Ideal Gas Law and Raoult's Law, and have previously been approved by the Agency (most recently in MACT standards for the Polymers and Resins Industry, subparts U and JJJ of 40 CFR part 63). Upon their incorporation into the permit and approval by the permitting authority, a source must use these equations to determine applicability of the standard and to demonstrate initial compliance with it. Subsequently, the source must use the equations to determine the emissions from changes in operations together with those from ongoing operations. Anyone using the level of emissions predicted from these equations would then determine in exactly the same objective fashion how to maintain

compliance with subpart GGG while manufacturing different intermediate or final products.

The second feature providing flexibility is the requirement that control devices be designed to accommodate reasonable worst-case operating scenarios without need for revised operating parameters or operating conditions. This means that most changes that affect emissions can be handled by the devices. In all cases, compliance assurance is achieved by virtue of the requirement to compare the emissions profile associated with the change with the worst-case operation approved for the relevant control device(s) and to require a permit revision where the changed operation would present a need for greater control.

The third feature of the rule that facilitates operating changes is the record keeping requirements. In the OSIL, as described earlier (see section VI.L.2.a. *General Strategy for Change Management*) sources must keep a precise log of the operation of batches, the occurrence of any process or operational changes and associated changes in emissions, the requirements of subpart GGG contemporaneously applicable to each process under its new operational state, and the controls used to comply with these requirements. The information required by the permit, together with on-site records and the required calculations for the sizing of emissions sources and the sorting of changes relative to their subpart GGG requirements allows an inspector to determine initially and for any subsequent time period which activities from a listed process require control and the level of control that is required for each.

The rule enables the company's basic framework for the change management strategy to be incorporated into the title V permit. In addition, other permit terms are needed to assure that an appropriately useful scope of alternative scenarios can be reasonably anticipated and preapproved to meet section 70.6(a)(9) and that the compliance obligations of certain new process equipment (i.e., like-kind replacements and on-site surplus equipment identified in the permit) can be defined. The first of these terms applies to operations that are not covered by ROPs as taken directly from the requirements in subpart GGG. Previous discussions of ROPs have alluded to two types, those that are included in detail in subpart GGG and those that are established in the title V permitting process to meet subpart GGG. The latter category is necessary because of the compliance flexibility that subpart GGG contains.

For the methodology that the source proposes to receive the status of a permit-required ROP for purposes of the change management strategy, the permitting authority must determine that the methodology is scientifically credible and is objectively replicable. The bottom line is that the ROP must be a procedure based solely on nondiscretionary steps and on objective data (where data are required) to accomplish these steps. Accordingly, the results from using these procedures are the same regardless of who uses them and when. Where the permitting authority preapproves ROPs, the permit shall require the source to use them over the defined range of similar operations (unless, of course, the source wishes to obtain approval of a different method under the permit revision process). The EPA would like to stress that the ROPs are only an important part of the compliance process established by following the standard and are not an alternative standard, monitoring, or test method.

Section 504 (a) of the Act provides the legal basis for establishing ROPs during the permit process. This section requires that title V permits contain emissions limits/ standards and other terms as needed to assure compliance with applicable requirements. In its White Paper Number Two issued in March 1996, EPA stated that title V permits pursuant to section 504(a) may contain terms which are not necessarily the terms of a particular applicable requirement, provided that such terms assure compliance with this requirement. (see section II.A.2.d. and II.A.5.) The Agency believes that this same authority also supports development of a methodology as a ROP during the title V permit process, provided that its development is consistent with the provisions of the applicable requirement, following the methodology would provide the same degree of compliance assurance as would following the applicable requirement directly, and sufficient procedural safeguards are followed in its establishment.

Subpart GGG is consistent with establishing such methodologies. For example, it empowers the permitting authority to review and approve, as appropriate, a source's proposed emissions estimating procedures for operations not covered by the standard's equations. In addition, as part of the initial compliance determination process laid out in subpart GGG, the source is required to provide the specifics of its calculations and engineering analysis procedures to the permitting authority as a matter of

course. Subject to certain boundary conditions on its applicability and use, the specific source proposal can often be extended into a methodology to address future qualifying changes.

The EPA is testing whether reliance on this approach also provides equivalent compliance assurance to that provided from a case-by-case review implemented for the same change by the permitting authority. In the absence of the change management strategy, the permitting authority would evaluate the procedures used by the source each time a change was to be made. Thus, the permitting authority would be called upon to make the same judgments in either case; only the timing and frequency of the review and approval process would change. In the context of the strategy, the permitting authority and the source simply agree ahead of time on the replicable procedures that are to be used for a range of changes.

Finally, by requiring that the approval to take place during permit issuance, permit renewal, or significant permit modification, the change management strategy ensures that adequate oversight by the public and EPA occurs. This determination and approval by the permitting authority must take place during a process in which EPA and the public are afforded the opportunity to review and comment on the methodology and upon its initial use. The EPA requires that the streamlining process contained in its White Paper Number Two issued March 1996 be used to accomplish this review (including the submittal of the demonstration to EPA while a complete application containing the demonstration is otherwise submitted to the permitting authority). Application of the methodology and its outcomes must also be reflected in the OSIL. Verification of its use as well as the supporting calculations and analyses will be included (consistent with confidential business information protections) as part of the quarterly OSIL report describing changes since the last report. This report shall be submitted to the permitting authority on a quarterly basis and be made available to the public and EPA.

It should be noted that subpart GGG, while not specifying enough details to make some procedures replicable, typically does include guidance on what will be required. For example, the standard allows sources to demonstrate compliance for small control devices using a design evaluation and specifies for each type of control device the factors that must be included in this evaluation. This guidance facilitates the permitting authority's review of the

design evaluation that the source subsequently submits. Thus, in many cases, the standard provides the target for the design of a ROP, but leaves the details to be proposed by the source and approved by the permitting authority.

While the mentioned ROPs should enable the vast majority of expected changes to be preapproved in the title V permit with respect to compliance with the MACT standard, some exceptions do exist. Changes governed by MACT provisions which are affected by any meaningful subjective judgments cannot be preapproved. This would include all procedures which are not replicable as contained in subpart GGG and are not otherwise approved during the permit issuance or revision process to be ROPs. In addition, certain requirements apply in a very event-specific fashion and cannot be preapproved without a precise advance understanding of a particular change. The EPA has already identified some requirements and procedures in the final MACT rule that cannot be relied upon or developed as ROPs, and thus may not be employed under the change management strategy.

For example, for any process unit complying with the pollution prevention alternative standard, an owner/operator must establish baseline production-indexed HAP consumption factors from which to apply the 75 percent consumption reduction requirement. Such baseline factors are determined from historical information, and the acceptability of the value depends on which historical years are selected to represent the baseline and on the methods used for the involved material balance around the process unit. It is highly probable that each baseline consumption factor demonstration will encompass unique, process-specific information and methodologies that significantly affect the final value of the factor. With that in mind, the Agency feels that generic preapproval is not possible for changes whereby existing process units switch from complying with individual emission standards on emissions sources (such as a 93 percent reduction requirement for process vents) to complying with the pollution prevention alternative standard. It is appropriate that the permit revision process be used for making such changes.

An additional category not eligible for conversion to ROPs consists of determinations or approvals which have not been delegated to the permitting authority and must be submitted to EPA for approval. For example, the Administrator must review and approve, as appropriate, any source

proposal for an alternative emissions limit or test method. Such reviews cannot therefore be addressed in advance by a ROP defined by the permitting authority.
The Agency has preliminarily reviewed the requirements of subpart

GGG in the context of defining which of them contain: (1) ROPs as written; (2) requirements that can be established during the permit process as a ROP; and (3) requirements which are ineligible for developing such procedures. Tables 3, 4, and 5 follow which describe this

initial categorization. The EPA expects to address this subject more in its implementation guidance for subpart GGG.

TABLE 3.—PROCEDURES THAT ARE REPLICABLE AS WRITTEN IN SUBPART GGG

Procedure	40 CFR part 63 citation
Calculating uncontrolled emissions from process vents—equations for eight types of operations	63.1257(d)(2)(i)(A) through (H).
Calculating controlled emissions from process vents discharged through a condenser—equations for eight types of operations.	63.1257(d)(3)(i)(B) (1) through (8).
Equations for determining whether an existing vent is subject to 98% control	63.1254(a)(3)(i).
EPA performance test methods and calculations	63.1257(a)(2), (a)(3), (b)(1) through (8), and (b)(10)(i) through (iii).

TABLE 4.—POTENTIALLY REPLICABLE OPERATING PROCEDURES THAT CAN BE ESTABLISHED THROUGH PERMITTING WHERE APPROVED BY PERMITTING AUTHORITY, AND SUBJECT TO REVIEW BY EPA AND THE PUBLIC

Procedure	40 CFR part 63 citation
Evaluation of an air pollution control device capability for new scenario (not subject to testing)	63.1257(b)(8)(ii).
Establishing the emissions profile for inlet to control device	63.1257(a)(i).
Determining uncontrolled process vent emissions from an operation not covered by the eight equations in subpart GGG.	63.1257(d)(2)(ii).
Determining whether a new/modified process vent is within the worst-case emissions approved for a control device.	None.
Determining annual HAP load in a wastewater stream	63.1257(e)(1)(iii).
Determining annual average HAP concentration in a wastewater stream	63.1257(e)(1)(ii).
Identification of wastewater streams that require control	63.1256(a)(1).
Evaluation of wastewater treatment unit capability for new scenario	63.1257(e)(2)(ii).
Demonstrating that wastewater tank emissions are increased no more than 5 percent by heating, treating with an exothermic reaction, or sparging.	63.1256(b)(1).
Determining storage tank design capacity	63.1253(a) (1) and (2).
Maximum true vapor pressure for determining storage tank applicability	63.1251.
Methodology for determining individual HAP partial pressures in nonstandard situations	63.1257(d)(2)(i).
Emissions averaging compliance alternative	63.1252(d).
Pollution prevention compliance alternative	63.1252(e).
Demonstrating that an equation in the rule is not appropriate in a specific case for an operation covered by one of the eight equations.	63.1257(d)(2)(ii).
Demonstrating alternative test methods or emissions limits (or any other determinations which the Administrator has not delegated).	63.1261.

The recommended approach for permits also assures that alternative operating scenarios are reasonably anticipated for the reconfigurations of permit-listed equipment by requiring the initial detailed linkages among processes, vents, PODs, tanks, control obligations, and eligible controls contained in the NOCSR to be incorporated into the permit. This incorporation of the baseline operation serves to define an important benchmark from which to anticipate similar, but different future operating scenarios using the same equipment.

The Agency believes that the more general description of equipment within each particular alternative operating scenario in the menu may be appropriate under the particular design of the pharmaceutical MACT standard. That is, a description of process equipment in less detail can be justified here where the determination of process

emissions is clear and a highly effective control approach is used, which is also versatile and effective enough to accommodate a wide range of inlet loadings (and the range is documented and specified on permits). Thus, a conservative approach to emissions reduction (e.g., most devices would operate as if the worst-case scenario were occurring), coupled with a replicable, objective basis (i.e., a required ROP for emissions calculation) to assure that each new change in operation is no more demanding on the control device than the previously established worst case, inherently allows more flexibility under which to "anticipate" a family of alternative operating scenarios.

One potential weakness of the change management strategy is that, before the mentioned ROPs can be relied upon to establish compliance obligations and to assure compliance with them, the

strategy depends on the correct application of certain key definitions (e.g., process vent, process) and other regulatory provisions when a change in emissions occurs. Although EPA has carefully designed these definitions to be clear in their meaning, interpretive disputes could still conceivably arise. The Agency believes for several reasons, however, that there is an extremely low probability for such disputes to occur and that the change management strategy should assure compliance with subpart GGG.

First, the industry, in its basic operations and how subpart GGG definitions will apply to them, is relatively well known. While this assertion may appear to run counter to previous statements regarding the constantly changing processes and equipment configurations that characterize much of the industry, in actuality, the process steps that make up

the wide range of processes in the industry are confined to a relatively limited number of different chemical engineering unit operations. Thus, while the number of process steps, their order, and the specific conditions of each (e.g., temperature, solvents, etc.) may vary widely from process to process, the individual steps are basic, standard unit operations. The chemical engineering principles that govern these unit operations (and their air and wastewater emissions) are well understood. In addition, the FDA independently requires processes to be well defined which limits further any variations in definitional interpretations.

In addition to the significant protections that these inherent safeguards and the OSIL provide, the probability of misinterpreting the use of a particular definition is further reduced during the permit action that establishes the change management strategy. As mentioned, the initial linkages among processes, vents, PODs, tanks, control obligations, and eligible controls contained in the NOCSR would be incorporated into the title V permit to establish the baseline scenario from which to envision future changes. This incorporation also serves to demonstrate an appropriate working knowledge with the key definitions governing the applicability of subpart GGG. More importantly, the permitting authority must specifically approve the source's use of these definitions and this approval is subject to review by EPA and the public. The result will be that the source and the permitting authority will have a well validated common understanding of how these definitions work and how to apply them to future changes.

The recommended approach also fulfills the need to provide adequate review opportunities. In the permit issuance process, the permitting authority, EPA, and the public all have an opportunity to review how the current source operations would comply with the standard and how the proposed permit conditions establish alternative operating scenarios to manage changes occurring with respect to this compliance baseline. In particular, these groups will have the opportunity to review the operating boundaries to assure equal or greater controllability of other emissions profiles and to determine any further need to add specific operational constraints to safeguard against overloading the particular control device(s), for example, or additional permit terms or descriptions in order to assure compliance with the standard. The

alternative operating scenarios as described in the permit must reasonably anticipate reconfigurations of existing emissions units and activities and the additions of certain other preapproved equipment and must contain the associated compliance obligations for these changes under subpart GGG, in order to afford permitting authorities, EPA and the public meaningful opportunity to ensure that the permit's alternative scenarios assure compliance with the MACT standard. To provide an ongoing opportunity to understand which alternative operating scenarios have been operated by the source and the specific corresponding compliance obligations that apply, the permit shall require quarterly transmission of the OSIL changes to the permitting authority, which shall make copies available to the public and EPA upon request.

The Agency is considering whether and to what extent the change management strategy for implementing subpart GGG might also be appropriate for other sources and applicable requirements. Preliminarily, EPA believes that the recommended permitting approach for subpart GGG will be essentially limited to the pharmaceutical and other similar batch chemical industries but it could be extended to industries subject to other emission standards to the extent that EPA believes the same level of compliance assurance associated with the change management strategy described for subpart GGG would be achieved. The EPA expects to evaluate other situations individually, using the mentioned factors and other considerations as appropriate. Affected parties are encouraged to comment on the adequacy of other EPA rulemakings (including those for other MACT standards), to address issues related to the change management strategy where similar needs for operational flexibility potentially exist. Certainly, the same legal constraints together with several situation specific factors (such as those involving the replicability of operating procedures contained in, or derived from, the applicable requirements, the potential for misapplication of the standard, the expectation for detailed descriptions and emissions reduction from the applicable requirement itself for subject equipment, and the ability of the control and monitoring approaches to accommodate changes) would again be relevant to defining whether a strategy for such applicable requirements based on alternative operating scenarios is possible under section 70.6(a)(9).

The EPA believes that the change management strategy should presumptively be limited to the pharmaceutical MACT, since other standards do not initially appear to produce equivalent opportunities to create alternative operating scenarios under such a strategy. The most limiting element is the ability to predict accurately, using relatively simple, repeatable procedures, the effect a particular change has on emissions and compliance obligations. In the pharmaceutical industry, it is possible to do so in an extremely accurate fashion since HAP emissions nearly exclusively result from nonreactant solvent use. It may be more difficult, for example, to predict the effect of process changes in chemical manufacturing industries other than pharmaceutical manufacturing. Changes in these industries often involve complex reaction theory and reaction kinetics and other factors, which must be applied individually to the specific situation at hand to determine how HAP emissions will change. For most changes, it would be difficult to distill these chemical dynamics into an equation that would predict emissions variations for a source's process changes accurately. Without an accurate ROP, the applicable permit revision process would be necessary to reevaluate compliance under the change.

As previously mentioned, the Agency's decision whether to extend the availability of a change management strategy similar to that for subpart GGG to other standards will also depend on the empirical results achieved from implementing subpart GGG through such a strategy. In particular, EPA expects to learn whether and how frequently interpretive disputes result from using the blend of definitions and approved ROPs relied upon to carry out the change management strategy and how to develop permit terms that establish and implement ROPs.

Finally, the Agency supports the testing of the recommended subpart GGG strategy since it is consistent with the Agency's program objectives to reinvent regulations, to eliminate delays and paperwork burdens, and to implement more efficiently the title V program. The development of the recommended approach benefited to a significant extent through the activities of a permitting pilot project which EPA initiated with the Environmental Quality Board of Puerto Rico and Merck Corporation. Considering the implementation of subpart GGG through title V permits in the context of this project has been extremely valuable in defining the type and frequency of

anticipated operational changes and evaluating the appropriate permit content to assure compliance for these changes. The Agency is grateful to the participants in this Reinvention project and expects that its final results (in the form of more detailed guidance and/or model permit conditions) will be useful to others seeking to implement subpart GGG.

VII. Technical Amendment to 40 CFR Part 9

In compliance with the Paperwork Reduction Act (PRA), this technical correction amends the table that lists the Office of Management and Budget (OMB) control numbers issued under the RPA for this final rule.

The EPA is today amending the table in 40 CFR part 9 (Section 9.1) of currently approved information collection request (ICR) control numbers issued by OMB for various regulation. The affected regulations are codified at 40 CFR part 63 subpart GGG, sections 63.1259 and 63.1260 (recordkeeping and reporting requirements, respectively). The OMB control (tracking) number for this final rule is 2060-0358. The EPA will continue to present OMB control numbers in a consolidated table format to be codified in 40 CFR part 9 of the Agency's regulations, and in each CFR volume containing EPA regulations. The table lists the section numbers with reporting and recordkeeping requirements, and the current OMB control numbers. The listing of the OMB control numbers and their subsequent codification in the CFR satisfy the requirements of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*) and OMB's implementing regulations at 5 CFR part 1320.

This ICR was previously subject to public notice and comment prior to OMB approval. As a result, EPA finds that there is "good cause" under section 553(b)(B) of the Administrative Procedure Act (5 U.S.C. 553(b)(B)) to amend this table without prior notice and comment. Due to the technical nature of the table, further notice and comment would be necessary.

VIII. Administrative Requirements

A. Docket

The docket is an organized and complete file of all the information submitted to or otherwise considered by EPA in the development of this proposed rulemaking. The principal purposes of the docket are:

1. To allow interested parties to readily identify and locate documents so that they can intelligently and

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. Executive Order 12866

Under Executive Order 12866, [58 FR 51735 (October 4, 1993)] the Agency must determine whether the regulatory action is "significant" and therefore subject to Office of Management and Budget (OMB) review and the requirements of this Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may:

1. Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities;
2. Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
3. Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs 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 this Executive Order.

Pursuant to the terms of the Executive Order, the OMB has notified the EPA that it considers this a "significant regulatory action" within the meaning of the Executive Order. The EPA submitted this action to the OMB for review. Changes made in response to suggestions or recommendations from the OMB were documented and included in the public record.

C. Enhancing the Intergovernmental Partnership Under Executive Order 12875

In compliance with Executive Order 12875, EPA has involved State governments in the development of this rule. These governments will be required to implement the rule. They will collect permit fees which will be used to offset the resource burden of implementing the rule. Representatives of six State governments are members of the MACT partnership. This partnership group was consulted through out the development of this final regulation. Comments from the partnership members were carefully considered. In addition, all States were encouraged to comment on the proposed rule during the public comment period, and the EPA fully considered all the comments

submitted by States in this final rulemaking.

D. Paperwork Reduction Act

The Office of Management and Budget (OMB) has approved the information collection requirements contained in this rule under the provisions of the *Paperwork Reduction Act*, 44 U.S.C. 3501 *et seq* and has assigned OMB control No. 2060-0358. An information collection request (ICR) document has been prepared by EPA (ICR No. 1781.01), and a copy may be obtained from Sandy Farmer, Regulatory Information Division, U.S. Environmental Protection Agency (Mail Code 2137), 401 M Street SW., Washington, DC 20460, or by calling 202-260-2740.

The EPA is required under section 112(d) of the Clean Air Act to regulate emissions of HAPs listed in section 112(b). The requested information is needed as part of the overall compliance and enforcement program. The ICR requires that pharmaceuticals production facilities retain records of control device monitoring or HAP emissions calculations records at facilities for a period of 5 years, which is consistent with the General Provisions to 40 CFR part 63 and the permit requirements under 40 CFR part 70. All sources subject to this rule will be required to obtain operating permits either through the State-approved permitting program or, if one does not exist, in accordance with the provisions of 40 CFR part 71, when promulgated.

The public reporting burden for this collection of information is estimated to average 4,800 hours per respondent for the first year and 2,600 hours per respondent for each of the second and third years. It is also estimated that there are approximately 100 facilities that are likely respondents. These estimates include time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of

information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An Agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR Chapter 15. The EPA is amending Table 9.1 in 40 CFR part 9 of currently approved ICR control numbers issued by OMB for various regulations to list the information requirements contained in this final rule.

E. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) provides that, whenever an agency promulgates a final rule under 5 U.S.C. 553, after being required to publish a general notice of proposed rulemaking, an agency must prepare a final regulatory flexibility analysis unless the head of the agency certifies that the final rule will not have a significant economic impact on a substantial number of small entities. Pursuant to section 605(b) of the Regulatory Flexibility Act, 5 U.S.C. 605(b), the Agency certifies that this rule will not have a significant impact on a substantial number of small entities.

The EPA analyzed the potential impact of the rule on small entities and determined that only 16 of 56 pharmaceutical producing firms are small entities—not a substantial number of entities. Of these 16 firms, only 4 will experience an increase in costs as a result of the promulgation of today's rule that are greater than 1 percent of revenues. Therefore, the Agency did not prepare an initial regulatory flexibility analysis.

Although the statute does not require EPA to prepare an RFA because the Administrator has certified that the rule will not have a significant economic impact on a substantial number of small entities, EPA did undertake a limited assessment, to the extent it could, of possible outcomes and the economic effect of these on small pharmaceutical entities. That evaluation is available in the administrative record for today's action.

F. Unfunded Mandates

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Pub. L. 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and Tribal governments, and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written

statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and Tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including Tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal inter-governmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The EPA has determined that the final standards do not include a Federal mandate that may result in estimated costs of, in the aggregate, \$100 million or more to either State, local or Tribal governments, or to the private sector, nor do the standards significantly or uniquely impact small governments, because they contain no requirements that apply to such governments or impose obligations upon them. Therefore, the requirements of the Unfunded Mandates Act do not apply to this final rule.

G. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this rule and

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

H. National Technology Transfer and Advancement Act (NTTAA)

Under section 12(d) of the National Technology Transfer and Advancement Act ("NTTAA"), the Agency is required to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices, etc.) that are developed or adopted by voluntary consensus standards bodies. Where available and potentially applicable voluntary consensus standards are not used by EPA, the Act requires the Agency to provide Congress, through the Office of Management and Budget, an explanation of the reasons for not using such standards.

The Agency does not believe that this Notice addresses any technical standards subject to the NTTAA.

I. Executive Order 13045

The Executive Order 13045 applies to any rule that EPA determines (1) "economically significant" as defined under Executive Order 12866, and (2) the environmental health or safety risk addressed by the rule has a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children; and National Emission Standards for Hazardous Air Pollutants Pharmaceuticals Production—explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This final rule is not subject to Executive Order 13045, entitled "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), because it does not involve decisions on environmental health risks or safety risks that may disproportionately affect children.

List of Subjects

40 CFR Part 9

Environmental protection, Reporting and recordkeeping requirements.

40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances. Incorporation by reference. Reporting and recordkeeping requirements.

Dated: July 30, 1998.

Carol M. Browner, Administrator.

For the reasons set out in the preamble, parts 9 and 63 of title 40, chapter I, of the Code of Federal Regulations is amended as follows:

PART 9—[AMENDED]

1. The authority citation for part 9 continues to read as follows:

Authority: 7 U.S.C. 135 et seq., 136–136y; 15 U.S.C. 2001, 2003, 2005, 2006, 2601–2671; 21 U.S.C. 331j, 346a, 348; 31 U.S.C. 9701; 33 U.S.C. 1251 et seq., 1311, 1313d, 1314, 1318, 1321, 1326, 1330, 1342, 1344, 1345 (d) and (e), 1361; E.O. 11735, 38 FR 21243, 3 CFR, 1971–1975 Comp. p. 973; 42 U.S.C. 241, 242b, 243, 246, 300f, 300g, 300g–1, 300g–2, 300g–3, 300g–4, 300g–5, 300g–6, 300j–1, 300j–2, 300j–3, 300j–4, 300j–9 1857 et seq., 6901–6992k, 7401–7671g, 7542, 9601–9657, 11023, 11048.

2. Section 9.1 is amended by adding in numerical order a new entry to the table under the indicated heading to read as follows:

§ 9.1 OMB approvals under the Paperwork Reduction Act.

40 CFR citation	OMB control No.
National Emission Standards for Hazardous Air Pollutants for Source Categories. ³	
63.1259–63.1260	2060–0314

³The ICR's referenced in this section of the table encompass the applicable general provisions contained in the 40 CFR part 63, subpart A, which are not independent information collection requirements.

PART 63—[AMENDED]

3. The authority citation for part 63 continues to read as follows:

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

4. Section 63.14 is amended by adding paragraphs (b)(19) and (c)(3) to read as follows:

§ 63.14 Incorporations by reference.

- (b) (19) ASTM D2879–97, Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for § 63.1251 of subpart GGG of this part.

(19) ASTM D2879–97, Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for § 63.1251 of subpart GGG of this part.

(c) (3) API Manual of Petroleum Measurement Specifications (MPMS) Chapter 19.2, Evaporative Loss From Floating-Roof Tanks (formerly API Publications 2517 and 2519), First Edition, April 1997, IBR approved for § 63.1251 of subpart GGG of this part.

5. Part 63 is amended by adding a new subpart GGG to read as follows:

Subpart GGG—National Emission Standards for Pharmaceuticals Production

- Sec. 63.1250 Applicability.
- 63.1251 Definitions.
- 63.1252 Standards: General.
- 63.1253 Standards: Storage tanks.
- 63.1254 Standards: Process vents.
- 63.1255 Standards: Equipment leaks.
- 63.1256 Standards: Wastewater.
- 63.1257 Test methods and compliance procedures.
- 63.1258 Monitoring requirements.
- 63.1259 Recordkeeping requirements.
- 63.1260 Reporting requirements.
- 63.1261 Delegation of authority.

Table 1 to Subpart GGG—General Provisions Applicability to Subpart GGG

Table 2 to Subpart GGG—Partially Soluble HAP

Table 3 to Subpart GGG—Soluble HAP

Table 4 to Subpart GGG—Monitoring Requirements for Control Devices

Table 5 to Subpart GGG—Control Requirements for Items of Equipment That Meet the Criteria of § 63.1252(f)

Table 6 to Subpart GGG—Wastewater—Compliance Options for Wastewater Tanks

Table 7 to Subpart GGG—Wastewater—Inspection and Monitoring Requirements for Waste Management Units

Table 8 to Subpart GGG—Fraction Measured (F_m) for HAP Compounds in Wastewater Streams

Table 9 to Subpart GGG—Default Biorates for List 1 Compounds

§ 63.1250 Applicability.

(a) *Definition of affected source.* The affected source subject to this subpart is the pharmaceutical manufacturing operation, as defined in § 63.1251. Except as specified in paragraph (d) of this section, the provisions of this subpart apply to pharmaceutical manufacturing operations that meet the criteria specified in paragraphs (a)(1) through (a)(3) of this section as follows:

(1) Manufacture a pharmaceutical product, as defined in § 63.1251;

(2) Are located at a plant site that is a major source as defined in section 112(a) of the Act; and

(3) Process, use, or produce HAP.

(b) *New source applicability.* A new affected source subject to this subpart and to which the requirements for new sources apply is: an affected source for which construction or reconstruction commenced after April 2, 1997 and the standard was applicable at the time of construction or reconstruction; or a pharmaceutical manufacturing process unit (PMPU), dedicated to manufacturing a single product, that has the potential to emit 10 tons per year of any one HAP or 25 tons per year of combined HAP, for which construction commenced after April 2, 1997.

(c) *General Provisions.* Table 1 of this subpart specifies the provisions of subpart A of this part that apply to an owner or operator of an affected source subject to this subpart, and clarifies specific provisions in subpart A of this part as necessary for this subpart.

(d) *Processes exempted from the affected source.* The provisions of this subpart do not apply to research and development facilities.

(e) *Storage tank ownership determination.* The owner or operator shall follow the procedures specified in paragraphs (e)(1) through (e)(5) of this section to determine to which PMPU a storage tank shall belong.

(1) If a storage tank is dedicated to a single PMPU, the storage tank shall belong to that PMPU.

(2) If a storage tank is shared among PMPU's, then the storage tank shall belong to that PMPU located on the same plant site as the storage tank that has the greatest annual volume input into or output from the storage tank (i.e., said PMPU has the predominant use of the storage tank).

(3) If predominant use cannot be determined for a storage tank that is shared among PMPU's and if one of those PMPU's is subject to this subpart, the storage tank shall belong to said PMPU.

(4) If the predominant use of a storage tank varies from year to year, then predominant use shall be determined based on the utilization that occurred during the year preceding September 21, 1998 for existing affected sources. For new affected sources, predominant use will be based on the first year after initial startup. The determination of predominant use shall be reported in the Notification of Compliance Status required by § 63.1260(f). If the predominant use changes, the redetermination of predominant use

shall be reported in the next Periodic Report.

(5) If the storage tank begins receiving material from (or sending material to) another PMPU; or ceases to receive material from (or send material to) a PMPU; or if the applicability of this subpart to a storage tank has been determined according to the provisions of paragraphs (e)(1) through (4) of this section and there is a significant change in the use of the storage tank that could reasonably change the predominant use, the owner or operator shall reevaluate the applicability of this subpart to the storage tank, and report such changes to EPA in the next Periodic report.

(f) *Compliance dates.* The compliance dates for affected sources are as follows:

(1) An owner or operator of an existing affected source must comply with the provisions of this subpart within 3 years after September 21, 1998.

(2) An owner or operator of a new or reconstructed affected source must comply with the provisions of this subpart on September 21, 1998 or upon startup, whichever is later.

(3) Notwithstanding the requirements of paragraphs (f)(1) and (2) of this section, a new source which commences construction or reconstruction after April 2, 1997 and before September 21, 1998 shall not be required to comply with such promulgated standard until 3 years after September 21, 1998 if:

(i) The promulgated standard is more stringent than the proposed standard; and

(ii) The owner or operator complies with the standard as proposed during the 3-year period immediately after September 21, 1998.

(4) Pursuant to section 112(i)(3)(B) of the Act, an owner or operator may request an extension allowing the existing source up to 1 additional year to comply with section 112(d) standards.

(i) For purposes of this subpart, a request for an extension shall be submitted no later than 120 days prior to the compliance dates specified in paragraphs (f)(1) through (3) of this section, except as provided in paragraph (f)(4)(ii) of this section. The dates specified in § 63.6(i) for submittal of requests for extensions shall not apply to sources subject to this subpart.

(ii) An owner or operator may submit a compliance extension request after the date specified in paragraph (f)(4)(i) of this section provided the need for the compliance extension arose after that date and before the otherwise applicable compliance date, and the need arose due to circumstances beyond reasonable control of the owner or operator. This

request shall include the data described in § 63.6(i)(6)(i)(A), (B), (C), and (D).

(g) *Applicability of this subpart except during periods of startup, shutdown, and malfunction.* (1) Each provision set forth in this subpart shall apply at all times except that emission limitations shall not apply during periods of: startup; shutdown; and malfunction, if the startup, shutdown, and malfunction precludes the ability of a particular emission point of an affected source to comply with one or more specific emission limitations to which it is subject and the owner or operator follows the provisions for periods of startup, shutdown, and malfunction, as specified in §§ 63.1259(a)(3) and 63.1260(i). Startup, shutdown, and malfunction are defined in § 63.1251.

(2) The provisions set forth in § 63.1255 of this subpart shall apply at all times except during periods of nonoperation of the PMPU (or specific portion thereof) in which the lines are drained and depressurized resulting in the cessation of the emissions to which § 63.1255 of this subpart applies.

(3) The owner or operator shall not shut down items of equipment that are required or utilized for compliance with the emissions limitations of this subpart during times when emissions (or, where applicable, wastewater streams or residuals) are being routed to such items of equipment, if the shutdown would contravene emissions limitations of this subpart applicable to such items of equipment. This paragraph does not apply if the item of equipment is malfunctioning, or if the owner or operator must shut down the equipment to avoid damage due to a malfunction of the PMPU or portion thereof.

(4) During startups, shutdowns, and malfunctions when the emissions limitations of this subpart do not apply pursuant to paragraphs (g)(1) through (3) of this section, the owner or operator shall implement, to the extent reasonably available, measures to prevent or minimize excess emissions to the extent practical. For purposes of this paragraph, "excess emissions" means emissions in excess of those that would have occurred if there were no startup, shutdown, or malfunction and the owner or operator complied with the relevant provisions of this subpart. The measures to be taken shall be identified in the applicable startup, shutdown, and malfunction plan, and may include, but are not limited to, air pollution control technologies, work practices, pollution prevention, monitoring, and/or changes in the manner of operation of the source. Back-up control devices are not required, but may be used if available.

(h) *Consistency with other regulations.* (1) *Consistency with other MACT standards.* After the compliance dates specified in this section, an affected source subject to the provisions of this subpart that is also subject to the provisions of any other subpart of 40 CFR part 63 may elect, to the extent the subparts are consistent, which subpart under which to maintain records and report to EPA. The affected source shall identify in the Notification of Compliance Status report required by § 63.1260(f) under which authority such records will be maintained.

(2) *Consistency with 40 CFR parts 264 and 265, subparts AA, BB, and/or CC.* After the compliance dates specified in this section, if any affected source subject to this subpart is also subject to monitoring, recordkeeping, and reporting requirements in 40 CFR part 264, subpart AA, BB, or CC, or is subject to monitoring and recordkeeping requirements in 40 CFR part 265, subpart AA, BB, or CC and the owner or operator complies with the periodic reporting requirements under 40 CFR part 264, subpart AA, BB, or CC that would apply to the device if the facility had final-permitted status, the owner or operator may elect to comply either with the monitoring, recordkeeping, and reporting requirements of this subpart, or with the monitoring, recordkeeping, and reporting requirements in 40 CFR parts 264 and/or 265, as described in this paragraph, which shall constitute compliance with the monitoring, recordkeeping, and reporting requirements of this subpart. If the owner or operator elects to comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR parts 264 and/or 265, the owner or operator shall report all information required by § 63.1260(g). The owner or operator shall identify in the Notification of Compliance Status required by § 63.1260(f) the monitoring, recordkeeping, and reporting authority under which the owner or operator will comply.

(3) *Consistency with 40 CFR 60.112b.* After the compliance dates specified in this section, a storage tank controlled with a floating roof and in compliance with the provisions of 40 CFR 60.112b, subpart Kb, constitutes compliance with the provisions of this subpart GGG. A storage tank with a fixed roof, closed vent system, and control device in compliance with the provisions of 40 CFR 60.112b, subpart Kb must comply with the monitoring, recordkeeping, and reporting provisions of this subpart GGG. The owner or operator shall identify in the Notification of Compliance Status report required by

§ 63.1260(f) which tanks are in compliance with subpart Kb.

(4) *Consistency with subpart I of this part.* After the compliance dates specified in this section, for equipment at an affected source subject to this subpart that is also subject to subpart I of this part, an owner or operator may elect to comply with either the provisions of this subpart GGG or the provisions of subpart I of this part. The owner or operator shall identify in the Notification of Compliance Status report required by § 63.1260(f) the provisions with which the owner elects to comply.

(5) *Consistency with other regulations for wastewater.* After the compliance dates specified in this section, the owner or operator of an affected wastewater that is also subject to provisions in 40 CFR parts 260 through 272 shall comply with the more stringent control requirements (e.g., waste management units, numerical treatment standards, etc.) and the more stringent testing, monitoring, recording, and recordkeeping requirements that overlap between the provisions of this subpart and the provisions of 40 CFR parts 260 through 272. The owner or operator shall keep a record of the information used to determine which requirements were the most stringent and shall submit this information if requested by the Administrator.

(i) For the purposes of establishing whether a person is in violation of this subpart, nothing in this subpart shall preclude the use of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements.

§ 63.1251 Definitions.

Terms used in this subpart are defined in the Act, in subpart A of this part, or in this section. If the same term is defined in subpart A of this part and in this section, it shall have the meaning given in this section for the purposes of this subpart.

Active ingredient means any component that is intended to furnish pharmacological activity or other direct effect in the diagnosis, cure, mitigation, treatment, or prevention of disease, or to affect the structure or any function of the body of man or other animals. The term includes those components that may undergo chemical change in the manufacture of the pharmaceutical product and be present in the pharmaceutical product in a modified form intended to furnish the specified activity or effect.

Actual HAP emissions means the HAP emitted to the atmosphere from either

uncontrolled or controlled emission points.

Air pollution control device or Control device means equipment installed on a process vent, storage tank, wastewater treatment exhaust stack, or combination thereof that reduces the mass of HAP emitted to the air. The equipment may consist of an individual device or a series of devices. Examples include, but are not limited to, incinerators, carbon adsorption units, condensers, flares, boilers, process heaters, and gas absorbers. Process condensers are not considered air pollution control devices or control devices.

Annual average concentration, as used in the wastewater provisions, means the annual average concentration as determined according to the procedures specified in § 63.1257(e)(1).

Automated monitoring and recording system means any means of measuring values of monitored parameters and creating a hard copy or computer record of the measured values that does not require manual reading of monitoring instruments and manual transcription of data values. Automated monitoring and recording systems include, but are not limited to, computerized systems and strip charts.

Batch emission episode means a discrete venting episode that may be associated with a single unit operation. A unit operation may have more than one batch emission episode. For example, a displacement of vapor resulting from the charging of a vessel with HAP will result in a discrete emission episode that will last through the duration of the charge and will have an average flowrate equal to the rate of the charge. If the vessel is then heated, there will also be another discrete emission episode resulting from the expulsion of expanded vapor. Both emission episodes may occur in the same vessel or unit operation. There are possibly other emission episodes that may occur from the vessel or other process equipment, depending on process operations.

Batch operation or Batch process means a noncontinuous operation involving intermittent or discontinuous feed into equipment, and, in general, involves the emptying of the equipment after the batch operation ceases and prior to beginning a new operation. Addition of raw material and withdrawal of product do not occur simultaneously in a batch operation.

Bench-scale batch process means a batch process (other than a research and development facility) that is capable of being located on a laboratory bench top. This bench-scale equipment will typically include reagent feed vessels, a

small reactor and associated product separator, recovery and holding equipment. These processes are only capable of producing small quantities of product.

Block means a time period that comprises a single batch.

Cleaning operation means routine rinsing, washing, or boil-off of equipment in batch operations between batches.

Closed biological treatment process means a tank or surface impoundment where biological treatment occurs and air emissions from the treatment process are routed to either a control device by means of a closed-vent system or by means of hard-piping. The tank or surface impoundment has a fixed roof, as defined in this section, or a floating flexible membrane cover that meets the requirements specified in § 63.1256(c).

Closed-loop system means an enclosed system that returns process fluid to the process and is not vented to the atmosphere except through a closed-vent system.

Closed-purge system means a system or combination of system and portable containers, to capture purged liquids. Containers must be covered or closed when not being filled or emptied.

Closed-vent system means a system that is not open to the atmosphere and is composed of piping, ductwork, connections, and, if necessary, flow inducing devices that transport gas or vapor from an emission point to a control device.

Combustion device means an individual unit of equipment, such as a flare, incinerator, process heater, or boiler, used for the combustion of HAP vapors.

Component means any ingredient for use in the manufacture of a drug product, including those that may not appear in such drug product.

Connector means flanged, screwed, or other joined fittings used to connect two pipe lines or a pipe line and a piece of equipment. A common connector is a flange. Joined fittings welded completely around the circumference of the interface are not considered connectors for the purpose of this regulation. For the purpose of reporting and recordkeeping, connector means joined fittings that are not inaccessible, ceramic, or ceramic-lined as described in § 63.1255(b)(1)(vii) and § 63.1255(f)(3).

Construction means the onsite fabrication, erection, or installation of an affected source or a PMPU.

Consumption means the quantity of HAP entering a process that is not used as reactant (makeup). If the same HAP component is generated in the process

as well as added as makeup, consumption shall include the quantity generated in the process, as calculated assuming 100 theoretical conversion. The quantity of material used as reactant is the theoretical amount needed assuming a 100 percent stoichiometric conversion. Makeup is the net amount of material that must be added to the process to replenish losses.

Container, as used in the wastewater provisions, means any portable waste management unit that has a capacity greater than or equal to 0.1 m³ in which a material is stored, transported, treated, or otherwise handled. Examples of containers are drums, barrels, tank trucks, barges, dumpsters, tank cars, dump trucks, and ships.

Continuous process means a process where the inputs and outputs flow continuously throughout the duration of the process. Continuous processes are typically steady state.

Continuous recorder means a data recording device that either records an instantaneous data value at least once every 15 minutes or records 15-minute or more frequent block average values.

Continuous seal means a seal that forms a continuous closure that completely covers the space between the wall of the storage tank and the edge of the floating roof. A continuous seal may be a vapor-mounted, liquid-mounted, or metallic shoe seal.

Control device, for purposes of this § 63.1255, means any equipment used for recovering or oxidizing organic hazardous air pollutant vapors. Such equipment includes, but is not limited to, absorbers, carbon adsorbers, condensers, flares, boilers, and process heaters.

Controlled HAP emissions means the quantity of HAP discharged to the atmosphere from an air pollution control device.

Cover, as used in the wastewater provisions, means a device or system which is placed on or over a waste management unit containing wastewater or residuals so that the entire surface area is enclosed to minimize air emissions. A cover may have openings necessary for operation, inspection, and maintenance of the waste management unit such as access hatches, sampling ports, and gauge wells provided that each opening is closed when not in use. Examples of covers include a fixed roof installed on a wastewater tank, a lid installed on a container, and an air-supported enclosure installed over a waste management unit.

Dedicated PMPU means a PMPU that is composed of equipment that is used to manufacture the same product for a continuous period of 6 months or

greater. The PMPU includes any shared storage tank(s) that are determined to belong to the PMPU according to the procedures in § 63.1250(e).

Double block and bleed system means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.

Duct work means a conveyance system such as those commonly used for heating and ventilation systems. It is often made of sheet metal and often has sections connected by screws or crimping. Hard-piping is not ductwork.

Enhanced biological treatment system or enhanced biological treatment process means an aerated, thoroughly mixed treatment unit(s) that contains biomass suspended in water followed by a clarifier that removes biomass from the treated water and recycles recovered biomass to the aeration unit. The mixed liquor volatile suspended solids (biomass) is greater than 1 kilogram per cubic meter throughout each aeration unit. The biomass is suspended and aerated in the water of the aeration unit(s) by either submerged air flow or mechanical agitation. A thoroughly mixed treatment unit is a unit that is designed and operated to approach or achieve uniform biomass distribution and organic compound concentration throughout the aeration unit by quickly dispersing the recycled biomass and the wastewater entering the unit.

Equipment, for purposes of § 63.1255, means each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, and instrumentation system in organic hazardous air pollutant service; and any control devices or closed-vent systems required by this subpart.

Excipient means any substance other than the active drug or product which have been appropriately evaluated for safety and are included in a drug delivery system to either aid the processing of the drug delivery system during its manufacture; protect, support or enhance stability, bioavailability, or patient acceptability; assist in product identification; or enhance any other attribute of the overall safety and effectiveness of the drug delivery system during storage or use.

External floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a storage tank or waste management unit with no fixed roof.

Fill or filling means the introduction of material into a storage tank or the introduction of a wastewater stream or residual into a waste management unit, but not necessarily to complete capacity.

First attempt at repair means to take action for the purpose of stopping or reducing leakage of organic material to the atmosphere.

Fixed roof means a cover that is mounted on a waste management unit or storage tank in a stationary manner and that does not move with fluctuations in liquid level.

Floating roof means a cover consisting of a double deck, pontoon single deck, internal floating cover or covered floating roof, which rests upon and is supported by the liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and waste management unit or storage tank wall.

Flow indicator means a device which indicates whether gas flow is, or whether the valve position would allow gas flow to be, present in a line.

Formulation means the process of mixing, blending, or diluting one or more active or inert ingredients with one or more active or inert ingredients, without an intended chemical reaction, to obtain a pharmaceutical dosage form. Formulation operations include mixing, compounding, blending, and tablet coating.

Group of processes means all of the equipment associated with processes in a building, processing area, or facility-wide. For a dedicated process, a group of processes may consist of a single process.

Halogen atoms mean atoms of chlorine or fluorine.

Halogenated compounds means organic HAP compounds that contain halogen atoms.

Halogenated vent stream or Halogenated stream means a process, storage tank, or waste management unit vent determined to have a concentration of halogenated compounds of greater than 20 ppmv, as determined through process knowledge, test results using Method 18 of 40 CFR part 60, appendix A, or test results using any other test method that has been validated according to the procedures in Method 301 of appendix A of this part.

Hard-piping means piping or tubing that is manufactured and properly installed using good engineering judgment and standards, such as ANSI B31-3.

Hydrogen halides and halogens means hydrogen chloride (HCl), chlorine (Cl₂), and hydrogen fluoride (HF).

In gas/vapor service means that a piece of equipment in organic hazardous air pollutant service contains a gas or vapor at operating conditions.

In heavy liquid service means that a piece of equipment in organic

hazardous air pollutant service is not in gas/vapor service or in light liquid service.

In light liquid service means that a piece of equipment in organic hazardous air pollutant service contains a liquid that meets the following conditions:

(1) The vapor pressure of one or more of the organic compounds is greater than 0.3 kilopascals at 20°C;

(2) The total concentration of the pure organic compounds constituents having a vapor pressure greater than 0.3 kilopascals at 20°C is equal to or greater than 20 percent by weight of the total process stream; and

(3) The fluid is a liquid at operating conditions. (Note: Vapor pressures may be determined by the methods described in 40 CFR 60.485(e)(1).)

In liquid service means that a piece of equipment in organic hazardous air pollutant service is not in gas/vapor service.

In organic hazardous air pollutant or in organic HAP service means that a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 5 percent by weight of total organic HAP's as determined according to the provisions of § 63.180(d). The provisions of § 63.180(d) also specify how to determine that a piece of equipment is not in organic HAP service.

In vacuum service means that equipment is operating at an internal pressure which is at least 5 kilopascals below ambient pressure.

In-situ sampling systems means nonextractive samplers or in-line samplers.

Individual drain system means the stationary system used to convey wastewater streams or residuals to a waste management unit. The term includes hard piping; all process drains and junction boxes; and associated sewer lines, other junction boxes, manholes, sumps, and lift stations conveying wastewater streams or residuals. A segregated stormwater sewer system, which is a drain and collection system designed and operated for the sole purpose of collecting rainfall-runoff at a facility, and which is segregated from all other individual drain systems, is excluded from this definition.

Initial startup means the first time a new or reconstructed source begins production. Initial startup does not include operation solely for testing equipment. Initial startup does not include subsequent start ups (as defined in this section) of processes following malfunctions or process shutdowns.

Internal floating roof means a cover that rests or floats on the liquid surface (but not necessarily in complete contact with it) inside a storage tank or waste management unit that has a permanently affixed roof.

Instrumentation system means a group of equipment components used to condition and convey a sample of the process fluid to analyzers and instruments for the purpose of determining process operating conditions (e.g., composition, pressure, flow, etc.). Valves and connectors are the predominant type of equipment used in instrumentation systems; however, other types of equipment may also be included in these systems. Only valves nominally 0.5 inches and smaller, and connectors nominally 0.75 inches and smaller in diameter are considered instrumentation systems for the purposes of this subpart. Valves greater than nominally 0.5 inches and connectors greater than nominally 0.75 inches associated with instrumentation systems are not considered part of instrumentation systems and must be monitored individually.

Junction box means a manhole or access point to a wastewater sewer system line or a lift station.

Large control device means a control device that controls process vents with total emissions of greater than or equal to 10 tons of HAP per year, before control.

Liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage tank or waste management unit and the floating roof. The seal is mounted continuously around the tank or unit.

Liquids dripping means any visible leakage from the seal including dripping, spraying, misting, clouding, and ice formation. Indications of liquid dripping include puddling or new stains that are indicative of an existing evaporated drip.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, emissions monitoring equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused all or in part by poor maintenance or careless operation are not malfunctions.

Maximum true vapor pressure means the equilibrium partial pressure exerted by the total organic HAP in the stored or transferred liquid at the temperature equal to the highest calendar-month average of the liquid storage or transferred temperature for liquids stored or transferred above or below the

ambient temperature or at the local maximum monthly average temperature as reported by the National Weather Service for liquids stored or transferred at the ambient temperature, as determined:

(1) In accordance with methods described in Chapter 19.2 of the American Petroleum Institute's Manual of Petroleum Measurement Standards, Evaporative Loss From Floating-Roof Tanks (incorporated by reference as specified in § 63.14); or

(2) As obtained from standard reference texts; or

(3) As determined by the American Society for Testing and Materials Method D2879-97, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope (incorporated by reference as specified in § 63.14); or

(4) Any other method approved by the Administrator.

Metallic shoe seal or mechanical shoe seal means metal sheets that are held vertically against the wall of the storage tank by springs, weighted levers, or other mechanisms and connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

Nondedicated formulation operations means equipment used to formulate numerous products.

Nondedicated recovery device(s) means a recovery device that receives material from more than one PMPC.

Nonrepairable means that it is technically infeasible to repair a piece of equipment from which a leak has been detected without a process shutdown.

Open biological treatment process means a biological treatment process that is not a closed biological treatment process as defined in this section.

Open-ended valve or line means any valve, except pressure relief valves, having one side of the valve seat in contact with process fluid and one side open to atmosphere, either directly or through open piping.

Operating scenario for the purposes of reporting and recordkeeping, means any specific operation of a PMPC and includes for each process:

(1) A description of the process and the type of process equipment used;

(2) An identification of related process vents and their associated emissions episodes and durations, wastewater PODs, and storage tanks;

(3) The applicable control requirements of this subpart, including the level of required control;

(4) The control or treatment devices used, as applicable, including a

description of operating and/or testing conditions for any associated control device;

(5) The process vents, wastewater PODs, and storage tanks (including those from other processes) that are simultaneously routed to the control or treatment device(s);

(6) The applicable monitoring requirements of this subpart and any parametric level that assures compliance for all emissions routed to the control or treatment device;

(7) Calculations and engineering analyses required to demonstrate compliance; and

(8) A verification that the operating conditions for any associated control or treatment device have not been exceeded and that any required calculations and engineering analyses have been performed. For reporting purposes, a change to any of these elements not previously reported, except for paragraph (5) of this definition, shall constitute a new operating scenario.

Partially soluble HAP means a HAP listed in Table 2 of this subpart.

Pharmaceutical manufacturing operations means the facility-wide collection of PMPU's and any other equipment such as heat exchanger systems, or cooling towers that are not associated with an individual PMPU, but that are located at a facility for the purpose of manufacturing pharmaceutical products and are under common control.

Pharmaceutical manufacturing process unit (PMPU) means the process, as defined in this subpart, and any associated storage tanks, equipment identified in § 63.1252(f), and components such as pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems that are used in the manufacturing of a pharmaceutical product.

Pharmaceutical product means:

(1) Any material described by the standard industrial classification (SIC) code 2833 or 2834;

(2) Any material whose manufacturing process is described by north american industrial classification system (NAICS) code 325411 or 325412;

(3) A finished dosage form of a drug, for example, a tablet, capsule, solution, etc., that contains an active ingredient generally, but not necessarily, in association with inactive ingredients; or

(4) Any component whose intended primary use is to furnish pharmacological activity or other direct effect in the diagnosis, cure, mitigation,

treatment, or prevention of disease, or to affect the structure or any function of the body of man or other animals (the term does not include excipients, but includes drug components such as raw starting materials or precursors that undergo chemical change or processing before they become active ingredients).

Plant site means all contiguous or adjoining property that is under common control, including properties that are separated only by a road or other public right-of-way. Common control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination thereof.

Point of determination (POD) means the point where a wastewater stream exits the process, storage tank, or last recovery device. If soluble and/or partially soluble HAP compounds are not recovered from water before discharge, the discharge point from the process equipment or storage tank is a POD. If water streams are routed to a recovery device, the discharge from the recovery device is a POD. There can be more than 1 POD per process or PMPU.

Pressure release means the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device. This release can be one release or a series of releases over a short time period due to a malfunction in the process.

Pressure relief device or valve means a safety device used to prevent operating pressures from exceeding the maximum allowable working pressure of the process equipment. A common pressure relief device is a spring-loaded pressure relief valve. Devices that are actuated either by a pressure of less than or equal to 2.5 psig or by a vacuum are not pressure relief devices.

Primary use means the single largest use of a material.

Process means all equipment which collectively function to produce a pharmaceutical product. A process may consist of one or more unit operations. For the purposes of this subpart, process includes all or a combination of reaction, recovery, separation, purification, or other activity, operation, manufacture, or treatment which are used to produce a pharmaceutical product. Cleaning operations conducted are considered part of the process. The holding of the pharmaceutical product in tanks or other holding equipment for more than 30 consecutive days, or transfer of the pharmaceutical product to containers for shipment, marks the end of a process, and the tanks are considered part of the PMPU that produced the stored material. When

material from one unit operation is used as the feedstock for the production of two or more different pharmaceutical products, the unit operation is considered the endpoint of the process that produced the material, and the unit operations into which the material is routed mark the beginning of the other processes. Nondedicated recovery devices located within a contiguous area within the affected source are considered single processes. Nondedicated formulation operations occurring within a contiguous area are considered a single process that is used to formulate numerous materials and/or products. Quality Assurance and Quality Control laboratories are not considered part of any process.

Process condenser means a condenser whose primary purpose is to recover material as an integral part of a process. The condenser must support a vapor-to-liquid phase change for periods of source equipment operation that are at or above the boiling or bubble point of substance(s) at the liquid surface. Examples of process condensers include distillation condensers, reflux condensers, and condensers used in stripping or flashing operations. In a series of condensers, all condensers up to and including the first condenser with an exit gas temperature below the boiling or bubble point of the substance(s) at the liquid surface are considered to be process condensers. All condensers in line prior to a vacuum source are included in this definition.

Process shutdown means a work practice or operational procedure that stops production from a process or part of a process during which it is technically feasible to clear process material from a process or part of a process consistent with safety constraints and during which repairs can be effected. An unscheduled work practice or operational procedure that stops production from a process or part of a process for less than 24 hours is not a process shutdown. An unscheduled work practice or operational procedure that would stop production from a process or part of a process for a shorter period of time than would be required to clear the process or part of the process of materials and start up the process, and would result in greater emissions than delay of repair of leaking components until the next scheduled process shutdown, is not a process shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping production are not process shutdowns.

Process tank means a tank that is used to collect material discharged from a feedstock storage tank or unit operation

within the process and transfer this material to another unit operation within the process or to a product storage tank. Surge control vessels and bottoms receivers that fit these conditions are considered process tanks.

Process vent means a vent from a unit operation or vents from multiple unit operations within a process that are manifolded together into a common header, through which a HAP-containing gas stream is, or has the potential to be, released to the atmosphere. Examples of process vents include, but are not limited to, vents on condensers used for product recovery, bottom receivers, surge control vessels, reactors, filters, centrifuges, and process tanks. Emission streams that are undiluted and uncontrolled containing less than 50 ppmv HAP, as determined through process knowledge that no HAP are present in the emission stream or using an engineering assessment as discussed in § 63.1257(d)(2)(ii), test data using Methods 18 of 40 CFR part 60, appendix A, or any other test method that has been validated according to the procedures in Method 301 of appendix A of this part, are not considered process vents. Process vents do not include vents on storage tanks regulated under § 63.1253, vents on wastewater emission sources regulated under § 63.1256, or pieces of equipment regulated under § 63.1255.

Production-indexed HAP consumption factor is the result of dividing the annual consumption of total HAP by the annual production rate, per process.

Production-indexed volatile organic compound (VOC) consumption factor is the result of dividing the annual consumption of total VOC by the annual production rate, per process.

Publicly owned treatment works (POTW) means any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature as defined in section 212(2)(A) of the Clean Water Act, as amended [33 U.S.C. § 1292(2)(A)]. A POTW includes the treatment works, intercepting sewers, outfall sewers, sewage collection systems, pumping, power, and other equipment. The POTW is defined at 40 CFR 403.3(o).

Reactor means a device or vessel in which one or more chemicals or reactants, other than air, are combined or decomposed in such a way that their molecular structures are altered and one or more new organic compounds are formed.

Recovery device, as used in the wastewater provisions, means an individual unit of equipment used for

the purpose of recovering chemicals for fuel value (i.e., net positive heating value), use, reuse, or for sale for fuel value, use or reuse. Examples of equipment that may be recovery devices include organic removal devices such as decanters, strippers, or thin-film evaporation units. To be a recovery device, a decanter and any other equipment based on the operating principle of gravity separation must receive only two-phase liquid streams.

Repaired means that equipment is adjusted, or otherwise altered, to eliminate a leak as defined in the applicable sections of § 63.1255.

Research and development facility means any stationary source whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically trained personnel, and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

Residual means any HAP-containing liquid or solid material that is removed from a wastewater stream by a waste management unit or treatment process that does not destroy organics (nondestructive unit). Examples of residuals from nondestructive waste management units are: the organic layer and bottom residue removed by a decanter or organic-water separator and the overheads from a steam stripper or air stripper. Examples of materials which are not residuals are: silt; mud; leaves; bottoms from a steam stripper or air stripper; and sludges, ash, or other materials removed from wastewater being treated by destructive devices such as biological treatment units and incinerators.

Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purposes of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air

emission control equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

Sampling connection system means an assembly of equipment within a process unit used during periods of representative operation to take samples of the process fluid. Equipment used to take nonroutine grab samples is not considered a sampling connection system.

Sensor means a device that measures a physical quantity or the change in a physical quantity, such as temperature, pressure, flow rate, pH, or liquid level.

Set pressure means the pressure at which a properly operating pressure relief device begins to open to relieve atypical process system operating pressure.

Sewer line means a lateral, trunk line, branch line, or other conduit including, but not limited to, grates, trenches, etc., used to convey wastewater streams or residuals to a downstream waste management unit.

Shutdown means the cessation of operation of a PMPU or an individual piece of equipment required or used to comply with this part or for emptying and degassing storage tanks. Shutdown occurs for purposes including but not limited to: periodic maintenance, replacement of equipment, or repair. Shutdown does not apply to routine batch operations or the rinsing or washing of equipment in batch operations between batches.

Single-seal system means a floating roof having one continuous seal that completely covers the space between the wall of the storage tank and the edge of the floating roof. This seal may be a vapor-mounted, liquid-mounted, or metallic shoe seal.

Small control device means a control device that controls process vents with total emissions of less than 10 tons of HAP per year, before control.

Soluble HAP means a HAP listed in Table 3 of this subpart.

Startup means the first time a new or reconstructed source begins production, or, for new equipment added, including equipment used to comply with this subpart, the first time the equipment is put into operation, or for the introduction of a new product/process, the first time the product or process is run in equipment. As used in § 63.1255, startup means the setting in operation of

a piece of equipment or a control device that is subject to this subpart.

Storage tank means a tank or other vessel that is used to store organic liquids that contain one or more HAP as feedstocks or products of a PMPU. The following are not considered storage tanks for the purposes of this subpart:

- (1) Vessels permanently attached to motor vehicles such as trucks, railcars, barges, or ships;
- (2) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere;
- (3) Vessels storing organic liquids that contain HAP only as impurities;
- (4) Wastewater storage tanks; and
- (5) Process tanks.

Surface impoundment means a waste management unit which is a natural topographic depression, manmade excavation, or diked area formed primarily of earthen materials (although it may be lined with manmade materials), which is designed to hold an accumulation of liquid wastes or waste containing free liquids. A surface impoundment is used for the purpose of treating, storing, or disposing of wastewater or residuals, and is not an injection well. Examples of surface impoundments are equalization, settling, and aeration pits, ponds, and lagoons.

Total organic compounds (TOC) means those compounds measured according to the procedures of Method 18 or Method 25A, 40 CFR part 60, appendix A.

Treatment process means a specific technique that removes or destroys the organics in a wastewater or residual stream such as a steam stripping unit, thin-film evaporation unit, waste incinerator, biological treatment unit, or any other process applied to wastewater streams or residuals to comply with § 63.1256. Most treatment processes are conducted in tanks. Treatment processes are a subset of waste management units.

Uncontrolled HAP emissions means a gas stream containing HAP which has exited the process (or process condenser, if any), but which has not yet been introduced into an air pollution control device to reduce the mass of HAP in the stream. If the process vent is not routed to an air pollution control device, uncontrolled emissions are those HAP emissions released to the atmosphere.

Unit operation means those processing steps that occur within distinct equipment that are used, among other things, to prepare reactants, facilitate reactions, separate and purify products, and recycle materials.

Equipment used for these purposes includes but is not limited to reactors, distillation columns, extraction columns, absorbers, decanters, dryers, condensers, and filtration equipment.

Vapor-mounted seal means a continuous seal that completely covers the annular space between the wall, the storage tank or waste management unit and the edge of the floating roof and is mounted such that there is a vapor space between the stored liquid and the bottom of the seal.

Volatile organic compounds (VOC) means those materials defined in 40 CFR 51.100.

Waste management unit means the equipment, structure(s), and/or devices used to convey, store, treat, or dispose of wastewater streams or residuals. Examples of waste management units include wastewater tanks, air flotation units, surface impoundments, containers, oil-water or organic-water separators, individual drain systems, biological wastewater treatment units, waste incinerators, and organic removal devices such as steam and air stripper units, and thin film evaporation units. If such equipment is used for recovery then it is part of a pharmaceutical process and is not a waste management unit.

Wastewater means any portion of an individual wastewater stream or any aggregation of wastewater streams.

Wastewater stream means water that is discarded from a PMPU through a single POD, that contains an annual average concentration of partially soluble and/or soluble HAP compounds of at least 5 parts per million by weight and a load of at least 0.05 kg/yr, and that is not exempted by the provisions of § 63.1256(a)(3). For the purposes of this subpart, noncontact cooling water is not considered a wastewater stream. Wastewater streams are generated by both process operations and maintenance activities.

Wastewater tank means a stationary waste management unit that is designed to contain an accumulation of wastewater or residuals and is constructed primarily of nonearthen materials (e.g., wood, concrete, steel, plastic) which provide structural support. Wastewater tanks used for flow equalization are included in this definition.

Water seal controls means a seal pot, p-leg trap, or other type of trap filled with water (e.g., flooded sewers that maintain water levels adequate to prevent air flow through the system) that creates a water barrier between the sewer line and the atmosphere. The water level of the seal must be

maintained in the vertical leg of a drain in order to be considered a water seal.

§ 63.1252 Standards: General.

Each owner or operator of any affected source subject to the provisions of this subpart shall control HAP emissions to the level specified in this section on and after the compliance dates specified in § 63.1250(f). Compliance with the emission limits may be demonstrated initially through the provisions of § 63.1257 (Test methods and compliance procedures) and continuously through the provisions of § 63.1258 (Monitoring requirements).

(a) *Opening of a safety device.* Opening of a safety device, as defined in § 63.1251, is allowed at any time conditions require it to do so to avoid unsafe conditions.

(b) *Closed-vent systems.* The owner or operator of a closed-vent system that contains bypass lines that could divert a vent stream away from a control device used to comply with the requirements in §§ 63.1253, 63.1254, and 63.1256 shall comply with the requirements of Table 4 to this subpart and paragraph (b)(1) or (2) of this section. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, rupture disks and pressure relief valves needed for safety purposes are not subject to this paragraph.

(1) Install, calibrate, maintain, and operate a flow indicator that determines whether vent stream flow is present at least once every 15 minutes. Records shall be maintained as specified in § 63.1259(i)(6)(i). The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere; or

(2) Secure the bypass line valve in the closed position with a car seal or lock and key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and the vent stream is not diverted through the bypass line. Records shall be maintained as specified in § 63.1259(i)(6)(ii).

(c) *Heat exchange systems.* Except as provided in paragraph (c)(2) of this section, owners and operators of affected sources shall comply with the requirements in paragraph (c)(1) of this section for heat exchange systems that cool process equipment or materials used in pharmaceutical manufacturing operations.

(1) The heat exchange system shall be treated according to the provisions of

§ 63.104, except that the monitoring frequency shall be no less than quarterly.

(2) For identifying leaking equipment, the owner or operator of heat exchange systems on equipment which meet current good manufacturing practice (CGMP) requirements of 21 CFR part 211 may elect to use the physical integrity of the reactor as the surrogate indicator of heat exchange system leaks around the reactor.

(d) *Emissions averaging provisions.* Except as specified in paragraphs (d)(1) through (5) of this section, owners or operators of storage tanks or processes subject to the provisions of §§ 63.1253 and 63.1254 may choose to comply by using emissions averaging requirements specified in § 63.1257(g) or (h) for any storage tank or process.

(1) A State may prohibit averaging of HAP emissions and require the owner or operator of an existing source to comply with the provisions in §§ 63.1253 and 63.1254.

(2) Only emission sources subject to the requirements of § 63.1253(b)(1) and (c)(1) or § 63.1254(a)(2), (a)(3)(ii)(A) or (a)(3)(iii) may be included in any averaging group.

(3) Processes which have been permanently shutdown or storage tanks permanently taken out of HAP service may not be included in any averaging group.

(4) Processes and storage tanks already controlled on or before November 15, 1990 may not be included in an emissions averaging group, except where the level of control is increased after November 15, 1990. In these cases, the uncontrolled emissions shall be the controlled emissions as calculated on November 15, 1990 for the purpose of determining the uncontrolled emissions as specified in § 63.1257(g) and (h).

(5) Emission points controlled to comply with a State or Federal rule other than this subpart may not be included in an emission averaging group, unless the level of control has been increased after November 15, 1990 above what is required by the other State or Federal rule. Only the control above what is required by the other State or Federal rule will be credited. However, if an emission point has been used to generate emissions averaging credit in an approved emissions average, and the point is subsequently made subject to a State or Federal rule other than this subpart, the point can continue to generate emissions averaging credit for the purpose of complying with the previously approved average.

(6) Not more than 20 processes subject to § 63.1254(a)(2)(i), 20 storage tanks

subject to § 63.1253(b)(1), and 20 storage tanks subject to § 63.1253(c)(1)(i) at an affected source may be included in an emissions averaging group.

(7) Compliance with the emissions standards in § 63.1253 shall be satisfied when the annual percent reduction efficiency is greater than or equal to 90 percent for those tanks meeting the requirements of § 63.1253(a)(1) and 95 percent for those tanks meeting the requirements of § 63.1253(a)(2), as demonstrated using the test methods and compliance procedures specified in § 63.1257(g).

(8) Compliance with the emissions standards in § 63.1254(a)(2) shall be satisfied when the annual percent reduction efficiency is greater than or equal to 93 percent, as demonstrated using the test methods and compliance procedures specified in § 63.1257(h).

(e) *Pollution prevention alternative.* Except as provided in paragraph (e)(1) of this section, owners and operators may choose to meet the pollution prevention alternative requirement specified in either paragraph (e)(2) or (3) of this section for any PMPU, in lieu of the requirements specified in §§ 63.1253, 63.1254, 63.1255, and 63.1256. Compliance with paragraphs (e)(2) and (3) of this section shall be demonstrated through the procedures in § 63.1257(f).

(1) The HAP that are generated in the PMPU that are not part of the production-indexed consumption factor must be controlled according to the requirements of §§ 63.1253, 63.1254, 63.1255, and 63.1256. The HAP that are generated as a result of combustion control of emissions must be controlled according to the requirements of paragraph (g) of this section.

(2) The production-indexed HAP consumption factor (kg HAP consumed/kg produced) shall be reduced by at least 75 percent from a 3 year average baseline established no earlier than the 1987 calendar year, or for the time period from startup of the process until the present in which the PMPU was operational and data are available, whichever is the lesser time period. If a time period less than 3 years is used to set the baseline, the data must represent at least 1 year's worth of data. For any reduction in the HAP factor achieved by reducing a HAP that is also a VOC, an equivalent reduction in the VOC factor is also required. For any reduction in the HAP factor that is achieved by reducing a HAP that is not a VOC, the VOC factor may not be increased.

(3) Both requirements specified in paragraphs (e)(3)(i) and (ii) of this section are met.

(i) The production-indexed HAP consumption factor (kg HAP consumed/kg produced) shall be reduced by at least 50 percent from a 3-year average baseline established no earlier than the 1987 calendar year, or for the time period from startup of the process until the present in which the PMPU was operational and data are available, whichever is less. If a time period less than 3 years is used to set the baseline, the data must represent at least 1 year's worth of data. For any reduction in the HAP factor achieved by reducing a HAP that is also a VOC, an equivalent reduction in the VOC factor is also required. For any reduction in the HAP factor that is achieved by reducing a HAP that is not a VOC, the VOC factor may not be increased.

(ii) The total PMPU HAP emissions shall be reduced by an amount, in kg/yr, that, when divided by the annual production rate, in kg/yr, and added to the reduction of the production-indexed HAP consumption factor, in kg/kg, yields a value of at least 75 percent of the average baseline HAP production-indexed consumption factor established according to paragraph (e)(3)(i) of this section according to the equation provided in § 63.1257(f)(2)(ii)(A). The total PMPU VOC emissions shall be reduced by an amount calculated according to the equation provided in § 63.1257(f)(2)(ii)(B). The annual reduction in HAP and VOC air emissions must be due to the use of the following control devices:

(A) Combustion control devices such as incinerators, flares or process heaters.

(B) Control devices such as condensers and carbon adsorbers whose recovered product is destroyed or shipped offsite for destruction.

(C) Any control device that does not ultimately allow for recycling of material back to the PMPU.

(D) Any control device for which the owner or operator can demonstrate that the use of the device in controlling HAP emissions will have no effect on the production-indexed consumption factor for the PMPU.

(f) *Control requirements for certain liquid streams in open systems within a PMPU.* (1) The owner or operator shall comply with the provisions of Table 5 of this subpart, for each item of equipment meeting all the criteria specified in paragraphs (f)(2) through (4) and either paragraph (f)(5)(i) or (ii) of this section.

(2) The item of equipment is of a type identified in Table 5 of this subpart;

(3) The item of equipment is part of a PMPU, as defined in § 63.1251;

(4) The item of equipment is controlled less stringently than in Table

5 of this subpart and the item of equipment is not otherwise exempt from controls by the provisions of this subpart or subpart A of this part: and

(5) The item of equipment:

(i) Is a drain, drain hub, manhole, lift station, trench, pipe, or oil/water separator that conveys water with an annual average concentration greater than or equal to 1,300 parts per million by weight (ppmw) of partially soluble HAP compounds; or an annual average concentration greater than or equal to 5,200 ppmw of partially soluble and/or soluble HAP compounds. The annual average concentration shall be determined according to the procedures in § 63.1257(e)(1)(ii).

(ii) Is a tank that receives one or more streams that contain water with an annual average concentration greater than or equal to 1,300 ppmw of partially soluble HAP compounds, or greater than or equal to 5,200 ppmw of total partially soluble and/or soluble HAP compounds. The owner or operator of the source shall determine the average concentration of the stream at the inlet to the tank and according to the procedures in § 63.1257(e)(1)(ii).

(g) *Control requirements for halogenated vent streams that are controlled by combustion devices.* If a combustion device is used to comply with the provisions of §§ 63.1253 (storage tanks), 63.1254 (process vents), 63.1256(h) (wastewater vent streams) for a halogenated vent stream, then the vent stream shall be ducted to a halogen reduction device such as, but not limited to, a scrubber, before it is discharged to the atmosphere. The halogen reduction device must reduce emissions by the amounts specified in either paragraph (g)(1) or (2) of this section.

(1) A halogen reduction device after the combustion control device must reduce overall emissions of hydrogen halides and halogens, as defined in § 63.1251, by 95 percent or to a concentration less than or equal to 20 ppmv.

(2) A halogen reduction device located before the combustion control device must reduce the halogen atom content of the vent stream to a concentration less than or equal to 20 ppmv.

§ 63.1253 Standards: Storage tanks.

(a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of a storage tank meeting the criteria of paragraph (a)(1) of this section is subject to the requirements of paragraph (b) of this section. Except as provided in paragraphs (d) and (e) of this section, the owner or operator of a

storage tank meeting the criteria of paragraph (a)(2) of this section is subject to the requirements of paragraph (c) of this section. Compliance with the provisions of paragraphs (b) and (c) of this section is demonstrated using the initial compliance procedures in § 63.1257(c) and the monitoring requirements in § 63.1258.

(1) A storage tank with a design capacity greater than or equal to 38 m³ (10,000 gallons [gal]) but less than 75 m³ (20,000 gal), and storing a liquid for which the maximum true vapor pressure of total HAP is greater than or equal to 13.1 kPa (1.9 psia).

(2) A storage tank with a design capacity greater than or equal to 75 m³ (20,000 gal) storing a liquid for which the maximum true vapor pressure of total HAP is greater than or equal to 13.1 kPa (1.9 psia).

(b) The owner or operator of a storage tank shall equip the affected storage tank with either a fixed roof with internal floating roof, an external floating roof, an external floating roof converted to an internal floating roof, or a closed-vent system meeting the conditions of § 63.1252(b) with a control device that meets any of the following conditions:

(1) Reduces inlet emissions of total HAP by 90 percent by weight or greater;

(2) Is an enclosed combustion device that provides a minimum residence time of 0.5 seconds at a minimum temperature of 760° C;

(3) Is a flare that meets the requirements of § 63.11(b); or

(4) Is a control device specified in § 63.1257(a)(4).

(c) The owner or operator of a storage tank shall equip the affected storage tank with either a fixed roof with internal floating roof, an external floating roof, an external floating roof converted to an internal floating roof, or a closed-vent system meeting the conditions of § 63.1252(b) with a control device that meets any of the following conditions:

(1) Reduces inlet emissions of total HAP as specified in paragraph (c)(1)(i) or (ii) of this section:

(i) By 95 percent by weight or greater; or (ii) If the owner or operator can demonstrate that a control device installed on a storage tank on or before April 2, 1997 is designed to reduce inlet emissions of total HAP by greater than or equal to 90 percent by weight but less than 95 percent by weight, then the control device is required to be operated to reduce inlet emissions of total HAP by 90 percent or greater.

(2) Is an enclosed combustion device that provides a minimum residence time

of 0.5 seconds at a minimum temperature of 760° C;

(3) Is a flare that meets the requirements of § 63.11(b); or

(4) Is a control device specified in § 63.1257(a)(4).

(d) As an alternative standard, the owner or operator of an existing or new affected source may comply with the storage tank standards by routing storage tank vents to a control device achieving an outlet TOC concentration, as calibrated on methane or the predominant HAP, of 20 ppmv or less, and an outlet concentration of hydrogen halides and halogens of 20 ppmv or less. Compliance with the outlet concentrations shall be determined by the initial compliance procedures of § 63.1257(c)(4) and the continuous emission monitoring requirements of § 63.1258(b)(5).

(e) *Planned routine maintenance.* The specifications and requirements in paragraphs (b) through (d) of this section for control devices do not apply during periods of planned routine maintenance. Periods of planned routine maintenance of the control devices, during which the control device does not meet the specifications of paragraphs (b) through (d) of this section, as applicable, shall not exceed 240 hours per year.

§ 63.1254 Standards: Process vents.

(a) *Existing sources.* Except as provided in paragraph (c) of this section, the owner or operator of an existing affected source must control the collection of all gas streams originating from processes subject to this standard so as to comply with the requirements in paragraph (a)(1) or the requirements of paragraphs (a)(2) and (a)(3) of this section. If any vent within a process meets the criteria of paragraph (a)(3)(i) of this section, the owner or operator must comply with the provisions in paragraphs (a)(2) and (a)(3) for that process. The requirements of paragraphs (a)(1) and (2) of this section apply to all process vents within a process, as a group, and do not apply to individual vents. An owner or operator may switch from compliance with paragraph (a)(1) of this section to compliance with paragraphs (a)(2) and (3) of this section only after at least 1 year of operation in compliance with paragraph (a)(1) of this section. An owner or operator may switch from compliance with paragraphs (a)(2) and (3) of this section to compliance with paragraph (a)(1) of this section at any time. Notification of such a change in the compliance method shall be reported according to the procedures in § 63.1260(h) of this subpart. Compliance with the required

emission limits or reductions in paragraphs (a) (1) through (3) of this section may be demonstrated using the initial compliance procedures described in § 63.1257(d) and the monitoring requirements described in § 63.1258.

(1) Except for processes with a vent that meets the conditions in paragraph (a)(3)(i) of this section, actual HAP emissions shall not exceed 900 kilograms (kg) per year [2,000 pounds per year] from the sum of all process vents within a process.

(i) Except as provided in paragraph (a)(1)(ii) of this section, the owner or operator is limited to 7 processes in any 365-day period that can be selected to comply with paragraph (a)(1) of this section.

(ii) The owner or operator may exclude processes with less than 100 lb/yr HAP, on an uncontrolled basis, from the 7-process limit described in paragraph (a)(1)(i) of this section.

(2) Uncontrolled HAP emissions from the sum of all process vents within a process that do not meet the conditions in paragraph (a)(3)(i) of this section or are not controlled according to any of the requirements of paragraphs (a)(2)(i), (a)(2)(ii), (a)(2)(iii), or (c) of this section shall be reduced by 93 percent or greater by weight.

(i) To outlet concentrations less than or equal to 20 ppmv as TOC and less than or equal to 20 ppmv as hydrogen halides and halogens;

(ii) By a flare that meets the requirements of § 63.11(b); or (iii) By a control device specified in § 63.1257(a)(4).

(3) Except as provided in paragraph (a)(3)(iii) of this section, uncontrolled HAP emissions from each process vent that meets the conditions in paragraph (a)(3)(i) of this section shall be reduced as specified in paragraph (a)(3)(ii) of this section.

(i) Uncontrolled HAP emissions from a process vent shall be reduced as specified in paragraph (a)(3)(ii) if the vent meets either of the criteria described in paragraph (a)(3)(i) (A) or (B) of this section:

(A) The flow-weighted average flowrate calculated using Equation 1 of this subpart is less than or equal to the flowrate calculated using Equation 2 of this subpart.

$$FR_a = \frac{\sum_{i=1}^n (D_i)(FR_i)}{\sum_{i=1}^n D_i} \quad (\text{Eq. 1})$$

$$FR = 0.02 * (HL) - 1,000 \quad (\text{Eq. 2})$$

Where:

FR_a = flow-weighted average flowrate for the vent, scfm

D_i = duration of each emission event, min

FR_i = flowrate of each emission event, scfm

n = number of emission events

FR = flowrate, scfm

HL = annual uncontrolled HAP emissions, lb/yr, as defined in § 63.1251

(B) As an alternative to the criteria described in paragraph (a)(3)(i)(A) of this section, uncontrolled HAP emissions from a process vent shall be reduced or controlled as specified in paragraph (a)(3)(ii) of this section if the process vent meets the criteria specified in paragraphs (a)(3)(i)(B)(1) and (2) of this section or the criteria specified in paragraphs (a)(3)(i)(B)(1) and (3) of this section.

(1) Uncontrolled HAP emissions from the process vent exceed 25 tons per year.

(2) The flow-weighted average flowrate for the vent, as calculated in Equation 1 of this section, is less than or equal to 100 scfm.

(3) The flow weighted average is greater than 100 scfm and less than or equal to the flowrate calculated using Equation 2 of this section.

(ii) Uncontrolled HAP emissions shall be reduced:

(A) By 98 percent by weight or greater; or

(B) To outlet concentrations less than or equal to 20 ppmv as TOC and less than or equal to 20 ppmv as hydrogen halides and halogens; or

(C) By a flare that meets the requirements of § 63.11(b); or

(D) By a control device specified in § 63.1257(a)(4).

(iii) If the owner or operator can demonstrate that a control device, installed on a process vent that meets the conditions of paragraph (a)(3)(i) of this section on or before April 2, 1997, was designed to reduce uncontrolled HAP emissions of total HAP by greater than or equal to 93 percent by weight, but less than 98 percent by weight, then the control device is required to be operated to reduce inlet emissions of total HAP by 93 percent by weight or greater.

(b) *New sources.* Uncontrolled HAP emissions from the sum of all process vents within a process at a new affected source that are not controlled according to any of the requirements of paragraphs (b)(1), (2), or (3) of this section or paragraph (c) of this section shall be reduced by 98 percent or greater by weight if the uncontrolled HAP

emissions from the sum of all process vents within a process is greater than 180 kg/yr (400 lb/yr). Compliance with the required emission limit or reduction is demonstrated using the initial compliance procedures in § 63.1257(d) and the monitoring requirements described in § 63.1258.

(1) To outlet concentrations less than or equal to 20 ppmv as TOC and less than or equal to 20 ppmv as hydrogen halides and halogens;

(2) By a flare that meets the requirements of § 63.11(b); or

(3) By a control device specified in § 63.1257(a)(4).

(c) As an alternative standard, the owner or operator of an existing or new affected source may comply with the process vent standards by routing all vents from a process to a control device achieving an outlet TOC concentration, as calibrated on methane or the predominant HAP, of 20 ppmv or less, and an outlet concentration of hydrogen halides and halogens of 20 ppmv or less. Any process vents within a process that are not routed to this control device must be controlled in accordance with the provisions of paragraphs (a)(2), (a)(3), and (b) of this section, as applicable. Compliance with the outlet concentrations shall be determined by the initial compliance procedures described in § 63.1257(d)(1)(iv) and the continuous emission monitoring requirements described in § 63.1258(b)(5).

§ 63.1255 Standards: Equipment leaks.

(a) *General Equipment Leak Requirements.* (1) The provisions of this section apply to pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, instrumentation systems, control devices, and closed-vent systems required by this subpart that are intended to operate in organic hazardous air pollutant service 300 hours or more during the calendar year within a source subject to the provisions of this subpart.

(2) *Consistency with other regulations.* After the compliance date for a process, equipment subject to both this section and either of the following will be required to comply only with the provisions of this subpart:

(i) 40 CFR part 60.

(ii) 40 CFR part 61.

(3) [Reserved]

(4) The provisions in § 63.1(a)(3) of subpart A of this part do not alter the provisions in paragraph (a)(2) of this section.

(5) Lines and equipment not containing process fluids are not subject

to the provisions of this section. Utilities, and other nonprocess lines, such as heating and cooling systems which do not combine their materials with those in the processes they serve, are not considered to be part of a process.

(6) The provisions of this section do not apply to bench-scale processes, regardless of whether the processes are located at the same plant site as a process subject to the provisions of this subpart.

(7) Each piece of equipment to which this section applies shall be identified such that it can be distinguished readily from equipment that is not subject to this section. Identification of the equipment does not require physical tagging of the equipment. For example, the equipment may be identified on a plant site plan, in log entries, or by designation of process boundaries by some form of weatherproof identification. If changes are made to the affected source subject to the leak detection requirements, equipment identification for each type of component shall be updated, if needed, within 15 calendar days of the end of each monitoring period for that component.

(8) Equipment that is in vacuum service is excluded from the requirements of this section.

(9) Equipment that is in organic HAP service, but is in such service less than 300 hours per calendar year, is excluded from the requirements of this section if it is identified as required in paragraph (g)(9) of this section.

(10) When each leak is detected by visual, audible, or olfactory means, or by monitoring as described in § 63.180(b) or (c), the following requirements apply:

(i) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(ii) The identification on a valve or connector in light liquid or gas/vapor service may be removed after it has been monitored as specified in paragraph (e)(7)(iii) of this section and § 63.174(e), and no leak has been detected during the follow-up monitoring.

(iii) The identification on equipment, except on a valve or connector in light liquid or gas/vapor service, may be removed after it has been repaired.

(b) *References.* (1) The owner or operator of a source subject to this section shall comply with the following sections of subpart H, except for § 63.160, § 63.161, § 63.162, § 63.163, § 63.167, § 63.168, § 63.170, § 63.171, § 63.172, § 63.173, § 63.181, and § 63.182 of this subpart. In place of

§ 63.160 and § 63.162, the owner or operator shall comply with paragraph (a) of this section; in place of § 63.161, the owner or operator shall comply with § 63.1251 of this subpart; in place of § 63.163 and § 63.173, the owner or operator shall comply with paragraph (c) of this section; in place of § 63.167, the owner or operator shall comply with paragraph (d) of this section; in place of § 63.168, the owner or operator shall comply with paragraph (e) of this section; in place of § 63.170, the owner or operator shall comply with § 63.1254 of this subpart; in place of § 63.171, the owner or operator shall comply with paragraph (b)(1)(v) of this section; in place of § 63.172, the owner or operator shall comply with paragraph (b)(1)(vi) of this section; in place of § 63.181, the owner or operator shall comply with paragraph (g) of this section; in place of § 63.182, the owner or operator shall comply with paragraph (h) of this section. The term "process unit" as used in subpart H shall be considered to be defined the same as "group of processes" for sources subject to this subpart GGG.

(i) Section 63.164, Compressors;

(ii) Section 63.165, Pressure relief devices in gas/vapor service;

(iii) Section 63.166, Sampling connection systems;

(iv) Section 63.169, Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service;

(v) Section 63.171, Delay of repair, shall apply except § 63.171(a) shall not apply. Instead, delay of repair of equipment for which leaks have been detected is allowed if one of the following conditions exist:

(A) The repair is technically infeasible without a process shutdown. Repair of this equipment shall occur by the end of the next scheduled process shutdown.

(B) The owner or operator determines that repair personnel would be exposed to an immediate danger if attempting to repair without a process shutdown. Repair of this equipment shall occur by the end of the next scheduled process shutdown.

(vi) Section 63.172, Closed-vent systems and control devices, for closed-vent systems used to comply with this subpart, and for control devices used to comply with this section only, except

(A) Sections 63.172(k) and (l) shall not apply. In place of § 63.172(k) and (l), the owner or operator shall comply with paragraph (f) of this section.

(B) Owners or operators may, instead of complying with the provisions of § 63.172(f), design a closed-vent system

to operate at a pressure below atmospheric pressure. The system shall be equipped with at least one pressure gage or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the associated control device is operating.

(vii) Section 63.174, Connectors, except:

(A) Sections 63.174(f) and (g) shall not apply. In place of § 63.174(f) and (g), the owner or operator shall comply with paragraph (f) of this section.

(B) Days that the connectors are not in organic HAP service shall not be considered part of the 3 month period in § 63.174(e).

(C) Section 63.174(b)(3)(ii) shall not apply. Instead, if the percent leaking connectors in the process unit was less than 0.5 percent, but equal to or greater than 0.25 percent, during the last required monitoring period, monitoring shall be performed once every 4 years. An owner or operator may comply with the requirements of this paragraph by monitoring at least 40 percent of the connectors in the first 2 years and the remainder of the connectors within the next 2 years. The percent leaking connectors will be calculated for the total of all monitoring performed during the 4 year period.

(D) Section 63.174(b)(3)(iv) shall not apply. Instead, the owner or operator shall increase the monitoring frequency to once every 2 years for the next monitoring period if leaking connectors comprise at least 0.5 percent but less than 1.0 percent of the connectors monitored within the 4 years specified in paragraph (b)(1)(vii)(C) of this section or the first 4 years specified in § 63.174(b)(3)(iii). At the end of that 2 year monitoring period, the owner or operator shall monitor once per year while the percent leaking connectors is greater than or equal to 0.5 percent; if the percent leaking connectors is less than 0.5 percent, the owner or operator may return to monitoring once every 4 years or may monitor in accordance with § 63.174(b)(3)(iii), if appropriate.

(E) Section 63.174(b)(3)(v) shall not apply. Instead, if an owner or operator complying with the requirements of paragraph (b)(1)(vii)(C) and (D) of this section or § 63.174(b)(3)(iii) for a group of processes determines that 1 percent or greater of the connectors are leaking, the owner or operator shall increase the monitoring frequency to one time per year. The owner or operator may again elect to use the provisions of paragraphs (b)(1)(vii)(C) or (D) of this section after a monitoring period in which less than

0.5 percent of the connectors are determined to be leaking.

(F) Section 63.174(b)(3)(iii) shall not apply. Instead, monitoring shall be required once every 8 years, if the percent leaking connectors in the process unit was less than 0.25 percent during the last required monitoring period. An owner or operator shall monitor at least 50 percent of the connectors in the first 4 years and the remainder of the connectors within the next 4 years. If the percent leaking connectors in the first 4 years is equal to or greater than 0.35 percent, the monitoring program shall revert at that time to the appropriate monitoring frequency specified in paragraphs (b)(1)(vii)(C), (D), or (E) of this section.

(viii) Section 63.177, Alternative means of emission limitation: General; (ix) Section 63.178, Alternative means of emission limitation: Batch processes, except that § 63.178(b), requirements for pressure testing, shall apply to all processes, not just batch processes;

(x) Section 63.179, Alternative means of emission limitation: Enclosed-vented process units;

(xi) Section 63.180, Test methods and procedures, except § 63.180(b)(4)(ii)(A) through (C) shall not apply. Instead calibration gases shall be a mixture of methane and air at a concentration of approximately, but less than, 10,000 parts per million methane for agitators; 2,000 parts per million for pumps; and 500 parts per million for all other equipment, except as provided in section 63.180(b)(4)(iii).

(2) [Reserved]

(c) *Standards for Pumps in Light Liquid Service and Agitators in Gas/Vapor Service and in Light Liquid Service.* (1) The provisions of this section apply to each pump that is in light organic HAP liquid service, and to each agitator in organic HAP gas/vapor service or in light organic HAP liquid service.

(2)(i) *Monitoring.* Each pump and agitator subject to this section shall be monitored quarterly to detect leaks by the method specified in § 63.180(b) of subpart H, except as provided in § 63.177 of subpart H, paragraph (f) of this section, and paragraphs (c)(5) through (c)(9) of this section.

(ii) *Leak definition.* The instrument reading, as determined by the method as specified in § 63.180(b), that defines a leak is:

(A) For agitators, an instrument reading of 10,000 parts per million or greater.

(B) For pumps, an instrument reading of 2,000 parts per million or greater.

(iii) *Visual Inspections.* Each pump and agitator shall be checked by visual

inspection each calendar week for indications of liquids dripping from the pump or agitator seal. If there are indications of liquids dripping from the seal, a leak is detected.

(3) *Repair provisions.* (i) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in paragraph (b)(1)(v) of this section.

(ii) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices where practicable:

(A) Tightening of packing gland nuts.

(B) Ensuring that the seal flush is operating at design pressure and temperature.

(4) *Calculation of percent leakers.* (i) The owner or operator shall decide no later than the end of the first monitoring period what groups of processes will be developed. Once the owner or operator has decided, all subsequent percent calculations shall be made on the same basis.

(ii) If, calculated on a 1 year rolling average, the greater of either 10 percent or three of the pumps in a group of processes leak, the owner or operator shall monitor each pump once per month.

(iii) The number of pumps in a group of processes shall be the sum of all the pumps in organic HAP service, except that pumps found leaking in a continuous process within 1 quarter after startup of the pump shall not count in the percent leaking pumps calculation for that one monitoring period only.

(iv) Percent leaking pumps shall be determined by the following Equation 3:

$$\%P_L = [(P_L - P_S) / (P_T - P_S)] \times 100 \text{ (Eq. 3)}$$

Where:

$\%P_L$ = percent leaking pumps
 P_L = number of pumps found leaking as determined through quarterly monitoring as required in paragraphs (c)(2)(i) and (c)(2)(ii) of this section.

P_T = total pumps in organic HAP service, including those meeting the criteria in paragraphs (c)(5) and (c)(6) of this section

P_S = number of pumps in a continuous process leaking within 1 quarter of startup during the current monitoring period

(5) *Exemptions.* Each pump or agitator equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraphs (c)(1) through (c)(4)(iii) of this section, provided the following requirements are met:

(i) Each dual mechanical seal system is:

(A) Operated with the barrier fluid at a pressure that is at all times greater than the pump/agitator stuffing box pressure; or

(B) Equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with the requirements of paragraph (b)(1)(vi) of this section; or

(C) Equipped with a closed-loop system that purges the barrier fluid into a process stream.

(ii) The barrier fluid is not in light liquid service.

(iii) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(iv) Each pump/agitator is checked by visual inspection each calendar week for indications of liquids dripping from the pump/agitator seal.

(A) If there are indications of liquids dripping from the pump/agitator seal at the time of the weekly inspection, the pump/agitator shall be monitored as specified in § 63.180(b) to determine if there is a leak of organic HAP in the barrier fluid.

(B) If an instrument reading of 2,000 parts per million or greater is measured for pumps, or 10,000 parts per million or greater is measured for agitators, a leak is detected.

(v) Each sensor as described in paragraph (c)(5)(iii) of this section is observed daily or is equipped with an alarm unless the pump is located within the boundary of an unmanned plant site.

(vi)(A) The owner or operator determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicate failure of the seal system, the barrier fluid system, or both.

(B) If indications of liquids dripping from the pump/agitator seal exceed the criteria established in paragraph (c)(5)(vi)(A) of this section, or if, based on the criteria established in paragraph (c)(5)(vi)(A) of this section, the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.

(C) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in paragraph (b)(1)(v) of this section.

(D) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(6) Any pump/agitator that is designed with no externally actuated

shaft penetrating the pump/agitator housing is exempt from the requirements of paragraphs (c)(1) through (c)(4) of this section, except for the requirements of paragraph (c)(2)(iii) and, for pumps, paragraph (c)(4)(iv).

(7) Any pump/agitator equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals back to the process or to a control device that complies with the requirements of paragraph (b)(1)(vi) of this section is exempt from the requirements of paragraphs (c)(2) through (c)(5) of this section.

(8) Any pump/agitator that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (c)(2)(iii) and (c)(5)(iv) of this section, and the daily requirements of paragraph (c)(5)(v) of this section, provided that each pump/agitator is visually inspected as often as practicable and at least monthly.

(9) If more than 90 percent of the pumps in a group of processes meet the criteria in either paragraph (c)(5) or (c)(6) of this section, the process is exempt from the requirements of paragraph (c)(4) of this section.

(d) *Standards: Open-Ended Valves or Lines.* (1)(i) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in § 63.177 and paragraphs (d)(4) through (6) of this section.

(ii) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair. The cap, blind flange, plug, or second valve shall be in place within 1 hour of cessation of operations requiring process fluid flow through the open-ended valve or line, or within 1 hour of cessation of maintenance or repair.

(2) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(3) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (d)(1) of this section at all other times.

(4) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (d)(1) through (d)(3) of this section.

(5) Open-ended valves or lines containing materials which would

autocatalytically polymerize are exempt from the requirements of paragraphs (d)(1) through (d)(3) of this section.

(6) Open-ended valves or lines containing materials which could cause an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (d)(1) through (d)(3) of this section are exempt from the requirements of paragraphs (d)(1) through (d)(3) of this section.

(e) *Standards: Valves in Gas/Vapor Service and in Light Liquid Service.* (1) The provisions of this section apply to valves that are either in gas organic HAP service or in light liquid organic HAP service.

(2) For existing and new affected sources, all valves subject to this section shall be monitored, except as provided in paragraph (f) of this section and in § 63.177, by no later than 1 year after the compliance date.

(3) *Monitoring.* The owner or operator of a source subject to this section shall monitor all valves, except as provided in paragraph (f) of this section and in § 63.177, at the intervals specified in paragraph (e)(4) of this section and shall comply with all other provisions of this section, except as provided in paragraph (b)(1)(v) of this section, § 63.178, and § 63.179.

(i) The valves shall be monitored to detect leaks by the method specified in § 63.180(b).

(ii) An instrument reading of 500 parts per million or greater defines a leak.

(4) *Subsequent monitoring frequencies.* After conducting the initial survey required in paragraph (e)(2) of this section, the owner or operator shall monitor valves for leaks at the intervals specified below:

(i) For a group of processes with 2 percent or greater leaking valves, calculated according to paragraph (e)(6) of this section, the owner or operator shall monitor each valve once per month, except as specified in paragraph (e)(9) of this section.

(ii) For a group of processes with less than 2 percent leaking valves, the owner or operator shall monitor each valve once each quarter, except as provided in paragraphs (e)(4)(iii) through (e)(4)(v) of this section.

(iii) For a group of processes with less than 1 percent leaking valves, the owner or operator may elect to monitor each valve once every 2 quarters.

(iv) For a group of processes with less than 0.5 percent leaking valves, the owner or operator may elect to monitor each valve once every 4 quarters.

(v) For a group of processes with less than 0.25 percent leaking valves, the

owner or operator may elect to monitor each valve once every 2 years.

(5) *Calculation of percent leakers.* For a group of processes to which this subpart applies, an owner or operator may choose to subdivide the valves in the applicable group of processes and apply the provisions of paragraph (e)(4) of this section to each subgroup. If the owner or operator elects to subdivide the valves in the applicable group of processes, then the provisions of paragraphs (e)(5)(i) through (e)(5)(viii) of this section apply.

(i) The overall performance of total valves in the applicable group of processes must be less than 2 percent leaking valves, as detected according to paragraphs (e)(3)(i) and (ii) of this section and as calculated according to paragraphs (e)(6)(ii) and (iii) of this section.

(ii) The initial assignment or subsequent reassignment of valves to subgroups shall be governed by the provisions of paragraphs (e)(5)(ii)(A) through (C) of this section.

(A) The owner or operator shall determine which valves are assigned to each subgroup. Valves with less than 1 year of monitoring data or valves not monitored within the last 12 months must be placed initially into the most frequently monitored subgroup until at least 1 year of monitoring data has been obtained.

(B) Any valve or group of valves can be reassigned from a less frequently monitored subgroup to a more frequently monitored subgroup provided that the valves to be reassigned were monitored during the most recent monitoring period for the less frequently monitored subgroup. The monitoring results must be included with the less frequently monitored subgroup's monitoring event and associated next percent leaking valves calculation for that group.

(C) Any valve or group of valves can be reassigned from a more frequently monitored subgroup to a less frequently monitored subgroup provided that the valves to be reassigned have not leaked for the period of the less frequently monitored subgroup (e.g., for the last 12 months, if the valve or group of valves is to be reassigned to a subgroup being monitored annually). Nonrepairable valves may not be reassigned to a less frequently monitored subgroup.

(iii) The owner or operator shall determine every 6 months if the overall performance of total valves in the applicable group of processes is less than 2 percent leaking valves and so indicate the performance in the next periodic report. If the overall performance of total valves in the

applicable group of processes is 2 percent leaking valves or greater, the owner or operator shall revert to the program required in paragraphs (e)(2) through (e)(4) of this section. The overall performance of total valves in the applicable group of processes shall be calculated as a weighted average of the percent leaking valves of each subgroup according to the following Equation 4:

$$\%V_{LO} = \frac{\sum_{i=1}^n (\%V_{Li} \times V_i)}{\sum_{i=1}^n V_i} \quad (\text{Eq. 4})$$

where:

$\%V_{LO}$ = overall performance of total valves in the applicable process or group of processes

$\%V_{Li}$ = percent leaking valves in subgroup I, most recent value calculated according to the procedures in paragraphs (e)(6)(ii) and (iii) of this section

V_i = number of valves in subgroup I

n = number of subgroups

(iv) *Records.* In addition to records required by paragraph (g) of this section, the owner or operator shall maintain records specified in paragraphs (e)(5)(iv)(A) through (D) of this section.

(A) Which valves are assigned to each subgroup.

(B) Monitoring results and calculations made for each subgroup for each monitoring period.

(C) Which valves are reassigned and when they were reassigned, and

(D) The results of the semiannual overall performance calculation required in paragraph (e)(5)(iii) of this section.

(v) The owner or operator shall notify the Administrator no later than 30 days prior to the beginning of the next monitoring period of the decision to subgroup valves. The notification shall identify the participating processes and the valves assigned to each subgroup.

(vi) *Semiannual reports.* In addition to the information required by paragraph (h)(3) of this section, the owner or operator shall submit in the periodic reports the information specified in paragraphs (e)(5)(vi)(A) and (B) of this section.

(A) Valve reassignments occurring during the reporting period, and

(B) Results of the semiannual overall performance calculation required by paragraph (e)(5)(iii) of this section.

(vii) To determine the monitoring frequency for each subgroup, the calculation procedures of paragraph (e)(6)(iii) of this section shall be used.

(viii) Except for the overall performance calculations required by paragraphs (e)(5)(i) and (e)(5)(iii) of this section, each subgroup shall be treated as if it were a process for the purposes of applying the provisions of this section.

(6)(i) The owner or operator shall decide no later than the implementation date of this subpart or upon revision of an operating permit how to group the processes. Once the owner or operator has decided, all subsequent percentage calculations shall be made on the same basis.

(ii) Percent leaking valves for each group of processes or subgroup shall be determined by the following Equation 5:

$$\%V_L = [V_L/V_T] \times 100 \quad (\text{Eq. 5})$$

Where:

$\%V_L$ = percent leaking valves

V_L = number of valves found leaking excluding nonrepairables as provided in paragraph (e)(6)(iv)(A) of this section

V_T = total valves monitored, in a monitoring period excluding valves monitored as required by (e)(7)(iii) of this section

(iii) When determining monitoring frequency for each group of processes or subgroup subject to monthly, quarterly, or semiannual monitoring frequencies, the percent leaking valves shall be the arithmetic average of the percent leaking valves from the last two monitoring periods. When determining monitoring frequency for each group of processes or subgroup subject to annual or biennial (once every 2 years) monitoring frequencies, the percent leaking valves shall be the arithmetic average of the percent leaking valves from the last three monitoring periods.

(iv)(A) Nonrepairable valves shall be included in the calculation of percent leaking valves the first time the valve is identified as leaking and nonrepairable and as required to comply with paragraph (e)(6)(iv)(B) of this section. Otherwise, a number of nonrepairable valves (identified and included in the percent leaking calculation in a previous period) up to a maximum of 1 percent of the total number of valves in organic HAP service at a process may be excluded from calculation of percent leaking valves for subsequent monitoring periods.

(B) If the number of nonrepairable valves exceeds 1 percent of the total number of valves in organic HAP service at a process, the number of nonrepairable valves exceeding 1 percent of the total number of valves in organic HAP service shall be included in the calculation of percent leaking valves.

(7) *Repair provisions.* (i) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in paragraph (b)(1)(v) of this section.

(ii) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(iii) When a leak is repaired, the valve shall be monitored at least once within the first 3 months after its repair. Days that the valve is not in organic HAP service shall not be considered part of this 3 month period.

(8) First attempts at repair include, but are not limited to, the following practices where practicable:

(i) Tightening of bonnet bolts,

(ii) Replacement of bonnet bolts,

(iii) Tightening of packing gland nuts, and

(iv) Injection of lubricant into lubricated packing.

(9) Any equipment located at a plant site with fewer than 250 valves in organic HAP service in the affected source is exempt from the requirements for monthly monitoring specified in paragraph (e)(4)(i) of this section. Instead, the owner or operator shall monitor each valve in organic HAP service for leaks once each quarter, or comply with paragraphs (e)(4)(iii) or (e)(4)(iv) of this section.

(f) *Unsafe to Monitor, Difficult to Monitor, and Inaccessible Equipment.*

(1) Equipment that is designated as unsafe to monitor, difficult to monitor, or inaccessible is exempt from the monitoring requirements specified in paragraphs (f)(1)(i) through (iv) of this section provided the owner or operator meets the requirements specified in paragraph (f)(2), (f)(3), or (f)(4) of this section, as applicable. Ceramic or ceramic-lined connectors are subject to the same requirements as inaccessible connectors.

(i) For pumps and agitators, paragraphs (c)(2), (c)(3), and (c)(4) of this section do not apply.

(ii) For valves, paragraphs (e)(2) through (e)(7) of this section do not apply.

(iii) For closed-vent systems, § 63.172(f)(1) and (2), and (g) do not apply.

(iv) For connectors, § 63.174(b) through (e) do not apply.

(2) *Equipment that is unsafe to monitor.* (i) Equipment may be designated as unsafe to monitor if the owner or operator determines that monitoring personnel would be exposed to an immediate danger as a consequence of complying with the monitoring requirements in paragraphs (f)(1)(i) through (iv) of this section.

(ii) The owner or operator of equipment that is designated as unsafe-to-monitor must have a written plan that requires monitoring of the equipment as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable.

(3) *Equipment that is difficult to monitor.* (i) Equipment may be designated as difficult to monitor if the owner or operator determines that the equipment cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner;

(ii) At an existing source, any equipment within a group of processes that meets the criteria of paragraph (f)(3)(i) of this section may be designated as difficult to monitor. At a new affected source, an owner or operator may designate no more than 3 percent of each type of equipment as difficult to monitor.

(iii) The owner or operator of equipment designated as difficult to monitor must follow a written plan that requires monitoring of the equipment at least once per calendar year.

(4) *Inaccessible equipment and ceramic or ceramic-lined connectors.* (i) A connector, agitator, or valve may be designated as inaccessible if it is:

(A) Buried;

(B) Insulated in a manner that prevents access to the equipment by a monitor probe;

(C) Obstructed by equipment or piping that prevents access to the equipment by a monitor probe;

(D) Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold which would allow access to equipment up to 7.6 meters (25 feet) above the ground; or

(E) Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment.

(ii) At an existing source, any connector, agitator, or valve that meets the criteria of paragraph (f)(4)(i) of this section may be designated as inaccessible. At a new affected source, an owner or operator may designate no more than 3 percent of each type of equipment as inaccessible.

(iii) If any inaccessible equipment or ceramic or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the leak shall

be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in paragraph (g) of this section.

(g) *Recordkeeping Requirements.* (1) An owner or operator of more than one group of processes subject to the provisions of this section may comply with the recordkeeping requirements for the groups of processes in one recordkeeping system if the system identifies with each record the program being implemented (e.g., quarterly monitoring) for each type of equipment. All records and information required by this section shall be maintained in a manner that can be readily accessed at the plant site. This could include physically locating the records at the plant site or accessing the records from a central location by computer at the plant site.

(2) *General recordkeeping.* Except as provided in paragraph (e) of this section and in paragraph (a)(9) of this section, the following information pertaining to all equipment subject to the requirements in this section shall be recorded:

(i) (A) A list of identification numbers for equipment (except connectors that are not subject to paragraph (f) of this section and instrumentation systems) subject to the requirements of this section. Connectors, except those subject to paragraph (f) of this section, need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this section are identified as a group, and the number of subject connectors is indicated. The list for each type of equipment shall be completed no later than the completion of the initial survey required for that component. The list of identification numbers shall be updated, if needed, to incorporate equipment changes within 15 calendar days of the completion of each monitoring survey for the type of equipment component monitored.

(B) A schedule for monitoring connectors subject to the provisions of § 63.174(a) and valves subject to the provisions of paragraph (e)(4) of this section.

(C) Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment subject to the provisions of this section may be identified on a plant site plan, in log entries, or by other appropriate methods.

(ii) (A) A list of identification numbers for equipment that the owner or operator elects to equip with a closed-vent system and control device, under the provisions of paragraph (c)(7) of this section, § 63.164(h), or § 63.165(c).

(B) A list of identification numbers for compressors that the owner or operator elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of § 63.164(i).

(iii) (A) A list of identification numbers for pressure relief devices subject to the provisions in § 63.165(a).

(B) A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions of § 63.165(d).

(iv) Identification of instrumentation systems subject to the provisions of this section. Individual components in an instrumentation system need not be identified.

(v) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by § 63.1260(i), for the source or may be part of a separate document that is maintained at the plant site. Reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

(vi) The following information shall be recorded for each dual mechanical seal system:

(A) Design criteria required by paragraph (c)(5)(vi)(A) of this section and § 63.164(e)(2), and an explanation of the design criteria; and

(B) Any changes to these criteria and the reasons for the changes.

(vii) A list of equipment designated as unsafe to monitor, difficult to monitor, or inaccessible under paragraphs (f) or (b)(1)(v)(B) of this section and a copy of the plan for monitoring or inspecting this equipment.

(viii) A list of connectors removed from and added to the process, as described in § 63.174(i)(1), and documentation of the integrity of the weld for any removed connectors, as required in § 63.174(j). This is not required unless the net credits for removed connectors is expected to be used.

(ix) For batch processes that the owner or operator elects to monitor as provided under § 63.178(c), a list of equipment added to batch product processes since the last monitoring period required in §§ 63.178(c)(3)(ii) and (3)(iii). This list must be completed for each type of equipment within 15 calendar days of the completion of each monitoring survey for the type of equipment monitored.

(3) *Records of visual inspections.* For visual inspections of equipment subject to the provisions of paragraphs (c)(2)(iii) and (c)(5)(iv)(A) of this section, the

owner or operator shall document that the inspection was conducted and the date of the inspection. The owner or operator shall maintain records as specified in paragraph (g)(4) of this section for leaking equipment identified in this inspection, except as provided in paragraph (g)(5) of this section. These records shall be retained for 2 years.

(4) *Monitoring records.* When each leak is detected as specified in paragraph (c) of this section and § 63.164; paragraph (e) of this section and § 63.169; and §§ 63.172 and 63.174 of subpart H, the following information shall be recorded and kept for 2 years onsite and 3 years offsite (5 years total):

(i) The instrument and the equipment identification number and the operator name, initials, or identification number.

(ii) The date the leak was detected and the date of the first attempt to repair the leak.

(iii) The date of successful repair of the leak.

(iv) If postrepair monitoring is required, the maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after the leak is successfully repaired or determined to be nonrepairable.

(v) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(A) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

(B) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked onsite before depletion and the reason for depletion.

(vi) If repairs were delayed, dates of process shutdowns that occur while the equipment is unrepaired.

(vii)(A) If the alternative in § 63.174(c)(1)(ii) is not in use for the monitoring period, identification, either by list, location (area or grouping), or tagging of connectors disturbed since the last monitoring period required in § 63.174(b), as described in § 63.174(c)(1).

(B) The date and results of follow-up monitoring as required in § 63.174(c). If identification of disturbed connectors is made by location, then all connectors within the designated location shall be monitored.

(viii) The date and results of the monitoring required in § 63.178(c)(3)(i) for equipment added to a batch process since the last monitoring period required in §§ 63.178(c)(3)(ii) and

(c)(3)(iii). If no leaking equipment is found in this monitoring, the owner or operator shall record that the inspection was performed. Records of the actual monitoring results are not required.

(ix) Copies of the periodic reports as specified in paragraph (h)(3) of this section, if records are not maintained on a computerized data base capable of generating summary reports from the records.

(5) *Records of pressure tests.* The owner or operator who elects to pressure test a process equipment train and supply lines between storage and processing areas to demonstrate compliance with this section is exempt from the requirements of paragraphs (g)(2), (g)(3), (g)(4), and (g)(6) of this section. Instead, the owner or operator shall maintain records of the following information:

(i) The identification of each product, or product code, produced during the calendar year. It is not necessary to identify individual items of equipment in the process equipment train.

(ii) Records demonstrating the proportion of the time during the calendar year the equipment is in use in the process that is subject to the provisions of this subpart. Examples of suitable documentation are records of time in use for individual pieces of equipment or average time in use for the process unit. These records are not required if the owner or operator does not adjust monitoring frequency by the time in use, as provided in § 63.178(c)(3)(iii).

(iii) Physical tagging of the equipment to identify that it is in organic HAP service and subject to the provisions of this section is not required. Equipment in a process subject to the provisions of this appendix may be identified on a plant site plan, in log entries, or by other appropriate methods.

(iv) The dates of each pressure test required in § 63.178(b), the test pressure, and the pressure drop observed during the test.

(v) Records of any visible, audible, or olfactory evidence of fluid loss.

(vi) When a process equipment train does not pass two consecutive pressure tests, the following information shall be recorded in a log and kept for 2 years:

(A) The date of each pressure test and the date of each leak repair attempt.

(B) Repair methods applied in each attempt to repair the leak.

(C) The reason for the delay of repair.

(D) The expected date for delivery of the replacement equipment and the actual date of delivery of the replacement equipment.

(E) The date of successful repair.

(6) *Records of compressor compliance tests.* The dates and results of each compliance test required for compressors subject to the provisions in § 63.164(i) and the dates and results of the monitoring following a pressure release for each pressure relief device subject to the provisions in §§ 63.165(a) and (b). The results shall include:

(i) The background level measured during each compliance test.

(ii) The maximum instrument reading measured at each piece of equipment during each compliance test.

(7) *Records for closed-vent systems.* The owner or operator shall maintain records of the information specified in paragraphs (g)(7)(i) through (g)(7)(iii) of this section for closed-vent systems and control devices subject to the provisions of paragraph (b)(1)(vi) of this section. The records specified in paragraph (g)(7)(i) of this section shall be retained for the life of the equipment. The records specified in paragraphs (g)(7)(ii) and (g)(7)(iii) of this section shall be retained for 2 years.

(i) The design specifications and performance demonstrations specified in paragraphs (g)(7)(i)(A) through (g)(7)(i)(D) of this section.

(A) Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams.

(B) The dates and descriptions of any changes in the design specifications.

(C) The flare design (i.e., steam assisted, air assisted, or nonassisted) and the results of the compliance demonstration required by § 63.11(b).

(D) A description of the parameter or parameters monitored, as required in paragraph (b)(1)(vi) of this section, to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

(ii) Records of operation of closed-vent systems and control devices.

(A) Dates and durations when the closed-vent systems and control devices required in paragraph (c) of this section and §§ 63.164 through 63.166 are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame.

(B) Dates and durations during which the monitoring system or monitoring device is inoperative.

(C) Dates and durations of startups and shutdowns of control devices required in paragraph (c)(7) of this section and §§ 63.164 through 63.166.

(iii) Records of inspections of closed-vent systems subject to the provisions of § 63.172.

(A) For each inspection conducted in accordance with the provisions of § 63.172(f)(1) or (f)(2) during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(B) For each inspection conducted in accordance with the provisions of § 63.172(f)(1) or (f)(2) during which leaks were detected, the information specified in paragraph (g)(4) of this section shall be recorded.

(8) *Records for components in heavy liquid service.* Information, data, and analysis used to determine that a piece of equipment or process is in heavy liquid service shall be recorded. Such a determination shall include an analysis or demonstration that the process fluids do not meet the criteria of "in light liquid or gas service." Examples of information that could document this include, but are not limited to, records of chemicals purchased for the process, analyses of process stream composition, engineering calculations, or process knowledge.

(9) *Records of exempt components.* Identification, either by list, location (area or group) of equipment in organic HAP service less than 300 hours per year subject to the provisions of this section.

(10) *Records of alternative means of compliance determination.* Owners and operators choosing to comply with the requirements of § 63.179 shall maintain the following records:

(i) Identification of the process(es) and the organic HAP they handle.

(ii) A schematic of the process, enclosure, and closed-vent system.

(iii) A description of the system used to create a negative pressure in the enclosure to ensure that all emissions are routed to the control device.

(h) *Reporting Requirements.*

(1) Each owner or operator of a source subject to this section shall submit the reports listed in paragraphs (h)(1)(i) through (ii) of this section.

(i) A Notification of Compliance Status Report described in paragraph (h)(2) of this section.

(ii) Periodic Reports described in paragraph (h)(3) of this section, and

(2) *Notification of compliance report.* Each owner or operator of a source subject to this section shall submit the information specified in paragraphs (h)(2)(i) through (iii) of this section in the Notification of Compliance Status Report described in § 63.1260(f).

(i) The notification shall provide the information listed in paragraphs (h)(2)(i)(A) through (C) of this section for each process subject to the

requirements of paragraphs (b) through (g) of this section.

(A) Process group identification.

(B) Approximate number of each equipment type (e.g., valves, pumps) in organic HAP service, excluding equipment in vacuum service.

(C) Method of compliance with the standard (for example, "monthly leak detection and repair" or "equipped with dual mechanical seals").

(ii) The notification shall provide the information listed in paragraphs (h)(2)(ii)(A) and (B) of this section for each process subject to the requirements of paragraph (b)(1)(ix) of this section and § 63.178(b).

(A) Products or product codes subject to the provisions of this section, and

(B) Planned schedule for pressure testing when equipment is configured for production of products subject to the provisions of this section.

(iii) The notification shall provide the information listed in paragraphs (h)(2)(iii)(A) and (B) of this section for each process subject to the requirements in § 63.179.

(A) Process identification.

(B) A description of the system used to create a negative pressure in the enclosure and the control device used to comply with the requirements of paragraph (b)(1)(vi) of this section.

(iv) Any change in the information submitted under paragraph (h) of this section shall be provided to the Administrator as a part of subsequent Periodic Reports. Section 63.9(j) shall not apply to the Notification of Compliance Status Report described in this paragraph (h)(2) of this section.

(3) *Periodic reports.* The owner or operator of a source subject to this section shall submit Periodic Reports.

(i) A report containing the information in paragraphs (h)(3)(ii), (h)(3)(iii), and (h)(3)(iv) of this section shall be submitted semiannually starting 6 months after the Notification of Compliance Status Report, as required in paragraph (h)(2) of this section. The first periodic report shall cover the first 6 months after the compliance date specified in § 63.1250(e). Each subsequent periodic report shall cover the 6 month period following the preceding period.

(ii) For equipment complying with the provisions of paragraphs (b) through (g) of this section, the summary information listed in paragraphs (h)(3)(ii)(A) through (L) of this section for each monitoring period during the 6-month period.

(A) The number of valves for which leaks were detected as described in paragraph (e)(3) of this section, the

percent leakers, and the total number of valves monitored;

(B) The number of valves for which leaks were not repaired as required in paragraph (e)(7) of this section, identifying the number of those that are determined nonrepairable;

(C) The number of pumps and agitators for which leaks were detected as described in paragraph (c)(2) of this section, the percent leakers, and the total number of pumps and agitators monitored;

(D) The number of pumps and agitators for which leaks were not repaired as required in paragraph (c)(3) of this section;

(E) The number of compressors for which leaks were detected as described in § 63.164(f);

(F) The number of compressors for which leaks were not repaired as required in § 63.164(g);

(G) The number of connectors for which leaks were detected as described in § 63.174(a), the percent of connectors leaking, and the total number of connectors monitored;

(H) The number of connectors for which leaks were not repaired as required in § 63.174(d), identifying the number of those that are determined nonrepairable;

(I) The facts that explain any delay of repairs and, where appropriate, why a process shutdown was technically infeasible.

(J) The results of all monitoring to show compliance with §§ 63.164(i), 63.165(a), and 63.172(f) conducted within the semiannual reporting period.

(K) If applicable, the initiation of a monthly monitoring program under either paragraph (c)(4)(ii) or paragraph (e)(4)(i) of this section.

(L) If applicable, notification of a change in connector monitoring alternatives as described in § 63.174(c)(1).

(iii) For owners or operators electing to meet the requirements of § 63.178(b), the report shall include the information listed in paragraphs (h)(3)(iii)(A) through (E) of this paragraph for each process.

(A) Product process equipment train identification;

(B) The number of pressure tests conducted;

(C) The number of pressure tests where the equipment train failed either the retest or two consecutive pressure tests;

(D) The facts that explain any delay of repairs; and

(E) The results of all monitoring to determine compliance with § 63.172(f) of subpart H.

(iv) Any revisions to items reported in earlier Notification of Compliance

Status Report, if the method of compliance has changed since the last report or any other changes to the information reported has occurred.

§ 63.1256 Standards: Wastewater.

(a) *General.* Each owner or operator of any affected source (existing or new) shall comply with the general wastewater requirements in paragraphs (a)(1) and (2) of this section.

(1) *Identify wastewater that requires control.* For each POD, the owner or operator shall comply with the requirements in either paragraph (a)(1)(i), or (ii) of this section to determine whether a wastewater stream is an affected wastewater stream that requires control for soluble and/or partially soluble HAP compounds or to designate the wastewater stream as an affected wastewater stream, respectively. The owner or operator may use a combination of the approaches in paragraphs (a)(1)(i) and (ii) of this section for different affected wastewater generated at the source. The owner or operator shall also comply with the requirements for multiphase discharges in paragraph (a)(4) of this section. Wastewater identified in paragraph (a)(3) of this section is exempt from the provisions of this subpart.

(i) *Determine characteristics of a wastewater stream.* At new and existing sources, a wastewater stream is an affected wastewater stream if the annual average concentration and annual load exceed any of the criteria specified in paragraph (a)(1)(i)(A) through (C) of this section. At new sources, a wastewater stream is subject to additional control requirements if the annual average concentration and annual load exceed the criteria specified in paragraphs (a)(1)(i)(D) of this section. The owner or operator shall comply with the provisions of § 63.1257(e)(1) to determine the annual average concentrations and annual load of partially soluble and soluble HAP compounds.

(A) The wastewater stream contains partially soluble HAP compounds at an annual average concentration greater than 1,300 ppmw, and the total soluble and partially soluble HAP load in all wastewater from the PMPU exceeds 1 Mg/yr.

(B) The wastewater stream contains partially soluble and/or soluble HAP compounds at an annual average concentration of 5,200 ppmw, and the total soluble and partially soluble HAP load in all wastewater from the PMPU exceeds 1 Mg/yr.

(C) The wastewater stream contains partially soluble and/or soluble HAP at an annual average concentration of

greater than 10,000 ppmw, and the total partially soluble and/or soluble HAP load in all wastewater from the affected source is greater than 1 Mg/yr.

(D) The wastewater stream contains soluble HAP compounds at an annual average concentration greater than 110,000 ppmw, and the total soluble and partially soluble HAP load in all wastewater from the PMPU exceeds 1 Mg/yr.

(ii) *Designate wastewater as affected wastewater.* For existing sources, the owner or operator may elect to designate wastewater streams as meeting the criteria of either paragraphs (a)(1)(i)(A), (B), or (C) of this section. For new sources, the owner or operator may elect to designate wastewater streams meeting the criterion in paragraph (a)(1)(i)(D) or for wastewater known to contain no soluble HAP, as meeting the criterion in paragraph (a)(1)(i)(A) of this section. For designated wastewater the procedures specified in paragraphs (a)(1)(ii)(A) and (B) of this section shall be followed, except as specified in paragraphs (g)(8)(i), (g)(9)(i), and (g)(10) of this section. The owner or operator is not required to determine the annual average concentration or load for each designated wastewater stream for the purposes of this section.

(A) From the POD for the wastewater stream that is designated as an affected wastewater stream to the location where the owner or operator elects to designate such wastewater stream as an affected wastewater stream, the owner or operator shall comply with all applicable emission suppression requirements specified in paragraphs (b) through (f) of this section.

(B) From the location where the owner or operator designates a wastewater stream as an affected wastewater stream, such wastewater stream shall be managed in accordance with all applicable emission suppression requirements specified in paragraphs (b) through (f) of this section and with the treatment requirements in paragraph (g) of this section.

(iii) *Scrubber Effluent.* Effluent from a water scrubber that has been used to control Table 2 HAP-containing vent streams that are controlled in order to meet the process vent requirements in § 63.1254 of this subpart is considered an affected wastewater stream.

(2) *Requirements for affected wastewater.* (i) An owner or operator of a facility shall comply with the applicable requirements for wastewater tanks, surface impoundments, containers, individual drain systems, and oil/water separators as specified in paragraphs (b) through (f) of this

section, except as provided in paragraph (g)(3) of this section.

(ii) Comply with the applicable requirements for control of soluble and partially soluble compounds as specified in paragraph (g) of this section. Alternatively, the owner or operator may elect to comply with the treatment provisions specified in paragraph (a)(5) of this section.

(iii) Comply with the applicable monitoring and inspection requirements specified in § 63.1258.

(iv) Comply with the applicable recordkeeping and reporting requirements specified in §§ 63.1259 and 63.1260.

(3) *Exempt wastewater.* The following wastewaters are not subject to the wastewater provisions of this part:

(i) Stormwater from segregated sewers;

(ii) Water from fire-fighting and deluge systems, including testing of such systems;

(iii) Spills; and

(iv) Water from safety showers.

(4) *Requirements for multiphase discharges.* The owner or operator shall not discharge a separate phase that can be isolated through gravity separation from the aqueous phase to a waste management or treatment unit, unless the stream is discharged to a treatment unit in compliance with paragraph (g)(13) of this section.

(5) *Offsite treatment or onsite treatment not owned or operated by the source.* The owner or operator may elect to transfer affected wastewater streams that contain less than 50 ppmw of partially soluble HAP or a residual removed from such affected wastewater to an onsite treatment operation not owned or operated by the owner or operator of the source generating the wastewater or residual, or to an offsite treatment operation, provided that the waste management units up to the activated sludge unit are covered or the owner or operator demonstrates that less than 5 percent of the total soluble HAP is emitted from the these units.

(i) The owner or operator transferring the wastewater or residual shall:

(A) Comply with the provisions specified in paragraphs (b) through (f) of this section for each waste management unit that receives or manages affected wastewater or a residual removed from affected wastewater prior to shipment or transport.

(B) Include a notice with each shipment or transport of affected wastewater or residual removed from affected wastewater. The notice shall state that the affected wastewater or residual contains organic HAP that are to be treated in accordance with the

provisions of this subpart. When the transport is continuous or ongoing (for example, discharge to a publicly-owned treatment works), the notice shall be submitted to the treatment operator initially and whenever there is a change in the required treatment. The owner or operator shall keep a record of the notice in accordance with § 63.1259(g).

(ii) The owner or operator may not transfer the affected wastewater or residual unless the transferee has submitted to the EPA a written certification that the transferee will manage and treat any affected wastewater or residual removed from affected wastewater received from a source subject to the requirements of this subpart in accordance with the requirements of either:

(A) Paragraphs (b) through (i) of this section; or

(B) Subpart D of this part if alternative emission limitations have been granted the transferor in accordance with those provisions; or

(C) Section 63.6(g).

(iii) The certifying entity may revoke the written certification by sending a written statement to the EPA and the owner or operator giving at least 90 days notice that the certifying entity is rescinding acceptance of responsibility for compliance with the regulatory provisions listed in this paragraph. Upon expiration of the notice period, the owner or operator may not transfer the wastewater stream or residual to the treatment operation.

(iv) By providing this written certification to the EPA, the certifying entity accepts responsibility for compliance with the regulatory provisions listed in paragraph (a)(5)(ii) of this section with respect to any shipment of wastewater or residual covered by the written certification. Failure to abide by any of those provisions with respect to such shipments may result in enforcement action by the EPA against the certifying entity in accordance with the enforcement provisions applicable to violations of these provisions by owners or operators of sources.

(v) Written certifications and revocation statements, to the EPA from the transferees of wastewater or residuals shall be signed by the responsible official of the certifying entity, provide the name and address of the certifying entity, and be sent to the appropriate EPA Regional Office at the addresses listed in § 63.13. Such written certifications are not transferable by the treater.

(b) *Wastewater tanks.* For each wastewater tank that receives, manages, or treats affected wastewater or a

residual removed from affected wastewater, the owner or operator shall comply with the requirements of either paragraph (b)(1) or (2) of this section as specified in Table 6 of this subpart.

(1) The owner or operator shall operate and maintain a fixed roof except when the contents of the wastewater tank are heated, treated by means of an exothermic reaction, or sparged, during which time the owner or operator shall comply with the requirements specified in paragraph (b)(2) of this section. For the purposes of this paragraph, the requirements of paragraph (b)(2) of this section are satisfied by operating and maintaining a fixed roof if the owner or operator demonstrates that the total soluble and partially soluble HAP emissions from the wastewater tank are no more than 5 percent higher than the emissions would be if the contents of the wastewater tank were not heated, treated by an exothermic reaction, or sparged.

(2) The owner or operator shall comply with the requirements in paragraphs (b)(3) through (9) of this section and shall operate and maintain one of the emission control techniques listed in paragraphs (b)(2)(i) through (iii) of this section.

(i) A fixed roof and a closed-vent system that routes the organic HAP vapors vented from the wastewater tank to a control device; or

(ii) A fixed roof and an internal floating roof that meets the requirements specified in § 63.119(b), with the differences noted in § 63.1257(c)(3)(i) through (iii) for the purposes of this subpart; or

(iii) An external floating roof that meets the requirements specified in §§ 63.119(c), 63.120(b)(5), and 63.120(b)(6), with the differences noted in § 63.1257(c)(3)(i) through (v) for the purposes of this subpart.

(3) If the owner or operator elects to comply with the requirements of paragraph (b)(2)(i) of this section, the fixed roof shall meet the requirements of paragraph (b)(3)(i) of this section, the control device shall meet the requirements of paragraph (b)(3)(ii) of this section, and the closed-vent system shall meet the requirements of paragraph (b)(3)(iii) of this section.

(i) The fixed roof shall meet the following requirements:

(A) Except as provided in paragraph (b)(3)(iv) of this section, the fixed roof and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be maintained in accordance with the requirements specified in § 63.1258(h).

(B) Each opening shall be maintained in a closed position (e.g., covered by a lid) at all times that the wastewater tank

contains affected wastewater or residual removed from affected wastewater except when it is necessary to use the opening for wastewater sampling, removal, or for equipment inspection, maintenance, or repair.

(ii) The control device shall be designed, operated, and inspected in accordance with the requirements of paragraph (h) of this section.

(iii) Except as provided in paragraph (b)(3)(iv) of this section, the closed-vent system shall be inspected in accordance with the requirements of § 63.1258(h).

(iv) For any fixed roof tank and closed-vent system that is operated and maintained under negative pressure, the owner or operator is not required to comply with the requirements specified in § 63.1258(h).

(4) If the owner or operator elects to comply with the requirements of paragraph (b)(2)(ii) of this section, the floating roof shall be inspected according to the procedures specified in § 63.120(a)(2) and (3), with the differences noted in § 63.1257(c)(3)(iv) for the purposes of this subpart.

(5) Except as provided in paragraph (b)(6) of this section, if the owner or operator elects to comply with the requirements of paragraph (b)(2)(iii) of this section, seal gaps shall be measured according to the procedures specified in § 63.120(b)(2)(i) through (b)(4) and the wastewater tank shall be inspected to determine compliance with § 63.120(b)(5) and (6) according to the schedule specified in § 63.120(b)(1)(i) through (iii).

(6) If the owner or operator determines that it is unsafe to perform the seal gap measurements specified in § 63.120(b)(2)(i) through (b)(4) or to inspect the wastewater tank to determine compliance with § 63.120(b)(5) and (6) because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the owner or operator shall comply with the requirements in either paragraph (b)(6)(i) or (ii) of this section.

(ii) The owner or operator shall empty and remove the wastewater tank from service within 45 calendar days of determining that the roof is unsafe. If the wastewater tank cannot be emptied within 45 calendar days, the owner or operator may utilize up to two extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the wastewater

tank will be emptied as soon as possible.

(7) Except as provided in paragraph (b)(6) of this section, each wastewater tank shall be inspected initially, and semiannually thereafter, for improper work practices in accordance with § 63.1258(g). For wastewater tanks, improper work practice includes, but is not limited to, leaving open any access door or other opening when such door or opening is not in use.

(8) Except as provided in paragraph (b)(6) of this section, each wastewater tank shall be inspected for control equipment failures as defined in paragraph (b)(8)(i) of this section according to the schedule in paragraphs (b)(8)(ii) and (iii) of this section in accordance with § 63.1258(g).

(i) Control equipment failures for wastewater tanks include, but are not limited to, the conditions specified in paragraphs (b)(8)(i)(A) through (I) of this section.

(A) The floating roof is not resting on either the surface of the liquid or on the leg supports.

(B) There is stored liquid on the floating roof.

(C) A rim seal is detached from the floating roof.

(D) There are holes, tears, cracks or gaps in the rim seal or seal fabric of the floating roof.

(E) There are visible gaps between the seal of an internal floating roof and the wall of the wastewater tank.

(F) There are gaps between the metallic shoe seal or the liquid mounted primary seal of an external floating roof and the wall of the wastewater tank that exceed 212 square centimeters per meter of tank diameter or the width of any portion of any gap between the primary seal and the tank wall exceeds 3.81 centimeters.

(G) There are gaps between the secondary seal of an external floating roof and the wall of the wastewater tank that exceed 21.2 square centimeters per meter of tank diameter or the width of any portion of any gap between the secondary seal and the tank wall exceeds 1.27 centimeters.

(H) Where a metallic shoe seal is used on an external floating roof, one end of the metallic shoe does not extend into the stored liquid or one end of the metallic shoe does not extend a minimum vertical distance of 61 centimeters above the surface of the stored liquid.

(I) A gasket, joint, lid, cover, or door has a crack or gap, or is broken.

(ii) The owner or operator shall inspect for the control equipment failures in paragraphs (b)(8)(i)(A) through (H) according to the schedule

specified in paragraphs (b)(4) and (5) of this section.

(iii) The owner or operator shall inspect for the control equipment failures in paragraph (b)(8)(i)(I) of this section initially, and semiannually thereafter.

(9) Except as provided in paragraph (i) of this section, when an improper work practice or a control equipment failure is identified, first efforts at repair shall be made no later than 5 calendar days after identification and repair shall be completed within 45 calendar days after identification. If a failure that is detected during inspections required by this section cannot be repaired within 45 calendar days and if the tank cannot be emptied within 45 calendar days, the owner or operator may utilize up to two extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the tank will be emptied as soon as practical.

(c) *Surface impoundments.* For each surface impoundment that receives, manages, or treats affected wastewater or a residual removed from affected wastewater, the owner or operator shall comply with the requirements of paragraphs (c)(1), (2), and (3) of this section.

(1) The owner or operator shall operate and maintain on each surface impoundment either a cover (e.g., air-supported structure or rigid cover) and a closed-vent system that routes the organic hazardous air pollutants vapors vented from the surface impoundment to a control device in accordance with paragraphs (c)(1)(i), (iii), (iv), and (v) of this section, or a floating flexible membrane cover as specified in paragraph (c)(1)(ii) of this section.

(i) The cover and all openings shall meet the following requirements:

(A) Except as provided in paragraph (c)(1)(iv) of this section, the cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be maintained in accordance with the requirements specified in § 63.1258(h).

(B) Each opening shall be maintained in a closed position (e.g., covered by a lid) at all times that affected wastewater or residual removed from affected wastewater is in the surface impoundment except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.

(C) The cover shall be used at all times that affected wastewater or

residual removed from affected wastewater is in the surface impoundment except during removal of treatment residuals in accordance with 40 CFR 268.4 or closure of the surface impoundment in accordance with 40 CFR 264.228.

(ii) Floating flexible membrane covers shall meet the requirements specified in paragraphs (c)(1)(ii)(A) through (F) of this section.

(A) The floating flexible cover shall be designed to float on the liquid surface during normal operations, and to form a continuous barrier over the entire surface area of the liquid.

(B) The cover shall be fabricated from a synthetic membrane material that is either:

(1) High density polyethylene (HDPE) with a thickness no less than 2.5 millimeters (100 mils); or

(2) A material or a composite of different materials determined to have both organic permeability properties that are equivalent to those of the material listed in paragraph (c)(1)(ii)(B)(1) of this section, and chemical and physical properties that maintain the material integrity for the intended service life of the material.

(C) The cover shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between cover section seams or between the interface of the cover edge and its foundation mountings.

(D) Except as provided for in paragraph (c)(1)(ii)(E) of this section, each opening in the floating membrane cover shall be equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device.

(E) The floating membrane cover may be equipped with one or more emergency cover drains for removal of stormwater. Each emergency cover drain shall be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening or a flexible fabric sleeve seal.

(F) The closure devices shall be made of suitable materials that will minimize exposure of organic HAP to the atmosphere, to the extent practical, and will maintain the integrity of the equipment throughout its intended service life. Factors to be considered in designing the closure devices shall include: the effects of any contact with the liquid and its vapor managed in the surface impoundment; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating

practices used for the surface impoundment on which the floating membrane cover is installed.

(G) Whenever affected wastewater or residual from affected wastewater is in the surface impoundment, the floating membrane cover shall float on the liquid and each closure device shall be secured in the closed position. Opening of closure devices or removal of the cover is allowed to provide access to the surface impoundment for performing routine inspection, maintenance, or other activities needed for normal operations and/or to remove accumulated sludge or other residues from the bottom of surface impoundment. Openings shall be maintained in accordance with § 63.1258(h).

(iii) The control device shall be designed, operated, and inspected in accordance with paragraph (h) of this section.

(iv) Except as provided in paragraph (c)(1)(v) of this section, the closed-vent system shall be inspected in accordance with § 63.1258(h).

(v) For any cover and closed-vent system that is operated and maintained under negative pressure, the owner or operator is not required to comply with the requirements specified in § 63.1258(h).

(2) Each surface impoundment shall be inspected initially, and semiannually thereafter, for improper work practices and control equipment failures in accordance with § 63.1258(g).

(i) For surface impoundments, improper work practice includes, but is not limited to, leaving open any access hatch or other opening when such hatch or opening is not in use.

(ii) For surface impoundments, control equipment failure includes, but is not limited to, any time a joint, lid, cover, or door has a crack or gap, or is broken.

(3) Except as provided in paragraph (i) of this section, when an improper work practice or a control equipment failure is identified, first efforts at repair shall be made no later than 5 calendar days after identification and repair shall be completed within 45 calendar days after identification.

(d) *Containers.* For each container that receives, manages, or treats affected wastewater or a residual removed from affected wastewater, the owner or operator shall comply with the requirements of paragraphs (d)(1) through (5) of this section.

(1) The owner or operator shall operate and maintain a cover on each container used to handle, transfer, or store affected wastewater or a residual removed from affected wastewater in

accordance with the following requirements:

(i) Except as provided in paragraph (d)(3)(iv) of this section, if the capacity of the container is greater than 0.42 m³, the cover and all openings (e.g., bungs, hatches, sampling ports, and pressure relief devices) shall be maintained in accordance with the requirements specified in § 63.1258(h).

(ii) If the capacity of the container is less than or equal to 0.42 m³, the owner or operator shall comply with either paragraph (d)(1)(ii)(A) or (B) of this section.

(A) The container must meet existing Department of Transportation specifications and testing requirements under 49 CFR part 178; or

(B) Except as provided in paragraph (d)(3)(iv) of this section, the cover and all openings shall be maintained without leaks as specified in § 63.1258(h).

(iii) The cover and all openings shall be maintained in a closed position (e.g., covered by a lid) at all times that affected wastewater or a residual removed from affected wastewater is in the container except when it is necessary to use the opening for filling, removal, inspection, sampling, or pressure relief events related to safety considerations.

(2) For containers with a capacity greater than or equal to 0.42 m³, either a submerged fill pipe shall be used when a container is being filled by pumping with affected wastewater or a residual removed from affected wastewater or the container shall be located within an enclosure with a closed-vent system that routes the organic HAP vapors vented from the container to a control device.

(i) The submerged fill pipe outlet shall extend to no more than 6 inches or within two fill pipe diameters of the bottom of the container while the container is being filled.

(ii) The cover shall remain in place and all openings shall be maintained in a closed position except for those openings required for the submerged fill pipe and for venting of the container to prevent physical damage or permanent deformation of the container or cover.

(3) During treatment of affected wastewater or a residual removed from affected wastewater, including aeration, thermal or other treatment, in a container, whenever it is necessary for the container to be open, the container shall be located within an enclosure with a closed-vent system that routes the organic HAP vapors vented from the container to a control device.

(i) Except as provided in paragraph (d)(3)(iv) of this section, the enclosure

and all openings (e.g., doors, hatches) shall be maintained in accordance with the requirements specified in § 63.1258(h).

(ii) The control device shall be designed, operated, and inspected in accordance with paragraph (h) of this section.

(iii) Except as provided in paragraph (d)(3)(iv) of this section, the closed-vent system shall be inspected in accordance with § 63.1258(h).

(iv) For any enclosure and closed-vent system that is operated and maintained under negative pressure, the owner or operator is not required to comply with the requirements specified in § 63.1258(h).

(4) Each container shall be inspected initially, and semiannually thereafter, for improper work practices and control equipment failures in accordance with § 63.1258(g).

(i) For containers, improper work practice includes, but is not limited to, leaving open any access hatch or other opening when such hatch or opening is not in use.

(ii) For containers, control equipment failure includes, but is not limited to, any time a cover or door has a gap or crack, or is broken.

(5) Except as provided in paragraph (i) of this section, when an improper work practice or a control equipment failure is identified, first efforts at repair shall be made no later than 5 calendar days after identification and repair shall be completed within 15 calendar days after identification.

(e) *Individual drain systems.* For each individual drain system that receives or manages affected wastewater or a residual removed from affected wastewater, the owner or operator shall comply with the requirements of paragraphs (e)(1), (2), and (3) or with paragraphs (e)(4), (5), and (6) of this section.

(1) If the owner or operator elects to comply with this paragraph, the owner or operator shall operate and maintain on each opening in the individual drain system a cover and if vented, route the vapors to a process or through a closed-vent system to a control device. The owner or operator shall comply with the requirements of paragraphs (e)(1)(i) through (v) of this section.

(i) The cover and all openings shall meet the following requirements:

(A) Except as provided in paragraph (e)(1)(iv) of this section, the cover and all openings (e.g., access hatches, sampling ports) shall be maintained in accordance with the requirements specified in § 63.1258(h).

(B) The cover and all openings shall be maintained in a closed position at all

times that affected wastewater or a residual removed from affected wastewater is in the drain system except when it is necessary to use the opening for sampling or removal, or for equipment inspection, maintenance, or repair.

(ii) The control device shall be designed, operated, and inspected in accordance with paragraph (h) of this section.

(iii) Except as provided in paragraph (e)(1)(iv) of this section, the closed-vent system shall be inspected in accordance with § 63.1258(h).

(iv) For any cover and closed-vent system that is operated and maintained under negative pressure, the owner or operator is not required to comply with the requirements specified in § 63.1258(h).

(v) The individual drain system shall be designed and operated to segregate the vapors within the system from other drain systems and the atmosphere.

(2) Each individual drain system shall be inspected initially, and semiannually thereafter, for improper work practices and control equipment failures, in accordance with § 63.1258(g).

(i) For individual drain systems, improper work practice includes, but is not limited to, leaving open any access hatch or other opening when such hatch or opening is not in use for sampling or removal, or for equipment inspection, maintenance, or repair.

(ii) For individual drain systems, control equipment failure includes, but is not limited to, any time a joint, lid, cover, or door has a gap or crack, or is broken.

(3) Except as provided in paragraph (i) of this section, when an improper work practice or a control equipment failure is identified, first efforts at repair shall be made no later than 5 calendar days after identification and repair shall be completed within 15 calendar days after identification.

(4) If the owner or operator elects to comply with this paragraph, the owner or operator shall comply with the requirements in paragraphs (e)(4) (i) through (iii) of this section:

(i) Each drain shall be equipped with water seal controls or a tightly fitting cap or plug. The owner or operator shall comply with paragraphs (e)(4)(i)(A) and (B) of this section.

(A) For each drain equipped with a water seal, the owner or operator shall ensure that the water seal is maintained. For example, a flow-monitoring device indicating positive flow from a main to a branch water line supplying a trap or water being continuously dripped into the trap by a hose could be used to verify flow of water to the trap. Visual

observation is also an acceptable alternative.

(B) If a water seal is used on a drain receiving affected wastewater, the owner or operator shall either extend the pipe discharging the wastewater below the liquid surface in the water seal of the receiving drain, or install a flexible shield (or other enclosure which restricts wind motion across the open area between the pipe and the drain) that encloses the space between the pipe discharging the wastewater to the drain receiving the wastewater. (Water seals which are used on hubs receiving wastewater that is not subject to the provisions of this subpart for the purpose of eliminating cross ventilation to drains carrying affected wastewater are not required to have a flexible cap or extended subsurface discharging pipe.)

(ii) Each junction box shall be equipped with a tightly fitting solid cover (i.e., no visible gaps, cracks, or holes) which shall be kept in place at all times except during inspection and maintenance. If the junction box is vented, the owner or operator shall comply with the requirements in paragraph (e)(4)(ii) (A) or (B) of this section.

(A) The junction box shall be vented to a process or through a closed-vent system to a control device. The closed-vent system shall be inspected in accordance with the requirements of § 63.1258(h) and the control device shall be designed, operated, and inspected in accordance with the requirements of paragraph (h) of this section.

(B) If the junction box is filled and emptied by gravity flow (i.e., there is no pump) or is operated with no more than slight fluctuations in the liquid level, the owner or operator may vent the junction box to the atmosphere provided that the junction box complies with the requirements in paragraphs (e)(4)(ii)(B) (1) and (2) of this section.

(1) The vent pipe shall be at least 90 centimeters in length and no greater than 10.2 centimeters in nominal inside diameter.

(2) Water seals shall be installed and maintained at the wastewater entrance(s) to or exit from the junction box restricting ventilation in the individual drain system and between components in the individual drain system. The owner or operator shall demonstrate (e.g., by visual inspection or smoke test) upon request by the Administrator that the junction box water seal is properly designed and restricts ventilation.

(iii) Each sewer line shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have

no visible gaps or cracks in joints, seals, or other emission interfaces. (Note: This provision applies to sewers located inside and outside of buildings.)

(5) Equipment used to comply with paragraphs (e)(4) (i), (ii), or (iii) of this section shall be inspected as follows:

(i) Each drain using a tightly fitting cap or plug shall be visually inspected initially, and semiannually thereafter, to ensure caps or plugs are in place and that there are no gaps, cracks, or other holes in the cap or plug.

(ii) Each junction box shall be visually inspected initially, and semiannually thereafter, to ensure that there are no gaps, cracks, or other holes in the cover.

(iii) The unburied portion of each sewer line shall be visually inspected initially, and semiannually thereafter, for indication of cracks or gaps that could result in air emissions.

(6) Except as provided in paragraph (i) of this section, when a gap, hole, or crack is identified in a joint or cover, first efforts at repair shall be made no later than 5 calendar days after identification, and repair shall be completed within 15 calendar days after identification.

(f) *Oil-water separators.* For each oil-water separator that receives, manages, or treats affected wastewater or a residual removed from affected wastewater, the owner or operator shall comply with the requirements of paragraphs (f)(1) through (6) of this section.

(1) The owner or operator shall maintain one of the following:

(i) A fixed roof and a closed-vent system that routes the organic HAP vapors vented from the oil-water separator to a control device. The fixed roof, closed-vent system, and control device shall meet the requirements specified in paragraph (f)(2) of this section:

(ii) A floating roof that meets the requirements in 40 CFR 60.693-2(a)(1)(i), (a)(1)(ii), (a)(2), (a)(3), and (a)(4). For portions of the oil-water separator where it is infeasible to construct and operate a floating roof, such as over the weir mechanism, the owner or operator shall operate and maintain a fixed roof, closed-vent system, and control device that meet the requirements specified in paragraph (f)(2) of this section.

(2) A fixed roof shall meet the requirements of paragraph (f)(2)(i) of this section, a control device shall meet the requirements of paragraph (f)(2)(ii) of this section, and a closed-vent system shall meet the requirements of (f)(2)(iii) of this section.

(i) The fixed roof shall meet the following requirements:

(A) Except as provided in (f)(2)(iv) of this section, the fixed roof and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be maintained in accordance with the requirements specified in § 63.1258(h).

(B) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that the oil-water separator contains affected wastewater or a residual removed from affected wastewater except when it is necessary to use the opening for sampling or removal, or for equipment inspection, maintenance, or repair.

(ii) The control device shall be designed, operated, and inspected in accordance with the requirements of paragraph (h) of this section.

(iii) Except as provided in paragraph (f)(2)(iv) of this section, the closed-vent system shall be inspected in accordance with the requirements of § 63.1258(h).

(iv) For any fixed-roof and closed-vent system that is operated and maintained under negative pressure, the owner or operator is not required to comply with the requirements of § 63.1258(h).

(3) If the owner or operator elects to comply with the requirements of paragraph (f)(1)(ii) of this section, seal gaps shall be measured according to the procedures specified in 40 CFR part 60, subpart QQQ § 60.696(d)(1) and the schedule specified in paragraphs (f)(3)(i) and (ii) of this section.

(i) Measurement of primary seal gaps shall be performed within 60 calendar days after installation of the floating roof and introduction of affected wastewater or a residual removed from affected wastewater and once every 5 years thereafter.

(ii) Measurement of secondary seal gaps shall be performed within 60 calendar days after installation of the floating roof and introduction of affected wastewater or a residual removed from affected wastewater and once every year thereafter.

(4) Each oil-water separator shall be inspected initially, and semiannually thereafter, for improper work practices in accordance with § 63.1258(g). For oil-water separators, improper work practice includes, but is not limited to, leaving open or ungasketed any access door or other opening when such door or opening is not in use.

(5) Each oil-water separator shall be inspected for control equipment failures as defined in paragraph (f)(5)(i) of this section according to the schedule specified in paragraphs (f)(5)(ii) and (iii) of this section.

(i) For oil-water separators, control equipment failure includes, but is not limited to, the conditions specified in

paragraphs (f)(5)(i)(A) through (G) of this section.

(A) The floating roof is not resting on either the surface of the liquid or on the leg supports.

(B) There is stored liquid on the floating roof.

(C) A rim seal is detached from the floating roof.

(D) There are holes, tears, or other open spaces in the rim seal or seal fabric of the floating roof.

(E) There are gaps between the primary seal and the separator wall that exceed 67 square centimeters per meter of separator wall perimeter or the width of any portion of any gap between the primary seal and the separator wall exceeds 3.8 centimeters.

(F) There are gaps between the secondary seal and the separator wall that exceed 6.7 square centimeters per meter of separator wall perimeter or the width of any portion of any gap between the secondary seal and the separator wall exceeds 1.3 centimeters.

(G) A gasket, joint, lid, cover, or door has a gap or crack, or is broken.

(ii) The owner or operator shall inspect for the control equipment failures in paragraphs (f)(5)(i)(A) through (F) according to the schedule specified in paragraph (f)(3) of this section.

(iii) The owner or operator shall inspect for control equipment failures in paragraph (f)(5)(i)(G) of this section initially, and semiannually thereafter.

(6) Except as provided in paragraph (i) of this section, when an improper work practice or a control equipment failure is identified, first efforts at repair shall be made no later than 5 calendar days after identification and repair shall be completed within 45 calendar days after identification.

(g) *Performance standards for treatment processes managing wastewater and/or residuals removed from wastewater.* This section specifies the performance standards for treating affected wastewater. The owner or operator shall comply with the requirements as specified in paragraphs (g)(1) through (6) of this section. Where multiple compliance options are provided, the options may be used in combination for different wastewater and/or for different compounds (e.g., soluble versus partially soluble compounds) in the same wastewater, except where otherwise provided in this section. Once affected wastewater or a residual removed from affected wastewater has been treated in accordance with this subpart, it is no longer subject to the requirements of this subpart.

(1) *Existing source.* For a wastewater stream at an existing source that exceeds or is designated to exceed the concentration and load criteria in paragraph (a)(1)(i)(A) of this section, the owner or operator shall comply with a control option in paragraph (g)(8) of this section. For a wastewater stream at an existing source that exceeds the concentration and load criteria in either paragraph (a)(1)(i)(B) or (C) of this section, the owner or operator shall comply with a control option in paragraph (g)(8) of this section and a control option in paragraph (g)(9) of this section. As an alternative to the control options in paragraphs (g)(8) and (g)(9) of this section, the owner or operator may comply with a control option in either paragraph (g)(10), (11) or (13) of this section, as applicable.

(2) *New source.* For a wastewater stream at a new source that exceeds or is designated to exceed the concentration and load criteria in paragraph (a)(1)(i)(A) of this section, the owner or operator shall comply with a control option in paragraph (g)(8) of this section. For wastewater at a new source that exceeds the concentration and load criteria in either paragraph (a)(1)(i)(B) or (C) of this section, but does not exceed the criteria in paragraph (a)(1)(i)(D) of this section, the owner or operator shall comply with a control option in paragraph (g)(8) of this section and a control option in paragraph (g)(9) of this section. As an alternative to the control options in paragraphs (g)(8) and/or (9) of this section, the owner or operator may comply with a control option in either paragraph (g)(10), (11), or (13) of this section, as applicable. For a wastewater stream at a new source that exceeds or is designated to exceed the concentration and load criteria in paragraph (a)(1)(i)(D) of this section, the owner or operator shall comply with a control option in paragraph (g)(12) or (13) of this section.

(3) *Biological treatment processes.* Biological treatment processes in compliance with this section may be either open or closed biological treatment processes as defined in § 63.1251. An open biological treatment process in compliance with this section need not be covered and vented to a control device. An open or a closed biological treatment process in compliance with this section and using § 63.1257(e)(2)(iii)(E) or (F) to demonstrate compliance is not subject to the requirements of paragraphs (b) and (c) of this section. A closed biological treatment process in compliance with this section and using § 63.1257(e)(2)(iii)(G) to demonstrate compliance shall comply with the

requirements of paragraphs (b) and (c) of this section. Waste management units upstream of an open or closed biological treatment process shall meet the requirements of paragraphs (b) through (f) of this section, as applicable.

(4) *Performance tests and design evaluations.* If the Resource Conservation and Recovery Act (RCRA) option [paragraph (g)(13) of this section] or the enhanced biological treatment process for soluble HAP compounds option [paragraph (g)(10) of this section] is selected to comply with this section, neither a design evaluation nor a performance test is required. For any other nonbiological treatment process, and for closed biological treatment processes as defined in § 63.1251, the owner or operator shall conduct either a design evaluation as specified in § 63.1257(e)(2)(ii) or performance test as specified in § 63.1257(e)(2)(iii). For each open biological treatment process as defined in § 63.1251, the owner or operator shall conduct a performance test as specified in § 63.1257(e)(2)(iii)(E) or (F).

(5) *Control device requirements.* When gases are vented from the treatment process, the owner or operator shall comply with the applicable control device requirements specified in paragraph (h) of this section and § 63.1257(e)(3), and the applicable leak inspection provisions specified in § 63.1258(h). This requirement is in addition to the requirements for treatment systems specified in paragraphs (g)(8) through (14) of this section. This requirement does not apply to any open biological treatment process that meets the mass removal requirements.

(6) *Residuals: general.* When residuals result from treating affected wastewater, the owner or operator shall comply with the requirements for residuals specified in paragraph (g)(14) of this section.

(7) *Treatment using a series of treatment processes.* In all cases where the wastewater provisions in this subpart allow or require the use of a treatment process or control device to comply with emissions limitations, the owner or operator may use multiple treatment processes or control devices, respectively. For combinations of treatment processes where the wastewater stream is conveyed by hard-piping, the owner or operator shall comply with either the requirements of paragraph (g)(7)(i) or (ii) of this section. For combinations of treatment processes where the wastewater stream is not conveyed by hard-piping, the owner or operator shall comply with the requirements of paragraph (g)(7)(ii) of this section. For combinations of control

devices, the owner or operator shall comply with the requirements of paragraph (g)(7)(i) of this section.

(i) *Compliance across the combination of all treatment units or control devices in series.* (A) For combinations of treatment processes, the wastewater stream shall be conveyed by hard-piping between the treatment processes. For combinations of control devices, the vented gas stream shall be conveyed by hard-piping between the control devices.

(B) For combinations of treatment processes, each treatment process shall meet the applicable requirements of paragraphs (b) through (f) of this section, except as provided in paragraph (g)(3) of this section.

(C) The owner or operator shall identify, and keep a record of, the combination of treatment processes or of control devices, including identification of the first and last treatment process or control device. The owner or operator shall include this information as part of the treatment process description reported in the Notification of Compliance Status.

(D) The performance test or design evaluation shall determine compliance across the combination of treatment processes or control devices. If a performance test is conducted, the "inlet" shall be the point at which the wastewater stream or residual enters the first treatment process, or the vented gas stream enters the first control device. The "outlet" shall be the point at which the treated wastewater stream exits the last treatment process, or the vented gas stream exits the last control device.

(ii) *Compliance across individual units.* (A) For combinations of treatment processes, each treatment process shall meet the applicable requirements of paragraphs (b) through (f) of this section except as provided in paragraph (g)(3) of this section.

(B) The owner or operator shall identify, and keep a record of, the combination of treatment processes, including identification of the first and last treatment process. The owner or operator shall include this information as part of the treatment process description reported in the Notification of Compliance Status report.

(C) The owner or operator shall determine the mass removed or destroyed by each treatment process. The performance test or design evaluation shall determine compliance for the combination of treatment processes by adding together the mass removed or destroyed by each treatment process and determine the overall control efficiency of the treatment system.

(8) *Control options: Wastewater containing partially soluble HAP compounds.* The owner or operator shall comply with either paragraph (g)(8)(i) or (ii) of this section for the control of partially soluble HAP compounds at new or existing sources.

(i) *50 ppmw concentration option.* The owner or operator shall comply with paragraphs (g)(8)(i)(A) and (B) of this section.

(A) Reduce, by removal or destruction, the concentration of total partially soluble HAP compounds to a level less than 50 ppmw as determined by the procedures specified in § 63.1257(e)(2)(iii)(B).

(B) This option shall not be used when the treatment process is a biological treatment process. This option shall not be used when the wastewater is designated as an affected wastewater as specified in paragraph (a)(1)(ii) of this section. Dilution shall not be used to achieve compliance with this option.

(ii) *Percent mass removal/destruction option.* The owner or operator shall reduce, by removal or destruction, the mass of total partially soluble HAP compounds by 99 percent or more. The removal destruction efficiency shall be determined by the procedures specified in § 63.1257(e)(2)(iii)(C), for noncombustion, nonbiological treatment processes; § 63.1257(e)(2)(iii)(D), for combustion processes; and § 63.1257(e)(2)(iii)(F) or (G) for biological treatment processes.

(9) *Control options: Wastewater containing soluble HAP compounds.* The owner or operator shall comply with either paragraph (g)(9)(i) or (ii) of this section for the control of soluble HAP compounds at new or existing sources.

(i) *520 ppmw concentration option.* The owner or operator shall comply with paragraphs (g)(9)(i)(A) and (B) of this section.

(A) Reduce, by removal or destruction, the concentration of total soluble HAP compounds to a level less than 520 ppmw as determined in the procedures specified in § 63.1257(e)(2)(iii)(B).

(B) This option shall not be used when the treatment process is a biological treatment process. This option shall not be used when the wastewater is designated as an affected wastewater as specified in paragraph (a)(1)(ii) of this section. Dilution shall not be used to achieve compliance with this option.

(ii) *Percent mass removal/destruction option.* The owner or operator shall reduce, by removal or destruction, the mass of total soluble HAP by 90 percent

or more. The removal/destruction efficiency shall be determined by the procedures in § 63.1257(e)(2)(iii)(C), for noncombustion, nonbiological treatment processes; § 63.1257(e)(2)(iii)(D), for combustion processes; and § 63.1257(e)(2)(iii)(F) or (G) for biological treatment processes.

(10) *Control option: Enhanced biotreatment for wastewater containing soluble HAP.* The owner or operator may elect to treat affected wastewater streams containing soluble HAP and less than 50 ppmv partially soluble HAP in an enhanced biological treatment system, as defined in § 63.1251. This option shall not be used when the wastewater is designated as an affected wastewater as specified in paragraph (a)(1)(ii) of this section. These treatment processes are exempt from the design evaluation or performance tests requirements specified in paragraph (g)(4) of this section.

(11) *95-percent mass reduction option, for biological treatment processes.* The owner or operator of a new or existing source using biological treatment for any affected wastewater shall reduce the mass of total soluble and partially soluble HAP sent to that biological treatment unit by at least 95 percent. All wastewater as defined in § 63.1251 entering such a biological treatment unit from PMPU's subject to this subpart shall be included in the demonstration of the 95-percent mass removal. The owner or operator shall comply with paragraphs (g)(11)(i) through (iv) of this section.

(i) Except as provided in paragraph (g)(11)(iv) of this section, the owner or operator shall ensure that all wastewater from PMPU's subject to this subpart entering a biological treatment unit are treated to destroy at least 95-percent total mass of all soluble and partially soluble HAP compounds.

(ii) For open biological treatment processes, compliance shall be determined using the procedures specified in § 63.1257(e)(2)(iii)(E). For closed aerobic biological treatment processes compliance shall be determined using the procedures specified in § 63.1257(e)(2)(iii)(E) or (G). For closed anaerobic biological treatment processes compliance shall be determined using the procedures specified in § 63.1257(e)(2)(iii)(G).

(iii) For each treatment process or waste management unit that receives, manages, or treats wastewater subject to this paragraph, from the POD to the biological treatment unit, the owner or operator shall comply with paragraphs (b) through (f) of this section for control of air emissions. When complying with this paragraph, the term affected

wastewater in paragraphs (b) through (f) of this section shall mean all wastewater from PMPU's, not just affected wastewater.

(iv) If wastewater is in compliance with the requirements in paragraph (g)(8), (9), or (12) of this section before entering the biological treatment unit, the hazardous air pollutants mass of that wastewater is not required to be included in the total mass flow rate entering the biological treatment unit for the purpose of demonstrating compliance.

(12) *Percent mass removal/destruction option for soluble HAP compounds at new sources.* The owner or operator of a new source shall reduce, by removal or destruction, the mass flow rate of total soluble HAP from affected wastewater by 99 percent or more. The removal/destruction efficiency shall be determined by the procedures in § 63.1257(e)(2)(iii)(C), for noncombustion, nonbiological treatment processes; § 63.1257(e)(2)(iii)(D), for combustion processes; and § 63.1257(e)(2)(iii)(F) or (G) for biological treatment processes.

(13) *Treatment in a RCRA unit option.* The owner or operator shall treat the affected wastewater or residual in a unit identified in, and complying with, paragraph (g)(13)(i), (ii), or (iii) of this section. These units are exempt from the design evaluation or performance tests requirements specified in paragraph (g)(4) of this section and § 63.1257(e)(2), and from the monitoring requirements specified in paragraph (a)(2)(iii) of this section, as well as recordkeeping and reporting requirements associated with monitoring and performance tests.

(i) The wastewater or residual is discharged to a hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 264, subpart O, or has certified compliance with the interim status requirements of 40 CFR part 265, subpart O;

(ii) The wastewater or residual is discharged to a process heater or boiler burning hazardous waste for which the owner or operator:

(A) Has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart H; or

(B) Has certified compliance with the interim status requirements of 40 CFR part 266, subpart H.

(iii) The wastewater or residual is discharged to an underground injection well for which the owner or operator has been issued a final permit under 40 CFR part 270 or 40 CFR part 144 and

complies with the requirements of 40 CFR part 122. The owner or operator shall comply with all applicable requirements of this subpart prior to the point where the wastewater enters the underground portion of the injection well.

(14) *Residuals.* For each residual removed from affected wastewater, the owner or operator shall control for air emissions by complying with paragraphs (b) through (f) of this section and by complying with one of the provisions in paragraphs (g)(14)(i) through (iv) of this section.

(i) Recycle the residual to a production process or sell the residual for the purpose of recycling. Once a residual is returned to a production process, the residual is no longer subject to this section.

(ii) Return the residual to the treatment process.

(iii) Treat the residual to destroy the total combined mass flow rate of soluble and/or partially soluble HAP compounds by 99 percent or more, as determined by the procedures specified in § 63.1257(e)(2)(iii)(C) or (D).

(iv) Comply with the requirements for RCRA treatment options specified in paragraph (g)(13) of this section.

(h) *Control devices.* For each control device or combination of control devices used to comply with the provisions in paragraphs (b) through (f) and (g)(5) of this section, the owner or operator shall operate and maintain the control device or combination of control devices in accordance with the requirements of paragraphs (h)(1) through (4) of this section.

(1) Whenever organic HAP emissions are vented to a control device which is used to comply with the provisions of this subpart, such control device shall be operating.

(2) The control device shall be designed and operated in accordance with paragraph (h)(2)(i), (ii), (iii), (iv), or (v) of this section, as demonstrated by the provisions in § 63.1257(e)(3).

(i) An enclosed combustion device (including but not limited to a vapor incinerator, boiler, or process heater) shall meet the conditions in paragraph (h)(2)(i)(A), (B), or (C) of this section, alone or in combination with other control devices. If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater.

(A) Reduce the organic HAP emissions vented to the control device by 95 percent by weight or greater;

(B) Achieve an outlet TOC concentration of 20 ppmv on a dry basis corrected to 3 percent oxygen. The

owner or operator shall use either Method 18 of 40 CFR part 60, appendix A, or any other method or data that has been validated according to the applicable procedures in Method 301 of appendix A of this part; or

(C) Provide a minimum residence time of 0.5 seconds at a minimum temperature of 760°C.

(ii) A vapor recovery system (including but not limited to a carbon adsorption system or condenser), alone or in combination with other control devices, shall reduce the organic HAP emissions vented to the control device by 95 percent by weight or greater or achieve an outlet TOC concentration of 20 ppmv. The 20 ppmv performance standard is not applicable to compliance with the provisions of paragraphs (c) or (d) of this section.

(iii) A flare shall comply with the requirements of § 63.11(b).

(iv) A scrubber, alone or in combination with other control devices, shall reduce the organic HAP emissions in such a manner that 95 weight-percent is either removed, or destroyed by chemical reaction with the scrubbing liquid, or achieve an outlet TOC concentration of 20 ppmv. The 20 ppmv performance standard is not applicable to compliance with the provisions of paragraphs (c) or (d) of this section.

(v) Any other control device used shall, alone or in combination with other control devices, reduce the organic HAP emissions vented to the control device by 95 percent by weight or greater or achieve an outlet TOC concentration of 20 ppmv. The 20 ppmv performance standard is not applicable to compliance with the provisions of paragraphs (c) or (d) of this section.

(3) If the control device is a combustion device, the owner or operator shall comply with the requirements in § 63.1252(g) to control halogenated vent streams.

(4) Except as provided in paragraph (i) of this section, if gaps, cracks, tears, or holes are observed in ductwork, piping, or connections to covers and control devices during an inspection, a first effort to repair shall be made as soon as practical but no later than 5 calendar days after identification. Repair shall be completed no later than 15 calendar days after identification or discovery of the defect.

(i) *Delay of repair.* Delay of repair of equipment for which a control equipment failure or a gap, crack, tear, or hole has been identified, is allowed if the repair is technically infeasible without a shutdown, as defined in § 63.1251, or if the owner or operator determines that emissions of purged material from immediate repair would

be greater than the emissions likely to result from delay of repair. Repair of this equipment shall occur by the end of the next shutdown.

(1) Delay of repair of equipment for which a control equipment failure or a gap, crack, tear, or hole has been identified, is allowed if the equipment is emptied or is no longer used to treat or manage affected wastewater or residuals removed from affected wastewater.

(2) Delay of repair of equipment for which a control equipment failure or a gap, crack, tear, or hole has been identified is also allowed if additional time is necessary due to the unavailability of parts beyond the control of the owner or operator. Repair shall be completed as soon as practical. The owner or operator who uses this provision shall comply with the requirements of § 63.1259(h) to document the reasons that the delay of repair was necessary.

§ 63.1257 Test methods and compliance procedures.

(a) *General.* Except as specified in paragraph (a)(5) of this section, the procedures specified in paragraphs (c),

(d), (e), and (f) of this section are required to demonstrate initial compliance with §§ 63.1253, 63.1254, 63.1256, and 63.1252(e), respectively. The provisions in paragraphs (a) (2) through (3) apply to performance tests that are specified in paragraphs (c), (d), and (e) of this section. The provisions in paragraph (a)(5) of this section are used to demonstrate initial compliance with the alternative standards specified in §§ 63.1253(d) and 63.1254(c). The provisions in paragraph (a)(6) of this section are used to comply with the outlet concentration requirements specified in §§ 63.1253(c), 63.1254(a)(2)(i) and (a)(3)(ii)(B), 63.1254(b)(i) and 63.1256(h)(2).

(1) *Design evaluation.* To demonstrate that a control device meets the required control efficiency, a design evaluation must address the composition and organic HAP concentration of the vent stream entering the control device. A design evaluation also must address other vent stream characteristics and control device operating parameters as specified in any one of paragraphs (a)(1)(i) through (vi) of this section, depending on the type of control device that is used. If the vent stream is not the only inlet to the control device, the efficiency demonstration also must consider all other vapors, gases, and liquids, other than fuels, received by the control device.

(i) For an enclosed combustion device used to comply with the provisions of

63.1253(b)(2) or (c)(2), or 63.1256(h)(2)(i)(C) with a minimum residence time of 0.5 seconds and a minimum temperature of 760°C, the design evaluation must document that these conditions exist.

(ii) For a combustion control device that does not satisfy the criteria in paragraph (a)(1)(i) of this section, the design evaluation must document control efficiency and address the following characteristics, depending on the type of control device:

(A) For a thermal vapor incinerator, the design evaluation must consider the autoignition temperature of the organic HAP, must consider the vent stream flow rate, and must establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

(B) For a catalytic vapor incinerator, the design evaluation shall consider the vent stream flow rate and shall establish the design minimum and average temperatures across the catalyst bed inlet and outlet.

(C) For a boiler or process heater, the design evaluation shall consider the vent stream flow rate; shall establish the design minimum and average flame zone temperatures and combustion zone residence time; and shall describe the method and location where the vent stream is introduced into the flame zone.

(iii) For a condenser, the design evaluation shall consider the vent stream flow rate, relative humidity, and temperature and shall establish the design outlet organic HAP compound concentration level, design average temperature of the condenser exhaust vent stream, and the design average temperatures of the coolant fluid at the condenser inlet and outlet. The temperature of the gas stream exiting the condenser must be measured and used to establish the outlet organic HAP concentration.

(iv) For a carbon adsorption system that regenerates the carbon bed directly onsite in the control device such as a fixed-bed adsorber, the design evaluation shall consider the vent stream flow rate, relative humidity, and temperature and shall establish the design exhaust vent stream organic compound concentration level, adsorption cycle time, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total regeneration stream mass or volumetric flow over the period of each complete carbon bed regeneration cycle, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service

life of carbon. For vacuum desorption, the pressure drop shall be included.

(v) For a carbon adsorption system that does not regenerate the carbon bed directly onsite in the control device such as a carbon canister, the design evaluation shall consider the vent stream mass or volumetric flow rate, relative humidity, and temperature and shall establish the design exhaust vent stream organic compound concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

(vi) For a scrubber, the design evaluation shall consider the vent stream composition; constituent concentrations; liquid-to-vapor ratio; scrubbing liquid flow rate and concentration; temperature; and the reaction kinetics of the constituents with the scrubbing liquid. The design evaluation shall establish the design exhaust vent stream organic compound concentration level and will include the additional information in paragraphs (a)(1)(vi)(A) and (B) of this section for trays and a packed column scrubber.

(A) Type and total number of theoretical and actual trays:

(B) Type and total surface area of packing for entire column, and for individual packed sections if column contains more than one packed section.

(2) *Calculation of TOC or total organic HAP concentration.* The TOC concentration or total organic HAP concentration is the sum of the concentrations of the individual components. If compliance is being determined based on TOC, the owner or operator shall compute TOC for each run using Equation 6 of this subpart. If compliance with the wastewater provisions is being determined based on total organic HAP, the owner or operator shall compute total organic HAP using Equation 6 of this subpart, except that only the organic HAP compounds shall be summed; when determining compliance with paragraph (e)(3)(i) of this section, only the soluble and partially soluble HAP compounds shall be summed.

$$CG_T = \frac{1}{m} \sum_{j=1}^m \left(\sum_{i=1}^n CGS_{i,j} \right) \quad (\text{Eq. 6})$$

where:

CG_T=total concentration of TOC in vented gas stream, average of samples, dry basis, ppmv

CGS_{i,j}=concentration of sample components in vented gas stream for sample j, dry basis, ppmv

i=identifier for a compound
n=number of components in the sample
j=identifier for a sample
m=number of samples in the sample run

(3) *Percent oxygen correction for combustion control devices.* If the control device is a combustion device, the TOC or total organic HAP concentrations must be corrected to 3 percent oxygen. The integrated sampling and analysis procedures of Method 3B of 40 CFR part 60, appendix A shall be used to determine the actual oxygen concentration (%O_{2d}). The samples shall be taken during the same time that the TOC or total organic HAP samples are taken. The concentration corrected to 3 percent oxygen (C_c) shall be computed using Equation 7 of this subpart:

$$C_c = C_m \left(\frac{17.9}{20.9 - \%O_{2d}} \right) \quad (\text{Eq. 7})$$

where:

C_c = concentration of TOC or total organic HAP corrected to 3 percent oxygen, dry basis, ppmv

C_m = total concentration of TOC in vented gas stream, average of samples, dry basis, ppmv

%O_{2d} = concentration of oxygen measured in vented gas stream, dry basis, percent by volume

(4) *Exemptions from compliance demonstrations.* An owner or operator using any control device specified in paragraphs (a)(4)(i) through (iv) of this section is exempt from the initial compliance provisions in paragraphs (c), (d), and (e) of this section.

(i) A boiler or process heater with a design heat input capacity of 44 megawatts or greater.

(ii) A boiler or process heater into which the emission stream is introduced with the primary fuel.

(iii) A boiler or process heater burning hazardous waste for which the owner or operator:

(A) Has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart H, or

(B) Has certified compliance with the interim status requirements of 40 CFR part 266, subpart H.

(iv) A hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 264, subpart O, or has certified compliance with the interim status requirements of 40 CFR part 265, subpart O.

(5) *Initial compliance with alternative standard.* Initial compliance with the alternative standards in §§ 63.1253(d)

and 63.1254(c) is demonstrated when the outlet TOC concentration is 20 ppmv or less, and the outlet hydrogen halide and halogen concentration is 20 ppmv or less. To demonstrate initial compliance, the owner or operator shall be in compliance with the monitoring provisions in § 63.1258(b)(5) on the initial compliance date. The owner or operator shall use Method 18 to determine the predominant organic HAP in the emission stream if the TOC monitor is calibrated on the predominant HAP.

(6) *Initial compliance with the 20 ppmv outlet limit.* Initial compliance with the 20 ppmv TOC and hydrogen halide and halogen concentration is demonstrated when the outlet TOC concentration is 20 ppmv or less, and the outlet hydrogen halide and halogen concentration is 20 ppmv or less. To demonstrate initial compliance, the operator shall use test methods described in paragraph (b) of this section. The owner or operator shall comply with the monitoring provisions in § 63.1258(b)(1) through (5) of this subpart on the initial compliance date.

(b) *Test methods.* When testing is conducted to measure emissions from an affected source, the test methods specified in paragraphs (b)(1) through (10) of this section shall be used.

(1) EPA Method 1 or 1A of appendix A of part 60 is used for sample and velocity traverses.

(2) EPA Method 2, 2A, 2C, or 2D of appendix A of part 60 is used for velocity and volumetric flow rates.

(3) EPA Method 3 of appendix A of part 60 is used for gas analysis.

(4) EPA Method 4 of appendix A of part 60 is used for stack gas moisture.

(5) [Reserved]

(6) Concentration measurements shall be adjusted to negate the dilution effects of introducing nonaffected gaseous streams into the vent streams prior to control or measurement. The following methods are specified for concentration measurements:

(i) Method 18 may be used to determine HAP concentration in any control device efficiency determination.

(ii) Method 25 of appendix A of part 60 may be used to determine total gaseous nonmethane organic concentration for control efficiency determinations in combustion devices.

(iii) Method 26 of appendix A of part 60 shall be used to determine hydrogen chloride concentrations in control device efficiency determinations or in the 20 ppmv outlet hydrogen halide concentration standard.

(iv) Method 25A of appendix A of part 60 may be used to determine the HAP or TOC concentration for control device

efficiency determinations under the conditions specified in Method 25 of appendix A for direct measurement of an effluent with a flame ionization detector, or in demonstrating compliance with the 20 ppmv TOC outlet standard. If Method 25A is used to determine the concentration of TOC for the 20 ppmv standard, the instrument shall be calibrated on methane or the predominant HAP. If calibrating on the predominant HAP, the use of Method 25A shall comply with paragraphs (b)(6)(iv)(A) through (C) of this section.

(A) The organic HAP used as the calibration gas for Method 25A, 40 CFR part 60, appendix A, shall be the single organic HAP representing the largest percent by volume.

(B) The use of Method 25A, 40 CFR part 60, appendix A, is acceptable if the response from the high level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(C) The span value of the analyzer must be less than 100 ppmv.

(7) *Testing conditions for continuous processes.* Testing of emissions on equipment operating as part of a continuous process will consist of three 1-hour runs. Gas stream volumetric flow rates shall be measured every 15 minutes during each 1-hour run. The HAP concentration shall be determined from samples collected in an integrated sample over the duration of each 1-hour test run, or from grab samples collected simultaneously with the flow rate measurements (every 15 minutes). If an integrated sample is collected for laboratory analysis, the sampling rate shall be adjusted proportionally to reflect variations in flow rate. For continuous gas streams, the emission rate used to determine compliance shall be the average emission rate of the three test runs.

(8) *Testing and compliance determination conditions for batch processes.* Testing of emissions on equipment where the flow of gaseous emissions is intermittent (batch operations) shall be conducted as specified in paragraphs (b)(8)(i) through (iii) of this section.

(i) Except as provided in paragraph (b)(9) of this section for condensers, testing shall be conducted at absolute worst-case conditions or hypothetical worst-case conditions. Gas stream volumetric flow rates shall be measured at 15-minute intervals. The HAP or TOC concentration shall be determined from samples collected in an integrated sample over the duration of the test, or from grab samples collected

simultaneously with the flow rate measurements (every 15 minutes). If an integrated sample is collected for laboratory analysis, the sampling rate shall be adjusted proportionally to reflect variations in flow rate. The absolute worst-case or hypothetical worst-case conditions shall be characterized by the criteria presented in paragraphs (b)(8)(i)(A) and (B) of this section. In all cases, a site-specific plan shall be submitted to the Administrator for approval prior to testing in accordance with § 63.7(c) and § 63.1260(l). The test plan shall include the emission profile described in paragraph (b)(8)(ii) of this section.

(A) Absolute worst-case conditions are defined by the criteria presented in paragraph (b)(8)(i)(A)(1) or (2) of this section if the maximum load is the most challenging condition for the control device. Otherwise, absolute worst-case conditions are defined by the conditions in paragraph (b)(8)(i)(A)(3) of this section.

(1) The period in which the inlet to the control device will contain at least 50 percent of the maximum HAP load (in lb) capable of being vented to the control device over any 8 hour period. An emission profile as described in paragraph (b)(8)(ii)(A) of this section shall be used to identify the 8-hour period that includes the maximum projected HAP load.

(2) A 1-hour period of time in which the inlet to the control device will contain the highest HAP mass loading rate, in lb/hr, capable of being vented to the control device. An emission profile as described in paragraph (b)(8)(ii)(A) of this section shall be used to identify the 1-hour period of maximum HAP loading.

(3) The period of time when the HAP loading or stream composition (including non-HAP) is most challenging for the control device. These conditions include, but are not limited to the following:

(i) Periods when the stream contains the highest combined VOC and HAP load, in lb/hr, described by the emission profiles in (b)(8)(ii);

(ii) Periods when the streams contain HAP constituents that approach limits of solubility for scrubbing media;

(iii) Periods when the streams contain HAP constituents that approach limits of adsorptivity for carbon adsorption systems.

(B) Hypothetical worst-case conditions are simulated test conditions that, at a minimum, contain the highest hourly HAP load of emissions that would be predicted to be vented to the control device from the emissions

profile described in paragraph (b)(8)(ii)(B) or (C) of this section.

(ii) *Emissions profile.* The owner or operator may choose to perform tests only during those periods of the worst-case conditions that the owner or operator selects to control as part of achieving the required emission reduction. The owner or operator must develop an emission profile for the vent to the control device that describes the characteristics of the vent stream at the inlet to the control device under worst case conditions. The emission profile shall be developed based on any one of the procedures described in (b)(8)(ii)(A) through (C) of this section, as required by paragraph (b)(8)(i).

(A) *Emission profile by process.* The emission profile must consider all emission episodes that could contribute to the vent stack for a period of time that is sufficient to include all processes venting to the stack and shall consider production scheduling. The profile shall describe the HAP load to the device that equals the highest sum of emissions from the episodes that can vent to the control device in any given hour. Emissions per episode shall be calculated using the procedures specified in paragraph (d)(2) of this section. Emissions per episode shall be divided by the duration of the episode only if the duration of the episode is longer than 1 hour.

(B) *Emission profile by equipment.* The emission profile must consist of emissions that meet or exceed the highest emissions, in lb/hr, that would be expected under actual processing conditions. The profile shall describe equipment configurations used to generate the emission events, volatility of materials processed in the equipment, and the rationale used to identify and characterize the emission events. The emissions may be based on using a compound more volatile than compounds actually used in the process(es), and the emissions may be generated from all equipment in the process(es) or only selected equipment.

(C) *Emission profile by capture and control device limitation.* The emission profile shall consider the capture and control system limitations and the highest emissions, in lb/hr, that can be routed to the control device, based on maximum flowrate and concentrations possible because of limitations on conveyance and control equipment (e.g., fans, LEL alarms and safety bypasses).

(iii) Three runs, at a minimum of 1 hour each and a maximum of 8 hours each, are required for performance testing. Each run must occur over the same worst-case conditions, as defined in paragraph (b)(8)(i) of this section.

(9) *Testing requirements for condensers.* For emission streams controlled using condensers, continuous direct measurement of condenser outlet gas temperature to be used in determining concentrations per the design evaluation described in § 63.1257(a)(1)(iii) is required.

(10) *Wastewater testing.* Wastewater analysis shall be conducted in accordance with paragraph (b)(10)(i), (ii), (iii), or (iv) of this section.

(i) *Method 305.* Use procedures specified in Method 305 of 40 CFR part 63, appendix A and comply with requirements specified in paragraph (b)(10)(v) of this section.

(ii) *Method 624, 625, 1624, 1625, or 8270.* Use procedures specified in Method 624, 625, 1624, 1625, or 8270 of 40 CFR part 136, appendix A and comply with requirements in paragraph (b)(10)(v) of this section.

(iii) *Other EPA Methods.* Use procedures specified in the method, validate the method using the procedures in paragraph (b)(10)(iii)(A) or (B) of this section, and comply with the procedures in paragraph (b)(10)(v) of this section.

(A) Validate the method according to section 5.1 or 5.3 of Method 301 of 40 CFR part 63, appendix A.

(B) Follow the procedure as specified in "Alternative Validation Procedure for EPA Waste Methods" 40 CFR part 63, appendix D.

(iv) *Methods other than an EPA method.* Use procedures specified in the method, validate the method using the procedures in paragraph (b)(10)(iii)(A) of this section, and comply with the requirements in paragraph (b)(10)(v) of this section.

(v) *Sampling plan.* The owner or operator shall prepare a sampling plan. Wastewater samples shall be collected using sampling procedures which minimize loss of organic compounds during sample collection and analysis and maintain sample integrity. The sample plan shall include procedures for determining recovery efficiency of the relevant partially soluble and soluble HAP compounds. An example of an acceptable sampling plan would be one that incorporates similar sampling and sample handling requirements to those of Method 25D of 40 CFR part 60, appendix A. The sampling plan shall be maintained at the facility.

(c) *Initial compliance with storage tank provisions.* The owner or operator of an affected storage tank shall demonstrate initial compliance with § 63.1253(b) or (c), as applicable, by fulfilling the requirements of paragraph (c)(1), or (c)(2), or (c)(3) of this section.

(1) *Performance test.* If this option is chosen to demonstrate initial compliance with the percent reduction requirement of § 63.1253(b)(1) or (c)(1)(i), the efficiency of the control device shall be calculated using performance test data as specified in paragraphs (c)(1)(i) through (iii) of this section. Initial compliance with the outlet concentration requirement of § 63.1253(b)(2) or (c)(1)(ii) is demonstrated by fulfilling the requirements of paragraph (a)(6) of this section.

(i) Equations 8 and 9 of this subpart shall be used to calculate the mass rate of total HAP reasonably expected maximum filling rate at the inlet and outlet of the control device for standard conditions of 20°C: where:

$$E_i = K_2 \left(\sum_{j=1}^n C_{ij} M_{ij} \right) Q_i \quad (\text{Eq. 8})$$

$$E_o = K_2 \left(\sum_{j=1}^n C_{oj} M_{oj} \right) Q_o \quad (\text{Eq. 9})$$

where:

C_{ij} , C_{oj} = concentration of sample component j of the gas stream at the inlet and outlet of the control device, respectively, dry basis, ppmv

E_i , E_o = mass rate of total HAP at the inlet and outlet of the control device, respectively, dry basis, kg/hr

M_{ij} , M_{oj} = molecular weight of sample component j of the gas stream at the inlet and outlet of the control device, respectively, gram/gram-mole

Q_i , Q_o = flow rate of gas stream at the inlet and outlet of the control device, respectively, dry standard cubic meter per minute

K_2 = constant, 2.494×10^{-6} (parts per million)⁻¹ (gram-mole per standard cubic meter) (kilogram/gram) (minute/hour), where standard temperature is 20°C

n = number of sample components in the gas stream

(ii) The percent reduction in total HAP shall be calculated using Equation 10 of this subpart:

$$R = \frac{E_i - E_o}{E_i} (100) \quad (\text{Eq. 10})$$

where:

R = control efficiency of control device, percent

E_i = mass rate of total HAP at the inlet to the control device as calculated

under paragraph (c)(1)(i) of this section, kilograms organic HAP per hour

E_o = mass rate of total HAP at the outlet of the control device, as calculated under paragraph (c)(1)(i) of this section, kilograms organic HAP per hour

(iii) A performance test is not required to be conducted if the control device used to comply with § 63.1253 (storage tank provisions) is also used to comply with § 63.1254 (process vent provisions), and compliance with § 63.1254 has been demonstrated in accordance with paragraph (d) of this section.

(2) *Design evaluation.* If this option is chosen to demonstrate initial compliance with the percent reduction requirement of § 63.1253(b) or (c), a design evaluation shall be prepared in accordance with the provisions in paragraph (a)(1) of this section. The design evaluation shall include documentation demonstrating that the control device being used achieves the required control efficiency during reasonably expected maximum filling rate.

(3) *Floating roof.* If the owner or operator of an affected source chooses to comply with the provisions of § 63.1253(b) or (c) by installing a floating roof, the owner or operator shall comply with the procedures described in §§ 63.119(b), (c), (d), and 63.120(a), (b), and (c), with the differences noted in paragraphs (c)(3)(i) through (v) of this section for the purposes of this subpart.

(i) When the term "storage vessel" is used in §§ 63.119 and 63.120, the definition of "storage tank" in § 63.1251 shall apply for the purposes of this subpart.

(ii) When December 31, 1992 is referred to in § 63.119, April 2, 1997 shall apply instead for the purposes of this subpart.

(iii) When April 22, 1994 is referred to in § 63.119, September 21, 1998 shall apply instead for the purposes of this subpart.

(iv) When the phrase "the compliance date specified in § 63.100 of subpart F of this part" is referred to in § 63.120, the phrase "the compliance date specified in § 63.1250" shall apply for the purposes of this subpart.

(v) When the phrase "the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels specified in table 5 or table 6 of this subpart" is referred to in § 63.120(b)(1)(iv), the phrase "the maximum true vapor pressure of the total organic HAP in the stored liquid

falls below 13.1 kPa (1.9 psia)'' shall apply for the purposes of this subpart.

(4) *Initial compliance with alternative standard.* Initial compliance with § 63.1253(d) is demonstrated by fulfilling the requirements of paragraph (a)(5) of this section.

(5) *Planned maintenance.* The owner or operator shall demonstrate compliance with the requirements of § 63.1253(e) by including the periods of planned routine maintenance specified by date and time in each Periodic Report required by § 63.1260.

(d) *Initial compliance with process vent provisions.* An owner or operator of an affected source complying with the process vent standards in § 63.1254 shall demonstrate compliance using the procedures described in paragraphs (d)(1) through (4) of this section.

(1) Except as provided in paragraph (a)(4) of this section, initial compliance with the process vent standards in § 63.1254 shall be demonstrated using the procedures specified in paragraphs (d)(1)(i) through (iv), as applicable.

(i) Initial compliance with § 63.1254(a)(1)(i) is demonstrated when the actual emissions of HAP from the sum of all process vents within a process that do not meet the criteria specified in § 63.1254(a)(3) is less than or equal to 2,000 lb/yr. Initial compliance with § 63.1254(a)(1)(ii) is demonstrated when the uncontrolled emissions of HAP from the sum of all process vents within a process is less than or equal to 100 lb/yr. Uncontrolled HAP emissions and controlled HAP emissions shall be determined using the procedures described in paragraphs (d)(2) and (3) of this section.

(ii) Initial compliance with the percent reduction requirements in §§ 63.1254(a)(2), (a)(3), and (b) is demonstrated by:

(A) Determining controlled HAP emissions using the procedures described in paragraph (d)(3) of this section and uncontrolled HAP emissions determined using the

procedures described in paragraph (d)(2) of this section and demonstrating that the reductions required by §§ 63.1254(a)(2), (a)(3), and (b) are met; or

(B) Controlling the process vents using a device meeting the criteria specified in paragraph (a)(4) of this section.

(iii) Initial compliance with the outlet concentration requirements in § 63.1254(a)(2)(ii) and (3) is demonstrated when the outlet TOC concentration is 20 ppmv or less and the outlet hydrogen halide and halogen concentration is 20 ppmv or less. The owner or operator shall demonstrate compliance by fulfilling the requirements in paragraph (a)(6) of this section.

(iv) Initial compliance with § 63.1254(c) is demonstrated by fulfilling the requirements of paragraph (a)(5) of this section.

(2) *Uncontrolled emissions.* An owner or operator of an affected source complying with the emission limitation required by § 63.1254(a)(1), or emissions reductions specified in § 63.1254(a)(2), (a)(3), or (b), for each process vent within a process, shall calculate uncontrolled emissions from all equipment in the process according to the procedures described in paragraph (d)(2)(i) or (ii) of this section, as appropriate.

(i) *Emission estimation procedures.* Owners or operators shall determine uncontrolled emissions of HAP using measurements and/or calculations for each batch emission episode within each unit operation according to the engineering evaluation methodology in paragraphs (d)(2)(i)(A) through (H) of this section. Except where variations are noted, individual HAP partial pressures in multicomponent systems shall be determined by the following methods: If the components are miscible in one another, use Raoult's law to calculate the partial pressures; if the solution is

a dilute aqueous mixture, use Henry's law to calculate partial pressures; if Raoult's law or Henry's law are not appropriate or available, use experimentally obtained activity coefficients or models such as the group-contribution models, to predict activity coefficients, or assume the components of the system behave independently and use the summation of all vapor pressures from the HAP as the total HAP partial pressure. Chemical property data can be obtained from standard reference texts.

(A) *Vapor displacement.* Emissions from vapor displacement due to transfer of material shall be calculated using Equation 11 of this subpart. The individual HAP partial pressures may be calculated using Raoult's law.

$$E = \frac{(V)}{(R)(T)} \times \sum_{i=1}^n (P_i)(MW_i) \quad (\text{Eq. 11})$$

where:

E = mass of HAP emitted

V = volume of gas displaced from the vessel

R = ideal gas law constant

T = temperature of the vessel vapor space; absolute

P_i = partial pressure of the individual HAP

MW_i = molecular weight of the individual HAP

n = number of HAP compounds in the emission stream i = identifier for a HAP compound

(B) *Purging.* Emissions from purging shall be calculated using Equation 12 of this subpart. The partial pressures of individual condensable compounds may be calculated using Raoult's law, the pressure of the vessel vapor space may be set equal to 760 mmHg, and the partial pressure of HAP shall be assumed to be 25 percent of the saturated value if the purge flow rate is greater than 100 standard cubic feet per minute (scfm).

$$E = \sum_{i=1}^n P_i MW_i \times \frac{(V)(t)}{(R)(T)} \times \frac{P_T}{P_T - \sum_{j=1}^m (P_j)} \quad (\text{Eq. 12})$$

Where:

E = mass of HAP emitted

V = purge flow rate at the temperature and pressure of the vessel vapor space

R = ideal gas law constant

T = temperature of the vessel vapor space; absolute

P_i = partial pressure of the individual HAP

P_j = partial pressure of individual condensable VOC compounds (including HAP)

P_T = pressure of the vessel vapor space

MW_i = molecular weight of the individual HAP

t = time of purge

n = number of HAP compounds in the emission stream

i = identifier for a HAP compound

j = identifier for a condensable compound

m = number of condensable compounds (including HAP) in the emission stream

(C) *Heating.* Emissions caused by the heating of a vessel to a temperature equal to or lower than 10 K below the boiling point shall be calculated using the procedures in either paragraph (d)(2)(i)(C)(1) or (3) of this section. Emissions caused by heating a vessel to a temperature that is higher than 10 K below the boiling point and less than the boiling point, must be calculated using the procedures in either paragraph (d)(2)(i)(C)(2) or (3) of this section. If

the contents of a vessel are heated to the boiling point, emissions must be calculated using the procedures in paragraph (d)(2)(i)(C)(4) of this section.

(1) This paragraph describes procedures to calculate emissions if the final temperature to which the vessel contents are heated is 10 K below the boiling point of the HAP in the vessel, or lower. The owner or operator shall calculate the mass of HAP emitted per episode using either Equation 13 or 14

of this subpart. The moles of noncondensable gas displaced are calculated using Equation 15 of this subpart. The initial and final pressure of the noncondensable gas in the vessel shall be calculated using Equation 16 of this subpart. The average molecular weight of HAP in the displaced gas shall be calculated using Equation 17 of this subpart.

$$E = \frac{\sum_{i=1}^n ((P_i^*)(x_i))}{760 - \sum_{j=1}^m ((P_j^*)(x_j))} \times \Delta\eta \times MW_{HAP} \quad (\text{Eq. 13})$$

$$E = \frac{\frac{\sum_{i=1}^n (P_i)_{T1}}{Pa_1} + \frac{\sum_{i=1}^n (P_i)_{T2}}{Pa_2}}{2} \times \Delta\eta \times MW_{HAP} \quad (\text{Eq. 14})$$

$$\Delta\eta = \frac{V}{R} \left[\left(\frac{Pa_1}{T_1} \right) - \left(\frac{Pa_2}{T_2} \right) \right] \quad (\text{Eq. 15})$$

$$Pa_n = P_{atm} - \sum_{j=1}^m (P_j)_{Tn} \quad (\text{Eq. 16})$$

$$MW_{HAP} = \frac{\sum_{i=1}^n \frac{((P_i)_{T1} + (P_i)_{T2}) MW_i}{\sum_{i=1}^n ((P_i)_{T1} + (P_i)_{T2})}} \quad (\text{Eq. 17})$$

Where:

E = mass of HAP vapor displaced from the vessel being heated

x_i = mole fraction of each HAP in the liquid phase

x_j = mole fraction of each condensable VOC (including HAP) in the liquid phase

(P_i^*) = vapor pressure of each HAP in the vessel headspace at any temperature between the initial and final heatup temperatures, mmHg

(P_j^*) = vapor pressure of each condensable VOC (including HAP) in the vessel headspace at any temperature between the initial and final heatup temperatures, mmHg

760 = atmospheric pressure, mmHg

MW_{HAP} = the average molecular weight of HAP present in the displaced gas

$\Delta\eta$ = number of moles of noncondensable gas displaced

V = volume of free space in the vessel

R = ideal gas law constant

T_1 = initial temperature of vessel contents, absolute

T_2 = final temperature of vessel contents, absolute

Pa_n = partial pressure of noncondensable gas in the vessel headspace at initial (n=1) and final (n=2) temperature

P_{atm} = atmospheric pressure (when $\Delta\eta$ is used in Equation 13 of this subpart, P_{atm} may be set equal to 760 mmHg for any vessel)

$(P_j)_{Tn}$ = partial pressure of each condensable compound (including HAP) in the vessel headspace at the initial temperature (n=1) and final (n=2) temperature

m = number of condensable compounds (including HAP) in the displaced vapor

j = identifier for a condensable compound

$(P_i)_{Tn}$ = partial pressure of each HAP in the vessel headspace at initial (T_1) and final (T_2) temperature; [for use in Equation 13, replace $(P_i)_{T1} + (P_i)_{T2}$ with P_i at the temperature used to calculate vapor pressure of HAP in Equation 13]

MW_i = molecular weight of each HAP
n = number of HAP compounds in the emission stream

i = identifier for a HAP compound

(2) If the vessel contents are heated to a temperature that is higher than 10 K below the boiling point and less than the boiling point, emissions must be calculated using the procedures in

paragraph (d)(2)(i)(C)(2)(i), or (ii), or (iii) of this section.

(i) Use Equation 13 of this subpart. In Equation 13 of this subpart, the HAP vapor pressures must be determined at the temperature 10 K below the boiling point. In the calculation of $\Delta\eta$ for Equation 13 of this subpart, T_2 must be the temperature 10 K below the boiling point, and P_{a2} must be determined at the temperature 10 K below the boiling point. In the calculation of MW_{HAP} , the HAP partial pressures must be determined at the temperature 10 K below the boiling point.

(ii) Use Equation 14 of this subpart. In Equation 14 of this subpart, the HAP

partial pressures must be determined at the temperature 10 K below the boiling point. In the calculation of $\Delta\eta$ for Equation 14 of this subpart, T_2 must be the temperature 10 K below the boiling point, and P_{a2} must be determined at the temperature 10 K below the boiling point. In the calculation of MW_{HAP} , the HAP partial pressures must be determined at the temperature 10 K below the boiling point.

(iii) Use Equation 14 of this subpart over specific temperature increments. If the initial temperature is lower than 10 K below the boiling point, emissions must be calculated as the sum over two

increments; one increment is from the initial temperature to 10 K below the boiling point, and the second is from 10 K below the boiling point to the lower of either the final temperature or the temperature 5 K below the boiling point. If the initial temperature is higher than 10 K below the boiling point, emissions are calculated over one increment from the initial temperature to the lower of either the final temperature or the temperature 5 K below the boiling point.

(3)(i) Emissions caused by heating a vessel are calculated using Equation 18 of this subpart.

$$E = MW_{HAP} \times \left(N_{avg} \times \ln \left(\frac{P_T - \sum_{i=1}^n (P_{i,1})}{P_T - \sum_{i=1}^n (P_{i,2})} \right) - (n_{i,2} - n_{i,1}) \right) \quad (\text{Eq. 18})$$

Where:

E = mass of HAP vapor displaced from the vessel being heated
 N_{avg} = average gas space molar volume during the heating process
 P_T = total pressure in the vessel
 $P_{i,1}$ = partial pressure of the individual HAP compounds at T_1

$P_{i,2}$ = partial pressure of the individual HAP compounds at T_2
 MW_{HAP} = average molecular weight of the HAP compounds
 $n_{i,1}$ = number of moles of condensable in the vessel headspace at T_1
 $n_{i,2}$ = number of moles of condensable in the vessel headspace at T_2

n = number of HAP compounds in the emission stream

(ii) The average gas space molar volume during the heating process is calculated using Equation 19 of this subpart.

$$N_{avg} = \frac{VP_T}{2R} \left(\frac{1}{T_1} + \frac{1}{T_2} \right) \quad (\text{Eq. 19})$$

Where:

N_{avg} = average gas space molar volume during the heating process
 V = volume of free space in vessel
 P_T = total pressure in the vessel

R = ideal gas law constant
 T_1 = initial temperature of the vessel
 T_2 = final temperature of the vessel
 (iii) The difference in the number of moles of condensable in the vessel

headspace between the initial and final temperatures is calculated using Equation 20 of this subpart.

$$(n_{i,2} - n_{i,1}) = \frac{V}{(R)(T_2)} \sum_{i=1}^n P_{i,2} - \frac{V}{(R)(T_1)} \sum_{i=1}^n P_{i,1} \quad (\text{Eq. 20})$$

Where:

V = volume of free space in vessel
 R = ideal gas law constant
 T_1 = initial temperature in the vessel
 T_2 = final temperature in the vessel
 $P_{i,1}$ = partial pressure of the individual HAP compounds at T_1
 $P_{i,2}$ = partial pressure of the individual HAP compounds at T_2
 n = number of HAP compounds in the emission stream

(4) If the vessel contents are heated to the boiling point, emissions must be calculated using the procedure in

paragraphs (d)(2)(i)(c)(4)(i) and (ii) of this section.

(i) Use either of the procedures in paragraph (d)(3)(i)(B)(3) of this section to calculate the emissions from heating to the boiling point (note that $P_{a2}=0$ in the calculation of $\Delta\eta$); and

(ii) While boiling, the vessel must be operated with a properly operated process condenser. An initial demonstration that a process condenser is properly operated is required for vessels that operate process condensers without secondary condensers that are air pollution control devices. The owner

or operator must either measure the condenser exhaust gas temperature and show it is less than the boiling point of the substance(s) in the vessel, or perform a material balance around the vessel and condenser to show that at least 99 percent of the material vaporized while boiling is condensed. Uncontrolled emissions are assumed to be zero under these conditions. The initial demonstration shall be conducted for all appropriate operating scenarios and documented in the Notification of Compliance report described in § 63.1260(f).

(D) *Depressurization.* Emissions from depressurization shall be calculated using the procedures in either paragraphs (d)(2)(i)(D)(1) through (4), paragraphs (d)(2)(i)(D)(5) through (9), or paragraph (d)(2)(i)(D)(10) of this section.

(1) Equations 21 and 22 of this subpart are used to calculate the initial and final volumes of noncondensable gas present in the vessel, adjusted to atmospheric pressure. The HAP partial pressures may be calculated using Raoult's law.

$$V_{nc1} = \frac{VP_{nc1}}{760} \quad (\text{Eq. 21})$$

$$V_{nc2} = \frac{VP_{nc2}}{760} \quad (\text{Eq. 22})$$

Where:

V_{nc1} = initial volume of noncondensable gas in the vessel

V_{nc2} = final volume of noncondensable gas in the vessel
 V = free volume in the vessel being depressurized
 P_{nc1} = initial partial pressure of the noncondensable gas, as calculated using Equation 23 of this subpart, mmHg
 P_{nc2} = final partial pressure of the noncondensable gas, as calculated using Equation 24 of this subpart, mmHg
 760 = atmospheric pressure, mmHg

(2) The initial and final partial pressures of the noncondensable gas in the vessel are determined using Equations 23 and 24 of this subpart:

$$P_{nc1} = P_1 - \sum_{j=1}^m (P_j^*)(x_j) \quad (\text{Eq. 23})$$

$$P_{nc2} = P_2 - \sum_{j=1}^m (P_j^*)(x_j) \quad (\text{Eq. 24})$$

Where:

P_{nc1} = initial partial pressure of the noncondensable gas
 P_{nc2} = final partial pressure of the noncondensable gas
 P_1 = initial vessel pressure
 P_2 = final vessel pressure
 P_j^* = vapor pressure of each condensable (including HAP) in the emission stream
 x_j = mole fraction of each condensable (including HAP) in the emission stream
 m = number of condensable compounds (including HAP) in the emission stream
 j = identifier for a condensable compound

(3) The average ratio of moles of noncondensable to moles of HAP is calculated using Equation 25 of this subpart:

$$n_R = \frac{\left(\frac{P_{nc1}}{\sum_{i=1}^n (P_i^*)(x_i)} + \frac{P_{nc2}}{\sum_{i=1}^n (P_i^*)(x_i)} \right)}{2} \quad (\text{Eq. 25})$$

Where:

n_R = average ratio of moles of noncondensable to moles of HAP

P_{nc1} = initial partial pressure of the noncondensable gas, as calculated using Equation 23 of this subpart

P_{nc2} = final partial pressure of the noncondensable gas, as calculated using Equation 24 of this subpart
 P_i^* = vapor pressure of each individual HAP
 x_i = mole fraction of each individual HAP in the liquid phase

n = number of HAP compounds
 i = identifier for a HAP compound

(4) The mass of HAP emitted shall be calculated using Equation 26 of this subpart:

$$E = \frac{V_{nc1} - V_{nc2}}{n_R} \times \frac{P_{atm}}{RT} \times MW_{HAP} \quad (\text{Eq. 26})$$

Where:

E = mass of HAP emitted

V_{nc1} = initial volume of noncondensable gas in the vessel, as calculated using Equation 21 of this subpart

V_{nc2} = final volume of noncondensable gas in the vessel, as calculated using Equation 22 of this subpart
 n_R = average ratio of moles of noncondensable to moles of HAP, as calculated using Equation 25 of this subpart

P_{atm} = atmospheric pressure, standard

R = ideal gas law constant

T = temperature of the vessel, absolute

MW_{HAP} = average molecular weight of the HAP, as calculated using Equation 17 of this subpart

(5) The moles of HAP vapor initially in the vessel are calculated using the ideal gas law using Equation 27 of this subpart:

$$n_{HAP} = \frac{(Y_{HAP})(V)(P_1)}{R T} \quad (\text{Eq. 27})$$

Where:

Y_{HAP} = mole fraction of HAP (the sum of the individual HAP fractions, $\sum Y_i$)

V = free volume in the vessel being depressurized

P_1 = initial vessel pressure

R = ideal gas law constant

T = vessel temperature, absolute

(6) The initial and final moles of noncondensable gas present in the

vessel are calculated using Equations 28 and 29 of this subpart:

$$n_1 = \frac{VP_{nc1}}{RT} \quad (\text{Eq. 28})$$

$$n_2 = \frac{VP_{nc2}}{RT} \quad (\text{Eq. 29})$$

Where:

n_1 = initial number of moles of noncondensable gas in the vessel

n_2 = final number of moles of noncondensable gas in the vessel

V = free volume in the vessel being depressurized
 P_{nc1} = initial partial pressure of the noncondensable gas, as calculated using Equation 23 of this subpart
 P_{nc2} = final partial pressure of the noncondensable gas, as calculated using Equation 24 of this subpart

R = ideal gas law constant
 T = temperature, absolute
 (7) The initial and final partial pressures of the noncondensable gas in the vessel are determined using Equations 23 and 24 of this subpart.
 (8) The moles of HAP emitted during the depressurization are calculated by

taking an approximation of the average ratio of moles of HAP to moles of noncondensable and multiplying by the total moles of noncondensables released during the depressurization, using Equation 30 of this subpart:
 where:

$$n_{HAP} = \frac{\left(\frac{n_{HAP,1}}{n_1} + \frac{n_{HAP,2}}{n_2} \right)}{2} [n_1 - n_2] \quad (\text{Eq. 30})$$

n_{HAP} = moles of HAP emitted
 n_1 = initial number of moles of noncondensable gas in the vessel, as calculated using Equation 28 of this subpart
 n_2 = final number of moles of noncondensable gas in the vessel, as calculated using Equation 29 of this subpart

(9) The mass of HAP emitted can be calculated using Equation 31 of this subpart:
 $E = N_{HAP} * MW_{HAP}$ (Eq. 31)
 where:
 E = mass of HAP emitted
 n_{HAP} = moles of HAP emitted, as calculated using Equation 30 of this subpart

MW_{HAP} = average molecular weight of the HAP as calculated using Equation 17 of this subpart
 (10) Emissions from depressurization may be calculated using Equation 32 of this subpart:

$$E = \frac{V}{(R)(T)} \times \ln \left(\frac{P_1 - \sum_{i=1}^n (P_i)}{P_2 - \sum_{i=1}^n (P_i)} \right) \times \sum_{i=1}^n (P_i)(MW_i) \quad (\text{Eq. 32})$$

where:
 V = free volume in vessel being depressurized
 R = ideal gas law constant
 T = temperature of the vessel, absolute
 P_1 = initial pressure in the vessel

P_2 = final pressure in the vessel
 P_i = partial pressure of the individual HAP compounds
 MW_i = molecular weight of the individual HAP compounds
 n = number of HAP compounds in the emission stream

i = identifier for a HAP compound
 (E) *Vacuum systems.* Emissions from vacuum systems may be calculated using Equation 33 of this subpart if the air leakage rate is known or can be approximated.

$$E = \frac{(MW_{HAP})(La)(t)}{MW_{nc}} \left(\frac{P_{system}}{P_{system} - P_1^*} - 1 \right) \quad (\text{Eq. 33})$$

where:
 E = mass of HAP emitted
 P_{system} = absolute pressure of receiving vessel or ejector outlet conditions, if there is no receiver
 P_1^* = vapor pressure of the HAP at the receiver temperature or the ejector outlet conditions

La = total air leak rate in the system, mass/time
 MW_{nc} = molecular weight of noncondensable gas
 t = time of vacuum operation
 MW_{HAP} = average molecular weight of HAP in the emission stream, as calculated using Equation 17 of this subpart, with HAP partial pressures

calculated at the temperature of the receiver or ejector outlet, as appropriate
 (F) *Gas evolution.* Emissions from gas evolution shall be calculated using Equation 12 of this subpart with V calculated using Equation 34 of this subpart:

$$V = \frac{(W_g)(R)(T)}{(P_T)(MW_g)} \quad (\text{Eq. 34})$$

Where:
 V = volumetric flow rate of gas evolution

W_g = mass flow rate of gas evolution
 R = ideal gas law constant
 T = temperature at the exit, absolute
 P_T = vessel pressure

MW_g = molecular weight of the evolved gas

(G) *Air drying.* Emissions from air drying shall be calculated using Equation 35 of this subpart:

$$E = B \times \left(\frac{PS_1}{100 - PS_1} - \frac{PS_2}{100 - PS_2} \right) \quad (\text{Eq. 35})$$

Where:

E = mass of HAP emitted

B = mass of dry solids

PS₁ = HAP in material entering dryer, weight percent

PS₂ = HAP in material exiting dryer, weight percent

(H) *Empty vessel purging.* Emissions from empty vessel purging shall be calculated using Equation (36) of this subpart (Note: The term -Ft/v can be assumed to be 1):

$$E = \left(\frac{V}{RT} \times \sum_{i=1}^n (P_i)(MW_i) \right) (1 - e^{-Ft/v}) \quad (\text{Eq. 36})$$

Where:

V = volume of empty vessel

R = ideal gas law constant

T = temperature of the vessel vapor space; absolute

P_i = partial pressure of the individual HAP at the beginning of the purge
(MW_i) = molecular weight of the individual HAP

F = flowrate of the purge gas

t = duration of the purge

n = number of HAP compounds in the emission stream

i = identifier for a HAP compound

(ii) *Engineering assessments.* The owner or operator shall conduct an engineering assessment to calculate uncontrolled HAP emissions for each emission episode that is not due to vapor displacement, purging, heating, depressurization, vacuum operations, gas evolution, or air drying. For emission episodes caused by any of these types of activities, the owner or operator also may calculate uncontrolled HAP emissions based on an engineering assessment if the owner or operator can demonstrate to the Administrator that the methods in paragraph (d)(2)(i) of this section are not appropriate. One criterion the owner or operator could use to demonstrate that the methods in paragraph (d)(2)(i) of this section are not appropriate is if previous test data are available that show a greater than 20 percent discrepancy between the test value and the estimated value. An engineering assessment includes, but is not limited to, the following:

(A) Previous test results, provided the tests are representative of current operating practices at the process unit.

(B) Bench-scale or pilot-scale test data representative of the process under representative operating conditions.

(C) Maximum flow rate, HAP emission rate, concentration, or other relevant parameter specified or implied within a permit limit applicable to the process vent.

(D) Design analysis based on accepted chemical engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to:

(1) Use of material balances based on process stoichiometry to estimate maximum organic HAP concentrations.

(2) Estimation of maximum flow rate based on physical equipment design such as pump or blower capacities.

(3) Estimation of HAP concentrations based on saturation conditions.

(E) All data, assumptions, and procedures used in the engineering assessment shall be documented in accordance with § 63.1260(e). Data or other information supporting a finding that the emissions estimation equations are inappropriate shall be reported in the Precompliance report.

(3) *Controlled emissions.* An owner or operator shall determine controlled emissions using the procedures in either paragraph (d)(3)(i) or (ii) of this section. For condensers, controlled emissions shall be calculated using the emission estimation equations described in paragraph (d)(3)(i)(B) of this section.

(i) *Small control devices.* Except for condensers, controlled emissions for each process vent that is controlled using a small control device shall be determined by using the design evaluation described in paragraph (d)(3)(i)(A) of this section, or conducting a performance test in accordance with paragraph (d)(3)(ii) of this section. Whenever a small control device becomes a large control device, the owner or operator must comply with the

provisions in paragraph (d)(3)(ii) of this section and submit the test report in the next Periodic report.

(A) *Design evaluation.* The design evaluation shall include documentation demonstrating that the control device being used achieves the required control efficiency under worst-case conditions, as determined from the emission profile described in § 63.1257(b)(8)(ii). The control efficiency determined from this design evaluation shall be applied to uncontrolled emissions to estimate controlled emissions. The documentation must be conducted in accordance with the provisions in paragraph (a)(1) of this section. The design evaluation shall also include the value(s) and basis for the parameter(s) monitored under § 63.1258.

(B) *Emission estimation equations.* An owner or operator using a condenser as a control device shall determine controlled emissions using exhaust gas temperature measurements and calculations for each batch emission episode within each unit operation according to the engineering methodology in paragraphs (d)(3)(i)(B)(1) through (8) of this section. Individual HAP partial pressures shall be calculated as specified in paragraph (d)(2)(i) of this section.

(1) Emissions from vapor displacement shall be calculated using Equation 11 of this subpart with T set equal to the temperature of the receiver and the HAP partial pressures determined at the temperature of the receiver.

(2) Emissions from purging shall be calculated using Equation 12 of this subpart with T set equal to the temperature of the receiver and the HAP partial pressures determined at the temperature of the receiver.

(3) Emissions from heating shall be calculated using either Equation 13 of this subpart or Equation 37 of this subpart. In Equation 13, the HAP vapor pressures shall be determined at the temperature of the receiver. In Equations 13 and 37 of this subpart, $\Delta\eta$ is equal to the number of moles of noncondensable displaced from the vessel, as calculated using Equation 15 of this subpart. In Equations 13 and 37 of this subpart, the HAP average molecular weight shall be calculated using Equation 17 with the HAP partial pressures determined at the temperature of the receiver.

$$E = \Delta\eta \times \frac{\sum_{i=1}^n P_i}{P_T - \sum_{j=1}^m P_j} \times MW_{HAP} \quad (\text{Eq. 37})$$

Where:

E = mass of HAP emitted
 $\Delta\eta$ = moles of noncondensable gas displaced
 P_T = pressure in the receiver
 P_i = partial pressure of the individual HAP at the receiver temperature
 P_j = partial pressure of the individual condensable (including HAP) at the receiver temperature

n = number of HAP compounds in the emission stream
 i = identifier for a HAP compound
 MW_{HAP} = the average molecular weight of HAP in vapor exiting the receiver, as calculated using Equation 17 of this subpart
 m = number of condensable compounds (including HAP) in the emission stream

(4) (i) Emissions from depressurization shall be calculated using Equation 38 of this subpart.

$$E = (V_{nc1} - V_{nc2}) \times \frac{\sum_{i=1}^n (P_i)}{P_T - \sum_{j=1}^m (P_j)} \times \frac{P_T}{RT} \times MW_{HAP} \quad (\text{Eq. 38})$$

Where:

E = mass of HAP vapor emitted
 V_{nc1} = initial volume of noncondensable in the vessel, corrected to the final pressure, as calculated using Equation 39 of this subpart
 V_{nc2} = final volume of noncondensable in the vessel, as calculated using Equation 40 of this subpart
 P_i = partial pressure of each individual HAP at the receiver temperature
 P_j = partial pressure of each condensable (including HAP) at the receiver temperature
 P_T = receiver pressure
 T = temperature of the receiver
 R = ideal gas law constant
 MW_{HAP} = the average molecular weight of HAP calculated using Equation 17 of this subpart with partial pressures determined at the receiver temperature
 i = identifier for a HAP compound
 n = number of HAP compounds in the emission stream
 m = number of condensable compounds (including HAP) in the emission stream
 j = identifier for a condensable compound

(ii) The initial and final volumes of noncondensable gas present in the vessel, adjusted to the pressure of the receiver, are calculated using Equations 39 and 40 of this subpart.

$$V_{nc1} = \frac{VP_{nc1}}{P_T} \quad (\text{Eq. 39})$$

$$V_{nc2} = \frac{VP_{nc2}}{P_T} \quad (\text{Eq. 40})$$

Where:

V_{nc1} = initial volume of noncondensable gas in the vessel
 V_{nc2} = final volume of noncondensable gas in the vessel
 V = free volume in the vessel being depressurized
 P_{nc1} = initial partial pressure of the noncondensable gas, as calculated using Equation 41 of this subpart
 P_{nc2} = final partial pressure of the noncondensable gas, as calculated using Equation 42 of this subpart
 P_T = pressure of the receiver

(iii) Initial and final partial pressures of the noncondensable gas in the vessel are determined using Equations 41 and 42 of this subpart.

$$P_{nc1} = P_1 - \sum_{j=1}^m P_j \quad (\text{Eq. 41})$$

$$P_{nc2} = P_2 - \sum_{j=1}^m P_j \quad (\text{Eq. 42})$$

Where:

P_{nc1} = initial partial pressure of the noncondensable gas in the vessel
 P_{nc2} = final partial pressure of the noncondensable gas in the vessel
 P_1 = initial vessel pressure
 P_2 = final vessel pressure
 P_j = partial pressure of each condensable compound (including HAP) in the vessel
 m = number of condensable compounds (including HAP) in the emission stream
 j = identifier for a condensable compound

(5) Emissions from vacuum systems shall be calculated using Equation 33 of this subpart.

(6) Emissions from gas evolution shall be calculated using Equation 12 with V calculated using Equation 34 of this subpart, T set equal to the receiver temperature, and the HAP partial pressures determined at the receiver temperature. The term for time, t , in Equation 12 of this subpart is not needed for the purposes of this calculation.

(7) Emissions from air drying shall be calculated using Equation 11 of this subpart with V equal to the air flow rate and P_i determined at the receiver temperature.

(8) Emissions from empty vessel purging shall be calculated using equation 43 of this subpart:

$$E = \frac{V}{R} \left(\left(\sum_{i=1}^n \frac{(P_i)_{T_1} (MW_i)}{T_1} \right) (-e^{-Ft/V}) - \left(\sum_{i=1}^n \frac{(P_i)_{T_2} (MW_i)}{T_2} \right) \ln \left(\frac{\sum_{i=1}^n (P_i)_{T_2}}{\sum_{i=1}^n (P_i)_{T_1}} \right) + 1 \right) \quad (\text{Eq. 43})$$

Where:

V = volume of empty vessel

R = ideal gas law constant

T₁ = temperature of the vessel vapor space at beginning of purge

T₂ = temperature of the receiver, absolute

(P_i)_{T₁} = partial pressure of the individual HAP at the beginning of the purge

(P_i)_{T₂} = partial pressure of the individual HAP at the receiver temperature

MW_i = molecular weight of the individual HAP

F = flowrate of the purge gas

t = duration of the purge

n = number of HAP compounds in the emission stream

i = identifier for a HAP compound

(ii) *Large control devices.* Except for condensers, controlled emissions for each process vent that is controlled using a large control device shall be determined by applying the control efficiency of the large control device to the estimated uncontrolled emissions. The control efficiency shall be determined by conducting a performance test on the control device as described in paragraphs (d)(3)(ii)(A) through (C) of this section, or by using the results of a previous performance test as described in paragraph (d)(4) of this section. If the control device is intended to control only hydrogen halides and halogens, the owner or operator may assume the control efficiency of organic HAP is zero percent. If the control device is intended to control only organic HAP, the owner or operator may assume the control efficiency for hydrogen halides and halogen is zero percent. Owners and operators are not required to conduct performance tests for devices described in paragraphs (a)(4) and (d)(4) of this section that are large control devices, as defined in § 63.1251.

(A) The performance test shall be conducted by performing emission testing on the inlet and outlet, or, if complying with the provisions of § 63.1254(c), on the outlet of the control device, following the test methods and procedures of § 63.1257(b). Concentrations shall be calculated from the data obtained through emission testing according to the procedures in paragraph (a)(2) of this section. If the control device is a combustion device that uses supplemental combustion air,

the concentrations shall be corrected to 3 percent oxygen according to the procedures in paragraph (a)(3) of this section.

(B) Performance testing shall be conducted under absolute, or hypothetical worst-case conditions, as defined in paragraphs (b)(8)(i)(A) through (B) of this section.

(C) The owner or operator may elect to conduct more than one performance test on the control device for the purpose of establishing more than one operating condition at which the control device achieves the required control efficiency.

(4) An owner or operator is not required to conduct a performance test for the following:

(i) Any control device for which a previous performance test was conducted, provided the test was conducted using the same procedures specified in § 63.1257(b) over conditions typical of the appropriate worst-case, as defined in § 63.1257(b)(8)(i). The results of the previous performance test shall be used to demonstrate compliance.

(e) *Compliance with wastewater provisions.* (1) *Determining annual average concentration and annual load.*

To determine the annual average concentration and annual load of partially soluble and/or soluble HAP compounds in a wastewater stream, as required by § 63.1256(a)(1), an owner or operator shall comply with the provisions in paragraphs (e)(1)(i) through (iii) of this section. A wastewater stream is exempt from the requirements of § 63.1256(a)(2) if the owner or operator determines the annual average concentration and annual load are below all of the applicability cutoffs specified in § 63.1256(a)(1)(i)(A) through (D). For annual average concentration, only initial rinses are included.

Concentration measurements based on Method 305 shall be adjusted by dividing each concentration by the compound-specific F_m factor listed in Table 8 of this subpart. Concentration measurements based on methods other than Method 305 may not be adjusted by the compound-specific F_m factor listed in Table 8 of this subpart.

(i) *Annual average concentration definition.* (A) When complying with § 63.1256(a)(1)(i)(A), the annual average

concentration means the total mass of partially soluble HAP compounds occurring in the wastewater stream during the calendar year divided by the total mass of the wastewater stream discharged during the same calendar year.

(B) When complying with § 63.1256(a)(1)(i)(B) or (C), the annual average concentration means the total mass of partially soluble and/or soluble HAP compounds occurring in the wastewater stream during the calendar year divided by the total mass of the wastewater stream discharged during the same calendar year.

(C) When complying with § 63.1256(a)(1)(i)(D), the annual average concentration means the total mass of soluble HAP compounds occurring in the wastewater stream during the calendar year divided by the total mass of the wastewater stream discharged during the same calendar year.

(ii) *Determination of annual average concentration.* An owner or operator shall determine annual average concentrations of partially soluble and/or soluble HAP compounds in accordance with the provisions specified in paragraph (e)(1)(ii)(A), (B), or (C) of this section. The owner or operator may determine annual average concentrations by process simulation. Data and other information supporting the simulation shall be reported in the Precompliance Report for approval by the Administrator. The annual average concentration shall be determined either at the POD or downstream of the POD with adjustment for concentration changes made according to paragraph (e)(1)(ii)(D) of this section.

(A) *Test methods.* The concentration of partially soluble HAP, soluble HAP, or total HAP shall be measured using any of the methods described in paragraphs (b)(10)(i) through (iv) of this section.

(B) *Knowledge of the wastewater stream.* The concentration of partially soluble HAP, soluble HAP, or total HAP shall be calculated based on knowledge of the wastewater stream according to the procedures in paragraphs (e)(1)(ii)(B)(1) and (2) of this section. The owner or operator shall document concentrations in the Notification of Compliance Status report described in § 63.1260(f).

(1) *Mass balance.* The owner or operator shall calculate the concentrations of HAP compounds in wastewater considering the total quantity of HAP discharged to the water, the amount of water at the POD, and the amounts of water and solvent lost to other mechanisms such as reactions, air emissions, or uptake in product or other processing materials. The quantities of HAP and water shall be based on batch sheets, manufacturing tickets, or FDA bills of materials. In cases where a chemical reaction occurs that generates or consumes HAP, the amount of HAP remaining after a reaction shall be based on stoichiometry assuming 100 percent theoretical consumption or yield, as applicable.

(2) *Published water solubility data.* For single components in water, owners and operators may use the water solubilities published in standard reference texts at the POD temperature to determine maximum HAP concentration.

(C) *Bench scale or pilot-scale test data.* The concentration of partially soluble HAP, soluble HAP, or total HAP shall be calculated based on bench scale or pilot-scale test data. The owner or operator shall provide sufficient information to demonstrate that the bench-scale or pilot-scale test concentration data are representative of actual HAP concentrations. The owner or operator shall also provide documentation describing the testing protocol, and the means by which sample variability and analytical variability were accounted for in the determination of HAP concentrations. Documentation of the pilot-scale or bench scale analysis shall be provided in the precompliance report.

(D) *Adjustment for concentrations determined downstream of the POD.* The owner or operator shall make corrections to the annual average concentration when the concentration is determined downstream of the POD at a location where: two or more wastewater streams have been mixed; one or more wastewater streams have been treated; or, losses to the atmosphere have occurred. The owner or operator shall make the adjustments either to the individual data points or to the final annual average concentration.

(iii) *Determination of annual load.* An owner or operator shall calculate the partially soluble and/or soluble HAP load in a wastewater stream based on the annual average concentration determined in paragraph (e)(1)(ii)(A), (B), or (C) of this section and the total volume of the wastewater stream, based on knowledge of the wastewater stream in accordance with paragraphs

(e)(1)(ii)(B) of this section. The owner or operator shall maintain records of the total liters of wastewater discharged per year as specified in § 63.1259(b).

(2) *Compliance with treatment unit control provisions.* (i) *Performance tests and design evaluations-general.* To comply with the control options in § 63.1256(g)(10) or (13), neither a design evaluation nor a performance test is required. For any other nonbiological treatment process, the owner or operator shall conduct either a design evaluation as specified in paragraph (e)(2)(ii) of this section, or a performance test as specified in paragraph (e)(2)(iii) of this section to demonstrate that each nonbiological treatment process used to comply with § 63.1256(g)(8), (9), and/or (12) achieves the conditions specified for compliance. The owner or operator shall demonstrate by the procedures in either paragraph (e)(2)(ii) or (iii) of this section that each closed biological treatment process used to comply with § 63.1256(g)(8)(ii), (g)(9)(ii), (g)(11), or (g)(12) achieves the conditions specified for compliance. If an open biological treatment unit is used to comply with § 63.1256(g)(8)(ii), (g)(9)(ii), (g)(11), or (g)(12), the owner or operator shall comply with the performance test requirements in paragraph (e)(2)(iii) of this section.

(ii) *Design evaluation.* A design evaluation and supporting documentation that addresses the operating characteristics of the treatment process and that is based on operation at a wastewater stream flow rate and a concentration under which it would be most difficult to demonstrate compliance. For closed biological treatment processes, the percent reduction from removal/destruction in the treatment unit and control device shall be determined by a mass balance over the unit. The mass flow rate of soluble and/or partially soluble HAP compounds exiting the treatment process shall be the sum of the mass flow rate of soluble and/or partially soluble HAP compounds in the wastewater stream exiting the biological treatment process and the mass flow rate of the vented gas stream exiting the control device. The mass flow rate entering the treatment process minus the mass flow rate exiting the process determines the actual mass removal. Compounds that meet the requirements specified in paragraph (e)(2)(iii)(A)(4) of this section are not required to be included in the design evaluation; the term "performance test" in paragraph (e)(2)(iii)(A)(4) of this section shall mean "design evaluation" for the purposes of this paragraph.

(iii) *Performance tests.* Performance tests shall be conducted using test methods and procedures that meet the applicable requirements specified in paragraphs (e)(2)(iii)(A) through (G) of this section.

(A) *General.* This paragraph specifies the general procedures for performance tests that are conducted to demonstrate compliance of a treatment process with the control requirements specified in § 63.1256(g).

(1) *Representative process unit operating conditions.* Compliance shall be demonstrated for representative operating conditions. Operations during periods of malfunction and periods of nonoperation shall not constitute representative conditions. The owner or operator shall record the process information that is necessary to document operating conditions during the test.

(2) *Representative treatment process operating conditions.* Performance tests shall be conducted when the treatment process is operating at a representative inlet flow rate and concentration. If the treatment process will be operating at several different sets of representative operating conditions, the owner or operator shall comply with paragraphs (e)(2)(iii)(A)(2)(i) and (ii) of this section. The owner or operator shall record information that is necessary to document treatment process or control device operating conditions during the test.

(i) *Range of operating conditions.* If the treatment process will be operated at several different sets of representative operating conditions, performance testing over the entire range is not required. In such cases, the performance test results shall be supplemented with modeling and/or engineering assessments to demonstrate performance over the operating range.

(ii) *Consideration of residence time.* If concentration and/or flow rate to the treatment process are not relatively constant (i.e., comparison of inlet and outlet data will not be representative of performance), the owner or operator shall consider residence time, when determining concentration and flow rate.

(3) *Testing equipment.* All testing equipment shall be prepared and installed as specified in the applicable test methods, or as approved by the Administrator.

(4) *Compounds not required to be considered in performance tests.* Compounds that meet the requirements specified in (e)(2)(iii)(A)(4)(i), (ii), or (iii) of this section are not required to be included in the performance test. Concentration measurements based on

Method 305 shall be adjusted by dividing each concentration by the compound-specific Fm factor listed in Table 8 of this subpart. Concentration measurements based on methods other than Method 305 shall not be adjusted by the compound-specific Fm factor listed in Table 8 of this subpart.

(i) Compounds not used or produced by the PMPU; or

(ii) Compounds with concentrations at the POD that are below 1 ppmw; or

(iii) Compounds with concentrations at the POD that are below the lower detection limit where the lower detection limit is greater than 1 ppmw. The method shall be an analytical method for wastewater which has the compound of interest as a target analyte.

(5) *Treatment using a series of treatment processes.* In all cases where the wastewater provisions in this subpart allow or require the use of a treatment process to comply with emissions limitations, the owner or operator may use multiple treatment processes. The owner or operator complying with the requirements of § 63.1256(g)(7)(i), when wastewater is conveyed by hard-piping, shall comply with either paragraph (e)(2)(iii)(A)(5)(i) or (ii) of this section. The owner or operator complying with the requirements of § 63.1256(g)(7)(ii) shall comply with the requirements of paragraph (e)(2)(iii)(A)(5)(ii) of this section.

(i) The owner or operator shall conduct the performance test across each series of treatment processes. For each series of treatment processes, inlet concentration and flow rate shall be measured either where the wastewater enters the first treatment process in a series of treatment processes, or prior to the first treatment process as specified in paragraph (e)(2)(iii)(A)(6) of this section. For each series of treatment processes, outlet concentration and flow rate shall be measured where the wastewater exits the last treatment process in the series of treatment processes, except when the last treatment process is an open or a closed aerobic biological treatment process demonstrating compliance by using the procedures in paragraphs (e)(2)(iii)(E) or (F) of this section. When the last treatment process is either an open or a closed aerobic biological treatment process demonstrating compliance by using the procedures in paragraphs (e)(2)(iii)(E) or (F) of this section, inlet and outlet concentrations and flow rates shall be measured at the inlet and outlet to the series of treatment processes prior to the biological treatment process and at the inlet to the biological treatment process, except as provided in

paragraph (e)(2)(iii)(A)(6)(ii) of this section. The mass flow rate destroyed in the biological treatment process for which compliance is demonstrated using paragraph (e)(2)(iii)(E) or (F) of this section shall be added to the mass flow rate removed or destroyed in the series of treatment units before the biological treatment unit. This sum shall be used to calculate the overall control efficiency.

(ii) The owner or operator shall conduct the performance test across each treatment process in the series of treatment processes. The mass flow rate removed or destroyed by each treatment process shall be added together and the overall control efficiency calculated to determine whether compliance has been demonstrated using paragraphs (e)(2)(iii)(C), (D), (E), (F), or (G) of this section, as applicable. If a biological treatment process is one of the treatment processes in the series of treatment processes, the inlet to the biological treatment process shall be the point at which the wastewater enters the biological treatment process, or the inlet to the equalization tank if all the criteria of paragraph (e)(2)(iii)(A)(6)(ii) of this section are met.

(6) The owner or operator determining the inlet for purposes of demonstrating compliance with paragraph (e)(2)(iii)(E), or (F) of this section may elect to comply with paragraph (e)(2)(iii)(A)(6)(i) or (ii) of this section.

(i) When wastewater is conveyed exclusively by hard-piping from the point of determination to a treatment process that is either the only treatment process or the first in a series of treatment processes (i.e., no treatment processes or other waste management units are used upstream of this treatment process to store, handle, or convey the wastewater), the inlet to the treatment process shall be at any location from the point of determination to where the wastewater stream enters the treatment process. When samples are taken upstream of the treatment process and before wastewater streams have converged, the owner or operator shall ensure that the mass flow rate of all affected wastewater is accounted for when using § 63.1256(g)(8)(ii), (g)(9)(ii) or (g)(12) of this subpart to comply and that the mass flow rate of all wastewater, not just affected wastewater, is accounted for when using § 63.1256(g)(11) to comply, except as provided in paragraph (e)(2)(iii)(A)(4) of this section.

(ii) The owner or operator may consider the inlet to the equalization tank as the inlet to the biological treatment process if the wastewater is conveyed by hard-piping from either the

last previous treatment process or the point of determination to the equalization tank; or the wastewater is conveyed from the equalization tank exclusively by hard-piping to the biological treatment process and no treatment processes or other waste management units are used to store, handle, or convey the wastewater between the equalization tank and the biological treatment process; or the equalization tank is equipped with a fixed roof and a closed-vent system that routes emissions to a control device that meets the requirements of § 63.1256(b)(1)(i) through (iv) and § 63.1256(b)(2)(i). The outlet from the series of treatment processes prior to the biological treatment process is the point at which the wastewater exits the last treatment process in the series prior to the equalization tank, if the equalization tank and biological treatment process are part of a series of treatment processes. The owner or operator shall ensure that the mass flow rate of all affected wastewater is accounted for when using § 63.1256(g)(9)(ii) or (12) to comply and that the mass flow rate of all wastewater, not just affected wastewater is accounted for when using § 63.1256(g)(11) to comply, except as provided in paragraph (e)(2)(iii)(A)(4) of this section.

(B) *Noncombustion treatment process—concentration limits.* This paragraph applies to performance tests that are conducted to demonstrate compliance of a noncombustion treatment process with the ppmw wastewater stream concentration limits at the outlet of the treatment process. This compliance option is specified in § 63.1256(g)(8)(i) and (9)(i). Wastewater samples shall be collected using sampling procedures which minimize loss of organic compounds during sample collection and analysis and maintain sample integrity per paragraph (b)(10)(iii) of this section. Samples shall be collected and analyzed using the procedures specified in paragraphs (b)(10)(i), (ii), and (iii) of this section. Samples may be grab samples or composite samples. Samples shall be taken at approximately equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of three runs. Concentration measurements based on methods other than Method 305 may be adjusted by multiplying each concentration by the compound-specific Fm factor listed in Table 8 of this subpart. (For affected wastewater streams that contains both partially soluble and soluble HAP compounds, compliance is

demonstrated only if the sum of the concentrations of partially soluble HAP compounds is less than 50 ppmw, and the sum of the concentrations of soluble HAP compounds is less than 520 ppmw.)

(C) *Noncombustion, nonbiological treatment process: percent mass removal/destruction option.* This paragraph applies to performance tests that are conducted to demonstrate compliance of a noncombustion, nonbiological treatment process with the percent mass removal limits specified in § 63.1256(g)(8)(ii) and (9)(ii) for partially soluble and soluble HAP compounds, respectively. The owner or operator shall comply with the requirements specified in paragraphs (e)(2)(iii)(C)(1) through (5) of this section.

(1) *Concentration.* The concentration of partially soluble and/or soluble HAP

compounds entering and exiting the treatment process shall be determined as provided in this paragraph.

Wastewater samples shall be collected using sampling procedures which minimize loss of organic compounds during sample collection and analysis and maintain sample integrity per paragraph (b)(10)(v) of this section. The method shall be an analytical method for wastewater which has the compound of interest as a target analyte. Samples may be grab samples or composite samples. Samples shall be taken at approximately equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of three runs. Concentration measurements based on Method 305 shall be adjusted by dividing each concentration by the compound-specific Fm factor listed in Table 8 of this

subpart. Concentration measurements based on methods other than Method 305 shall not be adjusted by the compound-specific Fm factor listed in Table 8 of this subpart.

(2) *Flow rate.* The flow rate of the entering and exiting wastewater streams shall be determined using inlet and outlet flow meters, respectively. Where the outlet flow is not greater than the inlet flow, a single flow meter may be used, and may be used at either the inlet or outlet. Flow rate measurements shall be taken at the same time as the concentration measurements.

(3) *Calculation of mass flow rate—for noncombustion, nonbiological treatment processes.* The mass flow rates of partially soluble and/or soluble HAP compounds entering and exiting the treatment process are calculated using Equations 44 and 45 of this subpart.

$$QMW_a = \frac{\rho}{p * 10^6} \left(\sum_{k=1}^p (Q_{a,k} * C_{T,a,k}) \right) \quad (\text{Eq. 44})$$

$$QMW_b = \frac{\rho}{p * 10^6} \left(\sum_{k=1}^p (Q_{b,k} * C_{T,b,k}) \right) \quad (\text{Eq. 45})$$

Where:

QMW_a, QMW_b = mass flow rate of partially soluble or soluble HAP compounds, average of all runs, in wastewater entering (QMW_a) or exiting (QMW_b) the treatment process, kg/hr

P = density of the wastewater, kg/m³

$Q_{a,k}, Q_{b,k}$ = volumetric flow rate of wastewater entering ($Q_{a,k}$) or exiting ($Q_{b,k}$) the treatment process during each run k , m³/hr

$C_{T,a,k}, C_{T,b,k}$ = total concentration of partially soluble or soluble HAP compounds in wastewater entering ($C_{T,a,k}$) or exiting ($C_{T,b,k}$) the treatment process during each run k , ppmw

p = number of runs

k = identifier for a run

10^6 = conversion factor, mg/kg

(4) *Percent removal calculation for mass flow rate.* The percent mass removal across the treatment process shall be calculated as follows:

$$E = \frac{QMW_a - QMW_b}{QMW_a} * 100 \quad (\text{Eq. 46})$$

Where:

E = removal or destruction efficiency of the treatment process, percent

QMW_a, QMW_b = mass flow rate of partially soluble or soluble HAP compounds in wastewater entering (QMW_a) and exiting (QMW_b) the treatment process, kg/hr (as calculated using Equations 44 and 45 of this subpart)

(5) *Compare mass removal efficiency to required efficiency.* Compare the mass removal efficiency (calculated in Equation 44 of this subpart) to the required efficiency as specified in § 63.1256(g)(8)(ii) or (9)(ii). If complying with § 63.1256(g)(8)(ii), compliance is demonstrated if the mass removal efficiency is 99 percent or greater. If complying with § 63.1256(g)(9)(ii), compliance is demonstrated if the mass removal efficiency is 90 percent or greater.

(D) *Combustion treatment processes: percent mass removal/destruction option.* This paragraph applies to performance tests that are conducted to demonstrate compliance of a combustion treatment process with the percent mass destruction limits specified in § 63.1256(g)(8)(ii) for partially soluble HAP compounds, and/or § 63.1256(g)(9)(ii) for soluble HAP compounds. The owner or operator shall comply with the requirements

specified in paragraphs (e)(2)(iii)(D)(1) through (8) of this section.

(1) *Concentration in wastewater stream entering the combustion treatment process.* The concentration of partially soluble and/or soluble HAP compounds entering the treatment process shall be determined as provided in this paragraph. Wastewater samples shall be collected using sampling procedures which minimize loss of organic compounds during sample collection and analysis and maintain sample integrity per paragraph (b)(10)(v) of this section. The method shall be an analytical method for wastewater which has the compound of interest as a target analyte. Samples may be grab samples or composite samples. Samples shall be taken at approximately equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of three runs. Concentration measurements based on Method 305 of appendix A of this part shall be adjusted by dividing each concentration by the compound-specific Fm factor listed in Table 8 of this subpart. Concentration measurements based on methods other than Method 305 shall not be adjusted by the compound-specific Fm factor listed in Table 8 of this subpart.

(2) *Flow rate of wastewater entering the combustion treatment process.* The flow rate of the wastewater stream entering the combustion treatment process shall be determined using an inlet flow meter. Flow rate

measurements shall be taken at the same time as the concentration measurements.

(3) *Calculation of mass flow rate in wastewater stream entering combustion treatment processes.* The mass flow rate

of partially soluble and/or soluble HAP compounds entering the treatment process is calculated as follows:

$$QMW_a = \frac{\rho}{p * 10^6} \left(\sum_{k=1}^p (Q_{a,k} * C_{T,a,k}) \right) \quad (\text{Eq. 47})$$

Where:

QMW_a = mass flow rate of partially soluble or soluble HAP compounds entering the combustion unit, kg/hr
 ρ = density of the wastewater stream, kg/m³

Q_{a,k} = volumetric flow rate of wastewater entering the combustion unit during run k, m³/hr

C_{T,a,k} = total concentration of partially soluble or soluble HAP compounds in the wastewater stream entering the combustion unit during run k, ppmw

p = number of runs

k = identifier for a run

(4) *Concentration in vented gas stream exiting the combustion treatment*

process. The concentration of partially soluble and/or soluble HAP compounds (or TOC) exiting the combustion treatment process in any vented gas stream shall be determined as provided in this paragraph. Samples may be grab samples or composite samples. Samples shall be taken at approximately equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of three runs. Concentration measurements shall be determined using Method 18 of 40 CFR part 60, appendix A. Alternatively, any other test method validated according to the procedures in Method 301 of appendix A of this part may be used.

(5) *Volumetric flow rate of vented gas stream exiting the combustion treatment process.* The volumetric flow rate of the vented gas stream exiting the combustion treatment process shall be determined using Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A, as appropriate. Volumetric flow rate measurements shall be taken at the same time as the concentration measurements.

(6) *Calculation of mass flow rate of vented gas stream exiting combustion treatment processes.* The mass flow rate of partially soluble and/or soluble HAP compounds in a vented gas stream exiting the combustion treatment process shall be calculated as follows:

$$QMG_b = K_2 * \left(\sum_{i=1}^n (CG_{b,i} * MW_i) \right) * QG_b \quad (\text{Eq. 48})$$

where:

QMG_b = mass rate of TOC (minus methane and ethane) or total partially soluble and/or soluble HAP, in vented gas stream, exiting (QMG_b) the combustion device, dry basis, kg/hr

CG_{b,i} = concentration of TOC (minus methane and ethane) or total partially soluble and/or soluble HAP, in vented gas stream, exiting (CG_{b,i}) the combustion device, dry basis, ppmv

MW_i = molecular weight of a component, kilogram/kilogram-mole

QG_b = flow rate of gas stream exiting (QG_b) the combustion device, dry standard cubic meters per hour

K₂ = constant, 41.57 x 10⁻⁹ (parts per million)⁻¹ (gram-mole per standard cubic meter) (kilogram/gram), where standard temperature (gram-mole per standard cubic meter) is 20°C

i = identifier for a compound

n = number of components in the sample

(7) *Destruction efficiency calculation.* The destruction efficiency of the

combustion unit for partially soluble and/or soluble HAP compounds shall be calculated as follows:

$$E = \frac{QMW_a - QMG_b}{QMW_a} * 100 \quad (\text{Eq. 49})$$

Where:

E = destruction efficiency of partially soluble or soluble HAP compounds for the combustion unit, percent

QMW_a = mass flow rate of partially soluble or soluble HAP compounds entering the combustion unit, kg/hr

QMG_b = mass flow rate of TOC (minus methane and ethane) or partially soluble and/or soluble HAP compounds in vented gas stream exiting the combustion treatment process, kg/hr

(8) *Compare mass destruction efficiency to required efficiency.* Compare the mass destruction efficiency (calculated in Equation 49 of this subpart) to the required efficiency as specified in § 63.1256(g) (8) (ii) or (g) (9) (ii). If complying with § 63.1256(g) (8) (ii), compliance is demonstrated if the mass destruction efficiency is 99 percent or greater. If complying with § 63.1256(g) (9) (ii),

compliance is demonstrated if the mass destruction efficiency is 90 percent or greater.

(E) *Open or closed aerobic biological treatment processes: 95-percent mass destruction option.* This paragraph applies to performance tests that are conducted for open or closed aerobic biological treatment processes to demonstrate compliance with the 95-percent mass destruction provisions in § 63.1256(g) (11) for partially soluble and/or soluble HAP compounds.

(1) *Concentration in wastewater stream.* The concentration of partially soluble and/or soluble HAP as provided in this paragraph. Concentration measurements to determine E shall be taken as provided in paragraph (e) (2) (iii) (A) (5) of this section for a series of treatment processes. Wastewater samples shall be collected using sampling procedures which minimize loss of organic compounds during sample collection and analysis and maintain sample integrity per paragraph (b) (10) (v) of this section. The method shall be an analytical method for wastewater which has the compound of interest as a target analyte. Samples may

be grab samples or composite samples. Samples shall be taken at approximately equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of three runs. Concentration measurements based on Method 305 shall be adjusted by dividing each concentration by the compound-specific Fm factor listed in Table 8 of this subpart. Concentration measurements based on methods other than Method 305 shall not be adjusted by the compound-specific Fm factor listed in Table 8 of this subpart.

(2) *Flow rate.* Flow rate measurements to determine E shall be taken as provided in paragraph (e)(2)(iii)(A)(5) of this section for a series of treatment processes. Flow rate shall be determined using inlet and outlet flow measurement

devices. Where the outlet flow is not greater than the inlet flow, a single flow measurement device may be used, and may be used at either the inlet or outlet. Flow rate measurements shall be taken at the same time as the concentration measurements.

(3) *Destruction efficiency.* The owner or operator shall comply with the provisions in either paragraph (e)(2)(iii)(E)(3)(i), (ii) or (iii) of this section. Compliance is demonstrated if the destruction efficiency, E, is equal to or greater than 95 percent.

(i) If the performance test is performed across the open or closed biological treatment system only, compliance is demonstrated if E is equal to F_{bio} , where E is the destruction efficiency of partially soluble and/or soluble HAP compounds and F_{bio} is the site-specific

fraction of partially soluble and/or soluble HAP compounds biodegraded. F_{bio} shall be determined as specified in paragraph (e)(2)(iii)(E)(4) of this section and appendix C of subpart G of this part.

(ii) If compliance is being demonstrated in accordance with paragraphs (e)(2)(iii)(A)(5)(i) or (ii) of this section, the removal efficiency shall be calculated using Equation 49 of this subpart. When complying with paragraph (e)(2)(iii)(A)(5)(i) of this section, the series of nonbiological treatment processes comprise one treatment process segment. When complying with paragraph (e)(2)(iii)(A)(5)(ii) of this section, each nonbiological treatment process is a treatment process segment.

$$E = \frac{\text{Nonbiotreatment HAP load removal} + \text{Biotreatment HAP load removal}}{\text{Total influent HAP load}} = \frac{\left(\sum_{i=1}^n (QMW_{a,i} - QMW_{b,i}) \right) + QMW_{bio} * F_{bio}}{QMW_{all}} \quad (\text{Eq. 50})$$

Where:

$QMW_{a,i}$ = the soluble and/or partially soluble HAP load entering a treatment process segment

$QMW_{b,i}$ = the soluble and/or partially soluble HAP load exiting a treatment process segment

n = the number of treatment process segments

i = identifier for a treatment process element

QMW_{bio} = the inlet load of soluble and/or partially soluble HAP to the biological treatment process. The inlet is defined in accordance with paragraph (e)(2)(iii)(A)(6) of this section. If complying with paragraph (e)(2)(iii)(A)(6)(ii) of this section, QMW_{bio} is equal to $QMW_{b,n}$

F_{bio} = site-specific fraction of soluble and/or partially soluble HAP compounds biodegraded. F_{bio} shall be determined as specified in paragraph (e)(2)(iii)(E)(4) of this section and Appendix C of subpart G of this part.

QMW_{all} = the total soluble and/or partially soluble HAP load to be treated.

(4) *Site-specific fraction biodegraded (F_{bio}).* The procedures used to determine the compound-specific kinetic parameters for use in calculating F_{bio} differ for the compounds listed in Tables 2 and 3 of this subpart. An owner or operator shall calculate F_{bio} as specified in either paragraph (e)(2)(iii)(E)(4)(i) or (ii) of this section.

(i) For biological treatment processes that do not meet the definition for enhanced biological treatment in § 63.1251, the owner or operator shall determine the F_{bio} for the compounds in Tables 2 and 3 of this subpart using any of the procedures in appendix C to part 63, except procedure 3 (inlet and outlet concentration measurements). (The symbol " F_{bio} " represents the site-specific fraction of an individual partially soluble or soluble HAP compound that is biodegraded.)

(ii) If the biological treatment process meets the definition of "enhanced biological treatment process" in § 63.1251, the owner or operator shall determine F_{bio} for the compounds in Table 2 of this subpart using any of the procedures specified in appendix C to part 63. The owner or operator shall calculate F_{bio} for the compounds in Table 3 of this subpart using the defaults for first order biodegradation rate constants (K_1) in Table 9 of this subpart and follow the procedure explained in Form III of appendix C, 40 CFR part 63, or any of the procedures specified in appendix C of 40 CFR part 63.

(F) *Open or closed aerobic biological treatment processes: percent removal for partially soluble or soluble HAP compounds.* This paragraph applies to the use of performance tests that are conducted for open or closed aerobic biological treatment processes to demonstrate compliance with the percent removal provisions for either

partially soluble HAP compounds in § 63.1256(g)(8)(ii) or soluble HAP compounds in § 63.1256(g)(9)(ii) or (g)(12). The owner or operator shall comply with the provisions in paragraph (e)(2)(iii)(E) of this section, except that compliance with § 63.1256(g)(8)(ii) shall be demonstrated when E is equal to or greater than 99 percent, compliance with § 63.1256(g)(9)(ii) shall be demonstrated when E is equal to or greater than 90 percent, and compliance with § 63.1256(g)(12) shall be demonstrated when E is equal to or greater than 99 percent.

(G) *Closed biological treatment processes: percent mass removal option.* This paragraph applies to the use of performance tests that are conducted for closed biological treatment processes to demonstrate compliance with the percent removal provisions in §§ 63.1256(g)(8)(ii), (g)(9)(ii), (g)(11), or (g)(12). The owner or operator shall comply with the requirements specified in paragraphs (e)(2)(iii)(C)(1) through (4) of this section.

(I) Comply with the procedures specified in paragraphs (e)(2)(iii)(C)(1) through (3) of this section to determine characteristics of the wastewater entering the biological treatment unit, except that the term "partially soluble and/or soluble HAP" shall mean "soluble HAP" for the purposes of this section if the owner or operator is complying with § 63.1256(g)(9)(ii) or (g)(12), and it shall mean "partially

soluble HAP" if the owner or operator is complying with § 63.1256(g)(8)(ii).

(2) Comply with the procedures specified in paragraphs (e)(2)(iii)(D) (4) through (6) of this section to determine the characteristics of gas vent streams exiting a control device, with the differences noted in paragraphs (e)(2)(iii)(C)(3) (j) and (i) of this section.

(j) The term "partially soluble and/or soluble HAP" shall mean "soluble HAP" for the purposes of this section if the owner or operator is complying with § 63.1256(g)(9)(ii) or (g)(12), and it shall mean "partially soluble HAP" if the owner or operator is complying with § 63.1256(g)(8)(ii).

(ii) The term "combustion treatment process" shall mean "control device" for the purposes of this section.

(3) *Percent removal/destruction calculation.* The percent removal and destruction across the treatment unit and any control device(s) shall be calculated using Equation 51 of this subpart:

$$E = \frac{(QMW_a - (QMW_b + QMG_b))}{QMW_a} \quad (\text{Eq. 51})$$

Where:

E = removal and destruction efficiency of the treatment unit and control device(s), percent

QMW_a, QMW_b = mass flow rate of partially soluble or soluble HAP compounds in wastewater entering (QMW_a) and exiting (QMW_b) the treatment process, kilograms per hour (as calculated using Equations WW1 and WW2)

QMG_b = mass flow rate of partially soluble or soluble HAP compounds in vented gas stream exiting the combustion treatment process, kg/hr

(4) *Compare mass removal/destruction efficiency to required efficiency.* Compare the mass removal/destruction efficiency (calculated using Equation 51 of this subpart) to the required efficiency as specified in § 63.1256(g)(8)(ii), (g)(9)(ii), (g)(11), or (g)(12). If complying with § 63.1256(g)(8)(ii), compliance is demonstrated if the mass removal/destruction is 99 percent or greater. If complying with § 63.1256(g)(9)(ii), compliance is demonstrated if the mass removal/destruction efficiency is 90 percent or greater. If complying with § 63.1256(g)(11), compliance is demonstrated if the mass removal/destruction efficiency is 95 percent or greater. If complying with § 63.1256(g)(12), compliance is demonstrated if the mass removal/destruction efficiency is 99 percent or greater.

(3) *Compliance with control device provisions.* Except as provided in paragraph (e)(3)(iv) of this section, an owner or operator shall demonstrate that each control device or combination of control devices achieves the appropriate conditions specified in § 63.1256(h)(2) by using one or more of the methods specified in paragraphs (e)(3)(i), (ii), or (iii) of this section.

(i) *Performance test for control devices other than flares.* This

paragraph applies to performance tests that are conducted to demonstrate compliance of a control device with the efficiency limits specified in § 63.1256(h)(2). If complying with the 95-percent reduction efficiency requirement, comply with the requirements specified in paragraphs (e)(3)(i) (A) through (J) of this section. If complying with the 20 ppm by volume requirement, comply with the requirements specified in paragraphs (e)(3)(i) (A) through (G) and (e)(3)(i) (J) of this section.

(A) *General.* The owner or operator shall comply with the general performance test provisions in paragraphs (e)(2)(iii)(A) (1) through (4) of this section, except that the term "treatment unit" shall mean "control device" for the purposes of this section.

(B) *Sampling sites.* Sampling sites shall be selected using Method 1 or 1A of 40 CFR part 60, appendix A, as appropriate. For determination of compliance with the 95 percent reduction requirement, sampling sites shall be located at the inlet and the outlet of the control device. For determination of compliance with the 20 ppmv limit, the sampling site shall be located at the outlet of the control device.

(C) *Concentration in gas stream entering or exiting the control device.* The concentration of total organic HAP or TOC in a gas stream shall be determined as provided in this paragraph. Samples may be grab samples or composite samples (i.e., integrated samples). Samples shall be taken at approximately equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of three runs. Concentration measurements shall be determined using Method 18 of 40 CFR part 60, appendix A. Alternatively, any other test method validated according to the procedures in Method 301 of appendix A of this part may be used.

(D) *Volumetric flow rate of gas stream entering or exiting the control device.*

The volumetric flow rate of the gas stream shall be determined using Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A, as appropriate. Volumetric flow rate measurements shall be taken at the same time as the concentration measurements.

(E) *Calculation of TOC concentration.* The owner or operator shall compute TOC in accordance with the procedures in paragraph (a)(2) of this section.

(F) *Calculation of total organic HAP concentration.* The owner or operator determining compliance based on total organic HAP concentration shall compute the total organic HAP concentration in accordance with the provisions in paragraph (a)(2) of this section.

(G) *Requirements for combustion control devices.* If the control device is a combustion device, the owner or operator shall correct TOC and organic HAP concentrations to 3 percent oxygen in accordance with the provisions in paragraph (a)(3) of this section, and demonstrate initial compliance with the requirements for halogenated streams in accordance with paragraph (a)(6) of this section.

(H) *Mass rate calculation.* The mass rate of either TOC (minus methane and ethane) or total organic HAP for each sample run shall be calculated using the following equations. Where the mass rate of TOC is being calculated, all organic compounds (minus methane and ethane) measured by methods specified in paragraph (e)(3)(i)(C) of this section are summed using Equations 52 and 53 of this subpart. Where the mass rate of total organic HAP is being calculated, only soluble and partially soluble HAP compounds shall be summed using Equations 52 and 53.

$$QMG_a = K_2 * \left(\sum_{i=1}^n (CG_{a,i}) * (MW_i) \right) * QG_a \quad (\text{Eq. 52})$$

$$QMG_b = K_2 * \left(\sum_{i=1}^n (CG_{b,i}) * (MW_i) \right) * QG_b \quad (\text{Eq. 53})$$

Where:

$CG_{a,i}$, $CG_{b,i}$ = concentration of TOC or total organic HAP, in vented gas stream, entering ($CG_{a,i}$) and exiting ($CG_{b,i}$) the control device, dry basis, ppmv

QMG_a , QMG_b = mass rate of TOC or total organic HAP, in vented gas stream, entering (QMG_a) and exiting (QMG_b) the control device, dry basis, kg/hr

M_{wi} = molecular weight of a component, kilogram/kilogram-mole

QG_a , QG_b = flow rate of gas stream entering (QG_a) and exiting (QG_b) the control device, dry standard cubic meters per hour

K_2 = constant, 41.57×10^{-9} (parts per million)⁻¹ (gram-mole per standard cubic meter) (kilogram/gram), where standard temperature (gram-mole per standard cubic meter) is 20°C

i = identifier for a compound

n = number of components in the sample

(I) *Percent reduction calculation.* The percent reduction in TOC or total organic HAP for each sample run shall be calculated using Equation 54 of this subpart:

$$E = \frac{QMG_a - QMG_b}{QMG_a} (100\%) \quad (\text{Eq. 54})$$

where:

E = destruction efficiency of control device, percent

QMG_a , QMG_b = mass rate of TOC or total organic HAP, in vented gas stream entering and exiting (QMG_b) the control device, dry basis, kilograms per hour

(J) *Compare mass destruction efficiency to required efficiency.* If complying with the 95-percent reduction efficiency requirement, compliance is demonstrated if the mass destruction efficiency (calculated in Equation 51 of this subpart) is 95

percent or greater. If complying with the 20 ppmv limit, compliance is demonstrated if the outlet TOC concentration is 20 ppmv, or less.

(ii) *Design evaluation.* A design evaluation conducted in accordance with the provisions in paragraph (a)(1) of this section. Compounds that meet the requirements specified in paragraph (e)(2)(iii)(A)(4) of this section are not required to be included in the design evaluation.

(iii) *Compliance demonstration for flares.* When a flare is used to comply with § 63.1256(h), the owner or operator shall comply with the flare provisions in § 63.11(b). An owner or operator is not required to conduct a performance test to determine percent emission reduction or outlet organic HAP or TOC concentration when a flare is used.

(iv) *Exemptions from compliance demonstrations.* An owner or operator using any control device specified in paragraph (a)(4) of this section is exempt from the requirements in paragraphs (e)(3)(i) through (e)(3)(iii) of this section and from the requirements in § 63.6(f).

(f) *Pollution prevention alternative standard.* The owner or operator shall demonstrate compliance with § 63.1252(e)(2) using the procedures described in paragraph (f)(1) and (f)(3) of this section. The owner or operator shall demonstrate compliance with § 63.1252(e)(3) using the procedures described in paragraphs (f)(2) and (f)(3) of this section.

(1) Compliance is demonstrated when the annual kg/kg factor, calculated according to the procedure in paragraphs (f)(1)(i) and (iii) of this section, is reduced by at least 75 percent as calculated according to the procedure in paragraph (f)(1)(i) and (ii) of this section.

(i) The production-indexed HAP consumption factors shall be calculated

by dividing annual consumption of total HAP by the annual production rate, per process. The production-indexed total VOC consumption factor shall be calculated by dividing annual consumption of total VOC by the annual production rate, per process.

(ii) The baseline factor is calculated from yearly production and consumption data for the first 3-year period in which the PMPU was operational, beginning no earlier than the 1987 calendar year, or for a minimum period of 12 months from startup of the process until the present in which the PMPU was operational and data are available, beginning no earlier than the 1987 calendar year.

(iii) The annual factor is calculated on the following bases:

(A) For continuous processes, the annual factor shall be calculated every 30 days for the 12-month period preceding the 30th day (30-day rolling average).

(B) For batch processes, the annual factor shall be calculated every 10 batches for the 12-month period preceding the 10th batch (10-batch rolling average). The annual factor shall be calculated every 5 batches if the number of batches is less than 10 for the 12-month period preceding the 10th batch and shall be calculated every year if the number of batches is less than 5 for the 12-month period preceding the 5th batch.

(2) Compliance is demonstrated when the requirements of paragraphs (f)(2)(i) through (iv) of this section are met.

(i) The annual kg/kg factor, calculated according to the procedure in paragraphs (f)(1)(i) and (f)(1)(iii) of this section, is reduced to a value equal to or less than 50 percent of the baseline factor calculated according to the procedure in paragraphs (f)(1)(i) and (ii) of this section.

(ii) The yearly reductions associated with add-on controls that meet the criteria of §§ 63.1252(h)(3)(ii)(A) through (D) must be equal to or greater than the amounts calculated in paragraphs (f)(2)(ii)(A) and (B) of this section:

(A) The mass of HAP calculated using Equation 55 of this subpart:

$$[\text{kg reduced}]_a = [\text{kg/kg}]_b(0.75 - P_R)[\text{kg produced}]_a \quad (\text{Eq. 55})$$

Where:

$[\text{kg/kg}]_b$ = the baseline production-indexed HAP consumption factor, in kg/kg

$[\text{kg produced}]_a$ = the annual HAP production rate, in kg/yr

$[\text{kg reduced}]_a$ = the annual reduction required by add-on controls, in kg/yr

P_R = the fractional reduction in the annual kg/kg factor achieved using pollution prevention where P_R is ≥ 0.5

(B) The mass of VOC calculated using Equation 56 of this subpart:

$$\text{VOC}_{\text{reduced}} = (\text{VF}_{\text{base}} - \text{VF}_P - \text{VF}_{\text{annual}}) \times M_{\text{prod}} \quad (\text{Eq. 56})$$

Where:

$\text{VOC}_{\text{reduced}}$ = required VOC emission reduction from add-on controls, kg/yr

VF_{base} = baseline VOC factor, kg VOC emitted/kg production

VF_P = reduction in VOC factor achieved by pollution prevention, kg VOC emitted/kg production

$\text{VF}_{\text{annual}}$ = target annual VOC factor, kg VOC emitted/kg production

M_{prod} = production rate, kg/yr

(iii) Demonstration that the criteria in § 63.1252(e)(3)(ii)(A) through (D) are met shall be accomplished through a description of the control device and of the material streams entering and exiting the control device.

(iv) The annual reduction achieved by the add-on control shall be quantified using the methods described in § 63.1257(d).

(3) Each owner or operator of a PMPU complying with the P2 standard shall prepare a P2 demonstration summary that shall contain, at a minimum, the following information:

(i) Descriptions of the methodologies and forms used to measure and record daily consumption of HAP compounds reduced as part of the P2 standard.

(ii) Descriptions of the methodologies and forms used to measure and record daily production of products which are included in the P2 standard.

(iii) Supporting documentation for the descriptions provided in paragraphs (f)(3)(i) and (ii) including, but not limited to, operator log sheets and copies of daily, monthly, and annual inventories of materials and products.

(g) *Compliance with storage tank provisions by using emissions averaging.*

An owner or operator with two or more affected storage tanks may demonstrate compliance with § 63.1253, as applicable, by fulfilling the requirements of paragraphs (g)(1) through (4) of this section.

(1) The owner or operator shall develop and submit for approval an Implementation Plan containing all the information required in § 63.1259(e) 6 months prior to the compliance date of the standard. The Administrator shall have 90 days to approve or disapprove the emissions averaging plan after which time the plan shall be considered approved.

(2) The annual mass rate of total organic HAP (E_{Ti} , E_{To}) shall be calculated for each storage tank included in the emissions average using the procedures specified in paragraph (c)(1), (2), or (3) of this section.

(3) Equations 57 and 58 of this subpart shall be used to calculate total HAP emissions for those tanks subject to § 63.1253(b) or (c):

$$E_{Ti} = \sum_{j=1}^n E_{ij} \quad (\text{Eq. 57})$$

$$E_{To} = \sum_{j=1}^n E_{oj} \quad (\text{Eq. 58})$$

Where:

E_{ij} = yearly mass rate of total HAP at the inlet of the control device for tank j

E_{oj} = yearly mass rate of total HAP at the outlet of the control device for tank j

E_{Ti} = total yearly uncontrolled HAP emissions

E_{To} = total yearly actual HAP emissions

n = number of tanks included in the emissions average

(4) The overall percent reduction efficiency shall be calculated as follows:

$$R = \frac{E_{Ti} - D E_{To}}{E_{Ti}} 100\% \quad (\text{Eq. 59})$$

where:

R = overall percent reduction efficiency

D = discount factor = 1.1 for all controlled storage tanks

(h) *Compliance with process vent provisions by using emissions averaging.*

An owner or operator with two or more affected processes complying with § 63.1254 by using emissions averaging shall demonstrate compliance with paragraphs (h)(1), (2) and (3) of this section.

(1) The owner or operator shall develop and submit for approval an Implementation Plan at least 6 months prior to the compliance date of the standard containing all the information required in § 63.1259(e). The Administrator shall have 90 days to approve or disapprove the emissions averaging plan. The plan shall be considered approved if the Administrator either approves the plan in writing, or fails to disapprove the plan in writing. The 90-day period shall begin when the Administrator receives the request. If the request is denied, the owner or operator must still be in compliance with the standard by the compliance date.

(2) Owners or operators shall calculate uncontrolled and controlled emissions of HAP by using the methods specified in paragraph (d)(2) and (3) of this section for each process included in the emissions average.

(i) Equations 60 and 61 of this subpart shall be used to calculate total HAP emissions:

$$E_{TU} = \sum_{j=1}^n E_{Uj} \quad (\text{Eq. 60})$$

where:

E_{Uj} = yearly uncontrolled emissions from process I

E_{Ci} = yearly actual emissions for process I

E_{TU} = total yearly uncontrolled emissions

E_{TC} = total yearly actual emissions

n = number of processes included in the emissions average

(3) The overall percent reduction efficiency shall be calculated using Equation 62 of this subpart:

$$E_{TC} = \sum_{j=1}^n E_{Ci} \quad (\text{Eq. 61})$$

$$R = \frac{E_{TU} - D E_{TC}}{E_{TU}} (100\%) \quad (\text{Eq. 62})$$

where:

R = overall percent reduction efficiency
D = discount factor = 1.1 for all controlled emission points

§ 63.1258 Monitoring Requirements.

(a) The owner or operator of any existing, new, or reconstructed affected source shall provide evidence of continued compliance with the standard as specified in this section. During the initial compliance demonstration, maximum or minimum operating parameter levels, as appropriate, shall be established for emission sources that will indicate the source is in compliance. Test data, calculations, or information from the evaluation of the control device design shall be used to establish the operating parameter level.

(b) *Monitoring for control devices.* (1) *Parameters to monitor.* Except as specified in paragraph (b)(1)(i) of this section, for each control device, the owner or operator shall install and operate monitoring devices and operate within the established parameter levels to ensure continued compliance with the standard. Monitoring parameters are specified for control scenarios in Table 4 of this subpart and in paragraphs (b)(1)(ii) through (xi) of this section.

(i) *Periodic verification.* For control devices that control vent streams totaling less than 1 ton/yr HAP emissions, before control, monitoring shall consist of a daily verification that the device is operating properly. If the control device is used to control batch process vents alone or in combination with other streams, the verification may be on a per batch basis. This verification shall include, but not be limited to, a daily or per batch demonstration that the unit is working as designed and may include the daily measurements of the parameters described in (b)(1)(ii) through (x) of this section. This demonstration shall be included in the Precompliance report, to be submitted 6 months prior to the compliance date of the standard.

(ii) *Scrubbers.* For affected sources using liquid scrubbers, the owner or operator shall establish a minimum scrubber liquid flow rate or pressure drop as a site-specific operating parameter which must be measured and recorded every 15 minutes during the period in which the scrubber is functioning in achieving the HAP

removal required by this subpart. If the scrubber uses a caustic solution to remove acid emissions, the owner or operator shall establish a minimum pH of the effluent scrubber liquid as a site-specific operating parameter which must be monitored at least once a day. The minimum scrubber flowrate or pressure drop shall be based on the conditions anticipated under worst-case conditions, as defined in § 63.1257(b)(8)(i).

(A) The monitoring device used to determine the pressure drop shall be certified by the manufacturer to be accurate to within a gage pressure of ± 10 percent of the maximum pressure drop measured.

(B) The monitoring device used for measurement of scrubber liquid flowrate shall be certified by the manufacturer to be accurate within ± 10 percent of the design scrubber liquid flowrate.

(C) The monitoring device shall be calibrated annually.

(iii) *Condensers.* For each condenser, the owner or operator shall establish the maximum condenser outlet gas temperature as a site-specific operating parameter which must be measured and recorded at least every 15 minutes during the period in which the condenser is functioning in achieving the HAP removal required by this subpart.

(A) The temperature monitoring device must be accurate to within ± 2 percent of the temperature measured in degrees Celsius or $\pm 2.5^\circ\text{C}$, whichever is greater.

(B) The temperature monitoring device must be calibrated annually.

(iv) *Regenerative carbon adsorbers.* For each regenerative carbon adsorber, the owner or operator shall comply with the provisions in paragraphs (b)(1)(iv)(A) through (F) of this section.

(A) Establish the regeneration cycle characteristics specified in paragraphs (b)(1)(iv)(A)(1) through (4) of this section under worst-case conditions, as defined in § 63.1257(b)(8)(i).

(1) Minimum regeneration frequency (i.e., operating time since last regeneration);

(2) Minimum temperature to which the bed is heated during regeneration;

(3) Maximum temperature to which the bed is cooled, measured within 15 minutes of completing the cooling phase; and

(4) Minimum regeneration stream flow.

(B) Monitor and record the regeneration cycle characteristics specified in paragraphs (b)(1)(iv)(B)(1) through (4) of this section for each regeneration cycle.

(1) Regeneration frequency (operating time since end of last regeneration);

(2) Temperature to which the bed is heated during regeneration;

(3) Temperature to which the bed is cooled, measured within 15 minutes of the completion of the cooling phase; and

(4) Regeneration stream flow.

(C) Use a temperature monitoring device that is accurate to within ± 2 percent of the temperature measured in degrees Celsius or $\pm 2.5^\circ\text{C}$, whichever is greater.

(D) Use a regeneration stream flow monitoring device capable of recording the total regeneration stream flow to within ± 10 percent of the established value (i.e., accurate to within ± 10 percent of the reading).

(E) Calibrate the temperature and flow monitoring devices annually.

(F) Conduct an annual check for bed poisoning in accordance with manufacturer's specifications.

(v) *Nonregenerative carbon adsorbers.* For each nonregenerative carbon adsorber, the owner or operator shall establish and monitor the maximum time interval between replacement based on the conditions anticipated under worst-case, as defined in § 63.1257(b)(8)(i).

(vi) *Flares.* For each flare, the presence of the pilot flame shall be monitored every 15 minutes during the period in which the flare is functioning in achieving the HAP removal required by this subpart.

(vii) *Thermal incinerators.* For each thermal incinerator, the owner or operator shall establish the minimum temperature of the gases exiting the combustion chamber as the site-specific operating parameter which must be measured and recorded at least once every 15 minutes during the period in which the combustion device is functioning in achieving the HAP removal required by this subpart.

(A) The temperature monitoring device must be accurate to within ± 0.75 percent of the temperature measured in degrees Celsius or $\pm 2.5^\circ\text{C}$, whichever is greater.

(B) The monitoring device must be calibrated annually.

(viii) *Catalytic incinerators.* For each catalytic incinerator, the owner or operator shall monitor the temperature of the gas stream immediately before and after the catalyst bed. The owner or operator shall establish the minimum temperature of the gas stream immediately before the catalyst bed and the minimum temperature difference across the catalyst bed as the site-specific operating parameter which must be monitored and recorded at least

once every 15 minutes during the period in which the catalytic incinerator is functioning in achieving the HAP removal required by this subpart.

(A) The temperature monitoring devices must be accurate to within ± 0.75 percent of the temperature measured in degrees Celsius or ± 2.5 °C, whichever is greater.

(B) The temperature monitoring devices must be calibrated annually.

(ix) *Process heaters and boilers.* (A) Except as specified in paragraph (b)(1)(ix)(B) of this section, for each boiler or process heater, the owner or operator shall establish the minimum temperature of the gases exiting the combustion chamber as the site-specific operating parameter which must be monitored and recorded at least once every 15 minutes during the period in which the boiler or process heater is functioning in achieving the HAP removal required by this subpart.

(1) The temperature monitoring device must be accurate to within ± 0.75 percent of the temperature measured in degrees Celsius or ± 2.5 °C, whichever is greater.

(2) The temperature monitoring device must be calibrated annually.

(B) The owner or operator is exempt from the monitoring requirements specified in paragraph (b)(1)(ix)(A) of this section if either:

(1) All vent streams are introduced with primary fuel; or

(2) The design heat input capacity of the boiler or process heater is 44 megawatts or greater.

(x) *Continuous emission monitor.* As an alternative to the parameters specified in paragraphs (b)(1)(ii) through (ix) of this section, an owner or operator may monitor and record the outlet HAP concentration or both the outlet TOC concentration and outlet hydrogen halide and halogen concentration every 15 minutes during the period in which the control device is functioning in achieving the HAP removal required by this subpart. The owner or operator need not monitor the hydrogen halide and halogen concentration if, based on process knowledge, the owner or operator determines that the emission stream does not contain hydrogen halides or halogens. The HAP or TOC monitor must meet the requirements of Performance Specification 8 or 9 of appendix B of part 60 and must be installed, calibrated, and maintained, according to § 63.8. As part of the QA/QC Plan, calibration of the device must include, at a minimum, quarterly cylinder gas audits.

(xi) *CVS visual inspections.* The owner or operator shall perform monthly visual inspections of each

closed vent system as specified in § 63.1252(b).

(2) *Averaging periods.* Averaging periods for parametric monitoring levels shall be established according to paragraphs (b)(2)(i) through (iii) of this section.

(i) Except as provided in paragraph (b)(2)(iii) of this section, a daily (24-hour) or block average shall be calculated as the average of all values for a monitored parameter level set according to the procedures in (b)(3)(iii) of this section recorded during the operating day or block.

(ii) The operating day or block shall be defined in the Notification of Compliance Status report. The daily average may be from midnight to midnight or another continuous 24-hour period. The block average is limited to a period of time that is, at a maximum, equal to the time from the beginning to end of a batch process.

(iii) Monitoring values taken during periods in which the control devices are not functioning in controlling emissions, as indicated by periods of no flow, shall not be considered in the averages. Where flow to the device could be intermittent, the owner or operator shall install, calibrate and operate a flow indicator at the inlet or outlet of the control device to identify periods of no flow.

(3) *Procedures for setting parameter levels for control devices used to control emissions from process vents.* (i) *Small control devices.* Except as provided in paragraph (b)(1)(i) of this section, for devices controlling less than 10 tons per year of HAP for which a performance test is not required, the parametric levels shall be set based on the design evaluation required in § 63.1257(d)(3)(i). If a performance test is conducted, the monitoring parameter level shall be established according to the procedures in (b)(3)(ii) of this section.

(ii) *Large control devices.* For devices controlling greater than 10 tons per year of HAP for which a performance test is required, the parameter level must be established as follows:

(A) If the operating parameter level to be established is a maximum, it must be based on the average of the values from each of the three test runs.

(B) If the operating parameter level to be established is a minimum, it must be based on the average of the values from each of the three test runs.

(C) The owner or operator may establish the parametric monitoring level(s) based on the performance test supplemented by engineering assessments and manufacturer's recommendations. Performance testing is not required to be conducted over the

entire range of expected parameter values. The rationale for the specific level for each parameter, including any data and calculations used to develop the level(s) and a description of why the level indicates proper operation of the control device shall be provided in the Precompliance report. The procedures specified in this section have not been approved by the Administrator and determination of the parametric monitoring level using these procedures is subject to review and approval by the Administrator.

(iii) *Parameters for control devices controlling batch process vents.* For devices controlling batch process vents alone or in combination with other streams, the parameter level(s) shall be established in accordance with paragraph (b)(3)(iii)(A) or (B) of this section.

(A) If more than one batch emission episode has been selected to be controlled, a single level for the batch process(es) shall be determined from the initial compliance demonstration.

(B) Instead of establishing a single level for the batch process(es), as described in paragraph (b)(3)(iii)(A) of this section, an owner or operator may establish separate levels for each batch emission episode, selected to be controlled. If separate monitoring levels are established, the owner or operator must provide a record indicating at what point in the daily schedule or log of processes required to be recorded per the requirements of § 63.1259(b)(9) the parameter being monitored changes levels and must record at least one reading of the new parameter level, even if the duration of monitoring for the new parameter is less than 15-minutes.

(4) *Request approval to monitor alternative parameters.* An owner or operator may request approval to monitor parameters other than those required by paragraphs (b)(1)(ii) through (ix) of this section. The request shall be submitted according to the procedures specified in § 63.8(f) or included in the Precompliance report.

(5) *Monitoring for the alternative standards.* For control devices that are used to comply with the provisions of § 63.1253(d) or 63.1254(c), the owner or operator shall monitor and record the outlet TOC concentration and the outlet hydrogen halide and halogen concentration every 15 minutes during the period in which the device is functioning in achieving the HAP removal required by this subpart. A TOC monitor meeting the requirements of Performance Specification 8 or 9 of appendix B of part 60 shall be installed, calibrated, and maintained, according to § 63.8. The owner or operator need not

monitor the hydrogen halide and halogen concentration if, based on process knowledge, the owner or operator determines that the emission stream does not contain hydrogen halides or halogens.

(6) *Exceedances of operating parameters.* An exceedance of an operating parameter is defined as one of the following:

(i) If the parameter, averaged over the operating day or block, is below a minimum value established during the initial compliance demonstration.

(ii) If the parameter, averaged over the operating day or block, is above the maximum value established during the initial compliance demonstration.

(iii) Each loss of pilot flame for flares.

(7) *Excursions.* Excursions are defined by either of the two cases listed in paragraphs (b)(7)(i) or (ii) of this section.

(i) When the period of control device operation is 4 hours or greater in an operating day and monitoring data are insufficient to constitute a valid hour of data, as defined in paragraph (b)(7)(iii) of this section, for at least 75 percent of the operating hours.

(ii) When the period of control device operation is less than 4 hours in an operating day and more than one of the hours during the period of operation does not constitute a valid hour of data due to insufficient monitoring data.

(iii) Monitoring data are insufficient to constitute a valid hour of data, as used in paragraphs (b)(7)(i) and (ii) of this section, if measured values are unavailable for any of the required 15-minute periods within the hour.

(8) *Violations.* Exceedances of parameters monitored according to the provisions of paragraphs (b)(1)(ii) and (iv) through (ix) of this section or excursions as defined by paragraphs (b)(7)(i) through (iii) of this section constitute violations of the operating limit according to paragraphs (b)(8)(i), (ii), and (iv) of this section. Exceedances of the temperature limit monitored according to the provisions of paragraph (b)(1)(iii) of this section or exceedances of the outlet concentrations monitored according to the provisions of paragraph (b)(1)(x) of this section constitute violations of the emission limit according to paragraphs (b)(8)(i), (ii), and (iv) of this section. Exceedances of the outlet concentrations monitored according to the provisions of paragraph (b)(5) of this section constitute violations of the emission limit according to the provisions of paragraphs (b)(8)(iii) and (iv) of this section.

(i) Except as provided in paragraph (b)(8)(iv) of this section, for episodes occurring more than once per day,

exceedances of established parameter limits or excursions will result in no more than one violation per operating day for each monitored item of equipment utilized in the process.

(ii) Except as provided in paragraph (b)(8)(iv) of this section, for control devices used for more than one process in the course of an operating day, exceedances or excursions will result in no more than one violation per operating day, per control device, for each process for which the control device is in service.

(iii) Except as provided in paragraph (b)(8)(iv) of this section, exceedances of the 20 ppmv TOC outlet emission limit, averaged over the operating day, will result in no more than one violation per day per control device. Except as provided in paragraph (b)(8)(iv) of this section, exceedances of the 20 ppmv hydrogen halide or halogen outlet emission limit, averaged over the operating day, will result in no more than one violation per day per control device.

(iv) Periods of time when monitoring measurements exceed the parameter values as well as periods of inadequate monitoring data do not constitute a violation if they occur during a startup, shutdown, or malfunction, and the facility follows its startup, shutdown, and malfunction plan.

(c) *Monitoring for emission limits.* The owner or operator of any affected source complying with the provisions of § 63.1254(a)(1) shall demonstrate continuous compliance with the 2,000 lb/yr emission limits by calculating daily a 365-day rolling summation of emissions. For owners and operators opting to switch compliance strategy from the 93 percent control requirement to the 2,000 lb/yr compliance method, as described in § 63.1254(a), the rolling average must include emissions from the past 365 days. Each day that the total emissions per process exceeds 2,000 lb/yr will be considered a violation of the emission limit.

(d) *Monitoring for equipment leaks.* The owner or operator of any affected source complying with the requirements of § 63.1255 of this subpart shall meet the monitoring requirements described § 63.1255 of this subpart.

(e) *Pollution prevention.* The owner or operator of any affected source that chooses to comply with the requirements of §§ 63.1252(e)(2) and (3) shall calculate a yearly rolling average of kg HAP consumption per kg production and kg VOC consumption per kg production every month or every 10 batches. Each rolling average kg/kg factor that exceeds the value established

in § 63.1257(f)(1)(ii) will be considered a violation of the emission limit.

(f) *Emissions averaging.* The owner or operator of any affected source that chooses to comply with the requirements of § 63.1252(d) shall meet all monitoring requirements specified in paragraphs (b)(1) and (3) of this section, as applicable, for all processes and storage tanks included in the emissions average.

(g) *Inspection and monitoring of waste management units and treatment processes.* (1) For each wastewater tank, surface impoundment, container, individual drain system, and oil-water separator that receives, manages, or treats wastewater, a residual removed from wastewater, a recycled wastewater, or a recycled residual removed from wastewater, the owner or operator shall comply with the inspection requirements specified in Table 7 of this subpart.

(2) For each biological treatment unit used to comply with § 63.1256(g), the owner or operator shall monitor TSS, BOD, and the biomass concentration at a frequency approved by the permitting authority and using methods approved by the permitting authority. The owner or operator may request approval to monitor other parameters. The request shall be submitted in the Precompliance report according to the procedures specified in § 63.1260(e), and shall include a description of planned reporting and recordkeeping procedures. The owner or operator shall include as part of the submittal the basis for the selected monitoring frequencies and the methods that will be used. The Administrator will specify appropriate reporting and recordkeeping requirements as part of the review of the permit application or by other appropriate means.

(3) For nonbiological treatment units, the owner or operator shall request approval to monitor appropriate parameters that demonstrate proper operation of the selected treatment process. The request shall be submitted in the Precompliance report according to the procedures specified in § 63.1260(e), and shall include a description of planned reporting and recordkeeping procedures. The Administrator will specify appropriate reporting and recordkeeping requirements as part of the review of the permit application or by other appropriate means.

(h) *Leak inspection provisions for vapor suppression equipment.* (1) Except as provided in paragraph (h)(9) of this section, for each vapor collection system, closed-vent system, fixed roof, cover, or enclosure required to comply

with this section, the owner or operator shall comply with the requirements of paragraphs (h)(2) through (8) of this section.

(2) Except as provided in paragraphs (h)(6) and (7) of this section, each vapor collection system and closed-vent system shall be inspected according to the procedures and schedule specified in paragraphs (h)(2)(i) and (ii) of this section and each fixed roof, cover, and enclosure shall be inspected according to the procedures and schedule specified in paragraph (h)(2)(iii) of this section.

(i) If the vapor collection system or closed-vent system is constructed of hard-piping, the owner or operator shall:

(A) Conduct an initial inspection according to the procedures in paragraph (h)(3) of this section, and

(B) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

(ii) If the vapor collection system or closed-vent system is constructed of ductwork, the owner or operator shall:

(A) Conduct an initial inspection according to the procedures in paragraph (h)(3) of this section, and

(B) Conduct annual visual inspections according to the procedures in paragraph (h)(3) of this section.

(C) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

(iii) For each fixed roof, cover, and enclosure, the owner or operator shall:

(A) Conduct an initial inspection according to the procedures in paragraph (h)(3) of this section, and

(B) Conduct semiannual visual inspections for visible, audible, or olfactory indications of leaks.

(3) Each vapor collection system, closed-vent system, fixed roof, cover, and enclosure shall be inspected according to the procedures specified in paragraphs (h)(3)(i) through (v) of this section.

(i) Inspections shall be conducted in accordance with Method 21 of 40 CFR part 60, appendix A.

(ii) *Detection instrument performance criteria.* (A) Except as provided in paragraph (h)(3)(ii)(B) of this section, the detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the process fluid not each individual VOC in the stream. For process streams that contain nitrogen, air, or other inerts which are not organic HAP or VOC, the average stream response factor shall be calculated on an inert-free basis.

(B) If no instrument is available at the plant site that will meet the performance criteria specified in paragraph (h)(3)(ii)(A) of this section, the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis as described in paragraph (h)(3)(ii)(A) of this section.

(iii) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.

(iv) Calibration gases shall be as follows:

(A) Zero air (less than 10 parts per million hydrocarbon in air); and

(B) Mixtures of methane in air at a concentration less than 10,000 parts per million. A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in paragraph (h)(2)(ii)(A) of this section. In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.

(v) An owner or operator may elect to adjust or not adjust instrument readings for background. If an owner or operator elects to not adjust readings for background, all such instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If an owner or operator elects to adjust instrument readings for background, the owner or operator shall measure background concentration using the procedures in § 63.180(b) and (c). The owner or operator shall subtract background reading from the maximum concentration indicated by the instrument.

(vi) The background level shall be determined according to the procedures in Method 21 of 40 CFR part 60 appendix A.

(vii) The arithmetic difference between the maximum concentration indicated by the instrument and the background level shall be compared with 500 parts per million for determining compliance.

(4) Leaks, as indicated by an instrument reading greater than 500 parts per million above background or by visual inspections, shall be repaired as soon as practicable, except as provided in paragraph (h)(5) of this section.

(i) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(ii) Repair shall be completed no later than 15 calendar days after the leak is

detected, except as provided in paragraph (h)(4)(iii) of this section.

(iii) For leaks found in vapor collection systems used for transfer operations, repairs shall be completed no later than 15 calendar days after the leak is detected or at the beginning of the next transfer loading operation, whichever is later.

(5) Delay of repair of a vapor collection system, closed-vent system, fixed roof, cover, or enclosure for which leaks have been detected is allowed if the repair is technically infeasible without a shutdown, as defined in § 63.1251, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next shutdown.

(6) Any parts of the vapor collection system, closed-vent system, fixed roof, cover, or enclosure that are designated, as described in paragraph (h)(8)(i) of this section, as unsafe to inspect are exempt from the inspection requirements of paragraphs (h)(2)(i), (ii), and (iii) of this section if:

(i) The owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs (h)(2)(i), (ii), or (iii) of this section; and

(ii) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

(7) Any parts of the vapor collection system, closed-vent system, fixed roof, cover, or enclosure that are designated, as described in paragraph (h)(8)(ii) of this section, as difficult to inspect are exempt from the inspection requirements of paragraphs (h)(2)(i), (ii), and (iii)(A) of this section if:

(i) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(ii) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years.

(8) Records shall be maintained as specified in § 63.1259(i) (4) through (9).

(9) If a closed-vent system subject to this section is also subject to the equipment leak provisions of § 63.1255, the owner or operator shall comply with the provisions of § 63.1255 and is exempt from the requirements of this section.

§ 63.1259 Recordkeeping requirements.

(a) *Requirements of subpart A of this part.* The owner or operator of an affected source shall comply with the recordkeeping requirements in subpart A of this part as specified in Table 1 of this subpart and in paragraphs (a)(1) through (5) of this section.

(1) *Data retention.* Each owner or operator of an affected source shall keep copies of all records and reports required by this subpart for at least 5 years, as specified in § 63.10(b)(1).

(2) *Records of applicability determinations.* The owner or operator of a stationary source that is not subject to this subpart shall keep a record of the applicability determination, as specified in § 63.10(b)(3).

(3) *Startup, shutdown, and malfunction plan.* The owner or operator of an affected source shall develop and implement a written startup, shutdown, and malfunction plan as specified in § 63.6(e)(3). This plan shall describe, in detail, procedures for operating and maintaining the affected source during periods of startup, shutdown, and malfunction and a program for corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with this subpart. The owner or operator of an affected source shall keep the current and superseded versions of this plan onsite, as specified in § 63.6(e)(3)(v). The owner or operator shall keep the startup, shutdown, and malfunction records specified in paragraphs (b)(3)(i) through (iii) of this section. Reports related to the plan shall be submitted as specified in § 63.1260(i).

(i) The owner or operator shall record the occurrence and duration of each malfunction of air pollution control equipment used to comply with this subpart, as specified in § 63.6(e)(3)(iii).

(ii) The owner or operator shall record the occurrence and duration of each malfunction of continuous monitoring systems used to comply with this subpart.

(iii) For each startup, shutdown, or malfunction, the owner or operator shall record all information necessary to demonstrate that the procedures specified in the affected source's startup, shutdown, and malfunction plan were followed, as specified in § 63.6(e)(3)(iii); alternatively, the owner or operator shall record any actions taken that are not consistent with the plan, as specified in § 63.6(e)(3)(iv).

(4) *Recordkeeping requirements for sources with continuous monitoring systems.* The owner or operator of an affected source who elects to install a

continuous monitoring system shall maintain records specified in § 63.10(c)(1) through (14).

(5) *Application for approval of construction or reconstruction.* For new affected sources, each owner or operator shall comply with the provisions in § 63.5 regarding construction and reconstruction, excluding the provisions specified in § 63.5(d)(1)(ii)(H), (d)(2), and (d)(3)(ii).

(b) *Records of equipment operation.* The owner or operator must keep the following records up-to-date and readily accessible:

(1) Each measurement of a control device operating parameter monitored in accordance with § 63.1258 and each measurement of a treatment process parameter monitored in accordance with § 63.1258(g)(2) and (3).

(2) For processes subject to § 63.1252(e), records of consumption, production, and the rolling average values of the production-indexed HAP and VOC consumption factors.

(3) For each continuous monitoring system used to comply with this subpart, records documenting the completion of calibration checks and maintenance of continuous monitoring systems.

(4) For processes in compliance with the 2,000 lb/yr emission limit of § 63.1254(a)(1), records of the rolling annual total emissions.

(5) Records of the following, as appropriate:

(i) The number of batches per year for each batch process.

(ii) The operating hours per year for continuous processes.

(6) Uncontrolled and controlled emissions per batch for each process.

(7) Wastewater concentration per POD or process.

(8) Number of storage tank turnovers per year, if used in an emissions average.

(9) Daily schedule or log of each operating scenario prior to its operation.

(10) Description of worst-case operating conditions as determined using the procedures described in § 63.1257(b)(8) for control devices.

(11) Periods of planned routine maintenance as described in § 63.1257(c)(5).

(c) *Records of operating scenarios.* The owner or operator of an affected source shall keep records of each operating scenario which demonstrates compliance with this subpart.

(d) *Records of equipment leak detection and repair programs.* The owner or operator of any affected source implementing the leak detection and repair (LDAR) program specified in § 63.1255 of this subpart, shall

implement the recordkeeping requirements in § 63.1255 of this subpart.

(e) *Records of emissions averaging.* The owner or operator of any affected source that chooses to comply with the requirements of § 63.1252(d) shall maintain up-to-date records of the following information:

(1) An Implementation Plan which shall include in the plan, for all process vents and storage tanks included in each of the averages, the information listed in paragraphs (e)(1)(i) through (v) of this section.

(i) The identification of all process vents and storage tanks in each emissions average.

(ii) The uncontrolled and controlled emissions of HAP and the overall percent reduction efficiency as determined in §§ 63.1257(g)(1) through (4) or 63.1257(h)(1) through (3) as applicable.

(iii) The calculations used to obtain the uncontrolled and controlled HAP emissions and the overall percent reduction efficiency.

(iv) The estimated values for all parameters required to be monitored under § 63.1258(f) for each process and storage tank included in an average.

(v) A statement that the compliance demonstration, monitoring, inspection, recordkeeping and reporting provisions in §§ 63.1257(g) and (h), 63.1258(f), and 63.1260(k) that are applicable to each emission point in the emissions average will be implemented beginning on the date of compliance.

(2) The Implementation Plan must demonstrate that the emissions from the processes and storage tanks proposed to be included in the average will not result in greater hazard or, at the option of the operating permit authority, greater risk to human health or the environment than if the storage tanks and process vents were controlled according to the provisions in §§ 63.1253 and 63.1254, respectively.

(i) This demonstration of hazard or risk equivalency shall be made to the satisfaction of the operating permit authority.

(A) The Administrator may require owners and operators to use specific methodologies and procedures for making a hazard or risk determination.

(B) The demonstration and approval of hazard or risk equivalency shall be made according to any guidance that the Administrator makes available for use or any other technically sound information or methods.

(ii) An emissions averaging plan that does not demonstrate hazard or risk equivalency to the satisfaction of the Administrator shall not be approved.

The Administrator may require such adjustments to the emissions averaging plan as are necessary in order to ensure that the average will not result in greater hazard or risk to human health or the environment than would result if the emission points were controlled according to §§ 63.1253 and 63.1254.

(iii) A hazard or risk equivalency demonstration must:

(A) Be a quantitative, comparative chemical hazard or risk assessment;
(B) Account for differences between averaging and non-averaging options in chemical hazard or risk to human health or the environment; and
(C) Meet any requirements set by the Administrator for such demonstrations.

(3) Records as specified in paragraphs (a), (b) and (d) of this section.

(4) A rolling quarterly calculation of the annual percent reduction efficiency as specified in § 63.1257(g) and (h).

(f) *Records of delay of repair.*

Documentation of a decision to use a delay of repair due to unavailability of parts, as specified in § 63.1256(i), shall include a description of the failure, the reason additional time was necessary (including a statement of why replacement parts were not kept onsite and when delivery from the manufacturer is scheduled), and the date when the repair was completed.

(g) *Record of wastewater stream or residual transfer.* The owner or operator transferring an affected wastewater stream or residual removed from an affected wastewater stream in accordance with § 63.1256(a)(5) shall keep a record of the notice sent to the treatment operator stating that the wastewater stream or residual contains organic HAP which are required to be managed and treated in accordance with the provisions of this subpart.

(h) *Records of extensions.* The owner or operator shall keep documentation of a decision to use an extension, as specified in § 63.1256(b)(6)(ii) or (b)(9), in a readily accessible location. The documentation shall include a description of the failure, documentation that alternate storage capacity is unavailable, and specification of a schedule of actions that will ensure that the control equipment will be repaired and the tank will be emptied as soon as practical.

(i) *Records of inspections.* The owner or operator shall keep records specified in paragraphs (i)(1) through (9) of this section.

(1) A record that each waste management unit inspection required by § 63.1256(b) through (f) was performed.

(2) A record that each inspection for control devices required by § 63.1256(h) was performed.

(3) A record of the results of each seal gap measurement required by § 63.1256(b)(5) and (f)(3). The records shall include the date of measurement, the raw data obtained in the measurement, and the calculations described in § 63.120(b)(2) through (4).

(4) Records identifying all parts of the vapor collection system, closed-vent system, fixed roof, cover, or enclosure that are designated as unsafe to inspect in accordance with § 63.1258(h)(6), an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.

(5) Records identifying all parts of the vapor collection system, closed-vent system, fixed roof, cover, or enclosure that are designated as difficult to inspect in accordance with § 63.1258(h)(7), an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.

(6) For each vapor collection system or closed-vent system that contains bypass lines that could divert a vent stream away from the control device and to the atmosphere, the owner or operator shall keep a record of the information specified in either paragraph (i)(6)(i) or (ii) of this section.

(i) Hourly records of whether the flow indicator specified under § 63.1252(b)(1) was operating and whether a diversion was detected at any time during the hour, as well as records of the times and durations of all periods when the vent stream is diverted from the control device or the flow indicator is not operating.

(ii) Where a seal mechanism is used to comply with § 63.1252(b)(2), hourly records of flow are not required. In such cases, the owner or operator shall record that the monthly visual inspection of the seals or closure mechanisms has been done, and shall record the occurrence of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has broken.

(7) For each inspection conducted in accordance with § 63.1258(h)(2) and (3) during which a leak is detected, a record of the information specified in paragraphs (i)(7)(i) through (viii) of this section.

(i) The instrument identification numbers; operator name or initials; and identification of the equipment.

(ii) The date the leak was detected and the date of the first attempt to repair the leak.

(iii) Maximum instrument reading measured by the method specified in § 63.1258(h)(4) after the leak is

successfully repaired or determined to be nonreparable.

(iv) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(v) The name, initials, or other form of identification of the owner or operator (or designee) whose decision it was that repair could not be effected without a shutdown.

(vi) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.

(vii) Dates of shutdowns that occur while the equipment is unrepaired.

(viii) The date of successful repair of the leak.

(8) For each inspection conducted in accordance with § 63.1258(h)(3) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(9) For each visual inspection conducted in accordance with § 63.1258(h)(2)(i)(B) or (h)(2)(iii)(B) of this section during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

§ 63.1260 Reporting requirements.

(a) The owner or operator of an affected source shall comply with the reporting requirements of paragraphs (b) through (l) of this section. Applicable reporting requirements of §§ 63.9 and 63.10 are also summarized in Table 1 of this subpart.

(b) *Initial notification.* The owner or operator shall submit the applicable initial notification in accordance with § 63.9(b) or (d).

(c) *Application for approval of construction or reconstruction.* An owner or operator who is subject to § 63.5(b)(3) shall submit to the Administrator an application for approval of the construction of a new major affected source, the reconstruction of a major affected source, or the reconstruction of a major source such that the source becomes a major affected source subject to the standards. The application shall be prepared in accordance with § 63.5(d).

(d) *Notification of CMS performance evaluation.* An owner or operator who is required by the Administrator to conduct a performance evaluation for a continuous monitoring system shall notify the Administrator of the date of the performance evaluation as specified in § 63.8(e)(2).

(e) *Precompliance report.* The Precompliance report shall be submitted at least 6 months prior to the

compliance date of the standard. For new sources, the Precompliance report shall be submitted to the Administrator with the application for approval of construction or reconstruction. The Administrator shall have 90 days to approve or disapprove the plan. The plan shall be considered approved if the Administrator either approves the plan in writing, or fails to disapprove the plan in writing. The 90 day period shall begin when the Administrator receives the request. If the request is denied, the owner or operator must still be in compliance with the standard by the compliance date. To change any of the information submitted in the report, the owner or operator shall notify the Administrator 90 days before the planned change is to be implemented; the change shall be considered approved if the Administrator either approves the change in writing, or fails to disapprove the change in writing. The Precompliance report shall include:

(1) Requests for approval to use alternative monitoring parameters or requests to set monitoring parameters according to § 63.1258(b)(4).

(2) Descriptions of the daily or per batch demonstrations to verify that control devices subject to § 63.1258(b)(1)(i) are operating as designed.

(3) A description of test conditions, and the corresponding monitoring parameter values for parameters that are set according to § 63.1258(b)(3)(ii)(C).

(4) For owners and operators complying with the requirements of § 63.1252(e), the P2 demonstration summary required in § 63.1257(f).

(5) Data and rationale used to support an engineering assessment to calculate uncontrolled emissions from process vents as required in § 63.1257(d)(2)(ii).

(f) *Notification of Compliance Status report.* The Notification of Compliance Status report required under § 63.9 shall be submitted no later than 150 days after the compliance date and shall include:

(1) The results of any applicability determinations, emission calculations, or analyses used to identify and quantify HAP emissions from the affected source.

(2) The results of emissions profiles, performance tests, engineering analyses, design evaluations, or calculations used to demonstrate compliance. For performance tests, results should include descriptions of sampling and analysis procedures and quality assurance procedures.

(3) Descriptions of monitoring devices, monitoring frequencies, and the values of monitored parameters established during the initial

compliance determinations, including data and calculations to support the levels established.

(4) Listing of all operating scenarios.
(5) Descriptions of worst-case operating and/or testing conditions for control devices.

(6) Identification of emission points subject to overlapping requirements described in § 63.1250(h) and the authority under which the owner or operator will comply.

(g) *Periodic reports.* An owner or operator shall prepare Periodic reports in accordance with paragraphs (g)(1) and (2) of this section and submit them to the Administrator.

(1) *Submittal schedule.* Except as provided in (g)(1)(i), (ii) and (iii) of this section, an owner or operator shall submit Periodic reports semiannually, beginning 60 operating days after the end of the applicable reporting period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due.

(i) When the Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the affected source; or

(ii) When the monitoring data are used directly for compliance determination and the source experience excess emissions, in which case quarterly reports shall be submitted. Once an affected source reports excess emissions, the affected source shall follow a quarterly reporting format until a request to reduce reporting frequency is approved. If an owner or operator submits a request to reduce the frequency of reporting, the provisions in § 63.10(e)(3)(ii) and (iii) shall apply, except that the term "excess emissions and continuous monitoring system performance report and/or summary report" shall mean "Periodic report" for the purposes of this section.

(iii) When a new operating scenario has been operated since the last report, in which case quarterly reports shall be submitted.

(2) *Content of Periodic report.* The owner or operator shall include the information in paragraphs (g)(2)(i) through (vii) of this section, as applicable.

(i) Each Periodic report must include the information in § 63.10(e)(3)(vi)(A) through (I) and (K) through (M). For each continuous monitoring system, the Periodic report must also include the information in § 63.10(e)(3)(vi)(J).

(ii) If the total duration of excess emissions, parameter exceedances, or

excursions for the reporting period is 1 percent or greater of the total operating time for the reporting period, or the total continuous monitoring system downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the Periodic report must include the information in paragraphs (g)(2)(ii)(A) through (D) of this section.

(A) Monitoring data, including 15-minute monitoring values as well as daily average values of monitored parameters, for all operating days when the average values were outside the ranges established in the Notification of Compliance Status report or operating permit.

(B) Duration of excursions, as defined in § 63.1258(b)(7).

(C) Operating logs and operating scenarios for all operating scenarios for all operating days when the values are outside the levels established in the Notification of Compliance Status report or operating permit.

(D) When a continuous monitoring system is used, the information required in § 63.10(c)(5) through (13).

(iii) For each inspection conducted in accordance with § 63.1258(h)(2) or (3) during which a leak is detected, the records specified in § 63.1259(i)(7) must be included in the next Periodic report.

(iv) For each vapor collection system or closed vent system with a bypass line subject to § 63.1252(b)(1), records required under § 63.1259(i)(6)(i) of all periods when the vent stream is diverted from the control device through a bypass line. For each vapor collection system or closed vent system with a bypass line subject to § 63.1252(b)(2), records required under § 63.1259(i)(6)(ii) of all periods in which the seal mechanism is broken, the bypass valve position has changed, or the key to unlock the bypass line valve was checked out.

(v) The information in paragraphs (g)(2)(iv)(A) through (D) of this section shall be stated in the Periodic report, when applicable.

(A) No excess emissions.

(B) No exceedances of a parameter.

(C) No excursions.

(D) No continuous monitoring system has been inoperative, out of control, repaired, or adjusted.

(vi) For each tank subject to control requirements, periods of planned routine maintenance during which the control device does not meet the specifications of § 63.1253(b) through (d).

(vii) Each new operating scenario which has been operated since the time period covered by the last Periodic report. For the initial Periodic report,

each operating scenario for each process operated since the compliance date shall be submitted.

(h) *Notification of process change.*

(1) Except as specified in paragraph (h)(2) of this section, whenever a process change is made, or a change in any of the information submitted in the Notification of Compliance Status Report, the owner or operator shall submit a report quarterly. The report may be submitted as part of the next Periodic report required under paragraph (g) of this section. The report shall include:

- (i) A brief description of the process change.
- (ii) A description of any modifications to standard procedures or quality assurance procedures.
- (iii) Revisions to any of the information reported in the original Notification of Compliance Status Report under paragraph (f) of this section.
- (iv) Information required by the Notification of Compliance Status Report under paragraph (f) of this section for changes involving the addition of processes or equipment.

(2) An owner or operator must submit a report 60 days before the scheduled implementation date of either of the following:

- (i) Any change in the activity covered by the Precompliance report.
- (ii) A change in the status of a control device from small to large.

(i) *Reports of startup, shutdown, and malfunction.* For the purposes of this subpart, the startup, shutdown, and malfunction reports shall be submitted on the same schedule as the periodic reports required under paragraph (g) of this section instead of the schedule specified in § 63.10(d)(5)(i). These reports shall include the information

specified in § 63.1259(a)(3)(i) through (iii) and shall contain the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy. Reports are only required if a startup, shutdown, or malfunction occurred during the reporting period. Any time an owner or operator takes an action that is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator shall submit an immediate startup, shutdown, and malfunction report as specified in § 63.10(d)(4)(ii).

(j) *Reports of LDAR programs.* The owner or operator of any affected source implementing the LDAR program specified in § 63.1255 of this subpart shall implement the reporting requirements in § 63.1255 of this subpart. Copies of all reports shall be retained as records for a period of 5 years, in accordance with the requirements of § 63.10(b)(1).

(k) *Reports of emissions averaging.* The owner or operator of any affected source that chooses to comply with the requirements of § 63.1252(d) shall submit the implementation plan described in § 63.1259(e) 6 months prior to the compliance date of the standard and the following information in the periodic reports:

- (1) The records specified in § 63.1259(e) for each process or storage tank included in the emissions average;
- (2) All information as specified in paragraph (g) of this section for each process or storage tank included in the emissions average;
- (3) Any changes of the processes or storage tanks included in the average.
- (4) The calculation of the overall percent reduction efficiency for the reporting period.

(5) Changes to the Implementation Plan which affect the calculation methodology of uncontrolled or controlled emissions or the hazard or risk equivalency determination.

(6) Every second semiannual or fourth quarterly report, as appropriate, shall include the results according to § 63.1259(e)(4) to demonstrate the emissions averaging provisions of §§ 63.1252(d), 63.1257(g) and (h), 63.1258(f), and 63.1259(f) are satisfied.

(l) *Notification of performance test and test plan.* The owner or operator of an affected source shall notify the Administrator of the planned date of a performance test at least 60 days before the test in accordance with § 63.7(b). The owner or operator also must submit the test plan required by § 63.7(c) and the emission profile required by 63.1257(b)(8)(ii) with the notification of the performance test.

(m) *Request for extension of compliance.* An owner or operator may submit to the Administrator a request for an extension of compliance in accordance with § 63.1250(f)(4).

§ 63.1261 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under § 112(d) of the Clean Air Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) The authority conferred in § 63.177; the authority to approve applications for determination of equivalent means of emission limitation; and the authority to approve alternative test methods shall not be delegated to any State.

TABLE 1 TO SUBPART GGG.—GENERAL PROVISIONS APPLICABILITY TO SUBPART GGG

General provisions reference	Summary of requirements	Applies to subpart GGG	Comments
63.1(a)(1)	General applicability of the General Provisions	Yes	Additional terms defined in § 63.1251; when overlap between subparts A and GGG of this part, subpart GGG takes precedence.
63.1(a)(2-7) .....	.....	Yes	Discusses state programs.
63.1(a)(8) .....	.....	No	
63.1(a)(9-14) .....	.....	Yes	
63.1(b)(1)	Initial applicability determination	Yes	Subpart GGG clarifies the applicability in § 63.1250.
63.1(b)(2)	Title V operating permit—see part 70	Yes	All major affected sources are required to obtain a title V permit.
63.1(b)(3)	Record of the applicability determination	Yes	All affected sources are subject to subpart GGG according to the applicability definition of subpart GGG.
63.1(c)(1)	Applicability after standards are set	Yes	Subpart GGG clarifies the applicability of each paragraph of subpart A to sources subject to subpart GGG.
63.1(c)(2)	Title V permit requirement	No	All major affected sources are required to obtain a title V permit. Area sources are not subject to subpart GGG.

TABLE 1 TO SUBPART GGG.—GENERAL PROVISIONS APPLICABILITY TO SUBPART GGG—Continued

General provisions reference	Summary of requirements	Applies to subpart GGG	Comments
63.1(c)(3)	Reserved	.....
63.1(c)(4)	Requirements for existing source that obtains an extension of compliance.	Yes	
63.1(c)(5)	No	Notification requirements for an area source that increases HAP emissions to major source levels.	Yes
63.1(d)	[Reserved]	NA	
63.1(e)	Applicability of permit program before a relevant standard has been set.	Yes	
63.2	Definitions.	Yes	Additional terms defined in §63.1251; when overlap between subparts A and GGG of this part occurs, subpart GGG takes precedence.
63.3	Units and abbreviations.	Yes	Other units used in subpart GGG are defined in that subpart.
63.4	Prohibited activities.	Yes	
63.5(a)	Construction and reconstruction—applicability	Yes	Except replace the terms "source" and "stationary source" with "affected source".
63.5(b)(1)	Upon construction, relevant standards for new sources.	Yes	
63.5(b)(2)	[Reserved]	NA	
63.5(b)(3)	New construction/reconstruction	Yes	
63.5(b)(4)	Construction/reconstruction notification	Yes	
63.5(b)(5)	Construction/reconstruction compliance	Yes	
63.5(b)(6)	Equipment addition or process change	Yes	
63.5(c)	[Reserved]	NA	
63.5(d)	Application for approval of construction/reconstruction	Yes	Except for certain provisions identified in 63.1259(a)(5)
63.5(e) .....	.....	Construction/reconstruction approval.	Yes
63.5(f)	Construction/reconstruction approval based on prior State review.	Yes	Except replace "source" with "affected source".
63.6(a)(1)	Compliance with standards and maintenance requirements.	Yes	
63.6(a)(2)	Requirements for area source that increases emissions to become major.	Yes	
63.6(b)(1-2)	Compliance dates for new and reconstructed sources	No	Subpart GGG specifies compliance dates.
63.6(b)(3-6)	Compliance dates for area sources that become major sources.	Yes	
63.6(b)(7)	Compliance dates for new sources resulting from new unaffected area sources becoming subject to standards.	No	Subpart GGG specifies NS applicability and compliance dates
63.6(c)	Compliance dates for existing sources	Yes	Except replace "source" with "affected source". Subpart GGG specifies compliance dates.
63.6(e)	Operation and maintenance requirements	Yes	Startup, Shutdown, Malfunction Plan requirements specifically include malfunction process, control and monitoring equipment.
63.6(f)-(g)	Compliance with nonopacity and alternative nonopacity emission standards.	Yes	Except that subpart GGG specifies performance test conditions.
63.6(h)	Opacity and visible emission standards	No	Subpart GGG does not contain any opacity or visible emission standards.
63.6(i)	Extension of compliance with emission standards	No	§63.1250(f)(4) specifies provisions for compliance extensions.
63.6(j)	Exemption from compliance with emission standards	Yes	
63.7(a)(1)	Performance testing requirements.	Yes	Subpart GGG specifies required testing and compliance procedures.
63.7(a)(2)(i-ix) .....	.....	Yes	
63.7(a)(3) .....	.....	Yes	
63.7(b)(1)	Notification of performance test	Yes	
63.7(b)(2)	Notification of delay in conducting a scheduled performance test.	Yes	

TABLE 1 TO SUBPART GGG.—GENERAL PROVISIONS APPLICABILITY TO SUBPART GGG—Continued

General provisions reference	Summary of requirements	Applies to subpart GGG	Comments
63.7(c)	Quality assurance program	Yes	Except that the test plan must be submitted with the notification of the performance test.
63.7(d)	Performance testing facilities.	Yes	Except replace "source" with "affected source".
63.7(e)	Conduct of performance tests.	Yes	Subpart GGG also contains test methods and procedures specific to pharmaceutical sources.
63.7(f)	Use of alternative test method	Yes	
63.7(g)	Data analysis, recordkeeping, and reporting	Yes	
63.7(h)	Waiver of performance tests	Yes	
63.8(a)	Monitoring requirements	Yes	See § 63.1258.
63.8(b)(1)	Conduct of monitoring	Yes	
63.8(b)(2)	CMS and combined effluents	No	§ 63.1258 of subpart GGG provides specific CMS requirements.
63.8(b)(3)–(c)(3)	CMS requirements	Yes	
63.8(c)(4–5)	CMS operation requirements	Yes	
63.8(c)(6–8)	CMS calibration and malfunction provisions	Yes	
63.8(d)	CMS quality control program	Yes	
63.8(e)(1)	Performance evaluations of CMS	Yes	
63.8(e)(2)	Notification of performance evaluation	Yes	
63.8(e)(3–4)	CMS requirements/alternatives	Yes	
63.8(e)(5)(i)	Reporting performance evaluation results	Yes	See §
63.1260(a)			
63.8(e)(5)(ii)	Results of COMS performance evaluation	No	Subpart GGG does not contain any opacity or visible emission standards.
63.8(f)–(g)	Alternative monitoring method/reduction of monitoring data.	Yes	
63.9(a)–(d)	Notification requirements—Applicability and general information.	Yes	
63.9(e)	Notification of performance test	Yes	
63.9(f)	Notification of opacity and visible emissions observations.	No	Subpart GGG does not contain any opacity or visible emission standards.
63.9(g)(1)	Additional notification requirements for sources with CMS.	Yes	
63.9(g)(2)	Notification of compliance with opacity emission standard.	No	Subpart GGG does not contain any opacity or visible emission standards.
63.9(g)(3)	Notification that criterion to continue use of alternative to relative accuracy testing has been exceeded.	Yes	
63.9(h)	Notification of compliance status.	Yes	Due 150 days after compliance date.
63.9(i)	Adjustment to time periods or postmark deadlines for submittal and review of required communications.	Yes	
63.9(j)	Change in information provided	Yes	
63.10(a)	Recordkeeping requirements	Yes	See §
63.1259			
63.10(b)(1)	Records retention	Yes	
63.10(b)(2)	Information and documentation to support notifications.	No	Subpart GGG specifies recordkeeping requirements.
63.10(b)(3)	Records retention for sources not subject to relevant standard.	Yes	Applicability requirements are given in § 63.1250.
63.10(c)–(d)(2)	Other recordkeeping and reporting provisions	Yes.	
63.10(d)(3)	Reporting results of opacity or visible emissions observations.	No	Subpart GGG does not include any opacity or visible emission standards.
63.10(d)(4–5)	Other recordkeeping and reporting provisions	Yes.	
63.10(e)	Additional CMS reporting requirements	Yes.	
63.10(f)	Waiver of recordkeeping or reporting requirements.	Yes.	
63.11	Control device requirements for flares	Yes.	
63.12	State authority and delegations	Yes	See § 63.1261.
63.13	Addresses of State air pollution control agencies	Yes.	
63.14	Incorporations by reference	Yes.	
63.15	Availability of information and confidentiality	Yes.	

TABLE 2 TO SUBPART GGG.—PARTIALLY SOLUBLE HAP

1,1,1-Trichloroethane (methyl chloroform)
 1,1,2,2-Tetrachloroethane
 1,1,2-Trichloroethane
 1,1-Dichloroethylene (vinylidene chloride)
 1,2-Dibromoethane
 1,2-Dichloroethane (ethylene dichloride)

TABLE 2 TO SUBPART GGG.—PARTIALLY SOLUBLE HAP—Continued

1,2-Dichloropropane
 1,3-Dichloropropene
 2,4,5-Trichlorophenol
 2-Butanone (mek)
 1,4-Dichlorobenzene
 2-Nitropropane
 4-Methyl-2-pentanone (mibk)

TABLE 2 TO SUBPART GGG.—PARTIALLY SOLUBLE HAP—Continued

Acetaldehyde
 Acrolein
 Acrylonitrile
 Allyl chloride
 Benzene
 Benzyl chloride
 Biphenyl

TABLE 2 TO SUBPART GGG.—
PARTIALLY SOLUBLE HAP—Continued

Bromoform (tribromomethane)
Bromomethane
Butadiene
Carbon disulfide
Chlorobenzene
Chloroethane (ethyl chloride)
Chloroform
Chloromethane
Chloroprene
Cumene
Dichloroethyl ether
Dinitrophenol
Epichlorohydrin

TABLE 2 TO SUBPART GGG.—
PARTIALLY SOLUBLE HAP—Continued

Ethyl acrylate
Ethylbenzene
Ethylene oxide
Hexachlorobenzene
Hexachlorobutadiene
Hexachloroethane
Methyl methacrylate
Methyl-t-butyl ether
Methylene chloride
N,N-dimethylaniline
Propionaldehyde
Propylene oxide
Styrene

TABLE 2 TO SUBPART GGG.—
PARTIALLY SOLUBLE HAP—Continued

Tetrachloroethene (perchloroethylene)
Tetrachloromethane (carbon tetrachloride)
Toluene
Trichlorobenzene (1,2,4-)
Trichloroethylene
Triethylamine
Trimethylpentane
Vinyl acetate
Vinyl chloride
Xylene (m)
Xylene (o)
Xylene (p)
N-hexane

TABLE 3 TO SUBPART GGG.—SOLUBLE HAP

Compound
1,1-Dimethylhydrazine.
1,4-Dioxane.
Acetonitrile.
Acetophenone.
Diethyl sulfate.
Dimethyl sulfate.
Dinitrotoluene.
Ethylene glycol dimethyl ether.
Ethylene glycol monobutyl ether acetate.
Ethylene glycol monomethyl ether acetate.
Isophorone.
Methanol (methyl alcohol).
Nitrobenzene.
Toluidene.

TABLE 4 TO SUBPART GGG.—MONITORING REQUIREMENTS FOR CONTROL DEVICES^a

Control device	Monitoring equipment required	Parameters to be monitored	Frequency
All control devices	1. Flow indicator installed at all bypass lines to the atmosphere and equipped with continuous recorder <i>or</i> . 2. Valves sealed closed with car-seal or lock-and-key configuration.	1. Presence of flow diverted from the control device to the atmosphere <i>or</i> . 2. Monthly inspections of sealed valves.	Hourly records of whether the flow indicator was operating and whether a diversion was detected at any time during each hour. Monthly.
Scrubber	Liquid flow rate or pressure drop mounting device. Also a pH monitor if the scrubber is used to control acid emissions.	1. Liquid flow rate into or out of the scrubber or the pressure drop across the scrubber. 2. pH of effluent scrubber liquid ...	1. Every 15 minutes. 2. Once a day.
Thermal incinerator	Temperature monitoring device installed in firebox or in ductwork immediately downstream of firebox ^b .	Firebox temperature	Every 15 minutes.
Catalytic incinerator	Temperature monitoring device installed in gas stream immediately before and after catalyst bed.	Temperature difference across catalyst bed.	Every 15 minutes.
Flare	Heat sensing device installed at the pilot light.	Presence of a flame at the pilot light.	Every 15 minutes.
Boiler or process heater <44 mega watts and vent stream is not mixed with the primary fuel.	Temperature monitoring device installed in firebox ^b .	Combustion temperature	Every 15 minutes.
Condenser	Temperature monitoring device installed at condenser exit.	Condenser exit (product side) temperature.	Every 15 minutes.
Carbon adsorber (nonregenerative).	None	Operating time since last replacement.	N/A.
Carbon adsorber (regenerative) ...	Stream flow monitoring device, <i>and</i> .	1. Total regeneration stream mass or volumetric flow during carbon bed regeneration cycle(s).	1. For each regeneration cycle, record the total regeneration stream mass or volumetric flow.

TABLE 4 TO SUBPART GGG.—MONITORING REQUIREMENTS FOR CONTROL DEVICES^a—Continued

Control device	Monitoring equipment required	Parameters to be monitored	Frequency
	Carbon bed temperature monitoring device.	2. Temperature of carbon bed after regeneration. 3. Temperature of carbon bed within 15 minutes of completing any cooling cycle(s). 4. Operating time since end of last regeneration. 5. Check for bed poisoning	2. For each regeneration cycle, record the maximum carbon bed-temperature. 3. Within 15 minutes of completing any cooling cycle, record the carbon bed temperature. 4. Operating time to be based on worst-case conditions. 5. Yearly.

^aAs an alternative to the monitoring requirements specified in this table, the owner or operator may use a CEM meeting the requirements of Performance Specifications 8 or 9 of appendix B of part 60 to monitor TOC every 15 minutes.

^bMonitor may be installed in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange is encountered.

TABLE 5 TO SUBPART GGG.—CONTROL REQUIREMENTS FOR ITEMS OF EQUIPMENT THAT MEET THE CRITERIA OF § 63.1252(f)

Item of equipment	Control requirement ^a
Drain or drain hub	(a) Tightly fitting solid cover (TFSC); or (b) TFSC with a vent to either a process, or to a fuel gas system, or to a control device meeting the requirements of § 63.1256(h)(2); or (c) Water seal with submerged discharge or barrier to protect discharge from wind.
Manhole ^b	(a) TFSC; or (b) TFSC with a vent to either a process, or to a fuel gas system, or to a control device meeting the requirements of § 63.1256(h)(2); or (c) If the item is vented to the atmosphere, use a TFSC with a properly operating water seal at the entrance or exit to the item to restrict ventilation in the collection system. The vent pipe shall be at least 90 cm in length and not exceeding 10.2 cm in nominal inside diameter.
Lift station	(a) TFSC; or (b) TFSC with a vent to either a process, or to a fuel gas system, or to a control device meeting the requirements of § 63.1256(h)(2); or (c) If the lift station is vented to the atmosphere, use a TFSC with a properly operating water seal at the entrance or exit to the item to restrict ventilation in the collection system. The vent pipe shall be at least 90 cm in length and not exceeding 10.2 cm in nominal inside diameter. The lift station shall be level controlled to minimize changes in the liquid level.
Trench	(a) TFSC; or (b) TFSC with a vent to either a process, or to a fuel gas system, or to a control device meeting the requirements of § 63.1256(h)(2); or (c) If the item is vented to the atmosphere, use a TFSC with a properly operating water seal at the entrance or exit to the item to restrict ventilation in the collection system. The vent pipe shall be at least 90 cm in length and not exceeding 10.2 cm in nominal inside diameter.
Pipe	Each pipe shall have no visible gaps in joints, seals, or other emission interfaces
Oil/Water separator	(a) Equip with a fixed roof and route vapors to a process or to a fuel gas system, or equip with a closed-vent system that routes vapors to a control device meeting the requirements of § 63.1256(h)(2); or (b) Equip with a floating roof that meets the equipment specifications of § 60.693 (a)(1)(i), (a)(1)(ii), (a)(2), (a)(3), and (a)(4).
Tank	Maintain a fixed roof. ^c If the tank is sparged ^d or used for heating or treating by means of an exothermic reaction, a fixed roof and a system shall be maintained that routes the organic hazardous air pollutants vapors to other process equipment or a fuel gas system, or a closed-vent system that routes vapors to a control device that meets the requirements of 40 CFR § 63.119 (e)(1) or (e)(2).

AAA^a Where a tightly fitting solid cover is required, it shall be maintained with no visible gaps or openings, except during periods of sampling, inspection, or maintenance.

AAA^b Manhole includes sumps and other points of access to a conveyance system.

AAA^c A fixed roof may have openings necessary for proper venting of the tank, such as pressure/vacuum vent, j-pipe vent.

AAA^d The liquid in the tank is agitated by injecting compressed air or gas.

TABLE 6 TO SUBPART GGG.—WASTEWATER—COMPLIANCE OPTIONS FOR WASTEWATER TANKS

Capacity, m ³	Maximum true vapor pressure, kPa	Control requirements
<75 .....	.....	§ 63.1256(b)(1).
≥75 and <151	<13.1	§ 63.1256(b)(1).
	≥13.1	§ 63.1256(b)(2).
≥151	<5.2	§ 63.1256(b)(1).
	≥5.2	§ 63.1256(b)(2).

TABLE 7 TO SUBPART GGG.—WASTEWATER—INSPECTION AND MONITORING REQUIREMENTS FOR WASTE MANAGEMENT UNITS

To comply with	Inspection or monitoring requirement	Frequency of inspection or monitoring	Method
TANKS:			
63.1256(b)(3)(i)	Inspect fixed roof and all openings for leaks.	Initially Semiannually	Visual.
63.1256(b)(4)	Inspect floating roof in accordance with §§ 63.120(a)(2) and (a)(3).	See §§ 63.120(a)(2) and (a)(3)	Visual.
63.1256(b)(5)	Measure floating roof seal gaps in accordance with §§ 63.120(b)(2)(i) through (b)(4).	.....	See § 63.120(b)(2)(i) through (b)(4).
	—Primary seal gaps	Initially Once every 5 years (annually if no secondary seal).	
	—Secondary seal gaps	Initially Semiannually	
63.1256(b)(7)	Inspect wastewater tank for control equipment failures and improper work practices.	Initially Semiannually	Visual.
63.1256(b)(8)		Initially Semiannually	
SURFACE IMPOUNDMENTS:			
63.1256(c)(1)(i)	Inspect cover and all openings for leaks.	Initially Semiannually	Visual.
63.1256(c)(2)	Inspect surface impoundment for control equipment failures and improper work practices.	Initially Semiannually	Visual.
CONTAINERS:			
63.1256(d)(1)(i)	Inspect cover and all openings for leaks.	Initially Semiannually	Visual.
63.1256(d)(1)(ii)	Inspect enclosure and all openings for leaks.	Initially Semiannually	Visual.
63.1256(d)(3)(i)		Initially Semiannually	Visual.
63.1256(d)(4)	Inspect container for control equipment failures and improper work practices.	Initially Semiannually	Visual.
INDIVIDUAL DRAIN SYSTEMS^a:			
63.1256(e)(1)(i)	Inspect cover and all openings to ensure there are no gaps, cracks, or holes.	Initially Semiannually	Visual.
63.1256(e)(2)	Inspect individual drain system for control equipment failures and improper work practices.	Initially Semiannually	Visual.
63.1256(e)(4)(i)	Verify that sufficient water is present to properly maintain integrity of water seals.	Initially Semiannually	Visual.
63.1256(e)(4)(ii)	Inspect all drains using tightly-fitted caps or plugs to ensure caps and plugs are in place and properly installed.	Initially Semiannually	Visual.
63.1256(e)(5)(i)		Initially Semiannually	Visual or smoke test or other means as specified.
63.1256(e)(5)(ii)	Inspect all junction boxes to ensure covers are in place and have no visible gaps, cracks, or holes.	Initially Semiannually	Visual.
63.1256(e)(5)(iii)	Inspect unburied portion of all sewer lines for cracks and gaps.	Initially Semiannually	Visual.
OIL-WATER SEPARATORS:			
63.1256(f)(2)(i)	Inspect fixed roof and all openings for leaks.	Initially Semiannually	Visual.
63.1256(f)(3)	Measure floating roof seal gaps in accordance with 40 CFR 60.696(d)(1).	Initially ^b	See 40 CFR 60.696(d)(1).
63.1256(f)(3)	—Primary seal gaps	Once every 5 years.	
63.1256(f)(4)	—Secondary seal gaps	Initially ^b Annually.	
63.1256(f)(4)	Inspect oil-water separator for control equipment failures and improper work practices.	Initially Semiannually	Visual.

^a As specified in § 63.1256(e), the owner or operator shall comply with either the requirements of § 63.1256(e)(1) and (2) or § 63.1256(e)(4) and (5).

^b Within 60 days of installation as specified in § 63.1256(f)(3).

TABLE 8 TO SUBPART GGG.—FRACTION MEASURED (F_m) for HAP Compounds in Wastewater Streams

Chemical name	CAS No. ^a	F_m
Acetaldehyde	75070	1.00
Acetonitrile	75058	0.99
Acetophenone	98862	0.31
Acrolein	107028	1.00
Acrylonitrile	107131	1.00
Allyl chloride	107051	1.00
Benzene	71432	1.00
Benzyl chloride	100447	1.00
Biphenyl	92524	0.86
Bromoform	75252	1.00
Butadiene (1,3-)	106990	1.00
Carbon disulfide	75150	1.00
Carbon tetrachloride	56235	1.00
Chlorobenzene	108907	0.96
Chloroform	67663	1.00
Chloroprene (2-Chloro-1,3-butadiene)	126998	1.00
Cumene	98828	1.00
Dichlorobenzene (p-1,4-)	106467	1.00
Dichloroethane (1,2-) (Ethylene dichloride)	107062	1.00
Dichloroethylether (Bis(2-Chloroethyl ether))	111444	0.76
Dichloropropene (1,3-)	542756	1.00
Diethyl sulfate	64675	0.0025
Dimethyl sulfate	77781	0.086
Dimethylaniline (N,N-)	121697	0.00080
Dimethylhydrazine (1,1-)	57147	0.38
Dinitrophenol (2,4-)	51285	0.0077
Dinitrotoluene (2,4-)	121142	0.085
Dioxane (1,4-) (1,4-Diethyleneoxide)	123911	0.87
Epichlorohydrin(1-Chloro-2,3-epoxypropane)	106898	0.94
Ethyl acrylate	140885	1.00
Ethylbenzene	100414	1.00
Ethyl chloride (Chloroethane)	75003	1.00
Ethylene dibromide (Dibromomethane)	106934	1.00
Ethylene glycol dimethyl ether	110714	0.86
Ethylene glycol monobutyl ether acetate	112072	0.043
Ethylene glycol monomethyl ether acetate	110496	0.093
Ethylene oxide	75218	1.00
Ethylidene dichloride (1,1-Dichloroethane)	75343	1.00
Hexachlorobenzene	118741	0.97
Hexachlorobutadiene	87683	0.88
Hexachloroethane	67721	0.50
Hexane	110543	1.00
Isophorone	78591	0.47
Methanol	67561	0.85
Methyl bromide (Bromomethane)	74839	1.00
Methyl chloride (Chloromethane)	74873	1.00
Methyl ethyl ketone (2-Butanone)	78933	0.99
Methyl isobutyl ketone (Hexone)	108101	0.98
Methyl methacrylate	80626	1.00
Methyl tert-butyl ether	1634044	1.00
Methylene chloride (Dichloromethane)	75092	1.00
Naphthalene	91203	0.99
Nitrobenzene	98953	0.39
Nitropropane (2-)	79469	0.99
Phosgene	75445	1.00
Propionaldehyde	123386	1.00
Propylene dichloride (1,2-Dichloropropane)	78875	1.00
Propylene oxide	75569	1.00
Styrene	100425	1.00
Tetrachloroethane (1,1,2,2-)	79345	1.00
Tetrachloroethylene (Perchloroethylene)	127184	1.00
Toluene	108883	1.00
Toluidine (o-)	95534	0.15
Trichlorobenzene (1,2,4-)	120821	1.00
Trichloroethane (1,1,1-) (Methyl chloroform)	71556	1.00
Trichloroethane (1,1,2-) (Vinyl Trichloride)	79005	0.98
Trichloroethylene	79016	1.00
Trichlorophenol (2,4,5-)	95954	1.00
Triethylamine	121448	1.00
Trimethylpentane (2,2,4-)	540841	1.00
Vinyl acetate	108054	1.00
Vinyl chloride (Chloroethylene)	75014	1.00

TABLE 8 TO SUBPART GGG.—FRACTION MEASURED (F_m) for HAP Compounds in Wastewater Streams—Continued

Chemical name	CAS No. ^a	F_m
Vinylidene chloride (1,1-Dichloroethylene)	75354	1.00
Xylene (m-)	108383	1.00
Xylene (o-)	95476	1.00
Xylene (p-)	106423	1.00

^a CAS numbers refer to the Chemical Abstracts Service registry number assigned to specific compounds, isomers, or mixtures of compounds.

TABLE 9 TO SUBPART GGG.—DEFAULT BIORATES FOR LIST 1 COMPOUNDS

Compound name	Biorate (K1), L/g MLVSS-hr
Acetonitrile	0.100
Acetophenone	0.538
Diethyl sulfate	0.105
Dimethyl hydrazine(1,1)	0.227
Dimethyl sulfate	0.178
Dinitrotoluene(2,4)	0.784
Dioxane(1,4)	0.393
Ethylene glycol dimethyl ether	0.364
Ethylene glycol monomethyl ether acetate	0.159
Ethylene glycol monobutyl ether acetate	0.496
Isophorone	0.598
Methanol	(^a)
Nitrobenzene	2.300
Toluidine (-0)	0.859

^a For direct dischargers, the default biorate for methanol is 3.5 L/g MLVSS-hr; for indirect dischargers, the default biorate for methanol is 0.2 L/g MLVSS-hr.

[FR Doc. 98-23168 Filed 9-18-98; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY**40 CFR Parts 9 and 63**

[FRL-6163-9]

RIN 2060-AE86

National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action promulgates national emission standards for hazardous air pollutants (NESHAP) for new and existing plantsites that manufacture flexible polyurethane foam. These standards are estimated to reduce HAP emissions from all existing sources of flexible polyurethane foam manufacturing by over 12,500 Mg/yr. This represents a 70 percent reduction from baseline. This action also promulgates amendments to 40 CFR part 9. 40 CFR part 9 is amended by revising the tables to reflect OMB approvals under the Paperwork Reduction Act.

DATES: *Effective date:* October 7, 1998.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Office of the Federal Register as of October 7, 1998.

Compliance dates: Existing sources—October 8, 2001. New sources—at initial start-up.

ADDRESSES: *Docket.* Docket No. A-95-48, containing information considered by the EPA in development of the promulgated standards, is available for public inspection between 8:00 a.m. to 5:30 p.m., Monday through Friday, at the following address in room M-1500, Waterside Mall (ground floor): U.S. Environmental Protection Agency, 401 M Street S.W., Washington, DC 20460, telephone number (202) 260-7548. A reasonable fee may be charged for copying docket materials.

FOR FURTHER INFORMATION CONTACT: For further information concerning applicability and rule determinations, contact the appropriate State or local agency representative. If no State or local representative is available, contact the EPA Regional Office staff listed in the Supplementary Information section of this preamble. For information concerning the analyses performed in developing this rule, contact Mr. David Svendsgaard, Organic Chemicals Group, Emission Standards Division (MD-13), Office of Air Quality Planning and

Standards, U.S. EPA, Research Triangle Park, North Carolina 27711, telephone number (919) 541-2380, facsimile number (919) 541-3470, electronic mail address "svendsgaard.dave@epa.gov".

SUPPLEMENTARY INFORMATION: The initial notification contains general facility information and a brief process description.

Initial notification: Provide to EPA by February 4, 1999.

Notification of compliance status: Existing sources must provide EPA a notification of compliance status by April 6, 2002. New sources must provide EPA a notification of compliance status within the 180 days after initial start-up.

For further information concerning applicability and rule determinations, contact the appropriate State or local agency representative. If no State or local representative is available, contact the following EPA Regional Office staff.

Director, Office of Environmental Stewardship, Attention: Air Compliance Clerk, U.S. EPA Region I (SEA), JFK Federal Building, Boston, MA 02203, (617) 565-3432

Umesh Dholakia, U.S. EPA Region II, 290 Broadway, New York, NY 10007-1866, (212) 637-4023

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Regulated Entities

Entities regulated by this action are flexible polyurethane foam production facilities. Typically, these entities are designated as SIC 3086. Regulated categories and entities include:

Category	Examples of regulated entities
Industry	Producers of slabstock, molded, and rebond flexible polyurethane foam.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that the EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether a facility is regulated by this promulgated action, examine the applicability criteria in section 63.1290 of the rule. For questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

Judicial Review

National emission standards for polyurethane foam production were proposed in the **Federal Register** on December 27, 1996 (61 FR 68406). Today's **Federal Register** action announces the EPA's final decision on the rule. Under section 307(b)(1) of the Act, judicial review of the final rule is available 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 notice may not be challenged later in civil or criminal proceedings brought by the EPA to enforce these requirements.

The following outline is provided to aid in reading the preamble to the final rule.

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I. Summary of Considerations Made in Developing This Standard

A. Background and Purpose of the Regulation

The Clean Air Act was created in part "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." [Clean Air Act, section 101(b)(1)] Section 112(b), as revised in 61 FR 30816 (June 18, 1996), lists 188 hazardous air pollutants (HAP) believed to cause adverse health or environmental effects. Section 112(d) requires that emission standards be promulgated for all categories and subcategories of "major" sources of these HAP and for many smaller "area" sources listed for regulation, pursuant to section 112(c). Major sources are defined as those that emit or have the potential to emit at least 10 tons per year of any single HAP or 25 tons per year of any combination of HAP.

On July 16, 1992 (57 FR 31576), the EPA published a list of categories of sources slated for regulation. This list included the flexible polyurethane foam production source category regulated by the standards being promulgated today. The statute requires emissions standards for the listed source categories to be promulgated between November 1992 and November 2000. On December 3, 1993, the EPA published a schedule for promulgating these standards (58 FR 63941). Standards for the flexible polyurethane foam production source category covered by this rule were

proposed on December 27, 1996 (61 FR 68406).

For the purpose of this rule, the EPA has separated the flexible polyurethane foam production source category into three subcategories. These subcategories are slabstock, molded, and rebond flexible polyurethane foam production.

In the 1990 Amendments to the Clean Air Act, Congress specified that each standard for major sources must require the maximum reduction in emissions of HAP that the EPA determines is achievable, considering cost, non-air quality health and environmental impacts, and energy requirements. In essence, these Maximum Achievable Control Technology (MACT) standards would ensure that all major sources of toxic air pollutants achieve the level of control already being achieved by the better controlled and lower emitting sources in each category. This approach provides assurance to citizens that each major source of toxic air pollution will be required to employ good control measures to limit its emissions.

Available emission data, collected during the development of this rule, shows that pollutants that are listed in section 112(b)(1) and are emitted by flexible polyurethane foam production sources include methylene chloride, 2,4-toluene diisocyanate, methyl chloroform, methylene diphenyl diisocyanate, propylene oxide, diethanolamine, methyl ethyl ketone, methanol, and toluene. Methylene chloride comprises over 98 percent of the total HAP emissions from this industry. Following is a summary of the potential health effects associated with exposure to methylene chloride that will be reduced by the standard.

The acute (short-term) effects of methylene chloride inhalation in humans consist mainly of nervous system symptoms such as decreased visual and auditory functions. These effects appear to be reversible once exposure ceases. Short-term exposure to high concentrations of methylene chloride also irritates the nose and throat. The effects of chronic (long-term) exposure to methylene chloride in humans involve the central nervous system, and include headaches, dizziness, nausea, and memory loss. Animal studies indicate that inhalation of methylene chloride affects the liver, kidney, and cardiovascular system. Developmental or reproductive effects of methylene chloride have not been reported in humans, but limited animal studies have reported lowered fetal body weights in rats exposed to inhalation.

Human data are considered inadequate to prove cancer caused by

exposure to methylene chloride; animal studies have shown increases in liver and lung cancer and benign mammary gland tumors following the inhalation of methylene chloride. Methylene chloride is classified as Group B2, probable human carcinogen of relatively low carcinogenic potency.

As noted earlier, there are other HAP emitted by flexible polyurethane foam production facilities. While the magnitude of emissions of these pollutants is dwarfed by those of methylene chloride, it is important to note that the EPA has not undertaken a risk assessment of these facilities. Therefore, it is possible that other HAP, such as diisocyanates, may also pose risks of concern. The seriousness of risks remaining after imposition of the final MACT standards will be examined at a later date, as provided for under Section 112(f) of the Clean Air Act.

The Clean Air Act strategy avoids dependence on a detailed and comprehensive risk assessment as a prerequisite for controlling air toxics. In addition, this is not a "significant" rule as defined by Executive Order 12866, and a specific benefits analysis is not required. Because of these issues, a detailed and intensive risk assessment of potential effects from HAP emitted from flexible foam production plants is not included in this rulemaking.

The effects of HAP vary in severity based on the level and length of exposure and are influenced by source-specific characteristics such as emission rates and local meteorological conditions. The extent and degree to which the health effects may be experienced is dependent upon: (1) the ambient concentrations observed in the area (e.g., as influenced by emission rates, meteorological conditions, and terrain); (2) the frequency and duration of exposures; (3) characteristics of the exposed individuals (e.g., genetics, age, pre-existing health conditions, and lifestyle), which vary significantly with the population; and (4) pollutant specific characteristics (e.g., toxicity, half-life in the environment, bioaccumulation, and persistence).

Due to the volatility and relatively low potential for bioaccumulation of these pollutants, air emissions are not expected to deposit on land or water and cause subsequent adverse health or ecosystem effects.

The final standards give existing sources 3 years from the date of promulgation to comply. Subject to certain limited exceptions, this is the maximum amount of time allowed under the Clean Air Act. New sources are required to comply with the standard upon initial startup. The EPA

believes these standards to be achievable for affected sources within the time provided.

Included in the final rule are methods for determining initial compliance, as well as monitoring, recordkeeping, and reporting requirements. All of these components are necessary to ensure that sources will comply with the standards both initially and over time. However, the EPA has made every effort to simplify the requirements in the rule.

Two of the HAP used and emitted by the flexible polyurethane foam industry (2,4-toluene diisocyanate and propylene oxide) are subject to the risk management program rule requirements under section 112(r) of the 1990 Clean Air Act Amendments. The risk management program rule was published in the *Federal Register* on June 20, 1996 (61 FR 31668). Facilities handling a listed substance in quantities greater than a threshold amount must comply with the risk management requirements by June 21, 1999. The list of substances and threshold quantities were published in the *Federal Register* on January 31, 1994 (59 FR 4478).

B. Source of Authority

The amended Clean Air Act requires the EPA to promulgate national emission standards for sources of HAP. Section 112(d) provides that these standards must reflect "the maximum degree of reduction in emissions of the HAP that the Administrator, taking into consideration the cost of achieving such emission reduction, and any nonair quality health and environmental impacts and energy requirements, determines is achievable for new or existing sources in the category or subcategory to which such emission standard applies." [42 U.S.C. 7412(d)(2)]. This level of control is referred to as the maximum achievable control technology (MACT). The Clean Air Act goes on to establish the least stringent level of control for MACT; this level is termed the "MACT floor."

For new sources, the standards for a source category or subcategory "shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator" [section 112(d)(3)]. Existing source standards shall be no less stringent than the average emission limitation achieved by the best performing 12 percent of the existing sources for source categories and subcategories with 30 or more sources, or the average emission limitation achieved by the best performing 5 sources for sources or subcategories with fewer than 30

sources [section 112(d)(3)]. These two minimum levels of control define the MACT floor for new and existing sources.

C. Stakeholder and Public Participation

Numerous representatives of the flexible polyurethane foam production industry were consulted in the development of this standard. Industry representatives have included trade associations and flexible foam producers responding to Information Collection Requests. The EPA also received input from representatives from State and Regional environmental agencies. Representatives from other interested EPA offices and programs participated in the regulatory development process as members of the Work Group. The Work Group was involved in the regulatory development process, and was given opportunities to review and comment on the standards before proposal and promulgation. Therefore, the EPA believes that the impact on other EPA offices and programs has been adequately considered during the development of these standards. Finally, industry representatives, regulatory authorities, environmental groups, and the public as a whole had the opportunity to comment on the proposed standards and to provide additional information during the public comment period that followed proposal.

The standards were proposed in the *Federal Register* on December 27, 1996 (61 FR 68406). The preamble and Basis and Purpose Document for the proposed standards described the rationale for the proposed standards. Public comments were solicited at the time of proposal. To provide interested individuals the opportunity for oral presentation of data, views, or arguments concerning the proposed standards, a public hearing was offered at proposal. However, the public did not request a hearing and, therefore, one was not held. The public comment period was from December 27, 1996 to February 25, 1997. A total of 12 comment letters were received. Commenters included industry representatives and State agencies. The comments were carefully considered, and changes were made in the proposed standards when determined by the EPA to be appropriate. A detailed discussion of these comments and responses can be found in the Basis and Purpose Document for Final Standards, which is referenced in Section V.A. of this preamble. The summary of comments and responses in the Basis and Purpose Document for the Final Standards serves as the basis for the revisions that have

been made to the standards between proposal and promulgation. Section IV of this preamble discusses some of the major changes made to the standards.

II. Summary of Promulgated Standards

HAP emissions from the following types of emission points (i.e., emission source types) are being covered by the final standard: storage vessels, equipment leaks, production line, mixhead flush, mold release agents, and auxiliary blowing agent (ABA) use. The HAP emitted and emission points required to be controlled by these standards vary according to whether the facility produces slabstock, molded, or rebond flexible polyurethane foam.

The affected source is defined as each process that produces flexible polyurethane or rebond foam, emits a HAP, and is located at a major source plant site. A process consists of raw material storage; production equipment and piping, ductwork, and other associated equipment; and curing and storage areas. The regulations do not apply to processes dedicated exclusively to the fabrication (i.e., gluing or otherwise bonding foam pieces together) of flexible polyurethane foam or to research and development.

Existing sources subject to the regulation are required to comply within three years of the effective date of the regulation, and new sources would be required to comply at initial startup. Following is a description of the requirements of the standards.

A. Standards for Molded and Rebond Flexible Polyurethane Foam Production

At new and existing molded and rebond flexible polyurethane foam facilities subject to the rule, the use of HAP or HAP-based products as equipment cleaners or mold release agents is prohibited. The one exception to this prohibition is that diisocyanates may be used at molded foam facilities to flush the mixhead and associated piping during periods of startup or maintenance, as long as such solvents are contained in closed loop systems and are re-used in production. Molded and rebond foam producers are required to submit an initial notification and maintain records to demonstrate that the equipment cleaners and mold release agents used are not HAP-based.

B. Standards for Slabstock Flexible Polyurethane Foam Production

The requirements for slabstock foam facilities are separated into two basic categories: (1) diisocyanates used as a reactant in the foam process; and (2) HAP used as an auxiliary blowing agent (ABA) and for equipment cleaning. The

diisocyanate HAP used in the production of slabstock foam is almost always 2,4-toluene diisocyanate (TDI), and the HAP used as an ABA and equipment cleaner is almost always methylene chloride. The rule covers emissions from two types of TDI emission points— storage vessels and equipment leaks. HAP ABA emissions from the following process points are covered: storage vessels, equipment leaks, the foam tunnel, and equipment cleaning.

C. Standards for Diisocyanate Emissions From Slabstock Flexible Polyurethane Foam Production

The standards cover emissions of diisocyanate from storage vessels and equipment leaks. For new and existing sources, there are two compliance options for storage vessels. The vessel can be equipped with a vapor return line that returns vapors displaced during storage vessel filling to the tank truck or rail car. During each unloading event, the vapor return line must be inspected for leaks. If a leak is detected, it must be repaired before the next unloading event. The second option is to equip the storage vessel with a system in which displaced vapors are routed through a carbon adsorption system prior to being discharged to the atmosphere. Storage vessels equipped with carbon adsorption systems must monitor the outlet of the carbon system to detect breakthrough. If breakthrough is detected, the carbon must be replaced before the next unloading event.

Transfer pumps in diisocyanate service must be either sealless pumps, or submerged pump systems that are visually monitored weekly to detect leaks. Any transfer pump leaks detected must be repaired within 15 calendar days. Diisocyanate leaks for other components in diisocyanate service (valves, connectors, and pressure-relief valves) detected by visual, audible, or any other detection method must be repaired within 15 calendar days, as well.

D. Standards for HAP ABA Emissions From Slabstock Flexible Polyurethane Foam Production

This regulation requires that owners or operators comply with requirements

for each of four types of emission points (HAP ABA emissions from storage vessels, equipment leaks, and the production line, and HAP emissions from equipment cleaning). These limitations are described below.

However, since the same HAP, methylene chloride, is frequently used as both an ABA and as an equipment cleaner, this rule allows owners and operators flexibility in complying with the HAP ABA and equipment cleaning provisions. As an alternative to the emission point specific limitations, the owner or operator can elect to comply with a source-wide emission limitation. Owners or operators selecting the source-wide emission limitation must maintain the combined emissions from all of these sources below the required level. While this option is slightly more stringent than the emission point specific limitations, the EPA believes the flexibility it provides will prove to be beneficial for sources selecting this alternative.

1. HAP ABA Storage Vessel Requirements

The requirements for HAP ABA storage vessels are similar to the diisocyanate storage vessel requirements discussed above. Storage vessels can be equipped with either a vapor return line to the tank truck or railcar, or a carbon adsorption system. The requirements for new and existing sources are identical.

2. HAP ABA Equipment Leaks

These standards contain requirements for pumps, valves, connectors, pressure-relief devices, and open-ended valves or lines in HAP ABA service at new and existing sources.

Pumps and valves must be monitored quarterly for leaks using Method 21, 40 CFR part 60, appendix A, where a leak is defined as an instrument reading of 10,000 parts per million or greater. Leaks must be repaired within 15 calendar days after their detection. Alternatively, leakless pumps can be used. Valves that are designated as unsafe-to-monitor must be monitored as frequently as possible, and difficult-to-monitor valves must be monitored once per year.

Connectors must be monitored annually using Method 21, unless the

connector has been opened or the seal broken. In these cases, the connector must be monitored within 3 months after being returned to HAP ABA service. As with the other components, a leak is defined as an instrument reading of 10,000 parts per million or greater, and a leak must be repaired within 15 calendar days. Connectors can also be designated as unsafe-to-monitor, in which case they must be monitored as frequently as possible.

Pressure-relief devices must be monitored using Method 21 if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method. If a leak is found (10,000 parts per million), it must be repaired within 15 calendar days. Each open-ended valve or line in HAP ABA service must be equipped with a cap, blind flange, plug, or a second valve.

3. HAP ABA Emissions from the Production Line

The rule includes an emission limit for HAP ABA emissions from the production line at affected slabstock facilities. There are two options for complying with the requirements for HAP ABA emissions from the production line— rolling annual compliance or monthly compliance. When using a rolling annual basis, compliance is determined each month, based on the previous 12-month period. Under the monthly compliance alternative, compliance is based on the previous month. Both options require comparing actual HAP ABA emissions to allowable HAP ABA emissions.

Rolling Annual Compliance. This regulation recognizes the variability in HAP ABA emissions for different grades of foam, where a grade of foam is determined by its density and indentation force deflection (IFD). Therefore, the allowable emission level is dependent on the mix of foam grades produced during the 12-month compliance period. The nucleus of the HAP ABA emission limitation provisions is the HAP ABA formulation limitation equation, which determines an allowable amount of HAP ABA for each grade of foam. For existing sources, this equation is:

$$ABA_{\text{limit}} = -0.25 (\text{IFD}) - 19.1 \left(\frac{1}{\text{IFD}} \right) - 16.2 (\text{DEN}) - 7.56 \left(\frac{1}{\text{DEN}} \right) + 36.5$$

Where:

ABA_{limit} = HAP ABA formulation limitation, parts HAP ABA allowed per hundred parts polyol (pph)

IFD = Indentation force deflection (25 percent), pounds

DEN = Density, pounds per cubic foot

Therefore, for each foam grade produced during the 12-month period, the owner or operator must determine the HAP ABA formulation limitation. This equation was developed using actual formulation data from the best performing foam production facilities.

Negative values are not intended to be used in calculating allowable emissions. That is, zero is the formulation limitation if the results of the formulation limitation equation are negative. For new sources, the equation is used to determine the HAP ABA formulation

limitation for a limited number of grades. However, the formulation limitation for many higher-density, higher-IFD foams is automatically set to zero. The following table describes how the HAP ABA formulation limitation for new sources is determined.

Values in parts ABA per hundred parts polyol		Density ranges (pounds per cubic foot)				
		0-0.95	0.96-1.05	1.06-1.15	1.16-1.40	1.41+
IFD	0-10	Use Equation				
	11-15					
	16-20					
	21-25	0				
	26-30					
	31+					

For any foam grade, the owner or operator has the option to designate the HAP ABA formulation limitation as zero. The benefit to such a designation is that the IFD and density testing requirements, as well as the polyol

usage monitoring and recordkeeping requirements, are not required for foam grades for which the owner has designated the HAP ABA formulation limitation as zero. The allowable HAP ABA emissions for a consecutive 12-month period are

calculated as the sum of allowable monthly HAP ABA emissions for each of the individual 12 months in the period. Allowable HAP ABA emissions for each individual month are calculated using the following equation.

$$emiss_{allow, month} = \sum_{j=1}^m \left(\sum_{i=1}^n \frac{(limit_i)(polyol_i)}{100} \right)_j$$

Where:

- $emiss_{allow, month}$ = Allowable HAP ABA emissions from the slabstock affected source for the month, pounds
- m = number of slabstock foam production lines at the affected source
- n = Number of foam grades produced in the month on foam production line j
- $limit_i$ = HAP ABA formulation limit for foam grade i , parts HAP ABA per 100 parts polyol
- $polyol_i$ = Amount of polyol used in the month in the production of foam grade i on foam production line j , pounds

The amount of polyol used is a key component of this analysis, and it must be determined by monitoring the amount of polyol added to the slabstock foam production line at the mixhead when foam is being poured. (See section II. F. 2. below for more information.) Actual HAP ABA emissions are determined by monitoring the HAP ABA added to the slabstock foam production line at the mixhead when foam is being poured. This regulation also contains provisions to allow for the use of HAP ABA recovery devices. If a recovery device is used, the actual HAP emissions are the difference between the uncontrolled HAP ABA emissions and

the HAP ABA recovered. The uncontrolled HAP ABA emissions are determined by monitoring the HAP ABA added to the slabstock foam production line at the mixhead, as discussed above. The amount of HAP ABA recovered is required to be monitored.

Monthly Compliance. As an alternative to the rolling annual compliance approach, owners or operators can elect to comply each month. If this approach is selected, actual and allowable emissions are determined as discussed above. However, compliance is determined by comparing allowable and actual emissions for each month, rather than

for the 12 previous months. An advantage of the monthly compliance approach is that a violation of the allowable monthly HAP limitation constitutes up to 30 days of violation for that compliance period, whereas a violation of the allowable annual total of HAP calculated in any given month constitutes up to 365 days of violation for that compliance period. This alternative is allowed because it is more stringent than the rolling annual compliance approach. In addition, as with the rolling average compliance approach, the use of HAP ABA recovery devices is permitted with the monthly compliance approach.

4. Equipment Cleaning HAP Emissions

Affected sources complying with the emission point specific limitations are prohibited from using a HAP, or a HAP-based product, as an equipment cleaner.

5. Source-wide Emission Limitation Alternative

This alternative allows the owner or operator to choose which of the HAP ABA emission sources to control, but is only available for sources using no more than one HAP as an ABA and equipment cleaner in the process. In other words, an owner or operator could choose not to control HAP ABA storage vessels and equipment leaks, and instead achieve a higher HAP ABA emission reduction from the production line. Alternatively, an owner or operator could choose to control emissions from equipment leaks and storage to "save" as much HAP ABA as possible for use in the production line. In addition, under the source-wide alternative, a facility could utilize a HAP equipment cleaner, as long as the HAP used as the equipment cleaner is the same chemical as the HAP ABA. However, the equipment cleaning HAP emissions must be offset by emission reductions from one of the HAP ABA emission sources.

An owner or operator electing to comply with the source-wide emission limitation for HAP ABA and equipment cleaning determines compliance by comparing actual emissions from the three HAP ABA emission sources and from equipment cleaning with an allowable emissions level. Compliance is determined each month for the previous 12-month period.

The allowable emissions level is determined using the same procedures discussed above for HAP ABA emissions from the production line. Therefore, the total HAP ABA and equipment cleaning HAP emissions allowed under this alternative are equivalent to the allowed HAP ABA emissions from the production line if the emission point specific alternative is selected.

The actual HAP ABA and equipment cleaning emissions are determined by performing a material balance at the HAP ABA storage vessel, using the following equation:

$$PWE_{actual} = \sum_i^n (ST_{i, begin} - ST_{i, end} + ADD_i)$$

Where:

PWE_{actual} = Actual source-wide HAP ABA and equipment cleaning HAP emissions for a month, pounds/month

$ST_{i, begin}$ = Amount of HAP ABA in storage tank i at the beginning of the month, pounds

$ST_{i, end}$ = Amount of HAP ABA in storage tank i at the end of the month, pounds,

ADD_i = Amount of HAP ABA added to storage tank i during the month, pounds

n = Number of HAP ABA storage vessels

Weekly monitoring of the level of HAP ABA in the storage vessels is required, thus providing the amounts for the beginning and end of month to be used in the above equation. In addition, the amount of each HAP ABA delivery must be determined. The requirements for the monitoring of HAP ABA storage vessel levels and the amount of HAP ABA added during each delivery are discussed later in this section. Emission reductions achieved by recovery devices can be accounted for by monitoring the amount of HAP ABA recovered.

As with the emission point specific limitation for HAP ABA from the production line, the source-wide emission limitation includes a monthly compliance alternative.

E. Monitoring Requirements

This regulation contains monitoring requirements for five situations: (1) storage vessels complying using carbon adsorption systems; (2) polyol and HAP ABA added to the production line at the mixhead; (3) recovered HAP ABA when a recovery device is used; (4) the amount of HAP ABA in a storage vessel; and (5) the amount of HAP ABA added to a storage vessel.

1. Storage Vessel Complying Using Carbon Adsorption Systems

Storage vessels equipped with carbon adsorption systems must monitor either the concentration of HAP or the concentration of organic compounds at the exit of the adsorption system. Measurements of HAP concentration must be made using Method 18 Appendix A of 40 CFR 60 and measurements of organic compound concentrations must be made using Method 25A. Outlet concentration measurements must be made monthly (or each time the vessel is filled, if filling occurs less frequently than monthly). Alternatively, the owner or operator can implement an alternative monitoring program where monitoring of HAP or organic compound concentrations during vessel filling must be conducted at an interval no

greater than 20 percent of the carbon replacement interval, which is established using a design analysis.

2. Polyol and HAP ABA Monitoring at the Mixhead

All slabstock facilities must continuously monitor the amount of polyol added to the slabstock foam production line at the mixhead when foam is being poured to allow the calculation of allowable emissions. The regulation contains two options for continuously monitoring the polyol added: (1) a device installed and operated to monitor and record pump revolutions per minute, or (2) a flow rate monitoring device installed and operated to measure the amount of polyol added at the mixhead. Either of these devices must be calibrated at least once each 6 months, and must have an accuracy to within ± 2 percent. The owner or operator can develop an alternative monitoring program to monitor the amount of polyol added at the mixhead. The components of an alternative monitoring plan must include, at a minimum: (1) description of the parameter to be monitored to measure the amount of HAP ABA or polyol added at the mixhead; (2) a description of how the monitoring results will be recorded, and how the results will be converted into amount of

HAP ABA or polyol delivered to the mixhead; (3) data demonstrating that the monitoring device is accurate to within ± 2.0 percent; and (4) procedures to ensure that the accuracy of the parameter monitoring results is maintained. These procedures shall, at a minimum, consist of periodic calibration of all monitoring devices. An alternative plan must be submitted to the Administrator for approval.

In addition, if an owner or operator elects to comply with the emission point specific limitations, the amount of HAP ABA added to the slabstock foam production line at the mixhead must be continuously monitored when foam that contains HAP ABA in the formulation is being poured. The requirements for monitoring the amount of HAP ABA added are the same as discussed above for polyol, except that the device must be calibrated at least once per month.

3. Recovered HAP ABA Monitoring

The rule also includes monitoring requirements for slabstock facilities using a recovery device to reduce HAP ABA emissions. The amount of HAP ABA recovered is determined by using a device that monitors the cumulative amount of HAP ABA recovered by the recovery device. This device must be installed, calibrated, maintained, and operated according to the manufacturer's specifications, and must be certified by the manufacturer to be accurate to within ± 2.0 percent. The rule requires the owner or operator to develop a recovered HAP ABA monitoring and recordkeeping plan and submit it to the EPA for approval.

4. Monitoring to Determine Amount of HAP ABA in a Storage Vessel

For slabstock sources complying with the source-wide alternative, the amount of HAP ABA in a storage vessel must be monitored weekly using a level measurement device. The level measurement device must be calibrated initially and at least once per year thereafter. If the level measurement device produces an output signal, it must have either a digital or printed output. If the level measurement device is a visually-read device (i.e., gauge glass), it must have permanent graduated markings to indicate HAP ABA level in the storage tank.

5. Monitoring to Determine the Amount of HAP ABA Added to a Storage Vessel

The amount of HAP ABA added to a storage vessel during a delivery must be determined using any one of four options. The first option requires that the amount of HAP ABA in the storage vessel be measured before and after the

loading, provided that the level measurement device meets the requirements discussed above in section "I.E.4". The second option requires that the volume of HAP ABA added to the storage vessel be determined by monitoring the flow rate using a device with an accuracy of 98 percent or greater, and which is calibrated at least once every six months. The third option allows the owner or operator to calculate the weight of HAP ABA added by determining the difference between the full weight of the transfer vehicle prior to unloading into the storage vessel and the empty weight of the transfer vehicle after unloading has been completed. This weight must be determined using a scale approved by the State or local agencies using the procedures contained in the National Institute of Standards and Technology Handbook 44, or a scale determined to be in compliance with the requirements of the National Institute of Standards and Technology Handbook 44 at least once per year by a registered scale technician. The final option for determining the amount of HAP ABA added to a storage vessel allows the owner or operator to develop an alternative monitoring program. The alternative monitoring program must include, at a minimum, a description of the parameter to be monitored to determine the amount of the addition, a description of how the results of the monitoring will be recorded and converted into the amount of HAP ABA added, data demonstrating the accuracy of the monitoring measurements, and procedures for ensuring that the accuracy of the monitoring measurements is maintained. Alternative monitoring programs must be submitted to the EPA for approval.

F. Testing Requirements

There are two instances where the use of test methods is required. First, for slabstock owners or operators complying with the emission point specific requirements for HAP ABA equipment leaks, testing must be conducted using Method 21 of 40 CFR part 60, subpart A.

Second, all slabstock affected sources must test each grade of foam produced during a single production "run" to verify the IFD and density, as these are integral inputs into the equation to determine the HAP ABA formulation limitation. This rule requires these parameters to be determined using American Society for Testing and Materials (ASTM) D3574 using a sample of foam cut from the center of the foam bun. The maximum sample size for which the IFD and density is

determined shall not be larger than 24 inches by 24 inches by 4 inches. IFD and density testing is not required for foam grades for which the owner or operator has designated the HAP ABA formulation limitation as zero. The IFD and density testing results must be conducted and recorded within 10 working days of the date the foam was produced.

G. Alternative Means of Emission Limitation

This regulation also contains provisions to allow an owner or operator to request approval to use an alternative means of emission limitation. Examples of alternative means of emission limitation could be the reduction of HAP ABA by a combustion device, use of a storage tank control not mentioned in the regulation, or an alternative program to reduce HAP ABA equipment leak emissions. The request, which may be submitted in the precompliance report for existing sources, the application for construction or reconstruction for new sources, or at any other time after the initial compliance, must include a complete description of the alternative means of emission limitation and documentation demonstrating equivalency with the requirements in the regulation. The owner or operator can begin using the alternative means of emission limitation upon approval of the request by the Administrator.

H. Applicability of General Provisions

The General Provisions for Part 63 (40 CFR part 63, subpart A) create the technical and administrative framework for implementing national emission standards established under section 112 of the Clean Air Act. The General Provisions establish baseline applicable requirements for activities such as performance testing, monitoring, notifications, recordkeeping, and reporting. They also implement statutory provisions such as compliance dates for new and existing sources and preconstruction review requirements. The General Provisions apply to all sources that are affected by Part 63 standards, including the standard for flexible polyurethane foam production. However, individual standards may override certain requirements in the General Provisions. This regulation contains a table outlining the sections of the General Provisions that are applicable to the standard for flexible polyurethane foam production. It also outlines sections of the General Provisions that are being overridden or not incorporated. The performance test requirements; monitoring requirements;

and startup, shutdown, and malfunction plan requirements of the General Provisions do not apply to this standard. Most of the other requirements in the General Provisions do apply.

I. Reporting Requirements

This regulation requires the submittal of seven types of reports: (1) initial notification, (2) application for approval of construction or reconstruction, (3) precompliance report, (4) notification of compliance status, (5) semi-annual compliance reports, (6) other reports, and (7) annual compliance certifications. These reports are briefly described below.

1. Initial Notification

Each owner or operator of an affected source must submit an initial notification to the Administrator within 120 days after promulgation of the rule. This initial notification must contain an identification of the facility that is subject to the regulation, the name and address of the owner or operator of the subject facility, and a brief description of the production process.

2. Application for Approval of Construction or Reconstruction

Owners or operators constructing a new affected source, or reconstructing an existing affected source, must submit an application for approval of construction or reconstruction. This application must contain identification information such as location, owner/operator, and the anticipated completion and start-up dates. The application must also contain a description of the planned process and how compliance will be achieved. The application must be submitted as soon as practicable before the construction or reconstruction is planned to commence. A permit application can take the place of this report.

3. Precompliance Report

One year before the compliance date, each existing owner or operator of an existing slabstock facility must submit a precompliance report. This report must contain notification of whether compliance will be achieved using the emission point specific HAP ABA and equipment cleaning emission limitation or the source-wide emission limitation. The report must also indicate if either of the following compliance options are going to be utilized:

- If compliance will be achieved on a monthly basis for either the emission point specific limitation for HAP ABA emissions from the production line or the source-wide emission limitation.

- If a recovery device will be used to reduce HAP ABA emissions.

This report must also contain a description of how the amount of polyol and HAP ABA (if required) added at the mixhead will be monitored. If the owner or operator is developing an alternative monitoring plan, the plan must be submitted with the precompliance report. In addition, owners or operators of slabstock flexible polyurethane production facilities using a recovery device to reduce HAP ABA emissions must include a description of the HAP ABA monitoring and recordkeeping program to determine the amount of HAP ABA recovered in the precompliance report.

Each owner or operator of an affected source complying with the source-wide emission limitation must submit a description of how the amount of HAP ABA in a storage vessel will be determined, and a description of how the amount of HAP ABA added to a storage vessel during a delivery will be monitored. If the owner or operator is developing an alternative monitoring program for the determination of HAP ABA added to a storage vessel, this program must be submitted with the precompliance report.

The rule specifies that if the Administrator does not notify the owner or operator of objections to an alternative monitoring program or a recovered HAP ABA monitoring and recordkeeping program within 45 days after its receipt, the program is automatically assumed to be approved.

4. Notification of Compliance Status

Each owner or operator of a new or existing slabstock affected source must submit a notification of compliance status report 180 days after the compliance date. This report must contain notification of the compliance status of diisocyanate storage vessels and diisocyanate transfer pumps. In addition, this report must contain compliance information for HAP ABA storage vessels and equipment in HAP ABA service.

5. Semi-annual Reports

Each slabstock owner or operator must submit semi-annual reports. For affected sources complying with the rolling annual compliance provisions (for either the emission point specific HAP ABA limitations or the source-wide emission limitation), the report must contain the allowable and actual HAP ABA emissions (or allowable and actual HAP ABA and equipment cleaning HAP emissions) for each of the 12-month periods ending on each of the six months in the reporting period. For

affected sources complying with the monthly compliance alternative, the report must contain the allowable and actual HAP ABA emissions (or allowable and actual HAP ABA and equipment cleaning HAP emissions) for each of the six months in the reporting period. Affected sources complying with the storage vessel provisions of § 63.1294(a) or § 63.1295 using a carbon adsorption system must include unloading events that occur after breakthrough is detected where the carbon in the system is not replaced. Any equipment leaks that were not repaired in accordance with the rule requirements must also be included in the semi-annual compliance report.

6. Other Reports

A slabstock owner or operator must provide a report to the Administrator indicating the intent to change the selected compliance alternative (emission point specific limitations or source-wide emission limitation). This report must be submitted at least 180 days prior to the change.

Similarly, the intent to switch the compliance method (rolling annual or monthly) must be reported. This report must be submitted at least 180 days prior to the change.

7. Annual Compliance Certifications

Each affected source is required to submit a compliance certification annually. Each compliance certification must be signed by a responsible official of the company that owns or operates the affected source.

J. Recordkeeping Requirements

Records must be completed in a form suitable and readily available for expeditious inspection and review, and must be kept for a period of 5 years. At a minimum, the most recent 2 years of data must be retained on-site.

Records are required for storage vessels, equipment leaks, and HAP ABA. If the owner or operator complies with the source-wide emission limitation, no records are required for HAP ABA storage vessel controls (see section "I.J.1" below) or controls for equipment in HAP ABA service (see section "I.J.2" below).

1. Storage Vessel Records

All slabstock affected sources must maintain records listing all diisocyanate storage vessels and the type of control utilized to comply with the regulation. For the storage vessels complying through the use of a carbon adsorption system, the records must include the design parameters of the system and the monitoring records.

2. Equipment Leak Records

All slabstock affected sources must maintain a list of components in diisocyanate service, and a description of the control utilized for each transfer pump. If the affected source is complying with the emission point specific limitations, records listing each component in HAP ABA service must also be maintained.

When a leak, as defined in the rule, is detected for any component, the component must be marked with a readily visible identification until the leak is repaired. For valves, the identification must remain until 2 successive quarters have passed where no leak is detected. Records must be kept specifying when the leak was detected, when it was repaired, and when the identification was removed.

3. HAP ABA records

All slabstock affected sources must keep records integral to the calculation of allowable emissions. These include a daily log of foam runs and daily records of the amount of polyol added at the mixhead for each grade of foam. The results of the density and IFD testing for each grade must be recorded within 10 working days of the production of the foam. Polyol usage and density/IFD testing records are not required for those foam grades for which the owner or operator has designated the HAP ABA formulation limitation as zero. Monthly, a cumulative record must be maintained listing the foam grades containing HAP ABA produced during the month, along with the total amount of polyol used for each foam grade, and the corresponding allowable HAP ABA (or HAP ABA and equipment cleaning) emissions level. If complying on an annual rolling basis, the allowable HAP ABA (or HAP ABA and equipment cleaning) emissions level for the previous 12 consecutive months must also be recorded each month.

For affected sources complying with the emission point specific limitation for HAP ABA emissions from the production line, records must be kept regarding the amount of HAP ABA added at the mixhead each day. In addition, there must also be a cumulative HAP ABA usage record for each month, and a cumulative record for the previous 12 consecutive months (if complying on an annual rolling basis).

For affected sources complying with the source-wide emission limitation, monthly records must be kept regarding the actual HAP ABA and equipment cleaning emissions, as measured at the storage vessel. Also required are weekly records of the HAP ABA storage vessel

levels and records of the amount of HAP ABA added to the storage vessel during each delivery. If complying on an annual rolling basis, monthly records must be kept of the actual cumulative HAP ABA and equipment cleaning emissions for the previous 12 months.

If an affected source uses a recovery device to reduce HAP ABA emissions, records must be kept regarding the amount of HAP ABA recovered. In addition, records of all required calibrations must be maintained.

III. Summary of Impacts

This section identifies the facilities affected by these NESHAP. It also presents the air, non-air environmental (waste and solid waste), energy, cost, and economic impacts resulting from the control of HAP emissions under this rule.

A. Facilities Affected by These NESHAP

It is estimated that 176 sources will be subject to the regulation. This number includes 57 slabstock foam facilities, 21 facilities with slabstock and rebond processes, and 98 molded foam facilities. It is estimated that 130 molded foam facilities are area sources, and will not be subject to this rule. It is also estimated that all rebond facilities not collocated with a slabstock foam process are area sources.

B. Air Impacts

These standards are estimated to reduce HAP emissions from all existing sources of flexible polyurethane foam manufacturing by over 12,500 Mg/yr. This represents a 70 percent reduction from baseline. This includes over 10,400 Mg/yr from slabstock foam production (69 percent reduction from baseline) and over 2,100 Mg/yr from molded foam production (73 percent reduction from baseline). No reduction is expected from rebond foam production, since it is believed that the entire industry has already stopped using HAP cleaners and mold release agents.

C. Other Environmental Impacts

The Agency estimates that there will be minimal secondary environmental impacts from this regulation. There could be a slight increase in volatile organic compound (VOC) air emissions if facilities switch from a HAP-based product to a non-HAP VOC based product for equipment cleaning, mold release agents, and mixhead flushes. Wastewater could contain minor amounts of HAP if carbon adsorption systems are used to comply with the HAP ABA limitations, but the Agency believes the use of such systems will be rare. The only potential hazardous

waste impact would be due to the disposal of spent carbon adsorption canisters used to control storage vessels. The Agency does not believe these impacts to be significant.

D. Energy Impacts

Due to the use of several control technologies in both slabstock and molded foam, there will be some increase in the amount of energy used by this source category. The impact will vary depending on which control technology is chosen by each facility, but is not expected to be significant.

E. Cost Impacts

Cost impacts include the capital costs of new equipment that reduces HAP emissions, the cost of energy required to operate the equipment, operation and maintenance costs, as well as cost savings. Also, cost impacts include the costs of monitoring, recordkeeping, and reporting associated with the promulgated standards. Average cost effectiveness (\$/Mg of pollutant removed) is also presented as part of cost impacts and is determined by dividing the annual cost by the annual emission reduction.

For the molded subcategory, the estimated total capital investment is \$5.9 million, and the total estimated annual cost is around \$715,000 per year. The total annual HAP emission reduction is 2,100 Mg/year, resulting in a cost effectiveness of \$350/Mg per year.

For the rebond subcategory, it is anticipated that there will be no cost or environmental impacts, since it is believed that every facility already complies with these provisions. The regulation will prohibit the future use of HAP-based cleaners and mold release agents in this industry.

For the slabstock subcategory, the total estimated capital investment is around \$68 million, and the total estimated annual cost is \$7.3 million per year. The total annual HAP emission reduction is over 10,400 Mg/yr, resulting in a cost-effectiveness of around \$700/Mg per year.

Therefore, the total capital investment for this regulation is estimated at \$74 million. The total estimated annual cost is \$8.1 million per year. The total emission reduction is over 12,500 Mg/yr, resulting in an overall cost effectiveness of around \$650/Mg per year.

F. Economic Impacts

An economic impact analysis of these standards was prepared to evaluate primary and secondary impacts on: (1) the slabstock and molded foam sectors of the flexible polyurethane foam

production industry; (2) consumers; and (3) society.

For the slabstock foam sector of the industry, the total annualized social cost (in 1994 dollars) of this promulgated regulation is \$7.18 million. Market price is estimated to increase by 2.20 percent, and the corresponding decrease in market output is estimated to be 1.08 percent. Employment loss is estimated to be 1.09 percent (i.e., 96 jobs).

For the molded foam sector, impacts on price and output are estimated to be smaller than those predicted for the slabstock market. The total annualized social cost (in 1994 dollars) of the promulgated standards for the molded foam subcategory is \$0.71 million. Price is estimated to increase by 1.14 percent, and the corresponding decrease in market output is estimated to be 0.56 percent. Employment loss in the molded sector is estimated to be 0.67 percent (37 jobs).

However, given the predicted changes in market price and output, the industry will experience increases in the value of shipments (i.e., industry profits), because estimated price increases more than offset the lower production volumes. Since no significant export or import markets exist for the industry (due to prohibitive transportation costs), no impacts on foreign trade are expected.

The analysis also predicts the number of plant closures that may result from the imposition of compliance costs on a facility. For the analysis, a worst-case assumption is adopted that the facilities with the highest emission control costs are the least efficient producers in the market. Actual plant closures will be less than that predicted if plants with the highest emission control costs are not the least efficient producers in the industry. In addition, the outcome of predicted closures is sensitive to the wide variety of emission control technologies assigned to the model plants. If the control technology assigned to the representative model plant is different than that which would be chosen by an actual facility, the analysis could overestimate the number of predicted plant closures. Therefore, a sensitivity analysis was performed to test the outcome of closures based on the assignment of control technology to model plants. For the slabstock sector, plant closures are estimated to range from 1 to 3 facilities for this standard. For the molded foam sector, closures are estimated to be zero for this promulgated standard (a sensitivity analysis was not performed for the molded foam production subcategory). Given the significant amount of restructuring currently occurring in the

industry (mergers, buy-outs, and shut-downs), the number of facility closures that will result from the regulation is likely to be minimal.

IV. Significant Comments and Changes to the Proposed Standards

In response to comments received on the proposed standards, changes have been made to the final standards. While several of these changes are clarifications designed to make the EPA's intent clearer, a number of them are changes to the requirements of the proposed standards. Public comment was received on several issues that the EPA raised in the proposal preamble. The public also commented on other issues. In addition, some changes were made to ensure that the regulations are "permit friendly." A summary of the substantive comments and changes made since the proposal are described in the following sections. The rationale for these changes and detailed responses to all public comments are included in the Basis and Purpose Document for the final standards. Additional information is contained in the docket for these final standards. (See ADDRESSES section of this preamble.)

A. Public Response to EPA Request for Comment

In the proposal preamble, the EPA specifically requested comment on the following issues: (1) the need for a federally enforceable mechanism for limiting potential to emit (PTE) at flexible polyurethane foam production sources; (2) controlling TDI emissions from slabstock flexible foam production lines; (3) the burdens of the monthly averaging time option for compliance with the emission limitation for slabstock flexible foam production lines; (4) monitoring in HAP ABA storage vessels; (5) the prohibition on the use of HAP-based adhesives; and (6) the number of affected facilities. No public comments were received on the number of affected facilities in the flexible polyurethane foam production source category. Public comments on the remaining five issues are summarized below.

1. Federally Enforceable Mechanism

The proposed regulation contained provisions for obtaining a federally enforceable limitation on PTE, which would allow sources to maintain emissions below the major source threshold amount. It also included recordkeeping and reporting requirements for sources obtaining the federally enforceable emission limitation. One commenter urged the EPA to identify the criteria for

establishing area source status, while others objected to the requirements that an area source maintain supporting documentation, stating that facilities should not be required to keep records to prove they are not subject to the regulation.

The EPA agrees that criteria for area source status should be included within the regulation, rather than the general criteria in the proposed rule. Therefore, § 63.1290(c) has been revised to add specific criteria for identifying slabstock sources with potential emissions below the major source threshold levels. Slabstock flexible polyurethane foam producers may elect to use a total of less than 5 tons of total HAP at the entire plant site, including uses as an auxiliary blowing agent, an equipment cleaner, and as an adhesive in foam fabrication operations. The addition of these specific criteria will ease the administrative burden for both State and local agency regulators and sources by reducing the need for case-by-case determination of area or synthetic minor source status. This option is not available to slabstock processes located at plant sites that have HAP-using processes other than slabstock foam production and foam fabrication. Also, due to the large number of potential uses of HAP at molded foam facilities, such criteria are not included for molded foam facilities.

The Agency agrees with the commenters that recordkeeping requirements should be sufficiently detailed to ensure that PTE limits are practically enforceable; however, the EPA recognizes that State and local agencies should establish such recordkeeping requirements. In the consideration of these comments, the EPA determined that it is not appropriate for the rule to require specific records at facilities that are not subject to the regulation. Therefore, the rule only requires that records be kept to verify the HAP usage.

2. TDI emissions from Slabstock Production Lines

The proposed rule did not require control of 2,4-toluene diisocyanate (TDI) emissions from the foam production line. At proposal, the EPA requested comment on the feasibility and necessity of additional controls for TDI emissions from the foam line.

Four commenters responded to the EPA's request for comments on this item. Three of the commenters supported the EPA in proposing no control for TDI emissions from the foam production line. All three commenters noted that TDI emissions from foam production are very small. Two of these

commenters also indicated the lack of currently available control technologies to address these emissions and the high costs of utilizing technologies that are common in other applications. However, one commenter believed additional controls for TDI were needed. This commenter urged the EPA to assess applicable work practices or equipment standards that would reduce TDI and other emissions from the production line and other emission points not covered under the current rule.

The EPA agrees with the three commenters who believe that the regulation should not control TDI emissions from the production line. The primary reasons for this opinion are the low level of emissions and the high costs of control. The EPA recognizes the concerns related to the health effects of TDI, even at relatively low concentrations. However, nationwide TDI emissions from the foam tunnel at slabstock polyurethane foam production facilities are estimated to be less than 10 tons per year. A typical plant emits around 1/10 of a ton per year. In addition, TDI is present in exhaust streams in very low concentrations, typically less than 1 part per million (ppm). Currently available control technologies common to other applications are not suited to the cost-effective removal of low concentrations of TDI from a high velocity exhaust stream.

Prior to proposal, the EPA determined that the floor for the control of TDI was no control. Further, no controls techniques were identified in practice to allow the consideration of levels more stringent than the floor. After proposal, the EPA re-investigated technologies for the control of TDI emissions from the foam production line by contacting vendors of control equipment, as well as air pollution regulatory agencies in other countries. Based on that additional analysis, the EPA concludes that the MACT floor is no control. Despite indications of the existence of cost-effective TDI control technologies, none of these efforts identified any technology for TDI that the Agency believed could be cost-effectively applied to the foam tunnel in a slabstock foam production facility.

In the future, the EPA will conduct a section 112(f) residual risk assessment of the flexible polyurethane foam industry. In a section 112(f) residual risk assessment, a regulated industry is evaluated based on the risks it still poses to people and the environment. If the assessment determines that unacceptable health risks are still related to the industry, the EPA will

impose additional requirements on the industry.

The EPA does not feel it is appropriate to require additional recordkeeping or reporting in this rule to support a future risk assessment, as suggested by the commenter. The EPA will obtain the necessary information at the time of the risk assessment.

3. Monthly Averaging Time

The proposed rule allowed for two averaging time formats for compliance with the requirements for HAP ABA emissions from the production line and source-wide HAP ABA and equipment cleaning emissions: (1) rolling annual compliance [§ 63.1297(a)(1)]; and (2) compliance determined for each individual month. [§ 63.1297(a)(2)] At proposal, the EPA requested comments on any burdens caused by inclusion of the monthly compliance alternative in the proposed regulation.

Two commenters responded to the EPA's request for comments on this item. Neither commenter reported any burdens associated with inclusion of the monthly compliance alternative. However, both commenters were concerned about the potential for being assessed penalties based on 365 days of violations when using the rolling annual compliance alternative, even if the actual number of non-compliance days was much less.

In response to the seasonal variation of the production of slabstock foam, the EPA based the proposed HAP ABA emission requirements on a 12-month period, where compliance would be determined each month for the previous 12 months. While industry recognized the flexibility of this 12-month averaging period, they were concerned regarding the enforcement of such provisions. The concerns expressed at that time were analogous to those made by these commenters.

In response to these concerns, the EPA included the monthly compliance alternative in the proposed regulation. This alternative, while reducing flexibility, eliminates the potential for violations for a 365-day period. Since no comments were received indicating that the inclusion of two averaging time options was inappropriate or burdensome to either affected sources or enforcement agencies, both averaging periods were retained in the final rule.

In response to the commenters' concern about penalties associated with the 12-month averaging option, the EPA points out that the rule cannot specify a penalty structure, but can only include the definition of a violation. Clearly, a violation of the HAP ABA (or source-wide) requirements of this rule occurs

when the actual emissions exceed the allowable emissions. In the case of a violation, the State or local enforcement agency (and in some cases the EPA Regional Office) will determine the penalty for a violation.

In conclusion, the commenters continue to be concerned with the potential penalties associated with the 12-month averaging time. The EPA continues to believe that the monthly averaging time is a viable alternative available to all affected sources, and that each owner or operator will have to weigh the added flexibility of the 12-month averaging period with the potential for higher penalties associated with this option.

4. Monitoring in HAP ABA Storage Vessels

If a facility is complying with the source-wide alternative for HAP ABA and HAP equipment cleaners, actual emissions are measured by conducting a monthly material balance at the HAP ABA storage vessel. An input to this determination is the amount of HAP ABA in the storage tank. The proposed rule at § 63.1303(d) contained criteria for the devices that could be used to measure the level of HAP ABA in the vessel. Gauge glasses and simple floats would not have fit these criteria. At proposal, the EPA requested comment on the monitoring requirements and whether the use of gauge glasses, float systems, and other visually-read systems should be allowed.

All the commenters that provided input on this issue felt that visually-read level measurement systems, which are "standard" in the industry, should be allowed. They believed that visually-read measurement systems were sufficiently accurate, and that the competitive nature of the industry dictated that facilities eliminate raw material loss. Due to the need to manage chemical use, visually-read level measurement systems in conjunction with existing inventory controls provide necessary compliance records.

Upon reviewing these comments and collecting additional information on this issue by conducting a survey of storage tank level measurement device vendors, contacting foam trade organizations and foam producers, and visiting a foam plant and observing first hand the use of visually-read level measurement devices to determine the storage tank level, the EPA agreed that these visually-read devices should be allowed. The EPA now believes that the use of gauge glasses and float systems will not result in significantly greater errors in level measurement than devices that meet the proposed

requirements. For example, an error analysis based on typical 10,000 gallon storage vessels and an error in measurement of 0.5 inches indicates that the error is approximately 3.27 cubic feet or 24.5 gallons (0.5 percent) for a vertical tank at half capacity. For horizontal tanks at half capacity, the error is approximately 8.8 cubic feet or 65.8 gallons (1.3 percent). In order to minimize the potential for human error, the final rule requires that all visually-read measurement devices have permanent graduated markings from which the level will be read. This practice should eliminate any error associated with the use of non-fixed measuring tools, such as tapes or rulers. Therefore, in the final rule, paragraph 63.1303(d) requires that devices that are used to measure the level in the storage vessel be calibrated initially and at least once per year. If the device produces an output signal, it must have either a digital or printed output. If the device is a visually-read device, it must have permanent graduated markings.

5. Prohibition on the Use of HAP-based Adhesives

The EPA requested comment on the technical feasibility of prohibiting the use of HAP-based adhesives for foam repair in molded foam production. Two responses to this request were received. The first commenter reported that HAP-free adhesives have not been successful in all applications. The commenter recommended a review process that would allow a facility to use HAP-based mold release agents if they demonstrated that product quality suffered with the use of HAP-free adhesives. The second commenter was also concerned about the proposed prohibition, and recommended that the EPA defer consideration of HAP-based adhesives until development of the foam fabrication NESHAP.

The EPA acknowledges the commenters' concern that HAP-free adhesives may not be successful in all applications. In further conversations after proposal of the regulations, adhesive manufacturers indicated that the molded foam production source category was not a major market for their products. The EPA therefore agrees with the second commenter that consideration of HAP-based adhesives should be deferred until development of the foam fabrication NESHAP. The proposed provisions at 63.1300(c) prohibiting the use of HAP-based adhesives to repair foam products in a molded flexible polyurethane foam source have been removed. The Agency expects to consider use of HAP-based molded foam repair adhesives in the

development of the flexible polyurethane foam fabrication NESHAP.

B. Other Rule Changes in Response to Public Comments

1. IFD and Density Testing

The proposed rule required that the indentation force deflection (IFD) and density be tested for every grade of foam produced. It also required that the amount of polyol used be monitored for every foam grade, and that records of this usage be maintained. A comment was received stating that there was no benefit to testing foams or monitoring and keeping records of the amount of polyol added for grades that do not have any ABA in the formulation.

For each specific grade, the allowable emissions are calculated using the formulation limitation (which is calculated using the IFD and density of the grade) and the amount of polyol used to produce the grade. The calculation of the allowable HAP ABA emissions is unrelated to the amount of HAP ABA added to the formulation for that grade. The amount of HAP ABA added represents the actual emissions. Therefore, if a facility produced a particular grade (e.g., Grade A) with a formulation limitation greater than zero, but used no HAP ABA, then emission "credits" would be generated. This "credit" would then allow the owner or operator to use an amount of HAP ABA higher than the formulation limitation for another grade (e.g., Grade B). If no testing of the grade, or records of polyol used, were kept for Grade A, then credits would not be generated to allow the production of Grade B with the desired amount. Therefore, the EPA sees considerable benefit in testing and keeping records for all grades that have formulation limitations greater than zero.

However, the EPA does believe that the burden can be reduced by eliminating the requirement that any IFD or density testing be conducted for grades where the owner or operator designates the formulation limitation as zero. This decision is reflected in the final rule.

2. Definition of Flexible

One comment was received regarding the adjective "flexible" in the term "flexible polyurethane foam". The commenter (IV-D-07) noted that while "flexible polyurethane foam" is defined in the rule, the definition did not address "the degree of flexibility or rigidity associated with the foam." The commenter believed that their "foam-in-place" operation is intended to be included within the scope of the

proposed rule. However, the foam, which is sprayed into boxes to provide a protective cushioning layer for shipment of products, is "quite rigid in nature". The commenter requested clarification regarding the meaning of flexible.

The EPA agrees that there is a need to clarify "flexible" as it is used in the definition of flexible polyurethane foam, and has added language to the definition provided in the rule, as follows:

"Flexible polyurethane foam means a flexible cellular polymer containing urea and carbamate linkages in the chain backbone produced by reacting a diisocyanate, polyol, and water. Flexible polyurethane foams are open-celled, permit the passage of air through the foam, and possess the strength and flexibility to allow repeated distortion or compression under stress with essentially complete recovery upon removal of the stress."

By comparison, rigid polyurethane foams are closed-celled, do not allow the passage of air through the foam, and do not distort or compress under stress until there is sufficient stress to crush the foam. Rigid foams that have been crushed do not recover to their original shape.

Based on information provided by the commenter, the EPA is unable to definitively determine if the foam produced is flexible polyurethane foam and if the commenter's process is subject to the rule. However, it is believed that the "foam-in-place" process described is a molded foam process and would be subject to the rule, if the foam produced meets the revised definition of flexible polyurethane foam cited above.

3. HAP ABA Emission Calculation

One commenter noted that there was a typographical error in the equation as published in the preamble. The first term should appear as "-.25(IFD)." Two commenters noted that the HAP ABA formulation equation results in a negative (<0) value for the ABA limitation in some cases. One commenter felt that this was a result of a typing error in the published equation. The second commenter was concerned that it would be "possible for certain foam grades to calculate a negative monthly ABA, thus reducing the total ABA and misrepresenting the intent of the ABA formulation limitation equation." This commenter recommended that the minimum amount of ABA be limited to zero (0) for averaging purposes.

The EPA recognizes that there was a typographical error in the equation as

published in the preamble. The first term in the equation 25(IFD) should be preceded by a negative sign. The proposed regulatory language was correct. The final rule and the rule summary in the preamble for the promulgated regulation include the correct equation.

However, the commenter was incorrect in assuming that an error in the published equation resulted in the equation yielding negative values. The equation indeed results in negative values for some combinations of density and indentation force deflection (IFD). The EPA did not intend for these negative values to be used in calculating allowable emissions. Rather, the intent was for the foam manufacturer to use zero if the calculated HAP ABA formulation limitation was negative. However, the proposed regulation did not state this intention, and the Agency recognizes that this situation would clearly lead to confusion. Therefore, in accordance with the commenter's suggestion, the EPA has revised the regulation to clearly state that zero shall be the formulation limitation if the results of the formulation limitation equation are negative. A new table has been added to § 63.1297(d)(2) to clarify the new source formulation limitation requirements.

4. State Delegation

One comment was received requesting clarification as to what authorities, if any, have been delegated to States. The commenter reported that in some instances, the EPA has specified within given Part 63 standards that certain authorities were not to be delegated to States.

The proposal regulation was silent on the implementation and enforcement authorities that may be delegated to States. The EPA agrees that the regulations should specify which authorities are and are not delegated to State and local permitting authorities. § 63.1308 has been added to the regulations to identify these authorities. The new provisions clarify that the authority to approve alternative monitoring plans and emission limitations shall be retained by the EPA Administrator and not transferred to a State or local permitting authority. The Administrator must approve alternative programs required in § 63.1303(b)(5) for monitoring HAP ABA and polyol added to the foam production line at the mixhead. Alternative emission limitations allowed under § 63.1305(d) must also be approved by the Administrator. These requirements are in keeping with longstanding EPA policy that emission limits to satisfy

Clean Air Act requirements for protecting the public health, as well as the monitoring to demonstrate compliance with those limits, must be determined by the Administrator.

C. Other Changes to the Proposed Regulation

In addition to the changes in response to public comments discussed above, changes to the proposed rule have been made to clarify the requirements of the regulations. These changes do not add emission standards or requirements to the regulation. In general, they specify aspects of the regulations that were not included in sufficient detail in the proposed rule. The effect of these changes will be to assure compliance with the standards while providing flexibility and regulatory certainty for affected sources, as well as for permitting and enforcement agencies. The changes are related to a test method for carbon adsorption and a continuous compliance demonstration.

The proposed rule required monitoring of HAP or organic compounds from storage vessel carbon adsorption systems to determine breakthrough. However, the rule did not indicate the test method to use if the owner or operator elected to monitor organic compound concentration. Section 63.1303(a)(4) now specifies the use of Method 25A for measuring organic emissions from carbon adsorption systems. This change clarifies the compliance requirements for carbon adsorption system use.

The regulation has been revised to clarify what constitutes compliance with the rule. No new emission standards or work practice requirements have been added to the regulations. While the compliance requirements could be inferred from the proposed regulation, the final rule now directly states the specific actions needed and the records required to demonstrate compliance, absent credible evidence to the contrary. These changes will ensure compliance to protect the public health, ensure the practical enforceability of the standards, identify the permit terms and conditions implementing the standards, and provide regulatory clarity for affected sources. They are in keeping with the Agency's priorities for streamlining the regulatory process and minimizing the burden on affected sources by clearly defining compliance terms.

Section 63.1308 summarizes what indicates compliance with the standards in § 63.1293-63.1301, absent credible evidence to the contrary, as well as what constitutes a violation of the standard, for each requirement in the rule. Facility

owners will not have to speculate on how compliance with a particular requirement may be interpreted. For regulating agencies, these provisions identify the terms and conditions that could be included in the permit. The provisions thus increase regulatory certainty, minimize the amount of time spent developing and reviewing permit terms, and ensure enforceability.

The provisions of §§ 63.1306(g) and 63.1308 do not, and are not intended to, alter or affect the requirements of 40 CFR part 70 for the purposes of addressing the requirements of this subpart, or any applicable requirements, in part 70 permits. Sources required to have a Title V operating permit must submit annual compliance certifications consistent with § 70.6(c)(5) applicable to all permit terms and conditions, which include applicable requirements such as subpart III. The certification requirements of part 70 require a statement from part 70 sources that, based on information and belief formed after reasonable inquiry, the statements and information in certifications—including annual compliance certifications—are true, accurate, and complete (40 CFR 70.5(d) and 71.5(d)). While a part 70 compliance certification may be used to satisfy the requirements of § 63.1306(g) (see § 63.1306(g)(2)) the annual compliance certification required by § 63.1306(g) may not be used to satisfy the compliance certification requirements of part 70, for purposes of part 70 permits that include subpart III as an applicable requirement.

In addition to the clarifying changes noted above, the EPA has removed the requirement that each facility develop, maintain, and implement a startup, shutdown, and malfunction plan.

The General Provisions include the requirements for a startup, shutdown, and malfunction plan in § 63.6(e)(3). A table of the proposed rule indicated that the provisions of § 63.6 were applicable to flexible polyurethane foam production affected sources. In the exercise of improving the clarity of the rule, the EPA decided that it would be more apparent to affected sources if the provisions related to the startup, shutdown, and malfunction were included in this rule, rather than simply referring to subpart A. However, in adding these provisions, the EPA concluded that they were not appropriate for the flexible polyurethane foam production industry. Therefore, the final rule has removed the requirement that flexible polyurethane foam affected sources create and implement a startup, shutdown, and malfunction plan. This is indicated by a "NO" in the General

Provisions table (Table 2) of the final rule for § 63.6(e)(3). The rationale for this conclusion is briefly discussed below.

The fundamental problem in applying the General Provisions startup, shutdown, and malfunction provisions to flexible polyurethane foam production facilities is defining a startup and a shutdown. The foam production process is intermittent in nature and, based on the EPA's knowledge of the industry, every foam production process will undergo at least one routine "startup" and one routine "shutdown" per day. The EPA never intended that these routine activities be addressed by the startup, shutdown, and malfunction plan.

The intent of the startup, shutdown, and malfunction plan is to identify methods to reduce excess emissions that may occur during these events when air pollution is emitted in quantities greater than anticipated by the standard. Given the comprehensive approach of subpart III to regulate emissions by restricting the amount of HAP used, the EPA does not believe that, for foam production facilities, startups, shutdowns, or malfunctions provide the opportunity for excess emissions not already anticipated in the regulation. Finally, as discussed in section I.A, two of the HAP used and potentially emitted during malfunctions by the flexible polyurethane foam industry (2,4-toluene diisocyanate and propylene oxide) are subject to the risk management program rule requirements under section 112(r) of the 1990 Clean Air Act Amendments.

V. Administrative Requirements

A. Docket

A record has been established for this rulemaking under docket number A-95-48. The record includes printed, paper versions of comments and data submitted electronically. A public version of this record, which does not include any information included as CBI, is available for inspection from 8:00 a.m. to 5:30 p.m. Monday-Friday, excluding legal holidays. The public record is located in the Air & Radiation Docket & Information Center, Room M1500, 401 M Street SW, Washington, DC 20460.

Response-to-Comment Document. The response-to-comment document for the promulgated standards contains: (1) A summary of the public comments made on the proposed standards and the Administrator's response to the comments; and (2) a summary of the changes made to the standards since proposal. The document may be obtained from the U.S. EPA Library

(MD-35), Research Triangle Park, North Carolina 27711, telephone (919) 541-2777. It may also be obtained from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia 22151, telephone (703) 487-4650. Please refer to "Hazardous Air Pollutant Emissions from the Flexible Polyurethane Foam Production Industry—Basis and Purpose Document for Final Standards, Summary of Public Comments and Responses" (EPA-453/R-97-008b, December 1997). This document is also located in the docket (Docket Item No. V-B-1) and is available for downloading from the Technology Transfer Network (TTN). The TTN is one of the EPA's electronic bulletin boards. The TTN provides information and technology exchange in various areas of air pollution control. The service is free except for the cost of a phone call. Dial (919) 541-5742 for up to a 14,400 bps modem, or connect through the internet to the following address: "www.epa.gov/ttn/oarpg". If more information on the Technology Transfer Network is needed, call the HELP line at (919) 541-5384.

Previous Background Documents.

Other materials related to this rulemaking are available for review in the docket. The Basis and Purpose Document, which contains the rationale for the various components of the standard, is available in the docket and on the TTN. This document is entitled "Hazardous Air Pollutant Emissions from the Production of Flexible Polyurethane Foam—Basis and Purpose Document for Proposed Standards," September 1996, and has been assigned document number EPA-453/D-96-008a.

Some of the technical memoranda have been compiled into a single document, the Supplementary Information Document (SID), to allow interested parties more convenient access to the information. The SID is available in the docket (Docket No. A-95-48 Category III-B), and, in limited supply, from the EPA Library by calling (919) 541-2777. The document is entitled Hazardous Air Pollutant Emissions from the Production of Flexible Polyurethane Foam—Supplementary Information Document for Proposed Standards, October 1996, and has been assigned document number EPA-453/D-96-009a.

B. Executive Order 12866

Under Executive Order 12866 (58 FR 5173, October 4, 1993), the EPA must determine whether the regulatory action is "significant" and therefore subject to Office of Management and Budget

(OMB) review and the requirements of the Executive Order. The Executive Order defines "significant regulatory action" as one that is likely to result in standards 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 entitlement, grants, user 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.

It has been determined that this rule is not a "significant regulatory action" under the terms of Executive Order 12866 and is therefore not subject to OMB review.

C. Applicability of Executive Order 13045

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 the EPA determines (1) is "economically significant," as defined under Executive Order 12866, and (2) the environmental health or safety risk addressed by the rule has a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This final rule is not subject to Executive Order 13045 because it is not an economically significant regulatory action as defined by Executive Order 12866, and it does not address an environmental health or safety risk that would have a disproportionate effect on children.

D. Paperwork Reduction Act

The Office of Management and Budget (OMB) has approved the information collection requirements contained in this rule under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* and has assigned OMB control number 2060-0357.

The public reporting burden for this collection of information is estimated to

average 101 hours per respondent per year. The average burden for the 78 affected slabstock foam producers is somewhat higher than this estimate, due to their monthly recordkeeping and semiannual reporting requirements, while the average burden for the 98 affected molded foam manufacturers is less than 101 hours, since they are only required to submit an initial one-time notification of compliance. No cost burden associated with the purchase of new equipment or technology is estimated to result from this collection of information. These estimates include time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

An Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15. The EPA is amending the table in 40 CFR Part 9 of currently approved ICR control numbers issued by OMB for various regulations to list the information requirements contained in this final rule.

E. Regulatory Flexibility Act

The EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this final rule. The EPA has also determined that this rule will not have a significant economic impact on a substantial number of small entities.

Due to insufficient data on the ownership of the plants in the flexible polyurethane foam industry, an analysis of each parent company in the industry was not feasible. Consequently, the EPA used data collected in the section 114 survey to evaluate the impact on small businesses based on model facilities. That analysis indicates that there is a total of approximately 121 businesses (31 slabstock, 90 molded) that are affected by the promulgated regulation, of which approximately 71 are small businesses (18 slabstock, 53 molded).

The calculation of average compliance costs as a percent of revenues is less than one percent for nearly all model facilities in the analysis. The analysis also indicates a potential for business closures ranging from 0 to 3 of the total number of estimated entities. However, because there is insufficient data to determine the exact size of the plants that may close, the analysis cannot determine if these impacts will occur at small businesses. Given the results of the analysis and the use of worst-case

assumptions in the closure analysis, the EPA believes that the effect of the promulgated regulation on small businesses will be minimal.

Pursuant to section 605(b) of the Regulatory Flexibility Act, 5 U.S.C. 605(b), as amended, Pub. L. 104-121, 110 Stat. 847, the EPA certifies that this rule will not have a significant economic impact on a substantial number of small entities and therefore no initial regulatory flexibility analysis under section 604(a) of the Act is required.

F. Submission to Congress and the Comptroller General

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

G. Unfunded Mandates

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), P.L. 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, the EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires the EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows the EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was

not adopted. Before the EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The 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 aggregate, or the private sector in any one year, nor does the rule significantly or uniquely impact small governments, because it contains no requirements that apply to such governments or impose obligations upon them. Thus, the requirements of the UMRA do not apply to this rule.

H. Executive Order 12875: Enhancing Intergovernmental Partnerships

Under Executive Order 12875, the 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. If the mandate is unfunded, the EPA must 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 the 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 implements requirements specifically set forth by the Congress in Section 112 of the Clean Air Act without the exercise of any discretion by the EPA. Accordingly, the requirements of section 1(a) of Executive Order 12875 do not apply to this rule.

I. Executive Order 13084: Consultation and Coordination With Indian Tribal Governments

Under Executive Order 13084, the 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. If the mandate is unfunded, the EPA must provide to the Office of Management and Budget, in a separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires the EPA to develop an effective process permitting elected and other representatives of Indian tribal governments "to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities."

Today's rule implements requirements specifically set forth by the Congress in Section 112 of the Clean Air Act without the exercise of any discretion by the EPA. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

J. Clean Air Act

In accordance with section 117 of the Act, publication of this rule was preceded by consultation with appropriate advisory committees, independent experts, and Federal departments and agencies.

This regulation will be reviewed 8 years from the date of promulgation. This review will include an assessment of such factors as evaluation of the residual health risks, any overlap with other programs, the existence of alternative methods, enforceability, improvements in emission control technology and health data, and the recordkeeping and reporting requirements.

K. National Technology Transfer and Advancement Act

Section 12 of the National Technology Transfer and Advancement Act of 1995 (NTTAA) requires federal agencies to evaluate existing technical standards when developing new regulations. To

comply with the NTTAA, the EPA must consider and use "voluntary consensus standards" (VCS), if available and applicable, when developing NESHAP and other programs and policies unless doing so would be inconsistent with applicable law or otherwise impractical.

A VCS is a technical standard developed or adopted by a legitimate standards developing organization. The NTTAA defines "technical standards" as "performance-based or design-specific technical specifications and related management systems practices." According to NTTAA's legislative history, a "technical standard" pertains to "products and processes, such as size, strength, or technical performance of a product, process or material." A legitimate standards-developing organization must produce standards by consensus and observe the principles of due process, openness, and balance of interests.

Examples of organizations generally regarded as voluntary consensus standards bodies 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 the Society of Automotive Engineers (SAE).

The well-known American National Standards Institute (ANSI) evaluates the standards development processes of these bodies, and when requested by one of them, certifies standards meeting the above criteria as American National Standards. Such a designation is an important indicator for determining whether a given standard qualifies as a legitimate VCS.

In developing the flexible polyurethane foam regulation, the EPA searched for potentially useful VCS. This search included the use of the National Standards System Network and the National Center for Standards for Certification Information. The Agency also conducted extensive conversations with the affected industry and other stakeholders. In response to this information, the regulation includes two VCS—ASTM D3574 and National Institute of Standards and Technology Handbook 44. ASTM D3574 is used to determine IFD and density of slabstock foam buns. Transfer vehicle weight may be determined by using the procedures contained in the National Institute of Standards and Technology Handbook 44. These VCS were selected for incorporation by reference because they provide the proper information with sufficient accuracy for this rule.

The EPA is not required to give deference under NTTAA to a standard that does not qualify as a VCS. Sight gauges and other level measurement devices, which are commonly used in the industry, do not qualify as VCS. However, the Agency did elect to utilize such devices to measure HAP ABA added to storage vessels in slabstock flexible polyurethane foam facilities. These requirements are described in Section II. C.4. of this preamble. The decision to adopt common industry practices reflects the Agency's commitment to reduce costs to the private sector where technically feasible and in accordance with Clean Air Act requirements.

List of Subjects in 40 CFR Parts 9 and 63

Environmental protection, Air pollution control, Hazardous substances, Incorporation by reference, Reporting and recordkeeping requirements.

Dated: September 15, 1998.

Carol M. Browner,
Administrator.

For the reasons set out in the preamble, parts 9 and 63 of title 40, chapter I of the Code of Federal Regulations are amended as follows:

PART 9—[AMENDED]

1. The authority citation for part 9 continues to read as follows:

Authority: 7 U.S.C. 135 *et seq.*, 136–136y; 15 U.S.C. 2001, 2003, 2005, 2006, 2601–2671; 21 U.S.C. 331j, 346a, 348; 31 U.S.C. 9701; 33 U.S.C. 1251 *et seq.*, 1311, 1313d, 1314, 1318, 1321, 1326, 1330, 1342, 1344, 1345 (d) and (e), 1361; E.O. 11735, 38 FR 21243, 3 CFR, 1971–1975 Comp. p. 973; 42 U.S.C. 241, 242b, 243, 246, 300f, 300g, 300g–1, 300g–2, 300g–3, 300g–4, 300g–5, 300g–6, 300j–1, 300j–2, 300j–3, 300j–4, 300j–9, 1857 *et seq.*, 6901–6992k, 7401–7671q, 7542, 9601–9657, 11023, 11048.

2. Section 9.1 is amended by adding the new entries to the table under the indicated heading in numerical order to read as follows:

§9.1 OMB approvals under the Paperwork Reduction Act.

40 CFR citation	OMB control No.
63.1290—63.1309	2060—0357

National Emission Standards for Hazardous Air Pollutants for Source Categories³
* * * * *

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR AFFECTED SOURCE CATEGORIES

3. The authority citation for part 63 continues to read as follows:

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

Subpart A—General Provisions

4. Section 63.14 is amended by revising paragraph (b) introductory text, and adding paragraphs (b)(20) and (e) to read as follows:

§ 63.14 Incorporation by reference.

(b) The materials listed below are available for purchase from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959; or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

(20) ASTM D3574-91, Standard Test Methods for Flexible Cellular Materials—Slab, Bonded, and Molded Urethane Foams, IBR approved for § 63.1304(b).

(e) The materials listed below are available for purchase from the National Institute of Standards and Technology, Springfield, VA 22161, (800) 553-6847.

(1) Handbook 44, Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices 1998, IBR approved for § 63.1303(e)(3).

(2) [Reserved]

5. Part 63 is amended by adding subpart III to read as follows:

Subpart III—National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production

- Sec.
63.1290 Applicability.
63.1291 Compliance schedule.
63.1292 Definitions.
63.1293 Standards for slabstock flexible polyurethane foam production.
63.1294 Standards for slabstock flexible polyurethane foam production—diisocyanate emissions.
63.1295 Standards for slabstock flexible polyurethane foam production—HAP ABA storage vessels.
63.1296 Standards for slabstock flexible polyurethane foam production—HAP ABA equipment leaks.
63.1297 Standards for slabstock flexible polyurethane foam production—HAP ABA emissions from the production line.
63.1298 Standards for slabstock flexible polyurethane foam production—HAP emissions from equipment cleaning.
63.1299 Standards for slabstock flexible polyurethane foam production—source-wide emission limitation.
63.1300 Standards for molded flexible polyurethane foam production.
63.1301 Standards for rebond foam production.
63.1302 Applicability of subpart A requirements.
63.1303 Monitoring requirements.
63.1304 Testing requirements.
63.1305 Alternative means of emission limitation.
63.1306 Reporting requirements.
63.1307 Recordkeeping requirements.
63.1308 Compliance demonstrations.
63.1309 Delegation of authority.
Appendix to Subpart III—Tables

Subpart III—National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production

§ 63.1290 Applicability.

(a) The provisions of this subpart apply to each new and existing flexible polyurethane foam or rebond foam

process that meets the criteria listed in paragraphs (a)(1) through (3) of this section.

(1) Produces flexible polyurethane or rebond foam;

(2) Emits a HAP, except as provided in paragraph (c)(2) of this section; and

(3) Is located at a plant site that is a major source, as defined in § 63.2 of subpart A.

(b) For the purpose of this subpart, an affected source includes all processes meeting the criteria in paragraphs (a)(1) through (a)(3) of this section that are located at a contiguous plant site, with the exception of those processes listed in paragraph (c) of this section.

(c) A process meeting one of the following criteria listed in paragraphs (c)(1) through (3) of this section shall not be subject to the provisions of this subpart:

(1) A process exclusively dedicated to the fabrication of flexible polyurethane foam;

(2) A research and development process; or

(3) A slabstock flexible polyurethane foam process at a plant site where the total amount of HAP, excluding diisocyanate reactants, used for slabstock foam production and foam fabrication is less than or equal to five tons per year, provided that slabstock foam production and foam fabrication processes are the only processes at the plant site that emit HAP. The amount of non-diisocyanate HAP used, HAP_{used}, shall be calculated using Equation 1. Owners or operators of slabstock foam processes exempt from the regulation in accordance with this paragraph shall maintain records to verify that total non-diisocyanate HAP use at the plant site is less than 5 tons per year (4.5 megagrams per year).

$$HAP_{used} = \left[\sum_{i=1}^m (VOL_{ABA,i})(D_{ABA,i}) + \sum_{j=1}^n (VOL_{clean,j})(D_{clean,j})(WT_{HAPclean,j}) + \sum_{k=1}^o (VOL_{adh,k})(D_{adh,k})(WT_{HAPadh,k}) \right] \div 2000$$

(Equation 1)

Where,

HAP_{used} = amount of HAP, excluding diisocyanate reactants, used at the plant site for slabstock foam production and foam fabrication, tons per year

VOL_{ABA,i} = volume of HAP ABA i used at the facility, gallons per year

D_{ABA,i} = density of HAP ABA i, pounds per gallon

m = number of HAP ABAs used

VOL_{clean,j} = volume of HAP used as an equipment cleaner, gallons per year

D_{clean,j} = density of HAP equipment cleaner j, pounds per gallon

WT_{HAPclean,k} = HAP content of equipment cleaner j, weight percent

n = number of HAP equipment cleaners used

VOL_{adh,k} = volume of adhesive k, gallons per year

D_{adh,k} = density of adhesive k, pounds per gallon

WT_{HAPadh,k} = HAP content of adhesive k, weight percent

o = number of adhesives used

§ 63.1291 Compliance schedule.

(a) Existing affected sources shall be in compliance with all provisions of this subpart no later than October 8, 2001.

(b) New or reconstructed affected sources shall be in compliance with all provisions of this subpart upon initial startup.

³The ICRs referenced in this section of the Table encompass the applicable general provisions

contained in 40 CFR part 63, subpart A, which are

not independent information collection requirements.

§ 63.1292 Definitions.

All terms used in this subpart shall have the meaning given them in the Act, in subpart A of this part, and in this section. If a term is defined in subpart A and in this section, it shall have the meaning given in this section for purposes of this subpart.

Auxiliary blowing agent, or ABA, means a low-boiling point liquid added to assist foaming by generating gas beyond that resulting from the isocyanate-water reaction.

Breakthrough means that point in the adsorption step when the mass transfer zone (i.e., the section of the carbon bed where the HAP is removed from the carrier gas stream) first reaches the carbon bed outlet as the mass transfer zone moves down the bed in the direction of flow. The breakthrough point is characterized by the beginning of a sharp increase in the outlet HAP or organic compound concentration.

Calibrate means to verify the accuracy of a measurement device against a known standard. For the purpose of this subpart, there are two levels of calibration. The initial calibration includes the verification of the accuracy of the device over the entire operating range of the device. Subsequent calibrations can be conducted for a point or several points in a limited range of operation that represents the most common operation of the device.

Canned motor pump means a pump with interconnected cavity housings, motor rotors, and pump casing. In a canned motor pump, the motor bearings run in the process liquid and all seals are eliminated.

Carbon adsorption system means a system consisting of a tank or container that contains a specific quantity of activated carbon. For the purposes of this subpart, a carbon adsorption system is used as a control device for storage vessels. Typically, the spent carbon bed does not undergo regeneration, but is replaced.

Connector means flanged, screwed, or other joined fittings used to connect two pipe lines or a pipe line and a piece of equipment. A common connector is a flange. Joined fittings welded completely around the circumference of the interface are not considered to be connectors for the purposes of this subpart.

Cured foam means flexible polyurethane foam with fully developed physical properties. A period of 12 to 24 hours from pour is typically required to completely cure foam, although mechanical or other devices are sometimes used to accelerate the curing process.

Curing area means the area in a slabstock foam production facility where foam buns are allowed to fully develop physical properties.

Diaphragm pump means a pump where the driving member is a flexible diaphragm made of metal, rubber, or plastic. In a diaphragm pump, there is no packing or seals that are exposed to the process liquid.

Diisocyanate means a compound containing two isocyanate groups per molecule. The most common diisocyanate compounds used in the flexible polyurethane foam industry are toluene diisocyanate (TDI) and methylene diphenyl diisocyanate (MDI).

Flexible polyurethane foam means a flexible cellular polymer containing urea and carbamate linkages in the chain backbone produced by reacting a diisocyanate, polyol, and water. Flexible polyurethane foams are open-celled, permit the passage of air through the foam, and possess the strength and flexibility to allow repeated distortion or compression under stress with essentially complete recovery upon removal of the stress.

Flexible polyurethane foam process means the equipment used to produce a flexible polyurethane foam product. For the purpose of this subpart, the flexible polyurethane foam process includes raw material storage; production equipment and associated piping, ductwork, etc.; and curing and storage areas.

Foam fabrication process means an operation for cutting or bonding flexible polyurethane foam pieces together or to other substrates.

Grade of foam means foam with a distinct combination of indentation force deflection (IFD) and density values.

HAP ABA means methylene chloride, or any other HAP compound used as an auxiliary blowing agent.

HAP-based means to contain 5 percent (by weight) or more of HAP. This applies to equipment cleaners (and mixhead flushes) and mold release agents. The concentration of HAP may be determined using EPA test method 18, material safety data sheets, or engineering calculations.

High-pressure mixhead means a mixhead where mixing is achieved by impingement of the high pressure streams within the mixhead.

Indentation Force Deflection (IFD) means a measure of the load bearing capacity of flexible polyurethane foam. IFD is generally measured as the force (in pounds) required to compress a 50 square inch circular indenter foot into a four inch thick sample, typically 15 inches square or larger, to 25 percent of the sample's initial height.

In diisocyanate service means a piece of equipment that contains or contacts a diisocyanate.

In HAP ABA service means a piece of equipment that contains or contacts a HAP ABA.

Initial startup means the first time a new or reconstructed affected source begins production of flexible polyurethane foam.

Isocyanate means a reactive chemical grouping composed of a nitrogen atom bonded to a carbon atom bonded to an oxygen atom; or a chemical compound, usually organic, containing one or more isocyanate groups.

Magnetic drive pump means a pump where an externally-mounted magnet coupled to the pump motor drives the impeller in the pump casing. In a magnetic drive pump, no seals contact the process fluid.

Metering pump means a pump used to deliver reactants, ABA, or additives to the mixhead.

Mixhead means a device that mixes two or more component streams before dispensing foam producing mixture to the desired container.

Molded flexible polyurethane foam means a flexible polyurethane foam that is produced by shooting the foam mixture into a mold of the desired shape and size.

Mold release agent means any material which, when applied to the mold surface, serves to prevent sticking of the foam part to the mold.

Plant site means all contiguous or adjoining property that is under common control, including properties that are separated only by a road or other public right-of-way. Common control includes properties that are owned, leased, or otherwise operated by the same entity, parent entity, subsidiary, or any combination thereof.

Polyol, for the purpose of this subpart, means a polyether or polyester polymer with more than one reactive hydroxyl group attached to the molecule.

Rebond foam means the foam resulting from a process of adhering small particles of foam (usually scrap or recycled foam) together to make a usable cushioning product. Various adhesives and bonding processes are used. A typical application for rebond foam is for carpet underlay.

Rebond foam process means the equipment used to produce a rebond foam product. For the purpose of this subpart, the rebond foam process includes raw material storage; production equipment and associated piping, ductwork, etc.; and curing and storage areas.

Reconstructed source means an affected source undergoing

reconstruction, as defined in subpart A. For the purposes of this subpart, process modifications made to reduce HAP ABA emissions to meet the existing source requirements of this subpart shall not be counted in determining whether or not a change or replacement meets the definition of reconstruction.

Recovery device means an individual unit of equipment capable of and used for the purpose of recovering chemicals for use, reuse, or sale. Recovery devices include, but are not limited to, carbon adsorbers, absorbers, and condensers.

Research and development process means a laboratory or pilot plant operation whose primary purpose is to conduct research and development into new processes and products, where the operations are under the close supervision of technically trained personnel, and which is not engaged in the manufacture of products for commercial sale except in a de minimis manner.

Run of foam means a continuous production of foam, which may consist of several grades of foam.

Sealless pump means a canned-motor pump, diaphragm pump, or magnetic drive pump, as defined in this section.

Slabstock flexible polyurethane foam means flexible polyurethane foam that is produced in large continuous buns that are then cut into the desired size and shape.

Slabstock flexible polyurethane foam production line includes all portions of the flexible polyurethane foam process from the mixhead to the point in the process where the foam is completely cured.

Storage vessel means a tank or other vessel that is used to store diisocyanate or HAP ABA for use in the production of flexible polyurethane foam. Storage vessels do not include vessels with capacities smaller than 38 cubic meters (or 10,000 gallons).

Transfer pump means all pumps used to transport diisocyanate or HAP ABA that are not metering pumps.

Transfer vehicle means a railcar, tank truck, or other vehicle used to transport HAP ABA to the flexible polyurethane foam facility.

§ 63.1293 Standards for slabstock flexible polyurethane foam production.

Each owner or operator of a new or existing slabstock affected source shall comply with § 63.1294 and either paragraph (a) or (b) of this section:

(a) The emission point specific limitations in §§ 63.1295 through 63.1298; or

(b) For sources that use no more than one HAP as an ABA and an equipment cleaner, the source-wide emission limitation in § 63.1299.

§ 63.1294 Standards for slabstock flexible polyurethane foam production—diisocyanate emissions.

Each new and existing slabstock affected source shall comply with the provisions of this section.

(a) *Diisocyanate storage vessels.* Diisocyanate storage vessels shall be equipped with either a system meeting the requirements in paragraph (a)(1) of this section, or a carbon adsorption system meeting the requirements of paragraph (a)(2) of this section.

(1) The storage vessel shall be equipped with a vapor return line from the storage vessel to the tank truck or rail car that is connected during unloading.

(i) During each unloading event, the vapor return line shall be inspected for leaks by visual, audible, or any other detection method.

(ii) When a leak is detected, it shall be repaired as soon as practicable, but not later than the subsequent unloading event.

(2) The storage vessel shall be equipped with a carbon adsorption system, meeting the monitoring requirements of § 63.1303(a), that routes displaced vapors through activated carbon before being discharged to the atmosphere. The owner or operator shall replace the existing carbon with fresh carbon upon indication of breakthrough before the next unloading event.

(b) *Transfer pumps in diisocyanate service.* Each transfer pump in diisocyanate service shall meet the requirements of paragraph (b)(1) or (b)(2) of this section.

(1) The pump shall be a sealless pump; or

(2) The pump shall be a submerged pump system meeting the requirements in paragraphs (b)(2)(i) through (iii) of this section.

(i) The pump shall be completely immersed in bis(2-ethylhexyl)phthalate (DEHP, CAS #118-81-7), 2(methyloctyl)phthalate (DINP, CAS #68515-48-0), or another neutral oil.

(ii) The pump shall be visually monitored weekly to detect leaks.

(iii) When a leak is detected, it shall be repaired in accordance with the procedures in paragraphs (b)(2)(iii)(A) and (B) of this section, except as provided in paragraph (d) of this section.

(A) The leak shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

(B) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices where practicable:

(1) Tightening of packing gland nuts.

(2) Ensuring that the seal flush is operating at design pressure and temperature.

(c) *Other components in diisocyanate service.* If evidence of a leak is found by visual, audible, or any other detection method, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in paragraph (d) of this section. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) *Delay of repair.* (1) Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in diisocyanate service.

(2) Delay of repair for valves and connectors is also allowed if:

(i) The owner or operator determines that diisocyanate emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

(ii) The purged material is collected and destroyed or recovered in a control device when repair procedures are effected.

(3) Delay of repair for pumps is also allowed if repair requires replacing the existing seal design with a sealless pump, and repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

§ 63.1295 Standards for slabstock flexible polyurethane foam production—HAP ABA storage vessels.

Each owner or operator of a new or existing slabstock affected source complying with the emission point specific limitation option provided in § 63.1293(a) shall control HAP ABA storage vessels in accordance with the provisions of this section.

(a) Each HAP ABA storage vessel shall be equipped with either a vapor balance system meeting the requirements in paragraph (b) of this section, or a carbon adsorption system meeting the requirements of paragraph (c) of this section.

(b) The storage vessel shall be equipped with a vapor balance system. The owner or operator shall ensure that the vapor return line from the storage vessel to the tank truck or rail car is connected during unloading.

(1) During each unloading event, the vapor return line shall be inspected for leaks by visual, audible, olfactory, or any other detection method.

(2) When a leak is detected, it shall be repaired as soon as practicable, but not later than the subsequent unloading event.

(c) The storage vessel shall be equipped with a carbon adsorption system, meeting the monitoring requirements of § 63.1303(a), that routes displaced vapors through activated carbon before discharging to the atmosphere. The owner or operator shall replace the existing carbon with fresh carbon upon indication of breakthrough before the next unloading event.

§ 63.1296 Standards for slabstock flexible polyurethane foam production—HAP ABA equipment leaks.

Each owner or operator of a new or existing slabstock affected source complying with the emission point specific limitation option provided in § 63.1293(a) shall control HAP ABA emissions from leaks from transfer pumps, valves, connectors, pressure-relief valves, and open-ended lines in accordance with the provisions in this section.

(a) *Pumps.* Each pump in HAP ABA service shall be controlled in accordance with either paragraph (a)(1) or (a)(2) of this section.

(1) The pump shall be a sealless pump, or

(2) Each pump shall be monitored for leaks in accordance with paragraphs (a)(2)(i) and (ii) of this section. Leaks shall be repaired in accordance with paragraph (a)(2)(iii) of this section.

(i) Each pump shall be monitored quarterly to detect leaks by the method specified in § 63.1304(a). If an instrument reading of 10,000 parts per million (ppm) or greater is measured, a leak is detected.

(ii) Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected.

(iii) When a leak is detected, it shall be repaired in accordance with the procedures in paragraphs (a)(2)(iii)(A) and (B) of this section, except as provided in paragraph (f) of this section.

(A) The leak shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

(B) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices, where practicable:

(1) Tightening of packing gland nuts.

(2) Ensuring that the seal flush is operating at design pressure and temperature.

(b) *Valves.* Each valve in HAP ABA service shall be monitored for leaks in accordance with paragraph (b)(1) of this section, except as provided in

paragraphs (b)(3) and (4) of this section. Leaks shall be repaired in accordance with paragraph (b)(2) of this section.

(1) Each valve shall be monitored quarterly to detect leaks by the method specified in § 63.1304(a). If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected.

(2) When a leak is detected, the owner or operator shall repair the leak in accordance with the procedures in paragraphs (b)(2)(i) and (ii) of this section, except as provided in paragraph (f) of this section.

(i) The leak shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

(ii) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices where practicable:

(A) Tightening of bonnet bolts;

(B) Replacement of bonnet bolts;

(C) Tightening of packing gland nuts; and

(D) Injection of lubricant into lubricated packing.

(3) Any valve that is designated as an unsafe-to-monitor valve is exempt from the requirements of paragraphs (b)(1) and (2) of this section if:

(i) The owner or operator of the valve determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (b)(1) and (2) of this section; and

(ii) The owner or operator of the valve has a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. The plan shall also include requirements for repairing leaks as soon as possible after detection.

(iii) The owner or operator shall monitor the unsafe-to-monitor valve in accordance with the written plan, and

(iv) The owner or operator shall repair leaks in accordance with the written plan.

(4) Any valve that is designated as a difficult-to-monitor valve is exempt from the requirements of paragraphs (b)(1) and (2) of this section if:

(i) The owner or operator of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at any time in a safe manner;

(ii) The process within which the valve is located is an existing source, or the process within which the valve is located is a new source that has less

than 3 percent of the total number of valves designated as difficult to monitor; and

(iii) The owner or operator of the valve develops a written plan that requires monitoring of the valve at least once per calendar year. The plan shall also include requirements for repairing leaks as soon as possible after detection.

(iv) The owner or operator shall monitor the difficult-to-monitor valve in accordance with the written plan, and

(v) The owner or operator shall repair leaks in accordance with the written plan.

(c) *Connectors.* Each connector in HAP ABA service shall be monitored for leaks in accordance with paragraph (c)(1) of this section, except as provided in paragraph (c)(3) of this section. Leaks shall be repaired in accordance with (c)(2) of this section, except as provided in paragraph (c)(4) of this section.

(1) Connectors shall be monitored at the times specified in paragraphs (c)(1)(i) through (iii) of this section to detect leaks by the method specified in § 63.1304(a). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(i) Each connector shall be monitored annually, and

(ii) Each connector that has been opened or has otherwise had the seal broken shall be monitored for leaks within the first 3 months after being returned to HAP ABA service.

(iii) If a leak is detected, the connector shall be monitored for leaks in accordance with paragraph (c)(1) of this section within the first 3 months after its repair.

(2) When a leak is detected, it shall be repaired in accordance with the procedures in paragraphs (c)(2)(i) and (ii) of this section, except as provided in paragraph (c)(4) and paragraph (f) of this section.

(i) The leak shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected.

(ii) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(3) Any connector that is designated as an unsafe-to-monitor connector is exempt from the requirements of paragraph (c)(1) of this section if:

(i) The owner or operator determines that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with paragraph (c)(1) of this section; and

(ii) The owner or operator has a written plan that requires monitoring of the connector as frequently as practicable during safe-to-monitor periods.

(4) Any connector that is designated as an unsafe-to-repair connector is exempt from the requirements of paragraph (c)(2) of this section if:

(i) The owner or operator determines that repair personnel would be exposed to an immediate danger as a consequence of complying with paragraph (c)(2) of this section; and

(ii) The connector will be repaired as soon as practicable, but not later than 6 months after the leak was detected.

(d) *Pressure-relief devices.* Each pressure-relief device in HAP ABA service shall be monitored for leaks in accordance with paragraph (d)(1) of this section. Leaks shall be repaired in accordance with paragraph (d)(2) of this section.

(1) Each pressure-relief device in HAP ABA service shall be monitored within 5 calendar days by the method specified in § 63.1304(a) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) When a leak is detected, the leak shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in paragraph (f) of this section.

The owner or operator shall make a first attempt at repair no later than 5 calendar days after the leak is detected.

(e) *Open-ended valves or lines.* (1)(i) Each open-ended valve or line in HAP ABA service shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in paragraph (e)(4) of this section.

(ii) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair.

(2) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(3) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (e)(1) of this section at all other times.

(4) Open-ended valves or lines in an emergency shutdown system which are

designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (e)(1), (2), and (3) of this section.

(f) *Delay of repair.* (1) Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in HAP ABA service.

(2) Delay of repair for valves and connectors is also allowed if:

(i) The owner or operator determines that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

(ii) The purged material is collected and destroyed or recovered in a control device when repair procedures are effected.

(3) Delay of repair for pumps is also allowed if repair requires replacing the existing seal design with a sealless pump, and repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

§ 63.1297 Standards for slabstock flexible polyurethane foam production—HAP ABA emissions from the production line.

(a) Each owner or operator of a new or existing slabstock affected source complying with the emission point specific limitation option provided in § 63.1293(a)(1) shall control HAP ABA emissions from the slabstock polyurethane foam production line in accordance with the provisions in this section. Compliance shall be determined on a rolling annual basis as described in paragraph (a)(1) of this section. As an alternative, the owner or operator can determine compliance on a monthly basis, as described in paragraph (a)(2) of this section.

(1) *Rolling annual compliance.* In determining compliance on a rolling annual basis, actual HAP ABA emissions shall be compared to allowable HAP ABA emissions for each consecutive 12-month period. The allowable HAP ABA emission level shall be calculated based on the production for the 12-month period, resulting in a potentially different allowable level for each 12-month period. Compliance shall be determined each month for the previous 12-month period. The compliance requirements are provided in paragraph (b) of this section.

(2) *Monthly compliance alternative.* As an alternative to determining compliance on a rolling annual basis, an owner or operator can determine compliance by comparing actual HAP ABA emissions to allowable HAP ABA emissions for each month. The allowable HAP ABA emission level shall be calculated based on the production for the month, resulting in a potentially different allowable level each month. The requirements for this monthly compliance alternative are provided in paragraph (c) of this section.

(3) Each owner or operator electing to change between the compliance methods described under paragraphs (a)(1) and (a)(2) of this section shall notify the Administrator no later than 180 calendar days prior to the change.

(b) *Rolling annual compliance.* At each slabstock foam production source complying with the rolling annual compliance provisions described in paragraph (a)(1) of this section, actual HAP ABA emissions shall not exceed the allowable HAP ABA emission level for a consecutive 12-month period. The actual HAP ABA emission level for a consecutive 12-month period shall be determined using the procedures in paragraph (b)(1) of this section, and the allowable HAP ABA emission level for the corresponding 12-month period shall be calculated in accordance with paragraph (b)(2) of this section.

(1) The actual HAP ABA emissions for a 12-month period shall be calculated as the sum of actual monthly HAP ABA emissions for each of the individual 12 months in the period. Actual monthly HAP ABA emissions shall be equal to the amount of HAP ABA added to the slabstock foam production line at the mixhead, determined in accordance with § 63.1303(b), unless a recovery device is used. Slabstock foam production sources using recovery devices to reduce HAP ABA emissions shall determine actual monthly HAP ABA emissions using the procedures in paragraph (e) of this section.

(2) The allowable HAP ABA emissions for a consecutive 12-month period shall be calculated as the sum of allowable monthly HAP ABA emissions for each of the individual 12 months in the period. Allowable HAP ABA emissions for each individual month shall be calculated using Equation 2.

$$\text{emiss}_{\text{allow, month}} = \sum_{j=1}^m \left(\sum_{i=1}^n \frac{(\text{limit}_i) (\text{polyol}_i)}{100} \right)_j \quad (\text{Equation 2})$$

Where:

$emiss_{allow,month}$ = Allowable HAP ABA emissions from the slabstock foam production source for the month, pounds.

m = Number of slabstock foam production lines.

$polyol_i$ = Amount of polyol used in the month in the production of foam grade i on foam production line j , determined in accordance with paragraph (b)(3) of this section, pounds.

n = Number of foam grades produced in the month on foam production line j .

$limit_i$ = HAP ABA formulation limit for foam grade i , parts HAP ABA per 100 parts polyol. The HAP ABA formulation limits are determined in accordance with paragraph (d) of this section.

(3) The amount of polyol used for specific foam grades shall be based on the amount of polyol added to the slabstock foam production line at the

mixhead, determined in accordance with the provisions of § 63.1303(b).

(c) *Monthly compliance alternative.*

At each slabstock foam production source complying with the monthly compliance alternative described in paragraph (a)(2) of this section, actual HAP ABA emissions shall not exceed the corresponding allowable HAP ABA emission level for the same month. The actual monthly HAP ABA emission level shall be determined using the procedures in paragraph (c)(1) of this section, and the allowable monthly HAP ABA emission level shall be calculated in accordance with paragraph (c)(2) of this section.

(1) The actual monthly HAP ABA emissions shall be equal to the amount of HAP ABA added to the slabstock foam production line at the mixhead, determined in accordance with § 63.1303(b), unless a recovery device is used. Slabstock foam production sources using recovery devices to reduce HAP ABA emissions shall determine actual monthly HAP ABA

emissions using the procedures in paragraph (e) of this section.

(2) The allowable HAP ABA emissions for the month shall be determined in accordance with Equation 2 of this section.

(d) *HAP ABA formulation limitations.*

For each grade, the HAP ABA formulation limitation shall be determined in accordance with paragraphs (d)(1) through (d)(3) of this section. For any grade, the owner or operator may designate zero as the HAP ABA formulation limitation and not determine the HAP ABA formulation limitation in accordance with paragraphs (d)(1) through (d)(3) of this section.

(1) For existing sources, the HAP ABA formulation limitation for each grade of slabstock foam produced shall be determined using Equation 3 of this section. Zero shall be the formulation limitation for any grade of foam where the result of the formulation limitation equation (Equation 3) is negative (i.e., less than zero).

$$ABA_{limit} = -0.25(IFD) - 19.1\left(\frac{1}{IFD}\right) - 16.2(DEN) - 7.56\left(\frac{1}{DEN}\right) + 36.5 \quad (\text{Equation 3})$$

Where:

ABA_{limit} = HAP ABA formulation limitation, parts HAP ABA allowed per hundred parts polyol (pph).

IFD = Indentation force deflection, pounds.

DEN = Density, pounds per cubic foot.

(2) For new sources, the HAP ABA formulation limitation for each grade of slabstock foam produced shall be determined as described in paragraphs (d)(2)(i) through (d)(2)(iv) of this section and in Table 1 of this subpart.

(i) For each foam grade with a density of 0.95 pounds per cubic foot or less, the HAP ABA formulation limitation shall be determined using Equation 3. Zero shall be the formulation limitation for any grade of foam where the result of the formulation limitation equation

(Equation 3 of this section) is negative (i.e., less than zero).

(ii) For each foam grade with a density of 1.4 pounds per cubic foot or less, and an IFD of 15 pounds or less, the HAP ABA formulation limitation shall be determined using Equation 3.

(iii) For each foam grade with a density greater than 0.95 pounds per cubic foot and an IFD greater than 15 pounds, the HAP ABA formulation limitation shall be zero.

(iv) For each foam grade with a density greater than 1.40 pounds per cubic foot, the HAP ABA formulation limitation shall be zero.

(3) With the exception of those grades for which the owner or operator has designated zero as the HAP ABA formulation limitation, the IFD and density for each foam grade shall be

determined in accordance with § 63.1304(b) and recorded in accordance with § 63.1307(c)(1)(i)(B) or § 63.1307(c)(2)(i)(B) within 10 working days of the production of the foam.

(e) *Compliance using recovery devices.* If a recovery device is used to comply with paragraphs (b) or (c) of this section, the owner or operator shall determine the allowable HAP ABA emissions for each month using Equation 2 in paragraph (b)(2) of this section, and the actual monthly HAP ABA emissions in accordance with paragraph (e)(1) of this section. The owner or operator shall also comply with the provisions of paragraph (e)(2) of this section.

(1) The actual monthly HAP ABA emissions shall be determined using Equation 4:

$$E_{actual} = E_{unc} - HAPABA_{recovered} \quad (\text{Equation 4})$$

Where:

E_{actual} = Actual HAP ABA emissions after control, pounds/month.

E_{unc} = Uncontrolled HAP ABA emissions, pounds/month, determined in accordance with paragraph (b)(1) of this section.

$HAPABA_{recovered}$ = HAP ABA recovered, pounds/month, determined in accordance with paragraph (e)(2) of this section.

(2) The amount of HAP ABA recovered shall be determined in accordance with § 63.1303(c).

§ 63.1298 Standards for slabstock flexible polyurethane foam production—HAP emissions from equipment cleaning.

Each owner or operator of a new or existing slabstock affected source complying with the emission point specific limitation option provided in § 63.1293(a)(1) shall not use a HAP or a

HAP-based material as an equipment cleaner.

§ 63.1299 Standards for slabstock flexible polyurethane foam production—source-wide emission limitation.

Each owner or operator of a new or existing slabstock affected source complying with the source-wide emission limitation option provided in § 63.1293(b) shall control HAP ABA storage and equipment leak emissions, HAP ABA emissions from the production line, and equipment cleaning HAP emissions in accordance with the provisions in this section. Compliance shall be determined on a rolling annual basis in accordance with paragraph (a) of this section. As an alternative, the owner or operator can determine compliance monthly, as described in paragraph (b) of this section.

(a) *Rolling annual compliance.* Under the rolling annual compliance provisions, actual source-wide HAP ABA storage and equipment leak emissions, HAP ABA emissions from the production line, and equipment cleaning HAP emissions are compared to allowable source-wide emissions for each consecutive 12-month period. The allowable source-wide HAP emission

level is calculated based on the production for the 12-month period, resulting in a potentially different allowable level for each 12-month period. While compliance is on an annual basis, compliance shall be determined monthly for the preceding 12-month period. The actual source-wide HAP emission level for a consecutive 12-month period shall be determined using the procedures in paragraphs (c)(1) through (4) of this section, unless a recovery device is used. Slabstock foam production sources using recovery devices shall determine actual source-wide HAP emissions in accordance with paragraph (e) of this section. The allowable HAP emission level for a consecutive 12-month period shall be determined using the procedures in paragraph (d) of this section.

(b) *Monthly compliance alternative.* As an alternative to determining compliance on a rolling annual basis, an owner or operator can determine compliance by comparing actual HAP emissions to allowable HAP emissions for each month. The allowable source-wide emission level is calculated based on the production for the month, resulting in a potentially different

allowable level each month. The actual monthly emission level shall be determined using the procedures in paragraphs (c)(1) through (3) of this section, unless a recovery device is used. Slabstock foam production sources using recovery devices shall determine actual source-wide HAP emissions in accordance with paragraph (e) of this section. The allowable monthly HAP ABA emission level shall be determined in accordance with Equation 6.

(c) *Procedures for determining actual source-wide HAP emissions.* The actual source-wide HAP ABA storage and equipment leak emissions, HAP ABA emissions from the production line, and equipment cleaning HAP emissions shall be determined using the procedures in this section. Actual source-wide HAP emissions for each individual month shall be determined using the procedures specified in paragraphs (c)(1) through (3) of this section.

(1) Actual source-wide HAP emissions for a month shall be determined using Equation 5 and the information determined in accordance with paragraphs (c)(2) and (3) of this section.

$$PWE_{\text{actual}} = \sum_i^n (ST_{i, \text{begin}} - ST_{i, \text{end}} + ADD_i) \quad (\text{Equation 5})$$

Where:

PWE_{actual} = Actual source-wide HAP ABA and equipment cleaning HAP emissions for a month, pounds/month.

n = Number of HAP ABA storage vessels.

$ST_{i, \text{begin}}$ = Amount of HAP ABA in storage vessel i at the beginning of the month, pounds, determined in accordance with the procedures listed in paragraph (c)(2) of this section.

$ST_{i, \text{end}}$ = Amount of HAP ABA in storage vessel i at the end of the month, pounds, determined in accordance with the procedures listed in paragraph (c)(2) of this section.

ADD_i = Amount of HAP ABA added to storage vessel i during the month, pounds, determined in accordance with the procedures listed in paragraph (c)(3) of this section.

(2) The amount of HAP ABA in a storage vessel shall be determined by monitoring the HAP ABA level in the storage vessel in accordance with § 63.1303(d).

(3) The amount of HAP ABA added to a storage vessel for a given month shall be the sum of the amounts of all individual HAP ABA deliveries that occur during the month. The amount of each individual HAP ABA delivery shall be determined in accordance with § 63.1303(e).

(4) Actual source-wide HAP emissions for each consecutive 12-month period shall be calculated as the sum of actual monthly source-wide HAP emissions for each of the individual 12 months in the period, calculated in accordance with paragraphs (c)(1) through (3) of this section.

(d) Allowable source-wide HAP emissions for a consecutive 12-month period shall be calculated as the sum of allowable monthly source-wide HAP emissions for each of the individual 12 months in the period. Allowable source-wide HAP emissions for each individual month shall be calculated using Equation 6.

$$emiss_{\text{allow, month}} = \sum_{j=1}^m \left(\sum_{i=1}^n \frac{(\text{limit}_i) (\text{polyol}_i)}{100} \right)_j \quad (\text{Equation 6})$$

Where:

$emiss_{\text{allow, month}}$ = Allowable HAP ABA storage and equipment leak

emissions, HAP ABA emissions from the production line, and equipment cleaning HAP emissions

from the slabstock foam production source for the month, pounds.

m = Number of slabstock foam production lines.
 $polyol_i$ = Amount of polyol used in the month in the production of foam grade i on foam production line j , determined in accordance with § 63.1303(b), pounds.
 n = Number of foam grades produced in the month on foam production line j .

$limit_i$ = HAP ABA formulation limit for foam grade i , parts HAP ABA per 100 parts polyol. The HAP ABA formulation limits are determined in accordance with § 63.1297(d).
 (e) *Compliance using recovery devices.* If a recovery device is used to comply with paragraphs (a) or (b) of this section, the owner or operator shall determine the allowable source-wide HAP emissions for each month using

Equation 6 in paragraph (d) of this section, and the actual monthly source-wide HAP emissions in accordance with paragraph (e)(1) of this section. The owner or operator shall also comply with the provisions of paragraph (e)(2) of this section.

(1) Actual monthly source-wide HAP emissions shall be determined using Equation 7.

$$E_{actual} = E_{unc} - HAPABA_{recovered} \quad (\text{Equation 7})$$

Where:

E_{actual} = Actual source-wide HAP emissions after control, pounds/month.

E_{unc} = Uncontrolled source-wide HAP emissions, pounds/month, determined in accordance with paragraph (c) (1) through (3) of this section.

$HAPABA_{recovered}$ = HAP ABA recovered, pounds/month, determined in accordance with paragraph (e)(2) of this section.

(2) The amount of HAP ABA recovered shall be determined in accordance with § 63.1303(c).

§ 63.1300 Standards for molded flexible polyurethane foam production.

Each owner or operator of a new or existing molded affected source shall comply with the provisions in paragraphs (a) and (b) of this section.

(a) A HAP or HAP-based material shall not be used as an equipment cleaner to flush the mixhead, nor shall it be used elsewhere as an equipment cleaner in a molded flexible polyurethane foam process, with the following exception. Diisocyanates may be used to flush the mixhead and associated piping during periods of startup or maintenance, provided that the diisocyanate compounds are contained in a closed-loop system and are re-used in production.

(b) A HAP-based mold release agent shall not be used in a molded flexible polyurethane foam source process.

§ 63.1301 Standards for rebond foam production.

Each owner or operator of a new or existing rebond foam affected source shall comply with the provisions in paragraphs (a) and (b) of this section.

(a) A HAP or HAP-based material shall not be used as an equipment cleaner at a rebond foam source.

(b) A HAP-based mold release agent shall not be used in a rebond foam source.

§ 63.1302 Applicability of subpart A requirements.

The owner or operator of an affected source shall comply with the applicable requirements of subpart A of this part, as specified in Table 2 of this subpart.

§ 63.1303 Monitoring requirements.

Owners and operators of affected sources shall comply with each applicable monitoring provision in this section.

(a) *Monitoring requirements for storage vessel carbon adsorption systems.* Each owner or operator using a carbon adsorption system to meet the requirements of § 63.1294(a) or § 63.1295 shall monitor the concentration level of the HAP or the organic compounds in the exhaust vent stream (or outlet stream exhaust) from the carbon adsorption system at the frequency specified in (a)(1) or (2) of this section in accordance with either (a)(3) or (4) of this section.

(1) The concentration level of HAP or organic compounds shall be monitored during each unloading event, or once per month during an unloading event if multiple unloading events occur in a month.

(2) As an alternative to monthly monitoring, the owner or operator can set the monitoring frequency at an interval no greater than 20 percent of the carbon replacement interval, which is established using a design analysis described below in paragraphs (a)(1)(i) through (iii) of this section.

(i) The design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature.

(ii) The design analysis shall establish the outlet organic concentration level, the capacity of the carbon bed, and the working capacity of activated carbon used for the carbon bed, and

(iii) The design analysis shall establish the carbon replacement interval based on the total carbon working capacity of the carbon

adsorption system and the schedule for filling the storage vessel.

(3) Measurements of HAP concentration shall be made using 40 CFR part 60, appendix A, Method 18. The measurement shall be conducted over at least one 5-minute interval during which the storage vessel is being filled.

(4) Measurements of organic compounds shall be made using 40 CFR part 60, Appendix A, Method 25A. The measurement shall be conducted over at least one 5-minute interval during which the storage vessel is being filled.

(b) *Monitoring for HAP ABA and polyol added to the foam production line at the mixhead.* (1) The owner or operator of each slabstock affected source shall comply with the provisions in paragraph (b)(1)(i) of this section, and, if applicable, the provisions of paragraph (b)(1)(ii) of this section. Alternatively, the owner or operator may comply with paragraph (b)(5) of this section.

(i) Owners or operators of all slabstock affected sources shall continuously monitor the amount of polyol added at the mixhead when foam is being poured, in accordance with paragraphs (b)(2) through (4) of this section.

(ii) Owners or operators of slabstock foam affected sources using the emission point specific limitation option provided in § 63.1293(a)(1) shall continuously monitor the amount of HAP ABA added at the mixhead when foam is being poured, in accordance with paragraphs (b)(2)(ii), (b)(3), and (b)(4) of this section.

(2) The owner or operator shall monitor either:

- (i) Pump revolutions; or
- (ii) Flow rate.

(3) The device used to monitor the parameter from paragraph (b)(2) shall have an accuracy to within ± 2.0 percent of the HAP ABA being measured, and shall be calibrated initially, and periodically, in

accordance with paragraph (b)(3)(i) or (ii) of this section.

(i) For polyol pumps, the device shall be calibrated at least once each 6 months.

(ii) For HAP ABA pumps, the device shall be calibrated at least once each month.

(4) Measurements must be recorded at the beginning and end of the production of each grade of foam within a run of foam.

(5) As an alternative to the monitoring described in paragraphs (b)(2) through (4) of this section, the owner or operator may develop an alternative monitoring program. Alternative monitoring programs must be submitted to the Administrator for approval in the Precompliance Report as specified in § 63.1306(c)(4) for existing sources or in the Application for approval of construction or reconstruction for new sources. If an owner or operator wishes to develop an alternative monitoring program after the compliance date, the program shall be submitted to the Administrator for approval before the owner or operator wishes to begin using the alternative program. If the Administrator does not notify the owner or operator of objections to the program, or any part of the program, within 45 days after its receipt, the program shall be deemed approved. Until the program is approved, the owner or operator of an affected source remains subject to the requirements of this subpart. The components of an alternative monitoring program shall include, at a minimum, the items listed in paragraphs (b)(5)(i) through (iv) of this section.

(i) A description of the parameter to be continuously monitored when foam is being poured to measure the amount of HAP ABA or polyol added at the mixhead.

(ii) A description of how the monitoring results will be recorded, and how the results will be converted into amount of HAP ABA or polyol delivered to the mixhead.

(iii) Data demonstrating that the monitoring device is accurate to within ± 2.0 percent.

(iv) Procedures to ensure that the accuracy of the parameter monitoring results is maintained. These procedures shall, at a minimum, consist of periodic calibration of all monitoring devices.

(c) *Recovered HAP ABA monitoring.* The owner or operator of each slabstock affected source using a recovery device to reduce HAP ABA emissions shall develop and comply with a recovered HAP ABA monitoring and recordkeeping program. The components of these plans shall

include, at a minimum, the items listed in paragraphs (c)(1) through (5) of this section. These plans must be submitted for approval in accordance with paragraph (c)(6) of this section.

(1) A device, installed, calibrated, maintained, and operated according to the manufacturer's specifications, that indicates the cumulative amount of HAP ABA recovered by the solvent recovery device over each 1-month period. The device shall be certified by the manufacturer to be accurate to within ± 2.0 percent.

(2) The location where the monitoring will occur shall ensure that the measurements are taken after HAP ABA has been fully recovered (i.e., after separation from water introduced into the HAP ABA during regeneration).

(3) A description of the parameter to be monitored, and the times the parameter will be monitored.

(4) Data demonstrating that the monitoring device is accurate to within ± 2.0 percent.

(5) Procedures to ensure that the accuracy of the parameter monitoring results is maintained. These procedures shall, at a minimum, consist of periodic calibration of all monitoring devices.

(6) Recovered HAP ABA monitoring and recordkeeping programs must be submitted to the Administrator for approval in the Precompliance Report as specified in § 63.1306(c)(6) for existing sources or in the Application for approval of construction or reconstruction for new sources. If an owner or operator wishes to develop a recovered HAP ABA monitoring program after the compliance date, the program shall be submitted to the Administrator for approval before the owner or operator wishes to begin using the program. If the Administrator does not notify the owner or operator of objections to the program within 45 days after its receipt, the program shall be deemed approved. Until the program is approved, the owner or operator of an affected source remains subject to the requirements of this subpart.

(d) *Monitoring of HAP ABA in a storage vessel.* The amount of HAP ABA in a storage vessel shall be determined weekly by monitoring the HAP ABA level in the storage vessel using a level measurement device that meets the criteria described in paragraphs (d)(1) and either (d)(2) or (d)(3) of this section.

(1) The level measurement device must be calibrated initially and at least once per year thereafter.

(2) With the exception of visually-read level measurement devices (i.e., gauge glass), the device must have either a digital or printed output.

(3) If the level measurement device is a visually-read device, the device must be equipped with permanent graduated markings to indicate HAP ABA level in the storage tank.

(e) *Monitoring of HAP ABA added to a storage vessel.* The amount of HAP ABA added to a storage vessel during a delivery shall be determined in accordance with either paragraphs (e)(1), (2), (3), or (4) of this section.

(1) The volume of HAP ABA added to the storage vessel shall be determined by recording the volume in the storage vessel prior to the delivery and the volume after the delivery, provided that the storage tank level measurement device used to determine the levels meets the criteria in (d) of this section.

(2) The volume of HAP ABA added to the storage vessel shall be determined by monitoring the flow rate using a device with an accuracy of ± 2.0 percent, and calibrated initially and at least once each six months thereafter.

(3) The weight of HAP ABA added to the storage vessel shall be calculated as the difference of the full weight of the transfer vehicle prior to unloading into the storage vessel and the empty weight of the transfer vehicle after unloading into the storage vessel. The weight shall be determined using a scale meeting the requirements of either paragraph (e)(2)(i) or (ii) of this section.

(i) A scale approved by the State or local agencies using the procedures contained in Handbook 44, Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices 1998 (incorporation by reference—see § 63.14).

(ii) A scale determined to be in compliance with the requirements of the National Institute of Standards and Technology Handbook 44 at least once per year by a registered scale technician.

(4) As an alternative to the monitoring options described in paragraphs (e)(1) through (e)(3) of this section, the owner or operator may develop an alternative monitoring program. Alternative monitoring programs must be submitted to the Administrator for approval in the Precompliance Report as specified in § 63.1306(c)(4) for existing sources or in the Application for approval of construction or reconstruction for new sources. If an owner or operator wishes to develop an alternative monitoring program after the compliance date, the program shall be submitted to the Administrator for approval before the owner or operator wishes to begin using the alternative program. If the Administrator does not notify the owner or operator of objections to the program within 45 days after its receipt, the

program shall be deemed approved. Until the program is approved, the owner or operator of an affected source remains subject to the requirements of this subpart. The components of an alternative monitoring program shall include, at a minimum, the items listed in paragraphs (e)(3)(i) through (iv) of this section.

(i) A description of the parameter to be monitored to determine the amount of HAP ABA added to the storage vessel during a delivery.

(ii) A description of how the results will be recorded, and how the results will be converted into the amount of HAP ABA added to the storage vessel during a delivery.

(iii) Data demonstrating that the monitoring device is accurate to within ± 2.0 percent, and

(iv) Procedures to ensure that the accuracy of the monitoring measurements is maintained. These procedures shall, at a minimum, consist of periodic calibration of all monitoring devices.

§ 63.1304 Testing requirements.

Owners and operators of affected sources shall use the test methods listed in this section, as applicable, to demonstrate compliance with this subpart.

(a) *Test method and procedures to determine equipment leaks.* Monitoring, as required under § 63.1296, shall comply with the following requirements:

(1) Monitoring shall comply with Method 21 of 40 CFR part 60, appendix A.

(2) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except that the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the source fluid, rather than for each individual VOC in the stream. For source streams that contain nitrogen, air, or other inerts which are not HAP or VOC, the average stream response factor shall be calculated on an inert-free basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.

(4) Calibration gases shall be:

(i) Zero air (less than 10 ppm of hydrocarbon in air); and

(ii) A mixture of methane and air at a concentration of approximately, 1,000 ppm for all transfer pumps; and 500 ppm for all other equipment, except as

provided in paragraph (a)(4)(iii) of this section.

(iii) The instrument may be calibrated at a higher methane concentration (up to 2,000 ppm) than the leak definition concentration for a specific piece of equipment for monitoring that piece of equipment. If the monitoring instrument's design allows for multiple calibration gas concentrations, then the lower concentration calibration gas shall be no higher than 2,000 ppm methane and the higher concentration calibration gas shall be no higher than 10,000 ppm methane.

(5) Monitoring shall be performed when the equipment is in HAP ABA service, in use with an acceptable surrogate volatile organic compound which is not a HAP ABA, or is in use with any other detectable gas or vapor.

(6) If no instrument is available onsite that will meet the performance criteria specified in section 3.1.2(a) of Method 21 of 40 CFR Part 60, appendix A, the readings from an available instrument may be adjusted by multiplying by the average response factor for the stream.

(b) *Test method to determine foam properties.* The IFD and density of each grade of foam produced during each run of foam shall be determined using ASTM D3574-91, Standard Test Methods for Flexible Cellular Materials—Slab, Bonded, and Molded (incorporation by reference—see § 63.14), using a sample of foam cut from the center of the foam bun. The maximum sample size for which the IFD and density is determined shall not be larger than 24 inches by 24 inches by 4 inches. For grades of foam where the owner or operator has designated the HAP ABA formulation limitation as zero, the owner or operator is not required to determine the IFD and density in accordance with this paragraph.

§ 63.1305 Alternative means of emission limitation.

An owner or operator of an affected source may request approval to use an alternative means of emission limitation, following the procedures in this section.

(a) The owner or operator can request approval to use an alternative means of emission limitation in the precompliance report for existing sources, the application for construction or reconstruction for new sources, or at any time.

(b) This request shall include a complete description of the alternative means of emission limitation.

(c) Each owner or operator applying for permission to use an alternative means of emission limitation under

§ 63.6(g) shall be responsible for collecting and verifying data to demonstrate the emission reduction achieved by the alternative means of emission limitation.

(d) Use of the alternative means of emission limitation shall not begin until approval is granted by the Administrator in accordance with § 63.6(g).

§ 63.1306 Reporting requirements.

Owners and operators of affected sources shall comply with each applicable reporting provision in this section.

(a) *Initial notification.* Each affected source shall submit an initial notification in accordance with § 63.9(b).

(b) *Application for approval of construction or reconstruction.* Each owner or operator shall submit an application for approval of construction or reconstruction in accordance with the provisions of § 63.5(d).

(c) *Precompliance report.* Each slabstock affected source shall submit a precompliance report no later than 12 months before the compliance date. This report shall contain the information listed in paragraphs (c)(1) through (c)(8) of this section, as applicable.

(1) Whether the source will comply with the emission point specific limitations described in § 63.1293(a), or with the source-wide emission limitation described in § 63.1293(b).

(2) For a source complying with the emission point specific limitations, whether the source will comply on a rolling annual basis in accordance with § 63.1297(b), or will comply with the monthly alternative for compliance contained in § 63.1297(c).

(3) For a source complying with the source-wide emission limitation, whether the source will comply on a rolling annual basis in accordance with § 63.1299(a), or will comply with the monthly alternative for compliance contained in § 63.1299(b).

(4) A description of how HAP ABA and/or polyol added at the mixhead will be monitored. If the owner or operator is developing an alternative monitoring program, the alternative monitoring program containing the information in § 63.1303(b)(5)(i) through (iv) shall be submitted.

(5) Notification of the intent to use a recovery device to comply with the provisions of § 63.1297 or § 63.1299.

(6) For slabstock affected sources complying with § 63.1297 or § 63.1299 using a recovery device, the continuous recovered HAP ABA monitoring and

recordkeeping program, developed in accordance with § 63.1303(c).

(7) For sources complying with the source-wide emission limitation, a description of how the amount of HAP ABA in a storage vessel shall be determined.

(8) For sources complying with the source-wide emission limitation, a description of how the amount of HAP ABA added to a storage vessel during a delivery will be monitored. If the owner or operator is developing an alternative monitoring program, the alternative monitoring program containing the information in § 63.1303(e)(4)(i) through (iv) shall be submitted.

(9) If the Administrator does not notify the owner or operator of objections to an alternative monitoring program submitted in accordance with (c)(4) or (c)(6) of this section, or a recovered HAP ABA monitoring and recordkeeping program submitted in accordance with (c)(7) of this section, the program shall be deemed approved 45 days after its receipt by the Administrator.

(d) *Notification of compliance status.* Each affected source shall submit a notification of compliance status report no later than 180 days after the compliance date. For slabstock affected sources, this report shall contain the information listed in paragraphs (d)(1) through (3) of this section, as applicable. This report shall contain the information listed in paragraph (d)(4) of this section for molded foam processes and in paragraph (d)(5) for rebond foam processes.

(1) A list of diisocyanate storage vessels, along with a record of the type of control utilized for each storage vessel.

(2) For transfer pumps in diisocyanate service, a record of the type of control utilized for each transfer pump.

(3) If the source is complying with the emission point specific limitations of §§ 63.1294 through 63.1298, the information listed in paragraphs (b)(3)(i) through (iii) of this section.

(i) A list of HAP ABA storage vessels, along with a record of the type of control utilized for each storage vessel.

(ii) A list of pumps, valves, connectors, pressure-relief devices, and open-ended valves or lines in HAP ABA service.

(iii) A list of any modifications to equipment in HAP ABA service made to comply with the provisions of § 63.1296.

(4) A statement that the molded foam affected source is in compliance with § 63.1300, or a statement that molded foam processes at an affected source are in compliance with § 63.1300.

(5) A statement that the rebond foam affected source is in compliance with § 63.1301, or that rebond processes at an affected source are in compliance with § 63.1301.

(e) *Semiannual reports.* Each slabstock affected source shall submit a report containing the information specified in paragraphs (e)(1) through (5) of this section semiannually no later than 60 days after the end of each 180 day period. The first report shall be submitted no later than 240 days after the date that the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date that the Notification of Compliance Status Report is due.

(1) For slabstock affected sources complying with the rolling annual compliance provisions of either § 63.1297 or § 63.1299, the allowable and actual HAP ABA emissions (or allowable and actual source-wide HAP emissions) for each of the 12-month periods ending on each of the six months in the reporting period. This information is not required to be included in the initial semi-annual compliance report.

(2) For sources complying with the monthly compliance alternative of either § 63.1297 or § 63.1299, the allowable and actual HAP ABA emissions (or allowable and actual source-wide HAP emissions) for each of the six months in the reporting period.

(3) For sources complying with the storage vessel provisions of § 63.1294(a) or § 63.1295 using a carbon adsorption system, unloading events that occurred after breakthrough was detected and before the carbon was replaced.

(4) Any equipment leaks that were not repaired in accordance with § 63.1294(b)(2)(iii), § 63.1294(c), § 63.1296(a)(2)(iii), (b)(2), (b)(3)(iv), (b)(4)(v), (c)(2), (c)(4)(ii), and (d)(2).

(5) Any leaks in vapor return lines that were not repaired in accordance with § 63.1294(a)(1)(ii) or § 63.1295(b)(2).

(f) *Other reports.* (1) Change in selected emission limitation. An owner or operator electing to change their slabstock flexible polyurethane foam emission limitation (from emission point specific limitations to a source-wide emission limitation, or vice versa), selected in accordance with § 63.1293, shall notify the Administrator no later than 180 days prior to the change.

(2) *Change in selected compliance method.* An owner or operator changing the period of compliance for either § 63.1297 or § 63.1299 (between rolling annual and monthly) shall notify the Administrator no later than 180 days prior to the change.

(g) *Annual compliance certifications.* Each affected source subject to the provisions in §§ 63.1293 through 63.1301 shall submit a compliance certification annually.

(1) The compliance certification shall be based on information consistent with that contained in § 63.1308 of this section, as applicable.

(2) A compliance certification required pursuant to a State or local operating permit program may be used to satisfy the requirements of this section, provided that the compliance certification is based on information consistent with that contained in § 63.1308 of this section, and provided that the Administrator has approved the State or local operating permit program under part 70 of this chapter.

(3) Each compliance certification submitted pursuant to this section shall be signed by a responsible official of the company that owns or operates the affected source.

§ 63.1307 Recordkeeping requirements.

The applicable records designated in paragraphs (a) through (c) of this section shall be maintained by owners and operators of all affected sources.

(a) *Storage vessel records.* (1) A list of diisocyanate storage vessels, along with a record of the type of control utilized for each storage vessel.

(2) For each slabstock affected source complying with the emission point specific limitations of §§ 63.1294 through 63.1298, a list of HAP ABA storage vessels, along with a record of the type of control utilized for each storage vessel.

(3) For storage vessels complying through the use of a carbon adsorption system, paragraph (a)(3)(i) or (ii), and paragraph (a)(3)(iii) of this section.

(i) Records of dates and times when the carbon adsorption system is monitored for carbon breakthrough and the monitoring device reading, when the device is monitored in accordance with § 63.1303(a); or

(ii) For affected sources monitoring at an interval no greater than 20 percent of the carbon replacement interval, in accordance with § 63.1303(a)(2), the records listed in paragraphs (a)(3)(ii)(A) and (B) of this section.

(A) Records of the design analysis, including all the information listed in § 63.1303(a)(2)(i) through (iii), and

(B) Records of dates and times when the carbon adsorption system is monitored for carbon breakthrough and the monitoring device reading.

(iii) Date when the existing carbon in the carbon adsorption system is replaced with fresh carbon.

(4) For storage vessels complying through the use of a vapor return line,

paragraphs (a)(4)(i) through (iii) of this section.

(i) Dates and times when each unloading event occurs and each inspection of the vapor return line for leaks occurs.

(ii) Records of dates and times when a leak is detected in the vapor return line.

(iii) Records of dates and times when a leak is repaired.

(b) *Equipment leak records.* (1) A list of components as specified below in paragraphs (b)(1)(i) and (ii).

(i) For all affected sources, a list of components in diisocyanate service,

(ii) For affected sources complying with the emission point specific limitations of §§ 63.1294 through 63.1298, a list of components in HAP ABA service.

(2) For transfer pumps in diisocyanate service, a record of the type of control utilized for each transfer pump and the date of installation.

(3) When a leak is detected as specified in § 63.1294(b)(2)(ii), § 63.1294(c), § 63.1296(a)(2), (b)(1), (c)(1), and (d)(1), the requirements listed in paragraphs (b)(3)(i) and (ii) of this section apply:

(i) Leaking equipment shall be identified in accordance with the requirements in paragraphs (b)(3)(i)(A) through (C) of this section.

(A) A readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(B) The identification on a valve may be removed after it has been monitored for 2-successive quarters as specified in § 63.1296(b)(1) and no leak has been detected during those 2 quarters.

(C) The identification on equipment, other than a valve, may be removed after it has been repaired.

(ii) The information in paragraphs (b)(2)(ii)(A) through (H) shall be recorded for leaking components.

(A) The instrument and operator identification numbers and the equipment identification number.

(B) The date the leak was detected and the dates of each attempt to repair the leak.

(C) Repair methods applied in each attempt to repair the leak.

(D) The words "above leak definition" if the maximum instrument reading measured by the methods specified in § 63.1304(a) after each repair attempt is equal or greater than the leak definitions for the specified equipment.

(E) The words "repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(F) The expected date of the successful repair of the leak if a leak is not repaired within 15 calendar days.

(G) The date of successful repair of the leak.

(H) The date the identification is removed.

(c) *HAP ABA records.* (1) *Emission point specific limitations—rolling annual compliance and monthly compliance alternative records.* Each slabstock affected source complying with the emission point specific limitations of §§ 63.1294 through 63.1298, and the rolling annual compliance provisions of § 63.1297(a)(1), shall maintain the records listed in paragraphs (c)(1)(i), (ii), (iii), and (iv) of this section. Each flexible polyurethane foam slabstock source complying with the emission point specific limitations of §§ 63.1294 through 63.1298, and the monthly compliance alternative of § 63.1297(a)(2), shall maintain the records listed in paragraphs (c)(1)(i), (ii), and (iv) of this section.

(i) Daily records of the information listed below in paragraphs (c)(1)(i)(A) through (C) of this section.

(A) A log of foam runs each day. For each run, the log shall include a list of the grades produced during the run.

(B) Results of the density and IFD testing for each grade of foam produced during each run of foam, conducted in accordance with the procedures in § 63.1304(b). The results of this testing shall be recorded within 10 working days of the production of the foam. For grades of foam where the owner or operator has designated the HAP ABA formulation limitation as zero, the owner or operator is not required to keep records of the IFD and density.

(C) The amount of polyol added to the slabstock foam production line at the mixhead for each run of foam, determined in accordance with § 63.1303(b).

(ii) Monthly records of the information listed in paragraphs (c)(1)(ii)(A) through (E) of this section.

(A) A listing of all foam grades produced during the month,

(B) For each foam grade produced, the HAP ABA formulation limitation, calculated in accordance with § 63.1297(d).

(C) With the exception of those grades for which the owner or operator has designated zero as the HAP ABA formulation limitation, the total amount of polyol used in the month for each foam grade produced.

(D) The total allowable HAP ABA emissions for the month, determined in accordance with § 63.1297(b)(2).

(E) The total amount of HAP ABA added to the slabstock foam production line at the mixhead during the month, determined in accordance with § 63.1303(b).

(iii) Each source complying with the rolling annual compliance provisions of § 63.1297(b) shall maintain the records listed in paragraphs (c)(1)(iii)(A) and (B) of this section.

(A) The sum of the total allowable HAP ABA emissions for the month and the previous 11 months.

(B) The sum of the total actual HAP ABA emissions for the month and the previous 11 months.

(iv) Records of all calibrations for each device used to measure polyol and HAP ABA added at the mixhead, conducted in accordance with § 63.1303(b)(3).

(2) *Source-wide limitations—rolling annual compliance and monthly compliance alternative records.* Each slabstock affected source complying with the source-wide limitations of § 63.1299, and the rolling annual compliance provisions in § 63.1299(a), shall maintain the records listed in paragraphs (c)(2)(i) through (c)(2)(vii) of this section. Each flexible polyurethane foam slabstock source complying with the source-wide limitations of § 63.1299, and the monthly compliance alternative of § 63.1299(b), shall maintain the records listed in paragraphs (c)(2)(i) through (c)(2)(iii) and paragraphs (c)(2)(v) through (c)(2)(vii) of this section.

(i) Daily records of the information listed in paragraphs (c)(2)(i)(A) through (C) of this section.

(A) A log of foam runs each day. For each run, the log shall include a list of the grades produced during the run.

(B) Results of the density and IFD testing for each grade of foam produced during each run of foam, conducted in accordance with the procedures in § 63.1304(b). The results of this testing shall be recorded within 10 working days of the production of the foam. For grades of foam where the owner or operator has designated the HAP ABA formulation limitation as zero, the owner or operator is not required to keep records of the IFD and density.

(C) With the exception of those grades for which the owner or operator has designated zero as the HAP ABA formulation limitation, the amount of polyol added to the slabstock foam production line at the mixhead for each grade produced during each run of foam, determined in accordance with § 63.1303(b).

(ii) For sources complying with the source-wide emission limitation, weekly records of the storage tank level,

determined in accordance with § 63.1303(d).

(iii) Monthly records of the information listed below in paragraphs (c)(2)(iii)(A) through (E) of this section.

(A) A listing of all foam grades produced during the month.

(B) For each foam grade produced, the residual HAP formulation limitation, calculated in accordance with § 63.1297(d).

(C) With the exception of those grades for which the owner or operator has designated zero as the HAP ABA formulation limitation, the total amount of polyol used in the month for each foam grade produced.

(D) The total allowable HAP ABA and equipment cleaning emissions for the month, determined in accordance with § 63.1297(b)(2).

(E) The total actual source-wide HAP ABA emissions for the month, determined in accordance with § 63.1299(c)(1), along with the information listed in paragraphs (c)(2)(iii)(E)(1) and (2) of this section.

(1) The amounts of HAP ABA in the storage vessel at the beginning and end of the month, determined in accordance with § 63.1299(c)(2); and

(2) The amount of each delivery of HAP ABA to the storage vessel, determined in accordance with § 63.1299(c)(3).

(iv) Each source complying with the rolling annual compliance provisions of § 63.1299(a) shall maintain the records listed in paragraphs (c)(2)(iv)(A) and (B) of this section.

(A) The sum of the total allowable HAP ABA and equipment cleaning HAP emissions for the month and the previous 11 months.

(B) The sum of the total actual HAP ABA and equipment cleaning HAP emissions for the month and the previous 11 months.

(v) Records of all calibrations for each device used to measure polyol added at the mixhead, conducted in accordance with § 63.1303(b)(3).

(vi) Records of all calibrations for each device used to measure the amount of HAP ABA in the storage vessel, conducted in accordance with § 63.1303(d)(1).

(vii) Records to verify that all scales used to measure the amount of HAP ABA added to the storage vessel meet the requirements of § 63.1303(e)(3). For scales meeting the criteria of § 63.1303(e)(3)(i), this documentation shall be in the form of written confirmation of the State or local approval. For scales complying with § 63.1303(e)(3)(ii), this documentation shall be in the form of a report provided by the registered scale technician.

(d) The owner or operator of each affected source complying with § 63.1297 or § 63.1299 through the use of a recovery device shall maintain the following records:

(1) A copy of the recovered HAP ABA monitoring and recordkeeping program, developed pursuant to § 63.1303(c);

(2) Certification of the accuracy of the monitoring device,

(3) Records of periodic calibration of the monitoring devices,

(4) Records of parameter monitoring results, and

(5) The amount of HAP ABA recovered each time it is measured.

(e) The owner or operator of an affected source subject to § 63.1298 of this subpart shall maintain a product data sheet for each equipment cleaner used which includes the HAP content, in kg of HAP/kg solids (lb HAP/lb solids).

(f) The owner or operator of an affected source following the compliance methods in § 63.1308(b)(1) and (c)(1) shall maintain records of each use of a vapor return line during unloading, of any leaks detected during unloading, and of repairs of leaks detected during unloading.

(g) The owner or operator of an affected source subject to § 63.1300 or § 63.1301 of this subpart shall maintain a product data sheet for each compound other than diisocyanates used to flush the mixhead and associated piping during periods of startup or maintenance, which includes the HAP content, in kg of HAP/kg solids (lb HAP/lb solids), of each solvent other than diisocyanates used to flush the mixhead and associated piping during periods of startup or maintenance.

(h) The owner or operator of an affected source subject to § 63.1300 or § 63.1301 of this subpart shall maintain a product data sheet for each mold release agent used that includes the HAP content, in kg of HAP/kg solids (lb HAP/lb solids), of each mold release agent.

§ 63.1308 Compliance demonstrations.

(a) For each affected source, compliance with the requirements listed in paragraphs (a)(1) through (a)(2) of this section shall mean compliance with the requirements contained in §§ 63.1293 through 63.1301, absent any credible evidence to the contrary.

(1) The requirements described in Tables 3, 4, and 5 of this subpart; and

(2) The requirement to submit a compliance certification annually as required under § 63.1306(g).

(b) *All slabstock affected sources.* For slabstock affected sources, failure to meet the requirements contained in

§ 63.1294 shall be considered a violation of this subpart. Violation of each item listed in the paragraphs (b)(1) through (b)(6) of this section, as applicable, shall be considered a separate violation.

(1) For each affected source complying with § 63.1294(a) in accordance with § 63.1294(a)(1), each unloading event that occurs when the diisocyanate storage vessel is not equipped with a vapor return line from the storage vessel to the tank truck or rail car, each unloading event that occurs when the vapor line is not connected, each unloading event that the vapor line is not inspected for leaks as described in § 63.1294(a)(1)(i), each unloading event that occurs after a leak has been detected and not repaired, and each calendar day after a leak is detected, but not repaired as soon as practicable;

(2) For each affected source complying with § 63.1294(a) in accordance with § 63.1294(a)(2), each unloading event that the diisocyanate storage vessel is not equipped with a carbon adsorption system, each unloading event (or each month if more than one unloading event occurs in a month) that the carbon adsorption system is not monitored for breakthrough in accordance with § 63.1303(a)(3) or (4), and each unloading event that occurs when the carbon is not replaced after an indication of breakthrough;

(3) For each affected source complying with § 63.1294(a) in accordance with § 63.1294(a)(2) through the alternative monitoring procedures in § 63.1303(a)(2), each unloading event that the diisocyanate storage vessel is not equipped with a carbon adsorption system, each time that the carbon adsorption system is not monitored for breakthrough in accordance with § 63.1303(a)(3) or (4) at the interval established in the design analysis, and each unloading event that occurs when the carbon is not replaced after an indication of breakthrough;

(4) For each affected source complying with § 63.1294(b) in accordance with § 63.1294(b)(1), each calendar day that a transfer pump in diisocyanate service is not a sealless pump;

(5) For each affected source complying with § 63.1294(b) in accordance with § 63.1294(b)(2), each calendar day that a transfer pump in diisocyanate service is not submerged as described in § 63.1294(b)(2)(i), each week that the pump is not visually monitored for leaks, each calendar day after 5 calendar days after detection of a leak that a first attempt at repair has not been made in accordance with

§ 63.1294(b)(2)(iii)(B), and the earlier of each calendar day after 15 calendar days after detection of a leak that a leak is not repaired, or a leak is not repaired as soon as practicable, each subsequent calendar day (with the exception of situations meeting the criteria of § 63.1294(d));

(6) For each affected source complying with § 63.1294(c), each calendar day after 5 calendar days after detection of a leak that a first attempt at repair has not been made, and the earlier of each calendar day after 15 calendar days after detection of a leak that a leak is not repaired, or if a leak is not repaired as soon as practicable, each subsequent calendar day (with the exception of situations meeting the criteria of § 63.1296(f)).

(c) *Slabstock affected sources complying with the emission point specific limitations.* For slabstock affected sources complying with the emission point specific limitations as provided in § 63.1293(a), failure to meet the requirements contained in §§ 63.1295 through 63.1298 shall be considered a violation of this subpart. Violation of each item listed in the paragraphs (c)(1) through (c)(17) of this section, as applicable, shall be considered a separate violation.

(1) For each affected source complying with § 63.1295(a) in accordance with § 63.1295(b), each unloading event that occurs when the HAP ABA storage vessel is not equipped with a vapor return line from the storage vessel to the tank truck or rail car, each unloading event that occurs when the vapor line is not connected, each unloading event that the vapor line is not inspected for leaks as described in § 63.1295(b)(1), each unloading event that occurs after a leak has been detected and not repaired, and each calendar day after a leak is detected but not repaired as soon as practicable;

(2) For each affected source complying with § 63.1295(a) in accordance with § 63.1295(c), each unloading event that the HAP ABA storage vessel is not equipped with a carbon adsorption system, each unloading event (or each month if more than one unloading event occurs in a month) that the carbon adsorption system is not monitored for breakthrough in accordance with § 63.1303(a)(3) or (4), and each unloading event that occurs when the carbon is not replaced after an indication of breakthrough;

(3) For each affected source complying with § 63.1295(a) in accordance with § 63.1295(c) through the alternative monitoring procedures in § 63.1303(a)(2), each unloading event

that the HAP ABA storage vessel is not equipped with a carbon adsorption system, each time that the carbon adsorption system is not monitored for breakthrough in accordance with § 63.1303(a)(3) or (4) at the interval established in the design analysis, and each unloading event that occurs when the carbon is not replaced after an indication of breakthrough;

(4) For each affected source complying with § 63.1296(a) in accordance with § 63.1296(a)(1), each calendar day that a transfer pump in HAP ABA service is not a sealless pump;

(5) For each affected source complying with § 63.1296(a) in accordance with § 63.1296(a)(2), each week that a visual inspection of a pump in HAP ABA service is not performed, each quarter that a pump in HAP ABA service is not monitored to detect leaks in accordance with § 63.1304(a), each calendar day after 5 calendar days after detection of a leak that a first attempt at repair has not been made in accordance with § 63.1296(b)(2)(iii)(B), and the earlier of each calendar day after 15 calendar days after detection of a leak that a leak is not repaired, or if a leak is not repaired as soon as practicable, each subsequent calendar day (with the exception of situations meeting the criteria of § 63.1296(f));

(6) For each affected source complying with § 63.1296(b) in accordance with § 63.1296(b)(1) and (2), each quarter that a valve in HAP ABA service is not monitored to detect leaks in accordance with § 63.1304(a), each calendar day after 5 calendar days after detection of a leak that a first attempt at repair has not been made in accordance with § 63.1296(b)(2)(ii), and each calendar day after 15 calendar days after detection of a leak that a leak is not repaired, or if a leak is not repaired as soon as practicable, whichever is earlier (with the exception of situations meeting the criteria of § 63.1296(f));

(7) For each affected source complying with § 63.1296(b)(3) for each valve designated as unsafe to monitor as described in § 63.1296(b)(3)(i), failure to develop the written plan required by § 63.1296(b)(3)(ii), each period specified in the written plan that an unsafe-to-monitor valve in HAP ABA service is not monitored, and each calendar day in which a leak is not repaired in accordance with the written plan;

(8) For each affected source complying with § 63.1296(b)(4) for one or more valves designated as difficult-to-monitor in accordance with § 63.1296(b)(4)(i) and (ii), failure to develop the written plan required by § 63.1296(b)(4)(iii), each calendar year

that a difficult-to-monitor valve in HAP ABA service is not monitored, and each calendar day in which a leak is not repaired in accordance with the written plan;

(9) For each affected source complying with § 63.1296(c) in accordance with § 63.1296(c)(1) and (2), each year that a connector in HAP ABA service is not monitored to detect leaks in accordance with § 63.1304(a); each calendar day after 3 months after a connector has been opened, has otherwise had the seal broken, or a leak is repaired, that each connector in HAP ABA service is not monitored to detect leaks in accordance with § 63.1304(a); each calendar day after 5 calendar days after detection of a leak that a first attempt at repair has not been made, and the earlier of each calendar day after 15 calendar days after detection of a leak that a leak is not repaired, or if a leak is not repaired as soon as practicable, each subsequent calendar day (with the exception of situations meeting the criteria of § 63.1296(f));

(10) For each affected source complying with § 63.1296(c)(3) for one or more connectors designated as unsafe-to-monitor in accordance with § 63.1296(c)(3)(i), failure to develop the written plan required by § 63.1296(c)(3)(ii), each period specified in the written plan that an unsafe-to-monitor valve in HAP ABA service is not monitored, each calendar day after 5 calendar days after detection of a leak of an unsafe-to-monitor connector that a first attempt at repair has not been made, and the earlier of each calendar day after 15 calendar days after detection of a leak that a leak is not repaired, or if a leak is not repaired as soon as practicable, each subsequent calendar day (with the exception of situations meeting the criteria of § 63.1296(f));

(11) For each affected source complying with § 63.1296(c)(4) for one or more connectors designated as unsafe to repair, each year that one or more unsafe-to-repair connectors in HAP ABA service is not monitored to detect leaks in accordance with § 63.1304(a); each calendar day after 3 months after one or more unsafe-to-repair connectors has been opened, has otherwise had the seal broken, or a leak is repaired, that each unsafe-to-repair connector in HAP ABA service is not monitored to detect leaks in accordance with § 63.1304(a); and the earlier of each calendar day after six-months after detection of a leak that a leak is not repaired, or if a leak is not repaired as soon as practicable, each subsequent calendar day;

(12) For each affected source complying with § 63.1296(d) in

accordance with § 63.1296(d)(1) and (2), each calendar day after the 5 days that the pressure-relief device has not been monitored in accordance with § 63.1304(a) after a potential leak was discovered as described in § 63.1296(d)(1), each calendar day after 5 calendar days after detection of a leak that a first attempt at repair has not been made, and the earlier of each calendar day after 15 calendar days after detection of a leak that a leak is not repaired, or if a leak is detected and not repaired as soon as practicable, each subsequent calendar day (with the exception of situations meeting the criteria of § 63.1296(f));

(13) For each affected source complying with § 63.1296(e) in accordance with § 63.1296(e)(1) through (5), each calendar day that an open-ended valve or line has no cap, blind flange, plug or second valve as described in § 63.1296(e)(2), and each calendar day that a valve on the process fluid end of an open-ended valve or line equipped with a second valve is not closed before the second valve is closed;

(14) For each affected source complying with § 63.1297(a) in accordance with the rolling annual compliance option in § 63.1297(a)(1) and (b), each calendar day in the 12-month period for which the actual HAP ABA emissions exceeded the allowable HAP ABA emissions level, each calendar day in which foam is being poured where the amount of polyol added at the mixhead is not monitored (as required) in accordance with § 63.1303(b)(1)(i), each calendar day in which foam is being poured where the amount of HAP ABA added at the mixhead is not monitored (as required) in accordance with § 63.1303(b)(1)(ii), each calendar day in a 6-month period in which the polyol pumps are not calibrated in accordance with § 63.1303(b)(3)(i), each calendar day in a month in which the HAP ABA pumps are not calibrated in accordance with § 63.1303(b)(3)(ii), and each calendar day after 10 working days after production where the IFD and density of a foam grade are not determined (where required) in accordance with § 63.1304(b);

(15) For each affected source complying with § 63.1297(a) in accordance with the monthly compliance option in § 63.1297(a)(2) and (c), each calendar day of each month for which the actual HAP ABA emissions exceeded the allowable HAP ABA emissions level for that month, each calendar day in which foam is being poured where the amount of polyol added at the mixhead is not monitored (as required) in accordance

with § 63.1303(b)(1)(i), each calendar day in which foam is being poured where the amount of HAP ABA added at the mixhead is not monitored (as required) in accordance with § 63.1303(b)(1)(ii), each 6-month period in which the polyol pumps are not calibrated in accordance with § 63.1303(b)(3)(i), each month in which the HAP ABA pumps are not calibrated in accordance with § 63.1303(b)(3)(ii), and each calendar day after 10 working days after production where the IFD and density of a foam grade are not determined (where required) in accordance with § 63.1304(b);

(16) For each affected source complying with § 63.1297(a) by using a recovery device as allowed under § 63.1297(e), the items listed in (c)(16)(i) or (ii) of this section, as applicable.

(i) If complying with rolling annual compliance option in § 63.1297(a)(1) and (b), each item listed in (c)(14) of this section, failure to develop a recovered HAP ABA monitoring and recordkeeping program in accordance with § 63.1303(c), and each instance when an element of the program is not followed.

(ii) If complying with the monthly compliance option in § 63.1297(a)(2) and (c), each item listed in (c)(15) of this section, failure to develop a recovered HAP ABA monitoring and recordkeeping program in accordance with § 63.1303(c), and each instance when an element of the program is not followed.

(17) For each affected source complying with § 63.1298, each calendar day that a HAP or any HAP-based material is used as an equipment cleaner.

(d) *Slabstock affected sources complying with the source-wide emission limitation.* For slabstock affected sources complying with the source-wide emission limitation as provided in § 63.1293(b), failure to meet the requirements contained in § 63.1299 shall be considered a violation of this subpart. Violation of each item listed in the paragraphs (d)(1) through (d)(3) of this section, as applicable, shall be considered a separate violation.

(1) For each affected source complying with § 63.1299 in accordance with the rolling annual compliance option in § 63.1299(a), each calendar day in the 12-month period for which the actual HAP ABA emissions exceeded the allowable HAP ABA emissions level, each calendar day in which foam is being poured where the amount of polyol added at the mixhead is not monitored (as required) in accordance with § 63.1303(b)(1)(i), each calendar day in a week in which the

amount of HAP ABA in a storage vessel is not determined in accordance with § 63.1303(d), each delivery of HAP ABA in which the amount of HAP ABA added to the storage vessel is not determined in accordance with § 63.1303(e), each calendar day in a 6-month period in which the polyol pumps are not calibrated in accordance with § 63.1303(b)(3)(i), and each calendar day after 10 working days after production where the IFD and density of a foam grade are not determined (where required) in accordance with § 63.1304(b);

(2) For each affected source complying with § 63.1299 in accordance with the monthly compliance option in § 63.1299(b), each calendar day of each month for which the actual HAP ABA emissions exceeded the allowable HAP ABA emissions level for that month, each calendar day in which foam is being poured where the amount of polyol added at the mixhead is not monitored (as required) in accordance with § 63.1303(b)(1)(i), each calendar day in a week in which the amount of HAP ABA in a storage vessel is not determined in accordance with § 63.1303(d), each delivery of HAP ABA in which the amount of HAP ABA added to the storage vessel is not determined in accordance with § 63.1303(e), and each calendar day in a 6-month period in which the polyol pumps are not calibrated in accordance with § 63.1303(b)(3)(i), and each calendar day after 10 working days after production where the IFD and density of a foam grade are not determined (where required) in accordance with § 63.1304(b).

(3) For each affected source complying with § 63.1299 by using a recovery device as allowed under § 63.1299(e), the items listed in (d)(3)(i) or (ii) of this section, as applicable.

(i) If complying with rolling annual compliance option in § 63.1299(a), each item listed in (d)(1) of this section, failure to develop a recovered HAP ABA monitoring and recordkeeping program in accordance with § 63.1303(c), and each instance when an element of the program is not followed.

(ii) If complying with the monthly compliance option in § 63.1299(b), each item listed in (d)(2) of this section, failure to develop a recovered HAP ABA monitoring and recordkeeping program in accordance with § 63.1303(c), and each instance when an element of the program is not followed.

(e) *Molded and rebond foam affected sources.* For molded and rebond foam affected sources, failure to meet the requirements contained in § 63.1300 and § 63.1301, respectively, shall be

considered a violation of this subpart. Violation of each item listed in the following paragraphs shall be considered a separate violation.

(1) For each molded foam affected source subject to the provisions in § 63.1300(a), each calendar day that a HAP-based material is used as an equipment cleaner (except for diisocyanates used to flush the mixhead and associated piping during periods of startup or maintenance, provided that the diisocyanate compounds are contained in a closed-loop system and are re-used in production);

(2) For each molded foam affected source subject to the provisions of § 63.1300(b), each calendar day that a

HAP-base material is used as a mold release agent;

(3) For each rebond foam affected source subject to the provisions of § 63.1301(a), each calendar day that a HAP-based material is used as an equipment cleaner; and

(4) For each rebond foam affected source complying with § 63.1301(b), each calendar day that a HAP-based mold release agent is used.

§ 63.1309 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under § 112(d) of the Clean Air Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) The authority conferred in § 63.1303(b)(5) and § 63.1305(d) shall not be delegated to any State.

Appendix to Subpart III—Tables

For the convenience of the readers of subpart III, the tables below summarize the requirements in §§ 63.1290 to 63.1307. These tables are intended to assist the reader in determining the requirements applicable to affected sources and do not alter an affected source's obligation to comply with the requirements in §§ 63.1290 to 63.1307.

TABLE 1 TO SUBPART III—HAP ABA FORMULATION LIMITATIONS MATRIX FOR NEW SOURCES [see § 63.1297(d)(2)]

Values in parts ABA per hundred parts polyol		Density ranges (pounds per cubic foot)				
		0-0.95	0.96-1.05	1.06-1.15	1.16-1.40	1.41+
IFD	0-10	Use Equation 3				
	11-15					
	16-20					
	21-25					
	26-30					
	31+	0				

TABLE 2 TO SUBPART III—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART III.

Subpart A reference	Applies to subpart III	Comment
§ 63.1	YES	Except that § 63.1(c)(2) is not applicable to the extent area sources are not subject to subpart III. Definitions are modified and supplemented by § 63.1292.
§ 63.2	YES	
§ 63.3	YES	
§ 63.4	YES	
§ 63.5	YES	
§ 63.6 (a)-(d)	YES	
§ 63.6(e) (1)-(2)	YES	Owners and operators of subpart III affected sources are not required to develop and implement a startup, shutdown, and malfunction plan.
§ 63.6(e)(3)	NO	
§ 63.6 (f)-(g)	YES	

TABLE 2 TO SUBPART III—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART III.—Continued

Subpart A reference	Applies to subpart III	Comment
§ 63.6(h)	NO	Subpart III does not require opacity and visible emission standards.
§ 63.6 (i)-(j)	YES	
§ 63.7	NO	Performance tests not required by subpart III.
§ 63.8	NO	
§ 63.9 (a)-(d)	YES	Continuous monitoring, as defined in subpart A, is not required by subpart III.
§ 63.9 (e)-(g)	NO	
§ 63.9(h)	NO	Subpart III specifies Notification of Compliance Status requirements.
§ 63.9 (i)-(j)	YES	
§ 63.10 (a)-(b)	YES	Except that the records specified in § 63.10(b)(2)(vi) through (xi) and (xiii) are not required.
§ 63.10(c)	NO	
§ 63.10(d)(1)	YES	
§ 63.10 (d) (2)-(3)	NO	
§ 63.10 (d) (4)-(5)	YES	
§ 63.10(e)	NO	
§ 63.10(f)	YES	
§ 63.11	YES	
§ 63.12	YES	
§ 63.13	YES	
§ 63.14	YES	
§ 63.15	YES	

TABLE 3 TO SUBPART III.—COMPLIANCE REQUIREMENTS FOR SLABSTOCK FOAM PRODUCTION AFFECTED SOURCES COMPLYING WITH THE EMISSION POINT SPECIFIC LIMITATIONS

Emission point	Emission point compliance option	Emission, work practice, and equipment standards	Monitoring	Recordkeeping	Reporting
Diisocyanate storage vessels § 63.1294(a)	Vapor balance	§ 63.1294(a)(1) and (1)(ii).	§ 63.1294(a)(1)(i)	§ 63.1307(a)(1) and (4)	§ 63.1306(e)(5).
	Carbon adsorber	§ 63.1294(a)(2)	§ 63.1303(a)(1), (3), and (4).	§ 63.1307(a)(1), (3)(i), and (3)(iii).	§ 63.1306(e)(3).
	Carbon adsorber—alternative monitoring.	§ 63.1294(a)(2)	§ 63.1303(a)(2), (3) and (4).	§ 63.1307(a)(1), (3)(ii), and (3)(iii).	§ 63.1306(e)(3).
Diisocyanate transfer pumps § 63.1294(b)	Sealless pump	§ 63.1294(b)(1) .....	.....	§ 63.1307 (b)(1)(i) and (2)	
	Submerged pump ..	§ 63.1294(b)(2)(i) and (iii).	§ 63.1294 (b)(2)(ii) ..	§ 63.1307 (b)(1)(i), (2), and (3)	§ 63.1306(e)(4).
Other components in diisocyanate service § 63.1294(c).	N/A	§ 63.1294(c)	§ 63.1294(c)	§ 63.1307 (b)(1)(i) and (3)	§ 63.1306(e)(4).
HAP ABA storage vessels § 63.1295	Vapor balance	§ 63.1295(b) and (b)(2).	§ 63.1295 (b)(1)	§ 63.1307(a)(2) and (4)	§ 63.1306(e)(5).
	Carbon adsorber	§ 63.1295(c)	§ 63.1303(a)(1), (3), and (4).	§ 63.1307(a)(2), (3)(i), (3)(iii) ..	§ 63.1306(e)(3).
	Carbon adsorber—alternative monitoring.	§ 63.1295(c)	§ 63.1303(a)(2), (3) and (4).	§ 63.1307(a)(2), (3)(ii), and (3)(iii).	§ 63.1306(e)(3).
HAP ABA pumps § 63.1296(a):	Sealless pump	§ 63.1296(a)(1) .....	.....	§ 63.1307 (b)(1)(ii)	
	Quarterly monitoring	§ 63.1296(a)(2) and (2)(iii).	§ 63.1296(a)(2)(i), (2)(ii) and § 63.1304(a).	§ 63.1307 (b)(1)(ii) and (3)	§ 63.1304(e)(4).
HAP ABA valves § 63.1296(b):	Quarterly monitoring	§ 63.1296(b), and (b)(2).	§ 63.1296 (b)(1) and § 63.1304(a).	§ 63.1307 (b)(1)(ii) and (3)	§ 63.1304(e)(4).
	Unsafe-to-monitor ..	§ 63.1296(b)(3) (i), (ii), and (iv).	§ 63.1296 (b)(3)(iii)	§ 63.1307 (b)(1)(ii), and (4)	§ 63.1304(e)(4).
	Difficult-to-monitor ..	§ 63.1296(b)(4) (i), (ii), (iii), and (v).	§ 63.1296(b)(4)(iv) and § 63.1304(a).	§ 63.1307 (b)(1)(ii) and (4)	§ 63.1306(e)(4).
HAP ABA Connectors § 63.1296(c):	Annual monitoring ..	§ 63.1296(c) and (c)(2).	§ 63.1296(c)(1) and § 63.1304(a).	§ 63.1307 (b)(1)(ii) and (3)	§ 63.1306(e)(4).
	Unsafe-to-monitor ..	§ 63.1296(c)(2), (3) (i), and (ii).	§ 63.1296(c)(3) (iii) and § 63.1304(a).	§ 63.1307 (b)(1)(ii) and (4)	§ 63.1306(e)(4).
	Unsafe-to-repair	§ 63.1296(c)(4)	§ 63.1296(c)(1)	§ 63.1307 (b)(1)(ii)	§ 63.1306(e)(4).

TABLE 3 TO SUBPART III.—COMPLIANCE REQUIREMENTS FOR SLABSTOCK FOAM PRODUCTION AFFECTED SOURCES COMPLYING WITH THE EMISSION POINT SPECIFIC LIMITATIONS—Continued

Emission point	Emission point compliance option	Emission, work practice, and equipment standards	Monitoring	Recordkeeping	Reporting
Pressure-relief devices § 63.1296(d) Open-ended valves or lines § 63.1296(e). Production line § 63.1297.	N/A	§ 63.1296(d) and (d)(2).	§ 63.1296 (d)(1) and § 63.1304(a).	§ 63.1307 (b)(1)(ii) and (3)	§ 63.1306(e)(4).
	N/A	§ 63.1296(e) .....	.....	§ 63.1307 (b)(1)(ii)	
	Rolling annual compliance.	§ 63.1297(a)(1) and (b).	§ 63.1303 (b)	§ 63.1307(c)(1)	§ 63.1306(e)(1).
	Monthly compliance	§ 63.1297(a)(2) and (c).	§ 63.1303 (b)	§ 63.1307(c)(1)	§ 63.1306(e)(2).
	Compliance Using a Recovery device.	§ 63.1297(a)(1), (b), and (e) for rolling annual compliance or § 63.1297(a)(2), (c), and (e) for monthly compliance.	§ 63.1303 (b) and (c).	§ 63.1307(c)(1) and (d)	§ 63.1306(e)(1) or (2).
Equipment Cleaning § 63.1298.	N/A	§ 63.1298 .....	.....	§ 63.1307(e)	

TABLE 4 TO SUBPART III.—COMPLIANCE REQUIREMENTS FOR SLABSTOCK FOAM PRODUCTION AFFECTED SOURCES COMPLYING WITH THE SOURCE-WIDE EMISSION LIMITATION

Emission point	Emission point compliance option	Emission, work practice, and equipment standards	Monitoring	Recordkeeping	Reporting
Diisocyanate storage vessels § 63.1294(a).	Vapor balance	§ 63.1294(a)(1) and (1)(ii).	§ 63.1294(a)(1)(i)	§ 63.1307(a)(1) and (4)	§ 63.1306(e)(5).
	Carbon adsorber ...	§ 63.1294(a)(2)	§ 63.1303(a)(1), (3), and (4).	§ 63.1307(a)(1), (3)(i), and (3)(ii).	§ 63.1306(e)(3).
	Carbon adsorber—alternative monitoring.	§ 63.1294(a)(2)	§ 63.1303(a)(2), (3) and (4).	§ 63.1307(a)(1), (3)(ii), and (3)(iii).	§ 63.1306(e)(3).
Diisocyanate transfer pumps § 63.1294(b).	Sealless pump	§ 63.1294(b)(1) .....	.....	§ 63.1307 (b)(1)(i) and (2)	
	Submerged pump ..	§ 63.1294(b)(2)(i) and (iii).	§ 63.1294 (b)(2)(ii) ..	§ 63.1307 (b)(1)(i), (2), and (3)	§ 63.1306(e)(4).
Other components in diisocyanate service § 63.1294(c).	N/A	§ 63.1294(c)	§ 63.1294(c)	§ 63.1307 (b)(1)(i) and (3)	§ 63.1306(e)(4).
HAP ABA storage vessels, equipment leaks, production line, and equipment cleaning.	Rolling annual compliance.	§ 63.1299(a), (c)(1) through (4), and (d).	§ 63.1303 (b) except (b)(1)(ii), (d), and (e).	§ 63.1307(c)(2)	§ 63.1306(e)(1).
	Monthly compliance	§ 63.1299(b), (c)(1) through (4), and (d).	§ 63.1303 (b) except (b)(1)(ii), (d), and (e).	§ 63.1307(c)(2)	§ 63.1306(e)(2).
	Compliance Using a Recovery device.	§ 63.1299(a), (d), and (e) for rolling annual compliance or § 63.1299(b), (d), and (e) for monthly compliance.	§ 63.1303 (b) except (b)(1)(ii) and (c).	§ 63.1307(c)(2) and (d)	§ 63.1306(e)(1) or (2).

TABLE 5 TO SUBPART III.—COMPLIANCE REQUIREMENTS FOR MOLDED AND REBOND FOAM PRODUCTION AFFECTED SOURCES

Emission point	Emission point compliance option	Emission, work practice, and equipment standards	Monitoring	Recordkeeping	Reporting
Molded Foam					
Equipment cleaning ..	N/A	§ 63.1300(a) .....	.....	§ 63.1307(g)	
Mold release agent ..	N/A	§ 63.1300(b) .....	.....	§ 63.1307 (h)	
Rebond Foam					
Equipment cleaning ..	N/A	§ 63.1301(a) .....	.....	§ 63.1307 (g)	
Mold release agent ..	N/A	§ 63.1301(b) .....	.....	§ 63.1307 (h)	

[FR Doc. 98-25894 Filed 10-6-98; 8:45 am]
 BILLING CODE 6560-50-P

Dated: December 1, 1998.
Richard G. Bryson,
Acting Assistant Director.
 [FR Doc. 98-32348 Filed 12-3-98; 8:45 am]
 BILLING CODE 4310-05-M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AD-FRL-6192-8]

RIN 2060-AC28

National Emission Standards for Hazardous Air Pollutants for Ethylene Oxide Commercial Sterilization and Fumigation Operations

AGENCY: Environmental Protection Agency (EPA).

ACTION: Interim final rule.

SUMMARY: Today's action suspends the National Emission Standards for Hazardous Air Pollutants for Ethylene Oxide Commercial Sterilization and Fumigation Operations (EO NESHAP) requirements for chamber exhaust and aeration room vents. The suspension allows affected sources subject to the EO NESHAP to defer compliance with the NESHAP requirements for chamber exhaust and aeration room vents for one year until December 6, 1999. This suspension does not affect the requirement for sources subject to the EO NESHAP to comply with provisions for sterilizer vents by December 6, 1998. This action does not change the level of the standards or the intent of the NESHAP promulgated in 1994.

DATES: This action is effective December 4, 1998.

Comments may be submitted until January 4, 1999.

ADDRESSES: Comments may be submitted to the Docket address which follows. Docket No. A-88-03, category VIII Amendments, containing information considered by the EPA in developing this rule, is available for public inspection and copying between 8:00 a.m. and 5:30 p.m., Monday through Friday, except for Federal holidays, at the EPA's Air and Radiation Docket and Information Center, room M1500, U.S. EPA, 401 M Street, SW, Washington, DC 20460; telephone (202) 260-7548. A reasonable fee may be charged for copying. This docket also contains information considered by the EPA in proposing and promulgating the original EO NESHAP.

FOR FURTHER INFORMATION CONTACT: For information concerning applicability and rule determinations, contact the

appropriate EPA regional or Office of Enforcement and Compliance Assurance (OECA) representative:

Region I: Susan Lancey, Air Programs Enforcement Office Chief, U.S. EPA, Region I, JFK Federal Building (SEA), Boston, MA 02203-2211, PH: (617) 565-3587 Fax: (617) 565-4940

Region II: Umesh Dholakia, Air Compliance Branch Chief, U.S. EPA, Region II, 290 Broadway, New York, NY 10007-1866, PH: (212) 637-4023, Fax: (212) 637-3901

Region III: Dianne Walker, U.S. EPA, Region III (3AT12), 841 Chestnut Building, Philadelphia, PA 19107, PH: (215) 566-3297, Fax number (215) 566-2114

Region IV: Lee Page, U.S. EPA, Region IV (AR-4), 100 Alabama Street, SW, Atlanta, GA 30303-3104, PH: (404) 562-9131, Fax: (404) 562-9095

Region V: Bruce Vainer (AE-17J), U.S. EPA, Region V, 77 W. Jackson Blvd., Chicago, IL 60604, PH: (312) 886-6793, Fax: (312) 353-8289

Region VI: Robert Todd (6PD-R), U.S. EPA, Region VI (6PD-R), 1445 Ross Avenue, Suite 700, Dallas, TX 75202-2733, PH: (214) 665-2156, Fax: (214) 665-7263

Region VII: Richard Tripp, U.S. EPA, Region VII, 726 Minnesota Avenue, Kansas City, KS 66101, PH: (913) 551-7566 Fax: (913) 551-7065

Region VIII: Victoria Parker-Christensen, U.S. EPA, Region VIII (8P2-A), 999 18th Street, Suite 500, Denver, CO 80202-2405, PH: (303) 312-6441, Fax: (303) 312-6064

Region IX: Mae Wang, U.S. EPA, Region IX (Air-4), 75 Hawthorne Street, San Francisco, CA 94105, PH: (415) 744-1200 Fax: (415) 744-1076

Region X: Andrea Wullenweber, Office of Air Quality (OAQ-107), U.S. EPA, Region X, 1200 Sixth Avenue, Seattle, WA 98101-9797, PH: (206) 553-8760 Fax: (206) 553-0110

OECA: Charlie Garlow, U.S. EPA, OECA (2242A), 401 M Street, SW, Washington, DC 20460, PH: (202) 564-1088, Fax: (202) 564-0068.

For information concerning the analyses performed in developing this interim final rule, contact Mr. David Markwordt, Policy, Planning and Standards Group, Emission Standards Division (MD-13), Office of Air Quality Planning and Standards, U.S. EPA, Research Triangle Park, NC 27711, PH: (919) 541-0837 Fax: (919) 541-0942. For information concerning the accident investigations, contact Mr. Craig Matthiessen, Chemical Emergency Preparedness and Prevention Office (5101), Office of Solid Waste and Emergency Response, U.S. EPA, 401 M

Street, SW, Washington, DC 20460, PH: (202) 260-9781 Fax: (202) 260 0927.

SUPPLEMENTARY INFORMATION:

Electronic Access

An electronic version of this rule is available for downloading from the EPA Technology Transfer Network (TTN) at "http://www.epa.gov/ttn/oarpg/remain.html." For assistance in downloading files, call the TTN Help line at (919) 541-5384.

Regulated Entities

Regulated categories and entities include:

TABLE 1.—REGULATED CATEGORIES AND ENTITIES

Entity category	Description/SIC code
Industrial	Medical suppliers/3841, 3842. Pharmaceuticals/2834, 5122, 2831, 2833. Spice manufactures/2099, 5149, 2034, 2035, 2046. Contract Sterilizers/7399, 7218, 8091.
Federal Government	Not Affected.
State/Local/Tribal Gov	Not Affected.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities regulated by the NESHAP addressed in this interim final rule. If you have questions regarding the applicability of the NESHAP addressed in this interim final rule to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION** section.

The information presented in this preamble is organized as follows:

- I. Background and Summary of Action
- II. Summary of and Rationale for Suspension of Chamber Exhaust and Aeration Room Vent Requirements
- III. Administrative Requirements
 - A. Paperwork Reduction Act
 - B. Executive Order 12866—Regulatory Planning and Review
 - C. Unfunded Mandates Reform Act
 - D. Regulatory Flexibility Act
 - E. Executive Order 13045—Protection of Children From Environmental Health Risks and Safety Risks
 - F. National Technology Transfer and Advancement Act
 - C. Executive Order 12875—Enhancing the Intergovernmental Partnerships
 - H. Executive Order 13084—Consultation and Coordination With Indian Tribal Governments
 - I. Submission to Congress and the Comptroller General
 - J. Petitions for Judicial Review

I. Background and Summary of Action

On December 6, 1994 (59 FR 62585), the EPA promulgated the EO NESHAP which regulates emissions of ethylene oxide from new and existing commercial sterilization and fumigation operations using one ton or more of EO per year. The regulated category and entities affected by today's action are the sources described in 40 CFR 63.360. That provision includes commercial operations using ethylene oxide as a sterilant and fumigant in the production of medical equipment and supplies, and in miscellaneous sterilization and fumigation operations at both major and area sources. Note that this description is not intended to be exhaustive but, rather, to provide a guide for readers interested in this compliance extension. To determine whether your facility is affected by today's action, you should carefully examine the applicability criteria in 40 CFR 63.360 and the explanation provided in this document. If you have questions about the applicability of today's action to a particular entity, consult the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

In July 1997, the Agency learned of reports of explosions at ethylene oxide sterilization and fumigation facilities. EPA subsequently suspended the EO NESHAP for one year until December 6, 1998 to provide time to determine the appropriate action necessary to mitigate the cause of the explosions. 62 FR 64736

II. Summary of and Rationale for Suspension of Chamber Exhaust and Aeration Room Vent Requirements

As noted above, in July 1997, the Agency learned of reports of explosions at ethylene oxide facilities. Several of these explosions occurred at facilities subject to the EO NESHAP. The Agency immediately began conducting a preliminary investigation to determine if the emission control equipment mandated by 40 CFR part 63, Subpart O was in any way associated with the cause of the problems at these facilities. The Agency, on December 9, 1997, wishing to adopt a cautious approach in order to assure public and worker safety, published in the **Federal Register** an interim final rule suspending 40 CFR Part 63, Subpart O. 62 FR 64736. Since publication of the December 9, 1997 rule, both EPA and industry have continued to investigate the cause of the accidents.

In a June 2, 1998 letter to the Agency, the Ethylene Oxide Sterilization Association (EOSA) recommended, "additional time to consider safe and

economical control, installation, operation and maintenance alternatives applicable to aeration and chamber exhaust (backvent) emissions . . ." (see Docket No. A-88-03, Item No. VIII-D-2). The Health Industries Manufacturers Association (HIMA) reviewed the recommendation. EOSA and HIMA membership represent most of the ethylene oxide sterilization and fumigation industry. EOSA "concluded that the oxidizer systems had not been properly integrated with traditional EtO sterilization process operations, that is, installation, operation and maintenance issues had not been sufficiently addressed by sterilizer operators." EOSA also concluded that "improperly overfeeding the oxidizer system from the chamber backvent was the primary safety concern."

The Agency also conducted an independent investigation of the accidents and reviewed reports prepared by EPA Regional Offices and by EOSA member sterilization companies and, based on that investigation and review, concurred with the industry conclusion and recommendation quoted above (see Docket No. A-88-03, Item No. VIII-B-1). The Agency agrees that, in the cases where explosions occurred, the catalytic oxidizer units were overfed with ethylene oxide in concentrations above the safe operations limit due to abnormal activation of the chamber exhaust (backvent). Normally, EO rich effluent drawn (vented) from the sterilizer chamber at low flow is metered or mechanically restricted and diluted with air to prevent high concentrations of EO from entering the emissions control unit. The much greater backvent or chamber exhaust flow, often in combination with aeration room exhaust, generally is not restricted or diluted before entering the emissions control unit. Aeration room concentrations typically are well below the lower flammability limit for EO and the backvent is supposed to be activated only when an extremely low concentration of EO is present in the chamber during loading/unloading of products. Although all units functioned as intended, the abnormal activation of the backvent at high EO concentrations in the sterilization chamber led to the explosions. The Agency also concludes main vent emissions routed through the vacuum pump played no role in the explosions.

The Agency also concludes that any emissions control technology necessary to comply with this rule needs to be properly integrated into the sterilization system and operations, and must reflect the full range of normal and abnormal

conditions that may occur.

Investigations and safety reviews, conducted independently by EPA and EOSA members, confirmed that, as currently designed and operated, there still is a possibility that backvents could be activated while high EO concentrations are present in the sterilization chamber. Consequently, sterilization chamber operators will need to further evaluate the integration of the emission control technology with sterilizer operation to ensure prevention of future explosions. Total system safety issues can be addressed by conducting a comprehensive process hazard analysis (PHA) for each sterilizer process and developing and instituting safeguards that address these hazards. Additional time is required to complete these analyses and install safeguards.

In this matter, the Agency wishes to err, if at all, on the side of safety. Accordingly, the Agency is today suspending the EO NESHAP emission limitation requirements in 40 CFR Part 63, Subpart O, for chamber exhaust and aeration room vents, as those emission points are defined at 40 CFR 63.361, for one year, until December 6, 1999, pursuant to EPA's general rulemaking authority under CAA Section 301(a), 42 U.S.C. 7601(a). Sources must comply with the EO NESHAP emission limitation requirements in 40 CFR part 63, Subpart O, for sterilization chamber vents, as those emission points are defined at 40 CFR 63.361 by December 6, 1998 because EPA has determined that they do not pose a safety concern.

CAA Section 301(a) grants the Administrator of the EPA the authority "to prescribe such regulations as are necessary to carry out his functions under this Act." Given the unique circumstances and uncertainty surrounding the EO NESHAP, as described in this document, EPA believes that it is necessary to further suspend this rule's requirements for chamber exhaust and aeration room vent for the safety of the public and workers in and around EO facilities. As EOSA's and EPA's investigations have shown, the control requirements of the EO NESHAP for chamber exhaust and aeration room vents continue to pose potential problems for which solutions are being developed. These solutions include the redesign of control systems to prevent the overfeeding of EO in concentrations above safe operating limits. The EOSA is also exploring an alternative control strategy for back draft vent emissions. This control approach does not require an abatement device thus completely eliminating the possibility of overfeeding (see Docket No. A-88-03, Items No. VIII-D-2 & 6).

The further extension provided in this document allows time for those solutions to be perfected and finalized. This action is consistent with the objectives of the Clean Air Act as stated in Section 101(b), 42 U.S.C. 7401(b). "The purposes of this sub chapter are . . . to promote the public health and welfare and the productive capacity of its population. . . ."

The original EO NESHAP and today's action are promulgated pursuant to CAA Section 307(d), 42 U.S.C. 7607(d), which requires that any rule subject to that section be issued only after the public has received notice of, and an opportunity to comment on, the rule. However, Section 307(d)(1) exempts from those requirements any rule for which the Agency finds under the Administrative Procedure Act, 5 U.S.C. 553(b), that providing prior notice-and-comment would be impracticable, unnecessary or contrary to the public interest.

EPA believes the circumstances presented here provide good cause to take this action without prior notice-and-comment. EPA finds that providing prior notice-and-comment would be impracticable and contrary to the public interest based on the potential ongoing danger to public and worker safety posed by the recent incidents at ethylene oxide facilities. There is simply not enough time to provide notice-and-comment procedures before the current compliance date of December 6, 1998 arrives, and until the compliance date is extended, sources are faced with having to install control equipment in time to meet the current compliance date. Only by omitting notice-and-comment from this action can EPA provide sources affected by the EO NESHAP with timely legal relief from the current compliance date, while EPA investigates the situation. Consequently, this action is being promulgated without prior notice-and-comment as provided for in CAA Section 307(b)(1) and is effective December 4, 1998 as provided for in CAA Section 112(d)(10).

Nonetheless, EPA is providing 30 days for submission of public comments. EPA will consider all written comments submitted in the allotted time period to determine if any change to this action is necessary.

In suspending the EO NESHAP requirements for chamber exhaust and aeration room vents, the Administrator wishes to remind the public and the regulated community that the role of the EPA has been and continues to be protection of public health and the environment in a way that is consistent with safety concerns.

III. Administrative Requirements

A. Paperwork Reduction Act

The information collection requirements of the EO NESHAP were submitted to and approved by the Office of Management and Budget (OMB). A copy of this Information Collection Request (ICR) document (OMB control number 2060-0283) may be obtained from Ms. Sandy Farmer, Information Policy Branch (2136); U.S. EPA; 401 M Street, SW, Washington, DC 20460, or by calling (202) 260-2740.

Today's action has no impact on the information collection burden estimates made previously. Today's action merely suspends the EO NESHAP requirements for chamber exhaust and aeration room vents for one year. This change does not impose new requirements. Consequently, the ICR has not been revised.

B. Executive Order 12866—Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), EPA must determine whether the regulatory action is "significant" and, therefore, subject to review by OMB on the basis of the requirements of the Executive Order in addition to its normal review requirements. The Executive Order defines "significant regulatory action" as one that is likely to result in a rule that may:

- (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities;
- (2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, 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.

Today's action does not fall within any of the four categories described above. Instead, it reduces the burden on certain sources by temporarily suspending the EO NESHAP requirements for chamber exhaust and aeration vents. Consequently, under Executive Order 12866, this action is not a "significant regulatory action" and is, therefore, not subject to review by the Office of Management and Budget.

C. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under Section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, Section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objects of the rule. The provisions of Section 205 do not apply when they are inconsistent with applicable law. Moreover, Section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation of why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under Section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

Today's rule contains no Federal mandates (under the regulatory provisions of Title II of the UMRA) for State, local, or tribal governments or the private sector. Instead, this rule provides additional time to comply with some requirements of the EO NESHAP. Because the rule is not expected to result in the expenditure by State, local, and tribal governments or the private sector of \$100 million or more in any one year, the Agency has not prepared a budgetary impact statement or specifically addressed the selection of the least costly, most 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. For the reasons stated above, the requirements of the UMRA do not apply to this section.

D. Regulatory Flexibility Act

Under the Regulatory Flexibility Act (or RFA), Public Law 96-354, whenever an Agency publishes any proposed or final rule in the **Federal Register**, it must, except under certain circumstances, prepare a Regulatory Flexibility Analysis (RFA) that describes the impact of the rule on small entities (i.e., small businesses, organizations, and governmental jurisdictions). That analysis is not necessary if the Agency certifies that the rule will not have a significant economic impact on a substantial number of small entities.

EPA believes that there will be little or no adverse impact on any small entities as a result of the promulgation of this rule because, rather than imposing additional requirements, this rule provides additional time to comply with parts of the EO NESHAP. Because the impacts are anticipated to be insignificant or beneficial, pursuant to the provisions of 5 U.S.C. 605(b), I hereby certify that this rule will not have a significant economic impact on a substantial number of small entities. Consequently, an RFA is not required.

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.

This interim final rule is 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. National Technology Transfer and Advancement Act

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

The EPA believes that the use of VCS in this interim final rule is impractical. The suspension of the EO NESHAP requirements for chamber exhaust and aeration room vents is merely a procedural action that does not require sources to take substantive steps that lend themselves to VCS.

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 consults with those governments, 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 does not create a mandate on State, local or tribal governments. The rule does not impose any enforceable duties on these entities. Rather, the rule temporarily suspends certain regulatory requirements. Accordingly, the requirements of section 1(a) of Executive Order 12875 do not apply to this rule.

H. 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. This rule imposes no enforceable duties on these entities. Rather, the rule temporarily suspends certain regulatory requirements. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

I. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2). This rule will be effective December 4, 1998.

J. Petitions for Judicial Review

Under Section 307(b)(1) of the Clean Air Act (Act), judicial review of this final action 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 interim final rule. Under Section 307(b)(2) of the Act, the actions taken in today's document may not be challenged later in civil or criminal proceedings brought by the EPA to enforce these requirements.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Ethylene oxide sterilization, Hazardous substances, Reporting and recordkeeping requirements.

Dated: November 18, 1998.

Carol M. Browner,
Administrator.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

PART 63—[AMENDED]

1. The authority citation for part 63 continues to read as follows:

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

Subpart O—[Amended]

2. Section 63.360 is amended by revising paragraphs (g)(1), (g)(2), and (g)(3) and adding paragraphs (g)(4), (g)(5), and (g)(6) to read as follows:

§ 63.360 Applicability.

* * * * *

(g) * * *

(1) All sterilization chamber vents subject to the emissions standards in § 63.362 with an initial startup date before December 6, 1998, no later than December 6, 1998.

(2) All sterilization chamber vents subject to the emissions standards in § 63.362 with an initial startup date on or after December 6, 1998, immediately upon initial startup of the source.

(3) All sterilization chamber vents at sources using less than 1 ton of ethylene oxide that increase their ethylene oxide usage after December 6, 1998 such that the sterilization chamber vent becomes subject to the emissions standards in § 63.362(c), immediately upon becoming subject to the emission standards.

(4) All aeration room and chamber exhaust vents subject to the emissions standards in § 63.362 with an initial startup date before December 6, 1999, no later than December 6, 1999.

(5) All aeration room and chamber exhaust vents subject to the emissions standards in § 63.362 with an initial startup on or after December 6, 1999, immediately upon initial startup of the source.

(6) All aeration room and chamber exhaust vents at sources using less than

10 tons of ethylene oxide that increase their ethylene oxide usage after December 6, 1999 such that the aeration room and chamber exhaust vents become subject to the emissions standards in § 63.362(d) and § 63.362(e), immediately upon becoming subject to the emission standards.

[FR Doc. 98-31396 Filed 12-3-98; 8:45 am]
BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180

[OPP-300757; FRL-6044-5]

RIN 2070-AB78

Thiabendazole; Extension of Tolerance for Emergency Exemptions

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This rule extends a time-limited tolerance for residues of the fungicide thiabendazole and its metabolites in or on lentils at 0.1 part per million (ppm) for an additional 18-month period, to April 30, 2000. This action is in response to EPA's granting of an emergency exemption under section 18 of the Federal Insecticide, Fungicide, and Rodenticide Act authorizing use of the pesticide on lentils. Section 408(l)(6) of the Federal Food, Drug, and Cosmetic Act (FFDCA) requires EPA to establish a time-limited tolerance or exemption from the requirement for a tolerance for pesticide chemical residues in food that will result from the use of a pesticide under an emergency exemption granted by EPA under section 18 of FIFRA.

DATES: This regulation becomes effective December 4, 1998. Objections and requests for hearings must be received by EPA, on or before February 2, 1999.

ADDRESSES: Written objections and hearing requests, identified by the docket control number [OPP-300757], must be submitted to: Hearing Clerk (1900), Environmental Protection Agency, Rm. M3708, 401 M St., SW., Washington, DC 20460. Fees accompanying objections and hearing requests shall be labeled "Tolerance Petition Fees" and forwarded to: EPA Headquarters Accounting Operations Branch, OPP (Tolerance Fees), P.O. Box 360277M, Pittsburgh, PA 15251. A copy of any objections and hearing requests filed with the Hearing Clerk identified by the docket control number, [OPP-300757], must also be submitted to:

Public Information and Records Integrity Branch, Information Resources and Services Division (7502C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. In person, bring a copy of objections and hearing requests to Rm. 119, CM #2, 1921 Jefferson Davis Hwy., Arlington, VA.

A copy of objections and hearing requests filed with the Hearing Clerk may also be submitted electronically by sending electronic mail (e-mail) to: opp-docket@epamail.epa.gov. Copies of electronic objections and hearing requests must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. Copies of objections and hearing requests will also be accepted on disks in WordPerfect 5.1/6.1 or ASCII file format. All copies of electronic objections and hearing requests must be identified by the docket control number [OPP-300757]. No Confidential Business Information (CBI) should be submitted through e-mail. Copies of electronic objections and hearing requests on this rule may be filed online at many Federal Depository Libraries.

FOR FURTHER INFORMATION CONTACT: By mail: Andrea Beard, Registration Division (7505C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. Office location, telephone number, and e-mail address: Rm. 267, CM 2, 1921 Jefferson Davis Hwy., Arlington, VA 22202, (703) 308-9356; e-mail: beard.andrea@epamail.epa.gov. **SUPPLEMENTARY INFORMATION:** EPA issued a final rule, published in the *Federal Register* of February 25, 1998 (63 FR 9435) (FRL-5767-6), which announced that on its own initiative and under section 408(e) of the FFDCA, 21 U.S.C. 346a(e) and (l)(6), it established a time-limited tolerance for the residues of thiabendazole and its metabolites in or on lentils at 0.1 ppm, with an expiration date of October 31, 1998. EPA established the tolerance because section 408(l)(6) of the FFDCA requires EPA to establish a time-limited tolerance or exemption from the requirement for a tolerance for pesticide chemical residues in food that will result from the use of a pesticide under an emergency exemption granted by EPA under section 18 of FIFRA. Such tolerances can be established without providing notice or period for public comment.

EPA received requests to extend the use of thiabendazole on lentils for this year's growing season due to the situation remaining an emergency. The Applicants (Idaho, Washington, and

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

F. Unfunded Mandates

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

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

G. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides

that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. This rule is not a "major" rule as defined by 5 U.S.C. 804(2).

H. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by February 8, 1999. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

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

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

Dated: November 13, 1998.

Laura Yoshii,
Regional Administrator, Region IX.

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

PART 52—[AMENDED]

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

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

Subpart F—California

2. Section 52.220 is amended by adding paragraphs (c)(194)(i)(H); (c)(248)(i)(A)(3); (c)(248)(i)(B)(2); and (c)(257) to read as follows:

§ 52.220 Identification of plan.

- * * * * *
- (c) * * *
- (194) * * *
- (i) * * *

(H) South Coast Air Quality Management District.

(I) Rule 403.1, adopted on January 15, 1993.

* * * * *

(248) * * *

(i) * * *

(A) * * *

(3) Rules 52, 53, 54, amended on January 27, 1997.

(B) * * *

(2) Rule 403, amended on February 14, 1997, and Rule 1186, adopted on February 14, 1997.

* * * * *

(257) Plan revisions for the Coachella Valley Planning Area were submitted on February 16, 1995, by the Governor's designee.

(i) Incorporation by reference.

(A) Fugitive dust control ordinances for: City of Cathedral City Ordinance No. 377, adopted on February 18, 1993; City of Coachella Ordinance No. 715, adopted on October 6, 1993; City of Desert Hot Springs Ordinance No. 93-2, adopted on May 18, 1993; City of Indian Wells Ordinance No. 313, adopted on February 4, 1993; City of Indio Ordinance No. 1138, adopted on March 17, 1993; City of La Quinta Ordinance No. 219, adopted on December 15, 1992; City of Palm Desert Ordinance No. 701, adopted on January 14, 1993; City of Palm Springs Ordinance No. 1439, adopted on April 21, 1993; City of Rancho Mirage Ordinance No. 575, adopted on August 5, 1993; and County of Riverside Ordinance No. 742, adopted on January 4, 1994.

* * * * *

[FR Doc. 98-32563 Filed 12-8-98; 8:45 am]
BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AD-FRL-6197-8]

RIN 2060-AC19

National Emission Standards for Hazardous Air Pollutants for Source Categories: Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry and Other Processes Subject to the Negotiated Regulation for Equipment Leaks; Rule Clarifications; Correction

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule: Correction.

SUMMARY: On January 17, 1997, the EPA amended certain portions of the "National Emission Standards for

Hazardous Air Pollutants for Source Categories: Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry and Other Processes Subject to the Negotiated Regulation for Equipment Leaks." This rule is commonly known as the Hazardous Organic NESHAP or the HON. Among the changes made to the rule in that action, the EPA added a definition for "enhanced biological treatment systems or enhanced biological treatment processes" to the rule and made clarifying revisions to appendix C of part 63. On August 22, 1997, the EPA proposed corrections to this definition in order to clarify its meaning and proposed revisions to appendix C of part 63 to reflect the clarification of the definition for "enhanced biological treatment systems or enhanced biological treatment processes." The August 22, 1997 document also proposed to revise the compliance demonstration procedures for biological treatment units to remove restrictions on the use of the batch test procedure. Today's action takes final action on those proposed amendments.

These amendments to the rule will not change the basic control requirements of the rule or the level of health protection it provides. The rule requires new and existing major sources to control emissions of hazardous air pollutants to the level reflecting application of the maximum achievable control technology.

EFFECTIVE DATE: December 9, 1998.

ADDRESSES: Docket. Docket No. A-90-23, containing the supporting information for the original NESHAP and this action, are available for public inspection and copying between 8:00 a.m. and 5:30 p.m., Monday through Friday, at the EPA's Air and Radiation Docket and Information Center, Waterside Mall, Room M-1500, first floor, 401 M Street, SW, Washington, DC 20460, or by calling (202) 260-7548 or 260-7549. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: For general questions, contact Dr. Janet S. Meyer, Coatings and Consumer Products Group, at (919) 541-5254 (meyer.jan@epamail.epa.gov). For technical questions on appendix C and wastewater provisions, contact Elaine Manning, Waste and Chemical Processes Group, telephone number (919) 541-5499 (manning.elaine@epamail.epa.gov). The mailing address for the contacts is Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711.

SUPPLEMENTARY INFORMATION:

I. Regulated Entities and Background Information:

A. Regulated Entities

The regulated category and entities affected by this action include:

Category	Examples of regulated entities
Industry ..	Synthetic organic chemical manufacturing industry (SOCMI) units, e.g., producers of benzene, toluene, or any other chemical listed in table 1 of 40 CFR part 63, subpart F.

This table is not intended to be exhaustive but, rather, provides a guide for readers regarding entities likely to be interested in the revisions to the regulation affected by this action. This action is expected to be of interest to owners and operators subject to this rule who plan to use biological treatment to comply with control requirements for wastewater streams. Entities potentially regulated by the HON are those which produce as primary intended products any of the chemicals listed in table 1 of 40 CFR part 63, subpart F and are located at facilities that are major sources as defined in section 112 of the Clean Air Act (the Act). Potentially regulated entities generally are companies that manufacture industrial organic chemicals and cyclic organic crude and intermediates. To determine whether your facility is regulated by this action, you should carefully examine all of the applicability criteria in 40 CFR 63.100. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

B. Background on the Rule

On April 22, 1994 (59 FR 19402), and June 6, 1994 (59 FR 29196), the EPA published in the **Federal Register** the NESHAP for the SOCMI, and for several other processes subject to the equipment leaks portion of the rule. These regulations were promulgated as subparts F, G, H, and I in 40 CFR part 63, and are commonly referred to as the hazardous organic NESHAP, or the HON. Since the April 22, 1994 **Federal Register** publication, there have been several amendments to clarify various aspects of the rule. Readers should see the following **Federal Register** documents for more information: September 20, 1994 (59 FR 48175); October 24, 1994 (59 FR 53359); October 28, 1994 (59 FR 54131); January 27, 1995 (60 FR 5321); April 10, 1995 (60 FR 18020); April 10, 1995 (60 FR

18026); December 12, 1995 (60 FR 63624); February 29, 1996 (61 FR 7716); June 20, 1996 (61 FR 31435); August 26, 1996 (61 FR 43698); December 5, 1996 (61 FR 64571); January 17, 1997 (62 FR 2721); and August 22, 1997 (62 FR 44608).

In June 1994, the Chemical Manufacturers Association (CMA) and Dow Chemical Company (Dow) filed petitions for review of the promulgated rule in the U.S. Court of Appeals for the District of Columbia Circuit, *Chemical Manufacturers Association v. EPA*, 94-1463 and 94-1464 (D.C. Cir.) and *Dow Chemical Company v. EPA*, 94-1465 (D.C. Cir.). The petitioners raised over 75 technical issues on the rule's structure and applicability. Issues were raised regarding details of the technical requirements, drafting clarity, and structural errors in the drafting of certain sections of the rule. On August 26, 1996, the EPA proposed clarifying and correcting amendments to subparts F, G, H, and I of part 63 to address the issues raised by CMA and Dow on the April 1994 rule. On December 5, 1996 and January 17, 1997, the EPA took final action on the amendments proposed on August 26, 1996. Subsequently, the EPA determined that some revisions to the definition of "enhanced biological treatment systems or enhanced biological treatment processes" and to appendix C of part 63 might be appropriate. These revisions were proposed on August 22, 1997 at 62 FR 44608.

C. Public Comment on the August 22, 1997 Proposal

Three comment letters were received on the August 22, 1997 **Federal Register** document that proposed changes to the rule. All comment letters received were from industry representatives and trade associations. While the commenters were supportive of the proposed rule amendments, they also expressed concerns with the clarity of the examples used in the preamble to describe systems that do and systems that do not meet the intent of the definition. The EPA has considered these suggestions and, where appropriate, has provided clarification of these examples in this document. The EPA has also developed a technical support document to provide additional information for use in evaluating whether a biological treatment unit meets the definition of "enhanced biological treatment system or enhanced biological treatment process." This document may be obtained from the Air and Radiation Docket and Information Center. It may also be obtained over the Internet at "http://www.epa.gov/ttn/

oarp/ramain.html." The Technology Transfer Network (TTN) provides information and technology exchange in various areas of air pollution control, including copies of rules and supporting documents. If more information on TTN is needed, contact the systems operator at (919) 541-5384.

D. Judicial Review

Under Section 307(b)(1) of the Act, judicial review of this final action is available only on 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 final rule. Under Section 307(b)(2) of the Act, the requirements that are subject to today's publication may not be challenged later in civil or criminal proceedings brought by the EPA to enforce these requirements.

II. Clarification of Definition of Enhanced Biological Treatment System or Enhanced Biological Treatment Process

The August 26, 1996 proposed changes to the wastewater treatment provisions of the HON included provisions that provided easier compliance demonstration options for well-mixed activated sludge systems that are used to control readily biodegraded compounds. In that proposed change to the April 1994 final rule, the compounds listed in table 9 of subpart G were divided into three lists; these lists were presented in table 36 of subpart G. In the proposal, a performance evaluation would not have been required for an activated sludge system if it met the definition of "enhanced biological treatment system or enhanced biological treatment process" and if the unit was controlling wastewater streams that contained only list 1 compounds. The August 1996 proposed revisions to the rule also required a performance demonstration for activated sludge systems used to treat a combination of list 1 and list 2 and/or list 3 compounds.

The August 1996 proposal defined an enhanced biological treatment system as an aerated treatment unit(s) that contains biomass suspended in water followed by a clarifier that removes biomass from the treated water and recycles recovered biomass to the aeration unit. The mixed liquor volatile suspended solids (biomass) is greater than 1 kilogram per cubic meter throughout each aeration unit. The biomass is suspended and aerated in the water of the aeration unit(s) by either submerged air flow or mechanical agitation.

This definition of "enhanced biological treatment system or enhanced biological treatment process" was intended to

reflect the basis for the simplified compliance approach for some systems. The three lists of compounds in table 36 of subpart G were developed by modeling performance of an activated sludge system that was a thoroughly mixed biological treatment unit. (A thoroughly mixed or completely mixed system is a biological treatment unit where biomass and wastewater entering the tank are dispersed quickly throughout the tank such that the system achieves or approaches uniform characteristics throughout the tank (Docket number A-90-23, item VII-B-8).) After the August 1996 proposal, the EPA learned that some were interpreting the proposed definition of "enhanced biological treatment system or biological treatment process" to apply more broadly than intended. In the January 17, 1997 final rule, the phrase "homogeneously distributed" was added to the second sentence of the definition to clarify the EPA's intent to define a well-mixed biological treatment unit. The EPA thought that this revision would better reflect the modeling and clarify the EPA's intent to limit the types of biological treatment units that could use the simplified compliance option to systems that were completely back mixed. The EPA also believed that this change did not alter the meaning of the term.

Following publication of the January 17, 1997 final rule, the EPA learned that industry representatives were concerned that the revised definition could be read to require absolute uniformity in the biomass concentration. These industry representatives pointed out that they believed that such a reading of the definition could preclude any system from using the simplified compliance approach and the performance evaluation exemption. It was not the EPA's intent that the phrase "homogeneously distributed" be interpreted this narrowly. Therefore, on August 22, 1997 the EPA proposed clarifying changes to the definition of "enhanced biological treatment system or enhanced biological treatment process" and proposed parallel conforming changes to appendix C to part 63.

Today's action promulgates without any changes, the definition, proposed in the August 22, 1997 document, of "enhanced biological treatment system or enhanced biological treatment process." That definition reads as follows:

Enhanced biological treatment system or enhanced biological treatment process means an aerated, thoroughly mixed treatment unit(s) that contains biomass suspended in water followed by a clarifier that removes

biomass from the treated water and recycles recovered biomass to the aeration unit. The mixed liquor volatile suspended solids (biomass) is greater than 1 kilogram per cubic meter throughout each aeration unit. The biomass is suspended and aerated in the water of the aeration unit(s) by either submerged air flow or mechanical agitation. A thoroughly mixed treatment unit is a unit that is designed and operated to approach or achieve uniform biomass distribution and organic compound concentration throughout the aeration unit by quickly dispersing the recycled biomass and the wastewater entering the unit.

The description of a "thoroughly mixed treatment unit" in the definition is intended to convey the concept of an activated sludge system that is designed and operated to approach or achieve the characteristics of a completely back mixed system. Because the EPA does not intend the definition to allow only systems with perfect uniformity in characteristics, a "thoroughly mixed treatment unit" is described as a unit that is "designed and operated to approach or achieve uniform biomass distribution and organic compound concentration." This description is intended to recognize that well-designed complete mix systems may still have small insignificant stagnant zones or other minor deviations from complete mixing. This was the intended meaning of the definition promulgated on January 17, 1997 and is also the intended meaning of the definition promulgated in today's action.

The EPA received three comment letters in response to the August 22, 1997 Federal Register proposal. While all of the commenters agreed with the proposed definition of "enhanced biological treatment system or enhanced biological treatment process," they expressed a concern that the examples in the preamble did not fully reflect the intent of the definition. The objections to the first example in the August 22, 1997 preamble were that the discussion referred to the units as having "uniform" characteristics instead of "approaching or achieving uniform characteristics" as described in the proposed definition. In the example, the system that was described as meeting the enhanced biological treatment system definition was characterized as a well-designed, well-operated, and well-maintained activated sludge system that has uniform characteristics in the aeration unit. The EPA agrees with the commenters that this example only illustrates a hypothetical ideal system and it would have been more useful to have described the unit as one that "approaches uniformity throughout the aeration unit" instead of as one that is "uniform." The EPA recognizes that it is

unrealistic to believe that aeration units will have completely uniform characteristics and also recognizes even well-designed complete mix systems may still have small insignificant stagnant zones or other minor deviations from complete mixing. Other relevant aspects of this first example are that the biological treatment unit of this enhanced biological treatment system would be thoroughly mixed throughout the unit and biomass and wastewater entering the unit would be quickly dispersed throughout the unit. The design of the unit would be such that thorough mixing and quick dispersion of the biomass and wastewater entering the unit would occur. The design and operation of the biological treatment unit would also take into account mixing, quick dispersion of the biomass and wastewater entering the unit, and the location of the wastewater inlet with regards to intake suction of surface aerators and the opportunity for volatilization prior to biodegradation.

In the second example in the proposal preamble, the EPA's intent was to make a general statement concerning the relationship between system size and location of the inlet and the number of inlets. The following adjustment to the example clarifies the intent. In smaller size units that approach a complete back mixed system, thorough mixing and quick dispersion may be achieved with a round or square tank and only one influent. For larger scale systems that have more difficulty reaching the complete back mixed conditions, thorough mixing and quick dispersion could be achieved by having multiple influents of biomass and wastewater. In either case, the biological treatment unit would approach or achieve uniform distribution of organic concentration and mixed liquor volatile suspended solids (MLVSS) throughout the vessel where the biological reactions occur.

A plug-flow system is an example of a biological treatment system that does not meet the enhanced biological treatment system definition. Plug-flow systems typically occur in long tanks with a high length-to-width ratio in which longitudinal dispersion is minimal or absent (Docket number A-90-23, item VII-B-8). Plug-flow systems are not considered acceptable units for the performance test exemption because they tend to have higher air emissions at the front of the system where the concentration is higher. The modeling used to develop the simplified compliance approach for systems meeting the definition for an "enhanced biological treatment system or enhanced biological treatment process" did not address plug-flow systems. The EPA did

not evaluate the performance of plug-flow systems in the development of the three lists for the simplified compliance approach due to the complexity of plug-flow systems. The wide range in characteristics of plug-flow systems led the EPA to conclude that these systems had to be modeled using site-specific characteristics. Consequently, these systems are required to demonstrate compliance through use of the procedures in appendix C. The exclusion of plug-flow biological treatment systems from the simplified compliance demonstration should not be interpreted as implying that a well designed and operated plug-flow biological treatment system would not achieve the required removal of a compound and, thus, not represent an acceptable means of compliance. If correctly evaluated through the applicable procedures in appendix C to part 63, they can be acceptable.

Examples of additional biological systems that would not meet the enhanced biological treatment system definition would be units that are not thoroughly mixed throughout the aeration unit and that have large concentration gradients between the inlet and the outlet of the aeration unit. Such biological units do not quickly disperse the biomass and wastewater entering the unit throughout the unit and tend to concentrate the volatile organics in a zone with relatively high air stripping rates.

Two commenters also objected to an example in which closeness of influent to the aerators was cited as a factor that would prevent a system from meeting the definition of enhanced biological treatment system. The commenters understood the example to be introducing the use of a criterion of the distance between the influent and an aerator as a de facto measure of poor mixing. The commenters pointed out that if the system achieves quick dispersion of the biomass and wastewater entering the unit, the spatial distance between any aerators or other mixing equipment and the influent is inconsequential. One of the commenters noted that simple spatial distance is not the important issue, rather the issue is whether the influent, recycle biomass, and basin contents are mixed such that the material which is aerated is a mixture of these materials rather than the raw influent. One of the two commenters requested that the EPA delete this example and address this issue through guidance. Both commenters also requested that the EPA state that the examples in the preamble are not intended to provide guidance regarding determinations of whether a

system meets the definition of an "enhanced biological treatment system or enhanced biological treatment process."

As a result of these comments, the EPA realized that the example lacked sufficient specificity to explain the basis for the EPA's concern. The EPA is therefore correcting this example to read:

Other examples of units that would not meet the definition include a unit where the influent is introduced close to the *intake suction of a surface aerator*, increasing the opportunity for volatilization prior to biodegradation, and a unit where the influent is introduced close to a discharge point such that channeling occurs.

Introduction of the influent close to the intake suction of a surface aerator is of concern because the more concentrated influent stream may be picked up and sprayed through the air thereby increasing losses due to volatilization. It is recommended that the influent be introduced in the return stream of the aerator to ensure mixing of the influent and destruction by the biomass before the material is sprayed through the air by the surface aerators.

The EPA agrees with the commenters' suggestion that the EPA should provide detailed technical guidance for determining whether a biological treatment unit meets the definition of "enhanced." This is important because the discussion in this document is limited to key factors and it is necessary to consider all factors that can influence mixing time and rate of volatilization before concluding that a system meets the criteria in the definition for enhanced biological treatment system. The EPA has developed additional information to assist in the determination of whether a biological treatment unit meets the enhanced biological treatment system definition. The additional information is available from the Air and Radiation Docket and Information Center and is also available through the Internet on the TTN website at "<http://www.epa.gov/ttn>." The EPA is presently working on additional information to assist in compliance demonstrations for biological treatment units that are not thoroughly mixed treatment units and, hence, do not meet the definition of enhanced biological treatment system. When this information is available, it will be available from the Air and Radiation Docket and Information Center and from the TTN.

III. Revisions to Requirements for Determining Site-Specific Fraction Biodegraded

All comments were supportive of the proposed amendments to revise the requirements in subpart G for determining site-specific fraction biodegraded (F_{bio}). Today's action issues the proposed revisions without change. Specifically, the EPA is revising § 63.145(h)(2) to allow use of the batch test procedure in appendix C for any type of biological treatment system. Today's action also revises table 36 by combining the list 2 and list 3 compounds into a new list 2 in table 36. These changes are being made to § 63.145(h) to provide more flexibility and to simplify this section of the rule.

IV. Revisions to Appendix C To Part 63

All comments were supportive of the proposed amendments to appendix C to part 63 to reflect the proposed revision of the definition for "enhanced biological treatment system or enhanced biological treatment process." Today's action issues those proposed revisions without change.

V. Administrative Requirements

A. Docket

The docket is an organized and complete file of all the information considered by the EPA in the development of this rulemaking. The docket is a dynamic file, because material is added throughout the rulemaking development. The docketing system is intended to allow members of the public and industries involved to readily identify and locate documents so that they can effectively participate in the rulemaking process. Along with the proposed and promulgated standards and their preambles, the contents of the docket, except for certain interagency documents, will serve as the record for judicial review. (See the Act section 307(d)(7)(A).)

B. Paperwork Reduction Act

The Office of Management and Budget (OMB) has approved the information collection requirements contained in the rule under the provisions of the *Paperwork Reduction Act*, 44 U.S.C. 3501, *et seq.* and has assigned OMB control number 2060-0282. An Information Collection Request (ICR) document was prepared by the EPA (ICR No. 1414.03) and a copy may be obtained from Sandy Farmer, OPPE Regulatory Information Division; U.S. Environmental Protection Agency (2137); 401 M St., SW; Washington, DC 20460 or by calling (202) 260-2740.

These revisions to the rule do not change the information collection requirements of the rule, and the currently approved OMB ICRs are still in force for the amended rule. The changes consist of revised definitions, alternative test procedures, and clarifications of requirements. The changes are not additional requirements and do not increase the information collection burden. Consequently, the ICR has not been revised for these amendments to the rule.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations are listed in 40 CFR part 9 and 48 CFR Chapter 15.

C. Executive Order 12866 Review

Under Executive Order 12866, the EPA must determine whether a regulatory action is "significant" and, therefore, subject to OMB review and the requirements of the Executive Order. The Executive 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 in State, local, or tribal governments or communities;
- (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs 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 the Executive Order, the EPA has determined that this final rule is not a "significant regulatory action" within the meaning of the Executive Order. The amendments issued today clarify the rule and remove restrictions on use of an alternative test procedure. These amendments do not add any new control requirements. Therefore, this regulatory action is considered "not significant" and OMB review is not required.

D. Regulatory Flexibility/Small Business Regulatory Enforcement Fairness Act of 1996

The Regulatory Flexibility Act (RFA) of 1980 (5 U.S.C. 601, *et seq.*), as amended by the Small Business

Regulatory Enforcement Fairness Act (SBREFA) of 1996, requires the EPA to give special consideration to the effect of Federal regulations on small entities and to consider regulatory options that might mitigate any such impacts. The EPA is required to prepare a regulatory flexibility analysis and coordinate with small entity stakeholders if the Agency determines that a rule will have a significant economic impact on a substantial number of small entities.

The EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this final amendment to the rule. The EPA has also determined that this amendment will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small government jurisdictions. See the April 22, 1994 *Federal Register* (59 FR 19449) for the basis for this determination. The changes to the rule merely clarify existing requirements and therefore, do not create any additional burden for any of the regulated entities.

E. Submission to Congress and the General Accounting Office

The Congressional Review Act, 5 U.S.C. § 801, *et seq.*, as added by the SBREFA of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this rule and other required information to the United States Senate, the United States House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the *Federal Register*. A Major rule cannot take effect until 60 days after it is published in the *Federal Register*. This action is not a "major rule" as defined by 5 U.S.C. § 804(2). This rule will be effective December 9, 1998.

F. Unfunded Mandates Reform Act

Under section 202 of the Unfunded Mandates Reform Act of 1995 ("Unfunded Mandates Act"), signed into law on March 22, 1995, the EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in estimated costs to State, local, or tribal governments in the aggregate, or to the private sector, of \$100 million or more in any one year. Under section 205, the EPA must select the least costly, most cost-effective, or least burdensome

alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires the EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

The EPA has determined that the action promulgated today does not include a Federal mandate that may result in estimated costs of \$100 million or more to either State, local, or tribal governments in the aggregate or to the private sector in any one year. Therefore, the requirements of sections 202 and 205 of the Unfunded Mandates Act do not apply to this action. The EPA has likewise determined that the action promulgated today does not include any regulatory requirements that might significantly or uniquely affect small governments. Thus, today's action is not subject to the requirements of section 203 of the Unfunded Mandates Act.

G. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (the NTTAA), Pub. L. No. 104-113, § 12(d) (15 U.S.C. 272 note), directs the EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices, etc.) that are developed or adopted by voluntary consensus standard bodies. The NTTAA requires the EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This regulatory action amends a definition and makes clarifying revisions to appendix C of part 63 to reflect the clarification of the definition. Thus, this action does not involve any technical standards that would require the EPA to consider voluntary consensus standards pursuant to section 12(d) of the NTTAA.

H. Executive Order 12875: Enhancing 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 does not create a mandate on State, local or tribal governments. The rule does not impose any enforceable duties on these entities. Accordingly, the requirements of section 1(a) of Executive Order 12875 do not apply to this rule.

I. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

Executive Order 13045, "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), applies to any rule that: (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that the EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the EPA must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This final rule is considered not "economically significant" as defined under Executive Order 12866 and, therefore, is not subject to Executive Order 13045.

J. 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. The amendments issued today clarify the rule and remove restrictions on use of an alternative test procedure and do not add any new requirements.

Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Reporting and recordkeeping requirements.

Dated: November 30, 1998.

Carol M. Browner,
Administrator.

For the reasons set out in the preamble, title 40 chapter I, part 63 of the Code of Federal Regulations is amended as follows:

PART 63—[AMENDED]

1. The authority citation for part 63 continues to read as follows:

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

2. Section 63.111 is amended by revising the definition of "enhanced biological treatment system or enhanced biological treatment process" to read as follows:

§ 63.111 Definitions.

* * * * *

Enhanced biological treatment system or enhanced biological treatment process means an aerated, thoroughly mixed treatment unit(s) that contains biomass suspended in water followed by a clarifier that removes biomass from the treated water and recycles recovered biomass to the aeration unit. The mixed liquor volatile suspended solids (biomass) is greater than 1 kilogram per cubic meter throughout each aeration unit. The biomass is suspended and aerated in the water of the aeration

unit(s) by either submerged air flow or mechanical agitation. A thoroughly mixed treatment unit is a unit that is designed and operated to approach or achieve uniform biomass distribution and organic compound concentration throughout the aeration unit by quickly dispersing the recycled biomass and the wastewater entering the unit.

* * * * *

3. Section 63.145 is amended by revising paragraph (h) introductory text and paragraph (h)(2) to read as follows:

§ 63.145 Process wastewater provisions—test methods and procedures to determine compliance.

* * * * *

(h) *Site-specific fraction biodegraded* (F_{bio}). The compounds listed in table 9 of this subpart are divided into two sets for the purpose of determining whether F_{bio} must be determined, and if F_{bio} must be determined, which procedures may be used to determine compound-specific kinetic parameters. These sets are designated as lists 1 and 2 in table 36 of this subpart.

* * * * *

(2) F_{bio} determination. If a biological treatment process does not meet the

requirement specified in paragraph (h)(1)(i) of this section, the owner or operator shall determine F_{bio} for the biological treatment process using the procedures in appendix C to part 63, and paragraph (h)(2)(ii) of this section. If a biological treatment process meets the requirements of paragraph (h)(1)(i) of this section but does not meet the requirement specified in paragraph (h)(1)(ii) of this section, the owner or operator shall determine F_{bio} for the biological treatment process using the procedures in appendix C to part 63, and paragraph (h)(2)(i) of this section.

(i) *Enhanced biological treatment processes*. If the biological treatment process meets the definition of "enhanced biological treatment process" in § 63.111 of this subpart and the wastewater streams include one or more compounds on list 2 of table 36 of this subpart that do not meet the criteria in paragraph (h)(1)(ii) of this section, the owner or operator shall determine f_{bio} for the list 2 compounds using any of the procedures specified in appendix C of 40 CFR part 63. (The symbol " f_{bio} " represents the site specific fraction of an individual Table 8 or Table 9 compound that is biodegraded.) The owner or

operator shall calculate f_{bio} for the list 1 compounds using the defaults for first order biodegradation rate constants (K_1) in table 37 of subpart G and follow the procedure explained in form III of appendix C, 40 CFR part 63, or any of the procedures specified in appendix C, 40 CFR part 63.

(ii) *Biological treatment processes that are not enhanced biological treatment processes*. For biological treatment processes that do not meet the definition for "enhanced biological treatment process" in § 63.111 of this subpart, the owner or operator shall determine the f_{bio} for the list 1 and 2 compounds using any of the procedures in appendix C to part 63, except procedure 3 (inlet and outlet concentration measurements). (The symbol " f_{bio} " represents the site specific fraction of an individual Table 8 or Table 9 compound that is biodegraded.)

* * * * *

4. Table 36 of appendix to subpart G is revised to read as follows:

Appendix to Subpart G—Tables and Figures

* * * * *

TABLE 36.—COMPOUND LISTS USED FOR COMPLIANCE DEMONSTRATIONS FOR ENHANCED BIOLOGICAL TREATMENT PROCESSES (SEE § 63.145(h))

List 1	List 2
Acetonitrile	Acetaldehyde.
Acetophenone	Acrolein.
Acrylonitrile	Allyl Chloride.
Biphenyl	Benzene.
Chlorobenzene	Benzyl Chloride,
Dichloroethyl Ether	Bromoform.
Diethyl Sulfate	Bromomethane.
Dimethyl Sulfate	Butadiene 1,3.
Dimethyl Hydrazine 1,1	Carbon Disulfide.
Dinitrophenol 2,4	Carbon Tetrachloride
Dinitrotoluene 2,4	Chloroethane (ethyl chloride).
Dioxane 1,4	Chloroform.
Ethylene Glycol Monobutyl	Chloroprene.
Ether Acetate	
Ethylene Glycol Monomethyl	Cumene (isopropylbenzene).
Ether Acetate	
Ethylene Glycol Dimethyl Ether	Dibromoethane 1,2.
Hexachlorobenzene	Dichlorobenzene 1,4.
Isophorone	Dichloroethane 1,2.
Methanol	Dichloroethane 1,1 (ethylidene dichloride).
Methyl Methacrylate	Dichloroethene 1,1 (vinylidene chloride).
Nitrobenzene	Dichloropropane 1,2.
Toluidine	Dichloropropene 1,3.
Trichlorobenzene 1,2,4.	Dimethylaniline N,N.
Trichlorophenol 2,4,6	Epichlorohydrin.
Triethylamine	Ethyl Acrylate.
	Ethylbenzene.
	Ethylene Oxide.
	Ethylene Dibromide.
	Hexachlorobutadiene.
	Hexachloroethane.
	Hexane-n.
	Methyl Isobutyl Ketone.
	Methyl Tertiary Butyl Ether.
	Methyl Ethyl Ketone, (2-butanone).
	Methyl Chloride.

TABLE 36.—COMPOUND LISTS USED FOR COMPLIANCE DEMONSTRATIONS FOR ENHANCED BIOLOGICAL TREATMENT PROCESSES (SEE § 63.145(h))—Continued

List 1	List 2
	Methylene Chloride (dichloromethane). Naphthalene. Nitropropane 2 Phosgene. Propionaldehyde. Propylene Oxide. Styrene. Tetrachloroethane 1,1,2,2. Toluene Trichloroethane 1,1,1 (methyl chloroform). Trichloroethane 1,1,2. Trichloroethylene. Trimethylpentane 2,2,4. Vinyl Chloride. Vinyl Acetate. Xylene-m. Xylene-o. Xylene-p.

* * * * *
 5. Section I of appendix C to part 63 is revised to read as follows:

Appendix C to Part 63—Determination of the Fraction Biodegraded (F_{bio}) in a Biological Treatment Unit

I. Purpose

The purpose of this appendix is to define the procedures for an owner or operator to use to calculate the site specific fraction of organic compounds biodegraded (F_{bio}) in a biological treatment unit. If an acceptable level of organic compounds is destroyed rather than emitted to the air or remaining in the effluent, the biological treatment unit may be used to comply with the applicable treatment requirements without the unit being covered and vented through a closed vent system to an air pollution control device.

The determination of F_{bio} shall be made on a system as it would exist under the rule. The owner or operator should anticipate changes that would occur to the wastewater flow and concentration of organics, to be treated by the biological treatment unit, as a result of enclosing the collection and treatment system as required by the rule.

The forms presented in this appendix are designed to be applied to thoroughly mixed treatment units. A thoroughly mixed treatment unit is a unit that is designed and operated to approach or achieve uniform biomass distribution and organic compound concentration throughout the aeration unit by quickly dispersing the recycled biomass and the wastewater entering the unit. Systems that are not thoroughly mixed treatment units should be subdivided into a series of zones that have uniform characteristics within each zone. The number of zones required to characterize a biological treatment system will depend on the design and operation of the treatment system. Each zone should then be modeled as a separate unit. The amount of air emissions and biodegradation from the modeling of these separate zones can then be added to reflect the entire system.

* * * * *

Appendix C [Amended]

6. Section III of appendix C of part 63, the second paragraph after (4) is revised to read as follows:

III. Procedures for Determination of f_{bio}

* * * * *

(4) * * *

* * * * *

Select one or more appropriate procedures from the four listed above based on the availability of site specific data. If the facility does not have site-specific data on the removal efficiency of its biological treatment unit, then Procedure 1 or Procedure 4 may be used. Procedure 1 allows the use of a bench top bioreactor to determine the first-order biodegradation rate constant. An owner or operator may elect to assume the first order biodegradation rate constant is zero for any regulated compound(s) present in the wastewater. Procedure 4 explains two types of batch tests which may be used to estimate the first order biodegradation rate constant. An owner or operator may elect to assume the first order biodegradation rate constant is zero for any regulated compound(s) present in the wastewater. Procedure 3 would be used if the facility has, or measures to determine, data on the inlet and outlet individual organic compound concentration for the biological treatment unit. Procedure 3 may only be used on a thoroughly mixed treatment unit. Procedure 2 is used if a facility has or obtains performance data on a biotreatment unit prior to and after addition of the microbial mass. An example where Procedure 2 could be used, is an activated sludge unit where measurements have been taken on inlet and exit concentration of organic compounds in the wastewater prior to seeding with the microbial mass and start-up of the unit. The flow chart in figure 1 outlines the steps to use for each of the procedures.

* * * * *

7. In appendix C of part 63, section III, in the second sentence of C. Inlet and Outlet Concentration Measurements

(Procedure 3), the phrase "uniform well-mixed or completely mixed system" is revised to read "thoroughly mixed treatment unit."

[FR Doc. 98-32567 Filed 12-8-98; 8:45 am]
 BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 180

[OPP-300760; FRL 6046-1]

RIN 2070-AB78

Zinc phosphide; Pesticide Tolerances for Emergency Exemptions

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This regulation establishes a time-limited tolerance for residues of phosphine in or on potatoes, sugar beet (roots), and sugar beet (tops). This action is in response to EPA's granting of an emergency exemption under section 18 of the Federal Insecticide, Fungicide, and Rodenticide Act authorizing use of the pesticide on potatoes and sugarbeets. This regulation establishes a maximum permissible level for residues of phosphine in these food commodities pursuant to section 408(l)(6) of the Federal Food, Drug, and Cosmetic Act, as amended by the Food Quality Protection Act of 1996. The tolerances will expire and are revoked on May 1, 2000.

DATES: This regulation is effective December 9, 1998. Objections and requests for hearings must be received by EPA on or before February 8, 1999.

Authority: 42 U.S.C. 7401-7642.

Subpart U—Maine

2. Part 62.4845 is amended by adding paragraphs (b)(4) and (c)(3) to read as follows:

§ 62.4845 Identification of plan.

* * * * *

(b) * * *
 (4) Control of metals, acid gases, organic compounds and nitrogen oxide emissions from existing municipal waste combustors, submitted on April 15, 1998.

(c) * * *

(3) Existing municipal waste combustors.

3. Part 62 is amended by adding a new § 62.4975 and a new undesignated center heading to Subpart U to read as follows:

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

§ 62.4975 Identification of sources.

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

- (a) Penobscot Energy Recovery Company, Orrington, Maine.
- (b) Maine Energy Recovery Company, Biddeford, Maine.
- (c) Regional Waste Systems, Inc., Portland, Maine.

[FR Doc. 98-32986 Filed 12-10-98; 8:45 am]
 BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AD-FRL-6201-2]

RIN 2060-A104

National Emission Standards for Hazardous Air Pollutants: Halogenated Solvent Cleaning

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; compliance extension.

SUMMARY: On December 2, 1994, the EPA issued the "National Emission Standards for Hazardous Air Pollutants: Halogenated Solvent Cleaning" (59 FR 61801). On May 5, 1998, the EPA announced an immediate 3-month stay of the effectiveness of that standard for continuous web cleaning machines using halogenated hazardous air

pollutant (HAP) solvents for good cause pursuant to section 553(b)(3)(B) of the Administrative Procedures Act (63 FR 24768). In that same document, the EPA proposed a temporary extension of the applicable compliance date beyond the 3 months of the stay for up to 1 year to complete analysis of equivalent methods of control for continuous web cleaning machines using halogenated HAP solvents.

This document promulgates that compliance extension, and for reasons discussed in this notice, extends the compliance extension until December 2, 1999. This document also discusses the three comment letters received on the May 5, 1998 proposal notice.

DATES: The regulation is effective on December 11, 1998.

ADDRESSES: *Docket.* Interested parties may review items used to support this notice at: Air and Radiation Docket and Information Center (6102), Attention, Docket No. A-92-39, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460.

FOR FURTHER INFORMATION CONTACT: For information concerning the standards and the proposed changes, contact Mr. Paul Almodóvar, Coatings and Consumer Products Group, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711; telephone (919) 541-0283. For information regarding the applicability of this action to a particular entity, contact Ms. Tracy Back, Manufacturing Branch, Office of Compliance (2223A), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; telephone (202) 564-7076.

SUPPLEMENTARY INFORMATION:

Regulated Entities

Entities potentially regulated by this action are owners or operators of individual continuous web cleaning machines using any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1 trichloroethane, carbon tetrachloride, or chloroform, or any combination of these halogenated HAP solvents in a concentration greater than 5 percent by weight, as a cleaning or drying agent.

Regulated categories include:

Category	Examples of regulated entities
Industry	Facilities engaging in cleaning operations using halogenated solvent cleaning machines.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities that the EPA is now aware potentially could be

regulated by this action. Other types of entities not listed in the table also could be regulated. To determine whether your facility [company, business, organization, etc.] is regulated by this action, you should carefully examine the applicability criteria in § 63.460 of the national emission standards for hazardous air pollutants (NESHAP) for halogenated solvent cleaning operations that was promulgated in the **Federal Register** on December 2, 1994 (59 FR 61801) and codified at 40 CFR part 63, subpart T. If you have questions regarding the applicability of this action to a particular entity, consult Mrs. Tracy Back at the address listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

The information presented below is organized as follows:

- I. Background
- II. Comments Received on Proposed Compliance Changes and EPA Response to Comments
- III. Administrative Requirements
 - A. Docket
 - B. Paperwork Reduction Act
 - C. Executive Order 12866 Review
 - D. Regulatory Flexibility/Small Business Regulatory Enforcement Fairness Act of 1996
 - E. Submission to Congress and the General Accounting Office
 - F. Unfunded Mandates Reform Act
 - G. National Technology Transfer and Advancement Act
 - H. Executive Order 12875: Enhancing the Intergovernmental Partnership
 - I. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks
 - J. Executive Order 13084: Consultation and Coordination with Indian Tribal Governments

I. Background

On December 2, 1994 (59 FR 61801), the EPA promulgated the NESHAP for halogenated solvent cleaning operations. These standards were codified as subpart T in 40 CFR part 63. These standards established equipment and work practice standards for individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machines using any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1 trichloroethane, carbon tetrachloride, or chloroform, or any combination of these halogenated HAP solvents in a concentration greater than 5 percent by weight, as a cleaning or drying agent.

Under § 63.469 of the halogenated solvent cleaning NESHAP, the Administrator may approve the use of equipment or procedures that have been demonstrated to be equivalent in terms of reducing emissions of methylene

chloride, perchloroethylene, trichloroethylene, 1,1,1 trichloroethane, carbon tetrachloride, or chloroform to the atmosphere, to those prescribed for compliance within a specified paragraph of the NESHAP.

After the rule was promulgated, two owners and operators of affected halogenated solvent cleaning machines requested approval for equivalent methods of control determinations for their continuous web cleaning machines because the final rule did not address their situation. In addition, the EPA has become aware of several other continuous web cleaning machines experiencing difficulties in determining how to comply with the NESHAP. In each case, the emission control requirements specified by the NESHAP would be difficult or impossible to implement due to the operating and emission characteristics of these machines. Without any action by the EPA to the contrary, individual case-by-case equivalency determinations would be required to ensure that each machine is applying alternative control measures that achieve the same or better emission reductions as the NESHAP-required controls. Such a case-by-case approach would be unduly burdensome for both the affected sources and the EPA. Therefore, the EPA is conducting an evaluation of methods of control for all continuous web cleaning machines to determine which emission control measures would be equivalent to the NESHAP.

As discussed below, the compliance extension promulgated today will allow sufficient time for the EPA to complete the evaluation of equivalent control technologies for continuous web cleaning machines, as well as time for industry to implement any required changes.

II. Comments Received on Proposed Compliance Changes and EPA Response to Comments

Three comment letters were received on the proposed extension of the compliance date for continuous web cleaning machines. All of these comments were from industrial facilities who believed that their operations fit the definition of "continuous web cleaning." These comments have been included in the docket to the Halogenated Solvent Cleaning NESHAP (Docket No. A-92-39) as Items VI-D-01 through VI-D-03.

Each of these facilities commented on the proposed compliance extension, as well as provided additional information for consideration by the EPA during the review and analysis of continuous web cleaning machines. Because there were

only three comment letters, no separate response to comment document has been prepared. This preamble serves as the only summary of the comments received on the proposed compliance extension.

The data provided by the commenters supported the EPA's conclusion that the continuous web cleaning machines warrant further evaluation. The design and operation, and, therefore, the emissions characteristics of these machines are different from the solvent cleaning machines (e.g., batch cold cleaning machines, in-line cleaning machines) that the EPA evaluated during the NESHAP development process. The types of units discussed in the comment letters as potentially fitting the definition of continuous web cleaners include web crawlers, wire drawers, thin strip cleaning machines, and photographic film cleaning equipment. According to the commenters, none of these units can unambiguously be classified as either a "batch cold cleaning machine" or as an "in-line cold cleaning machine."

All of the commenters supported the EPA's proposal to extend the comment period by 1 year. One commenter stated that a 1 year extension would not be sufficient to achieve compliance. As an alternative, the commenter recommended a minimum of 18 months after the promulgation of final standards applicable to continuous web cleaning machines. The commenter stated that the additional time would allow for the retrofit of existing equipment or the installation of new equipment if required by the revised rule.

The EPA shares the concern of the commenter that a 1 year extension to August 3, 1999 may not be sufficient time to allow both the EPA's analysis and a facility's compliance with the new requirements for these type of solvent cleaning machines. However, the EPA does not believe at this time that 18 months after the promulgated equivalency determination will be required. The time required for compliance with the new requirements will largely depend on the types of modification or enhancements required by the affected sources. Since the EPA agrees that some additional time will be necessary, the EPA is promulgating a small extension to the proposed August 3, 1999 date. The EPA will review this date during development of requirements for continuous web cleaning machines and may revise the date, if warranted. In today's action, the EPA is extending the compliance extension until December 2, 1999. The EPA currently believes that this will allow sufficient time for the EPA to

conduct the technical analysis, propose and promulgate the equivalency determination for continuous web cleaners, and for industry to comply with such requirements. This date is also linked to the original compliance date of December 2, 1997, which should help to provide consistent dates for ongoing reports to the regulating agencies.

III. Administrative Requirements

A. Docket

Docket A-92-39 is an organized and complete file of all of the information submitted to, or otherwise considered by, the EPA in the development of this rulemaking. The docket is a dynamic file, since material is added throughout the rulemaking development. The docketing system is intended to allow members of the public to readily identify and locate documents to enable them to participate effectively in the rulemaking process. The contents of the docket serves as the record in case of judicial review (except for interagency review materials) (section 307(d)(7)(A) of the Clean Air Act, 42 U.S.C. 7607(d)(7)(A)).

B. Paperwork Reduction Act

There are no additional information collection requirements contained in this final action. Therefore, approval under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501, *et seq.*, is not required.

C. Executive Order 12866 Review

Under Executive Order 12866, the EPA must determine whether a regulatory action is "significant" and, therefore, subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Executive 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 in State, local, or tribal governments or communities;
- (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs 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 the Executive Order, the EPA has determined that this final rule is not a "significant regulatory action" within the meaning of the Executive Order. The amendments issued today extend the compliance date for continuous web cleaning machines. These amendments do not add any new control requirements. Therefore, this regulatory action is considered "not significant" and OMB review is not required.

D. Regulatory Flexibility/Small Business Regulatory Enforcement Fairness Act of 1996

The Regulatory Flexibility Act of 1980 (5 U.S.C. 601, *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996, requires the EPA to give special consideration to the effect of Federal regulations on small entities and to consider regulatory options that might mitigate any such impacts. The EPA is required to prepare a regulatory flexibility analysis and coordinate with small entity stakeholders if the Agency determines that a rule will have a significant economic impact on a substantial number of small entities.

The EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this final amendment to the rule because the compliance extension for continuous web cleaning machines will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small government jurisdictions. See the April 22, 1994 *Federal Register* (59 FR 19449) for the basis for this determination. The changes to the rule merely extend the compliance date for continuous web cleaning machines and, therefore, do not create any additional burden for any of the regulated entities.

E. Submission to Congress and the General Accounting Office

The Congressional Review Act, 5 U.S.C. 801, *et seq.*, as added by the SBREFA of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this rule and other required information to the United States Senate, the United States House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the *Federal Register*. A major rule cannot take effect

until 60 days after it is published in the *Federal Register*. This action is not a "major rule" as defined by 5 U.S.C. 804(2). This rule will be effective December 11, 1998.

F. Unfunded Mandates Reform Act

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

The EPA has determined that the action promulgated today does not include a Federal mandate that may result in estimated costs of \$100 million or more to either State, local, or tribal governments in the aggregate or to the private sector in any one year. Therefore, the requirements of sections 202 and 205 of the Unfunded Mandates Act do not apply to this action. The EPA has likewise determined that the action promulgated today does not include any regulatory requirements that might significantly or uniquely affect small governments. Thus, today's action is not subject to the requirements of section 203 of the Unfunded Mandates Act.

G. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (the NTTAA) of 1995, Public Law 104-113, section 12(d) (15 U.S.C. 272 note), directs the EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices, etc.) that are developed or adopted by voluntary consensus standard bodies. The NTTAA requires the EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This regulatory action extends the compliance date for continuous web cleaning machines. Thus, this action does not involve any technical standards that would require the EPA to consider voluntary consensus standards pursuant to section 12(d) of the NTTAA.

H. Executive Order 12875: Enhancing Intergovernmental Partnership

Under Executive Order 12875, the 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 the EPA complies by consulting, Executive Order 12875 requires the EPA to provide to the OMB a description of the extent of the 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 the 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 amendments to the rule do not create a mandate on State, local, or tribal governments. The amendments do not impose any enforceable duties on these entities. Accordingly, the requirements of section 1(a) of Executive Order 12875 do not apply to this rule.

I. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

Executive Order 13045, "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), applies to any rule that: (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that the EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the EPA must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This final rule is considered not "economically significant" as defined under Executive Order 12866 and, therefore, is not subject to Executive Order 13045.

J. Executive Order 13084: Consultation and Coordination With Indian Tribal Governments

Under Executive Order 13084, the 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 the EPA consults with those governments. If the EPA complies by consulting, Executive Order 13084 requires the EPA to provide to the OMB, in a separately identified section of the preamble to the rule, a description of the extent of the 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 the 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 amendments to the rule do not significantly or uniquely affect the communities of Indian tribal governments. The amendments issued today extend the compliance date for continuous web cleaning machines, and do not add any new requirements. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Continuous web cleaning machines, Halogenated solvent cleaning machines, Hazardous substances, Reporting and recordkeeping requirements.

Dated: December 4, 1998.

Carol M. Browner,
Administrator.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

PART 63—[AMENDED]

1. The authority citation for part 63 continues to read as follows:

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

Subpart T—National Emission Standards for Halogenated Solvent Cleaning

2. Section 63.460 is amended by revising paragraphs (c) and (d), and adding paragraph (g) to read as follows:

§ 63.460 Applicability and designation of source.

* * * * *

(c) Except as provided in paragraph (g) of this section, each solvent cleaning machine subject to this subpart that commences construction or reconstruction after November 29, 1993 shall achieve compliance with the provisions of this subpart immediately upon start-up or by December 2, 1994, whichever is later.

(d) Except as provided in paragraph (g) of this section, each solvent cleaning machine subject to this subpart that commenced construction or reconstruction on or before November 29, 1993 shall achieve compliance with the provisions of this subpart no later than December 2, 1997.

* * * * *

(g) Each continuous web cleaning machine subject to this subpart shall achieve compliance with the provisions of this subpart no later than December 2, 1999.

* * * * *

§ 63.470 [Removed and reserved].

3. Part 63 is amended by removing and reserving section 63.470.

[FR Doc. 98-32991 Filed 12-10-98; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 72 and 73

[FRL-6201-3]

RIN 2060-AH60

Revisions to the Permits and Sulfur Dioxide Allowance System Regulations Under Title IV of the Clean Air Act: Allowance Transfer Deadline and Signature Requirements

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: Title IV of the Clean Air Act (the Act), as amended by the Clean Air Act Amendments of 1990, authorizes

the Environmental Protection Agency (EPA or Agency) to establish the Acid Rain Program. The program sets emissions limitations to reduce acidic particles and deposition and their serious, adverse effects on natural resources, ecosystems, materials, visibility, and public health.

The allowance trading component of the Acid Rain Program allows utilities to achieve sulfur dioxide emissions reductions in the most cost-effective way. Allowances are traded among utilities and recorded in EPA's Allowance Tracking System for use in determining compliance at the end of each year. The Acid Rain Program's permitting and allowance trading, and emissions monitoring requirements are set forth in the "core" rules initially promulgated on January 11, 1993. This action amends certain provisions in the permitting and allowance trading rules for the purpose of improving the operation of the Allowance Tracking System and the allowance market, while still preserving the Act's environmental goals. The entities affected by this change fall under Standard Industrial Code 49 (Electric, Gas and Sanitary Services).

EFFECTIVE DATE: January 11, 1999.

ADDRESSES: Docket. Docket No. A-98-15, containing supporting information used in developing the proposed rule, is available for public inspection and copying between 8:30 a.m. and 3:30 p.m., Monday through Friday, at EPA's Air Docket Section, Waterside Mall, room 1500, 1st Floor, 401 M Street, S.W., Washington, DC 20460. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Donna Deneen, Permits and Allowance Market Branch, Acid Rain Division (6204J), U.S. Environmental Protection Agency, 401 M Street S.W., Washington, DC 20460 (202-564-9089).

SUPPLEMENTARY INFORMATION: This preamble contains all of the responses to public comments received on the revisions finalized in today's action. There is no additional background information document.

The information in this preamble is organized as follows:

- I. Affected Entities
- II. Background
- III. Public Participation
- IV. Summary of Major Comments and Responses
 - A. Allowance Transfer Deadline
 - B. Signature Requirement for Transfer Requests
 - C. Impacts of Revisions on Acid Rain Permits
- V. Administrative Requirements
 - A. Docket

601 et seq.). EPA's compliance with these statutes and Executive Orders for the underlying rule is discussed in the August 19, 1998 **Federal Register** action.

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

808(2). As stated previously, EPA has made such a good cause finding, including the reasons therefore, and established an effective date of December 28, 1998. 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 in the **Federal Register**. This action is not a major rule as defined by 5 U.S.C. 804(2).

Dated: December 18, 1998.
J. Charles Fox,
Assistant Administrator, Office of Water.

For the reasons set out in the preamble, title 40 chapter I of the Code of Federal Regulations is amended as follows:

PART 9—[AMENDED]

1. The authority citation for part 9 continues to read as follows:

Authority: 7 U.S.C. 135 et seq., 136–136y; 15 U.S.C. 2001, 2003, 2005, 2006, 2601–2671; 21 U.S.C. 331j, 346a, 348; 31 U.S.C. 9701; 33 U.S.C. 1251 et seq., 1311, 1313d, 1314, 1318, 1321, 1326, 1330, 1342, 1344, 1345 (d) and (e), 1361; E.O. 11735, 38 FR 21243, 3 CFR, 1971–1975 Comp. p. 973; 42 U.S.C. 241, 242b, 243, 246, 300f, 300g, 300g–1, 300g–2, 300g–3, 300g–4, 300g–5, 300g–6, 300j–1, 300j–2, 300j–3, 300j–4, 300j–9, 1857 et seq., 6901–6992k, 7401–7671q, 7542, 9601–9657, 11023, 11048.

2. Section 9.1 is amended by adding the new entries in numerical order under the indicated heading in the table to read as follows:

§ 9.1 OMB approvals under the Paperwork Reduction Act.

* * * * *

	40 CFR citation	OMB control number
	* * * * *	* * * * *
	National Primary Drinking Water Regulations	
141.153–141.155	* * * * *	2040–0201
	National Primary Drinking Water Regulations Implementation	
142.16(f)	* * * * *	2040–0201
	* * * * *	* * * * *

PART 142—[AMENDED]

3. The authority citation for part 142 continues to read as follows:

Authority: 42 U.S.C. 300f, 300g–1, 300g–2, 300g–3, 300g–4, 300g–5, 300g–6, 300j–4, 300j–9, and 300j–11.

4. Section 142.78 is amended by revising paragraph (b) to read as follows:

§ 142.78 Procedure for processing an Indian Tribe's application.

* * * * *

(b) A tribe that meets the requirements of § 141.72 of this chapter is eligible to apply for development grants and primacy enforcement responsibility for a Public Water System Program and associated funding under section 1443(a) of the Act and for primary enforcement responsibility for public water systems under section 1413 of the Act and for the authority to waive the mailing requirement of § 141.155(a) of this chapter.

[FR Doc. 98–34304 Filed 12–24–98; 8:45 am]
BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AD–FRL–6210–3]

RIN 2060–AH66

National Emission Standards for Hazardous Air Pollutants: Wood Furniture Manufacturing Operations

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; amendments.

SUMMARY: This action promulgates amendments to the "National Emission Standards for Hazardous Air Pollutants; Final Standards for Hazardous Air Pollutant Emissions from Wood Furniture Manufacturing Operations," originally promulgated in the **Federal Register** on December 7, 1995. The amendments to the rule were proposed pursuant to three agreements reached in settlement of the following petitions for review: Chemical Manufacturers

Association v. EPA, No. 96–1031 (D.C. Cir.); Halogenated Solvents Industry Alliance, Inc. v. EPA, No. 96–1036 (D.C. Cir.); and Society of the Plastics Industry, Inc. v. Browner, No. 96–1038 (D.C. Cir.). This action also finalizes clarifying amendments, as well as technical amendments to certain sections of the rule.

DATES: This rule is effective December 28, 1998.

ADDRESSES: *Docket.* Interested parties may review items used to support this notice at: Air and Radiation Docket and Information Center (6102), Attention, Docket No. A–93–10, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

FOR FURTHER INFORMATION CONTACT: For information concerning the standards and the changes, contact Mr. Paul Almodóvar, Coatings and Consumer Products Group, Emission Standards Division (MD–13), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711; telephone (919) 541–

0283. For information regarding the applicability of this action to a particular entity, contact Mr. Robert Marshall, Manufacturing Branch, Office of Compliance (2223A), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460; telephone (202) 564-7021.

SUPPLEMENTARY INFORMATION:

Regulated Entities

Entities potentially regulated by this action are owners or operators of facilities that are engaged, either in part or in whole, in wood furniture manufacturing operations and that are major sources as defined in 40 CFR part 63, subpart A, section 63.2. Regulated categories include:

Category	Examples of regulated entities
Industry	Facilities which are major sources of hazardous air pollutants (HAP) and manufacture wood furniture or wood furniture components.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities that the EPA is now aware potentially could be regulated by this action. Other types of entities not listed in the table also could be regulated. To determine whether your facility (company, business, organization, etc.) is regulated by this action, you should carefully examine the applicability criteria in section 63.800 of the national emission standards for hazardous air pollutants (NESHAP) for wood furniture manufacturing operations (Wood Furniture NESHAP) that was promulgated in the **Federal Register** on December 7, 1995 (60 FR 62930) and codified at 40 CFR 63 subpart JJ. If you have questions regarding the applicability of this action to a particular entity, consult Mr. Robert Marshall at the address listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

The information presented below is organized as follows:

- I. Background
- II. Comments Received on Proposed Changes and EPA Response to Comments
- III. Summary of Changes
- IV. Administrative Requirements
 - A. Docket
 - B. Paperwork Reduction Act
 - C. Executive Order 12866 Review
 - D. Regulatory Flexibility
 - E. Submission to Congress and the General Accounting Office
 - F. Unfunded Mandates Reform Act
 - G. National Technology Transfer and Advancement Act
 - H. Executive Order 12875: Enhancing Intergovernmental Partnership

- I. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks
- J. Executive Order 13084: Consultation and Coordination with Indian Tribal Governments

I. Background

On December 7, 1995 (60 FR 62930), the EPA promulgated the Wood Furniture NESHAP. These standards were codified as subpart JJ in 40 CFR part 63. These standards established emission limits for, among other things, coating and gluing of wood furniture and wood furniture components. Three different parties, the Chemical Manufacturers Association (CMA), the Halogenated Solvents Industry Alliance, Inc. (HSIA), and the Society of the Plastics Industry, Inc. (SPI), petitioned for judicial review of the final rule under section 307(b) of the Clean Air Act (the Act).

The EPA executed settlement agreements with each of these petitioners on December 18, 1997. In accordance with section 113(g) of the Act, the EPA published notice of the petitions in the **Federal Register** on December 24, 1997 (62 FR 67360). The notice provided a 30-day opportunity for public comment. One comment supporting the agreements was submitted.

The settlement agreement between the EPA and the CMA requires the EPA to conduct notice and comment rulemaking proposing that certain glycol ethers be removed from the list of volatile hazardous air pollutants (VHAP) of potential concern in table 6 of the Wood Furniture NESHAP. The agreement also provides that the de minimis value in table 5 for 2-ethoxyethyl acetate be changed from 5.0 tons per year to 10.0 tons per year.

The settlement agreement between the EPA and the HSIA requires the EPA: (1) to conduct notice-and-comment rulemaking in accordance with section 307(d) of the Act proposing that perchloroethylene and trichloroethylene be deleted from the list of pollutants prohibited from use in cleaning and washoff solvents under section 63.803(e) of the regulations (table 4 of the Wood Furniture NESHAP); and (2) to give great weight to the recommendations of the Science Panel of the Joint Methylene Chloride Characterization Task Force regarding whether a reassessment of the cancer hazard for methylene chloride should be undertaken based on current scientific information. The settlement agreement also requires the EPA to conduct additional notice and comment rulemaking with respect to methylene

chloride if methylene chloride is reassessed and certain findings are made as a result of that reassessment.

The settlement agreement between the EPA and the SPI requires the EPA to propose technical amendments to the Wood Furniture NESHAP that would remove the subheadings of "Nonthreshold Pollutants," "High-Concern Pollutants," and "Unrankable Pollutants" in table 6, and remove footnote "a" to table 6 which relates to these hazard ranking classifications.

This action promulgates changes to the Wood Furniture NESHAP proposed to address the settlement agreements discussed above. This action also finalizes clarifying changes and corrections which were identified as being necessary after promulgation of the original rule.

II. Comments Received on Proposed Changes and EPA Response to Comments

Six comment letters were received on the proposed changes to the final wood furniture manufacturing operations. These comments have been included in the docket to the Wood Furniture NESHAP (Docket No. A-93-10) as items VI-D-01 through VI-D-04, and IV-G-01 through IV-G-03. This preamble serves as the only summary of the comments received on the proposed changes to the final rule.

Five of the commenters supported the EPA's proposed changes to the final rule based on the settlement agreements. One commenter suggested clarifying changes in addition to those that were proposed. This commenter suggested clarifying the requirements in the Formulation Assessment Plan for VHAP of potential concern, the applicability requirements of this rule, and the removal of the emission limit for thinners. The EPA will give further consideration to the suggested changes, but cannot finalize them at this time. The EPA believes that additional rulemaking would be necessary to provide the public with opportunity to comment on the suggested changes. The intent of this rulemaking was to address specific issues identified in the settlement agreements with the CMA, the HSIA, and the SPI, and make minor technical corrections rather than completely reopen the original rule for comment.

One commenter expressed concern that the EPA was proposing to delete perchloroethylene from the list of pollutants prohibited from use in cleaning and washing solvents and was "moving perc[hloroethylene] down a category in terms of risk classification." In particular, the commenter asserted

that the EPA has identified perchloroethylene as posing potential health risks, and has long considered it a "probable human carcinogen," citing a recent document from the EPA's Design for the Environment project on dry cleaning, an International Agency for Research on Cancer (IARC) monograph supporting a finding that perchloroethylene is a "probable human carcinogen," and a May 1998 report of the Children's Health Protection Advisory Committee.

Contrary to the commenter's concern, the EPA is not "moving perc[hloroethylene] down a category in terms of risk classification." At present, this chemical is not classified as to its carcinogenicity in the EPA's Integrated Risk Information System. The EPA is currently reassessing the potential carcinogenicity of perchloroethylene. Since a definitive assessment of carcinogenicity of this chemical has not been finalized by the EPA and since only chemicals classified as Type A and B carcinogens are prohibited in cleaning and washoff solvents, the EPA is removing perchloroethylene from the list of prohibited chemicals in table 4. This change in table 4 does not imply that the EPA has changed its judgment or, indeed, reached any judgment in its current scientific evaluation of this chemical, nor does it carry any weight with respect to policies adopted toward this chemical in other regulatory contexts. The EPA is aware of the IARC monograph on perchloroethylene, as well as assessments conducted by other groups, and will consider this information in its scientific reassessment. After this reassessment, the EPA will revisit, as needed, its decision to delete perchloroethylene from the list of chemicals prohibited in cleaning and washoff solvents.

The EPA does not believe that perchloroethylene, as a washoff or cleaning solvent in wood furniture manufacturing, poses a sufficiently significant risk to warrant prohibition under this rule at this time. Wood furniture manufacturers do not commonly use perchloroethylene as a washoff or cleaning solvent. Wood furniture manufacturers using water-borne coatings would probably use a water-based solvent as a cleaning solvent. Wood furniture manufacturers using solvent-borne coatings would use the same solvents contained in the coatings, such as methanol and mineral spirits for their washoff and cleaning operations. Therefore, the risk of exposure to perchloroethylene in wood furniture manufacturing operations is currently very low, and should continue to be low.

III. Summary of Changes

The EPA is finalizing the proposed changes to table 6 of the Wood Furniture NESHAP. Table 6 lists those VHAP that are thought to pose a high concern for chronic toxicity. The regulations require affected sources to track the usage levels of these chemicals as part of their formulation assessment plans. The EPA, as a result of the negotiated rulemaking process for the original rule, included in the table 6 list only those chemicals with a toxicity composite score of 20 or higher.

The original table 6 contained subheadings for "nonthreshold" pollutants, "high-concern" pollutants, and "unrankable" pollutants. These subheadings followed the hazard ranking classification scheme proposed in regulations to implement the offsetting provisions of section 112(g) of the Act. The EPA now believes, however, that these subheadings, and footnote "a" which relates to these subheadings, serve no substantive function in this rule and have been removed from table 6. The definition of "VHAP of potential concern" has also been revised to reflect this change in table 6.

Section 63.803(l)(6) is revised to eliminate the reference to the 112(g) regulations. This cross-reference is not necessary because table 6 has been revised to include the de minimis value for each chemical. The de minimis values provided in table 6 are not changed from the current values extrapolated from the proposed section 112(g) regulations.

The EPA is also finalizing the proposed changes to tables 4 and 5. The EPA is finalizing the proposed changes to table 5 to change the de minimis level for 2-ethoxyethyl acetate from 5.0 to 10.0 tons per year. The EPA is finalizing the proposed changes to table 4 of the Wood Furniture NESHAP by removing trichloroethylene and perchloroethylene from the list of prohibited cleaning and washoff solvents.

The EPA is taking this opportunity to make additional technical and clarifying corrections to the final rule. The EPA has removed caprolactam from the list of VHAP in table 2 of the rule because this chemical has been delisted from the HAP list in section 112(b)(1) of the Act (61 FR 30816).

The EPA has revised the definition of "organic solvent" to reflect the EPA's intent in the final rule to regulate only those organic solvents considered HAP. The definition in the final rule should be limited to those organic solvents which are HAP. Therefore, the EPA has added the term "hazardous air

pollutant" to the definition of organic solvent (e.g., organic HAP solvent). Elsewhere in the text of the rule, the EPA has replaced the term "organic solvent" with the term "organic HAP solvent."

IV. Administrative Requirements

A. Docket

Docket A-93-10 is an organized and complete file of all of the information submitted to, or otherwise considered by, the EPA in the development of this rulemaking. The docket is a dynamic file, since material is added throughout the rulemaking development. The docketing system is intended to allow members of the public to readily identify and locate documents to enable them to participate effectively in the rulemaking process. The contents of the docket serve as the record for purposes of judicial review (except for interagency review materials) (section 307(d)(7)(A) of the Act, 42 U.S.C. 7607(d)(7)(A)).

B. Paperwork Reduction Act

There are no additional information collection requirements contained in this action. Therefore, approval under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501, *et seq.*, is not required.

C. Executive Order 12866 Review

Under Executive Order 12866, the EPA must determine whether a regulatory action is "significant" and, therefore, subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Executive 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 in State, local, or tribal governments or communities;
- (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs 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 the Executive Order, it has been determined that this final rule is not a "significant regulatory action" within the meaning of the

Executive Order. These amendments do not add any new control requirements.

D. Regulatory Flexibility

The EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with these final amendments to the rule. The EPA has also determined that these amendments will not have a significant economic impact on a substantial number of small entities. The changes should actually ease the compliance burden of the Wood Furniture NESHAP. The amendments issued today are expected to reduce the regulatory burden on facilities by relaxing requirements related to specified chemical compounds and by increasing one of the de minimis levels triggering regulatory action.

E. Submission to Congress and the General Accounting Office

The Congressional Review Act, 5 U.S.C. section 801, *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this rule and other required information to the United States Senate, the United States 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. section 804(2).

F. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Pub.L. 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, the EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires the EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives

of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows the EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before the EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The EPA has determined that the action promulgated today does not include a Federal mandate that may result in estimated costs of \$100 million or more to either State, local, or tribal governments, in the aggregate, or to the private sector in any one year. The changes finalized in this action will generally ease compliance for entities owning or operating wood furniture manufacturing facilities. The rule does not impose enforceable duties on State, local, or tribal governments. Therefore, the requirements of sections 202 and 205 of the UMRA do not apply to this action.

The EPA has likewise determined that the action promulgated today does not include any regulatory requirements that might significantly or uniquely affect small governments. Today's action does not impose any enforceable duties on small governments. Thus, today's action is not subject to the requirements of section 203 of the UMRA.

G. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Pub. L. No. 104-113, section 12(d) (15 U.S.C. 272 note), directs the EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices, etc.) that are developed or adopted by voluntary

consensus standard bodies. The NTTAA requires the EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This regulatory action makes amendments to the final rule that do not involve any technical standards that would require the EPA to consider voluntary consensus standards pursuant to section 12(d) of the NTTAA.

H. Executive Order 12875: Enhancing Intergovernmental Partnership

Under Executive Order 12875, the 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 the EPA consults with those governments. If the EPA complies by consulting, Executive Order 12875 requires the EPA to provide to the OMB a description of the extent of the EPA's prior consultation with representatives of affected State, local, and tribal governments, the nature of their concerns, any written communications from the governments, and a statement supporting the need to issue the regulation. In addition, Executive Order 12875 requires the 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 amendments to the rule do not create a mandate on State, local, or tribal governments. The amendments do not impose any enforceable duties on these entities. Accordingly, the requirements of section 1(a) of Executive Order 12875 do not apply to this rule.

I. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

Executive Order 13045, "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), applies to any rule that: (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the EPA must evaluate the environmental health or safety effects of the planned rule on children, and

explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This final rule is not subject to the Executive Order because it is not economically significant as defined in Executive Order 12866, and because it does not involve decisions on environmental health risks or safety risks that may disproportionately affect children.

J. Executive Order 13084: Consultation and Coordination With Indian Tribal Governments

Under Executive Order 13084, the 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 the EPA consults with those governments. If the EPA complies by consulting, Executive Order 13084 requires the EPA to provide to the OMB, in a separately identified section of the preamble to the rule, a description of the extent of the 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 the 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 amendments to the rule do not significantly or uniquely affect the communities of Indian tribal governments. The amendments issued today do not add any new requirements that are significantly or uniquely applicable to tribal communities or governments, or that will impose substantial compliance costs on these communities. Today's action will generally ease the compliance burden of wood furniture manufacturers subject to this rule. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Reporting and

recordkeeping requirements, Wood furniture manufacturing.

Dated: December 18, 1998.

Carol M. Browner,
Administrator.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

PART 63—[AMENDED]

1. The authority citation for Part 63 continues to read as follows:

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

Subpart JJ—National Emissions Standards for Wood Furniture Manufacturing Operations

2. Section 63.801 is amended by revising the definitions for "Cleaning operations," "Disposed offsite," "Equipment leak," "Recycled onsite," "Strippable spray booth material," "VHAP of potential concern," and "Washoff operations" and by removing the definition of "Organic solvent" and adding a definition of "Organic HAP solvent" to read as follows:

§ 63.801 Definitions.

* * * * *

Cleaning operations means operations in which organic HAP solvent is used to remove coating materials or adhesives from equipment used in wood furniture manufacturing operations.

* * * * *

Disposed offsite means sending used organic HAP solvent or coatings outside of the facility boundaries for disposal.

* * * * *

Equipment leak means emissions of VHAP from pumps, valves, flanges, or other equipment used to transfer or apply coatings, adhesives, or organic HAP solvents.

* * * * *

Organic HAP solvent means a HAP that is a volatile organic liquid used for dissolving or dispersing constituents in a coating or contact adhesive, adjusting the viscosity of a coating or contact adhesive, or cleaning equipment. When used in a coating or contact adhesive, the organic HAP solvent evaporates during drying and does not become a part of the dried film.

* * * * *

Recycled onsite means the reuse of an organic HAP solvent in a process other than cleaning or washoff.

* * * * *

Strippable spray booth material means a coating that:

(1) Is applied to a spray booth wall to provide a protective film to receive over spray during finishing operations;

(2) That is subsequently peeled off and disposed; and

(3) By achieving (1) and (2) of this definition reduces or eliminates the need to use organic HAP solvents to clean spray booth walls.

* * * * *

VHAP of potential concern means any VHAP from the list in table 6 of this subpart.

* * * * *

Washoff operations means those operations in which organic HAP solvent is used to remove coating from wood furniture or a wood furniture component.

* * * * *

3. Section 63.803 is amended by revising paragraphs (c)(1), (d), (f), (i), (j), and (l)(6) to read as follows:

§ 63.803 Work practice standards

* * * * *

(c) * * *

(1) A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic HAP solvents;

* * * * *

(d) *Cleaning and washoff solvent accounting system.* Each owner or operator of an affected source shall develop an organic HAP solvent accounting form to record:

(1) The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in § 63.801 of this subpart;

(2) The number of pieces washed off, and the reason for the washoff; and

(3) The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.

* * * * *

(f) *Spray booth cleaning.* Each owner or operator of an affected source shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the affected source shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.

* * * * *

(i) *Line cleaning.* Each owner or operator of an affected source shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.

* * * * *

(j) *Gun cleaning.* Each owner or operator of an affected source shall collect all organic HAP solvent used to clean spray guns into a normally closed container.

* * * * *

(l) * * *

(6) If, after November 1998, an affected source uses a VHAP of potential concern listed in table 6 of this subpart for which a baseline level has not been previously established, then the baseline level shall be established as the *de minimis* level provided in that same table for that chemical. The affected source shall track the annual usage of each VHAP of potential concern identified in this paragraph that is present in amounts subject to MSDS reporting as required by OSHA. If usage of the VHAP of potential concern exceeds the *de minimis* level listed in table 6 of this subpart for that chemical, then the affected source shall provide an explanation to the permitting authority that documents the reason for the exceedance of the *de minimis* level. If the explanation is not one of those listed in paragraphs (l)(4)(i) through (l)(4)(iv) of this section, the affected source shall follow the procedures in paragraph (l)(5) of this section.

4. Table 2 of subpart JJ is revised to read as follows:

TABLE 2.—LIST OF VOLATILE HAZARDOUS AIR POLLUTANTS

Chemical name	CAS No.
Acetaldehyde	75070
Acetamide	60355
Acetonitrile	75058
Acetophenone	98862
2-Acetylaminofluorine	53963
Acrolein	107028
Acrylamide	79061
Acrylic acid	79107
Acrylonitrile	107131
Allyl chloride	107051
4-Aminobiphenyl	92671
Aniline	62533
o-Anisidine	90040
Benzene	71432
Benzidine	92875
Benzotrichloride	98077
Benzyl chloride	100447
Biphenyl	92524
Bis (2-ethylhexyl) phthalate (DEHP)	117817
Bis (chloromethyl) ether	542881
Bromoform	75252
1,3-Butadiene	106990
Carbon disulfide	75150
Carbon tetrachloride	56235

TABLE 2.—LIST OF VOLATILE HAZARDOUS AIR POLLUTANTS—Continued

Chemical name	CAS No.
Carbonyl sulfide	463581
Catechol	120809
Chloroacetic acid	79118
2-Chloroacetophenone	532274
Chlorobenzene	108907
Chloroform	67663
Chloromethyl methyl ether	107302
Chloroprene	126998
Cresols (isomers and mixture)	1319773
o-Cresol	95487
m-Cresol	108394
p-Cresol	106445
Cumene	98828
2,4-D (2,4-Dichlorophenoxyacetic acid, including salts and esters)	94757
DDE (1,1-Dichloro-2,2-bis(p-chlorophenyl)ethylene)	72559
Diazomethane	334883
Dibenzofuran	132649
1,2-Dibromo-3-chloropropane	96128
Dibutylphthalate	84742
1,4-Dichlorobenzene	106467
3,3'-Dichlorobenzidine	91941
Dichloroethyl ether (Bis(2-chloroethyl)ether)	111444
1,3-Dichloropropane	542756
Diethanolamine	111422
N,N-Dimethylaniline	121697
Diethyl sulfate	64675
N,N-Dimethylformamide	119904
4-Dimethylaminoazobenzene	60117
3,3'-Dimethylbenzidine	119937
Dimethylcarbamoyl chloride	79447
N,N-Dimethylformamide	68122
1,1-Dimethylhydrazine	57147
Dimethyl phthalate	131113
Dimethyl sulfate	77781
4,6-Dinitro-o-cresol, and salts	534521
2,4-Dinitrophenol	51285
2,4-Dinitrotoluene	121142
1,4-Dioxane (1,4-Diethyleneoxide)	123911
1,2-Diphenylhydrazine	122667
Epichlorohydrin (1-Chloro-2,3-epoxypropane)	106898
1,2-Epoxybutane	106887
Ethyl acrylate	140885
Ethylbenzene	100414
Ethyl carbamate (Urethane)	51796
Ethyl chloride (Chloroethane)	75003
Ethylene dibromide (Dibromoethane)	106934
Ethylene dichloride (1,2-Dichloroethane)	107062
Ethylene glycol	107211
Ethylene oxide	75218
Ethylenethiourea	96457
Ethylidene dichloride (1,1-Dichloroethane)	75343
Formaldehyde	50000
Glycoethers ^a	118741
Hexachlorobenzene	87683
Hexachloro-1,3-butadiene	67721
Hexachloroethane	822060
Hexamethylene-1,6-diisocyanate	680319
Hexamethylphosphoramide	110543
Hexane	302012
Hydrazine	123319
Hydroquinone	78591
Isophorone	108316
Maleic anhydride	67561
Methanol	

TABLE 2.—LIST OF VOLATILE HAZARDOUS AIR POLLUTANTS—Continued

Chemical name	CAS No.
Methyl bromide (Bromomethane)	74839
Methyl chloride (Chloromethane)	74873
Methyl chloroform (1,1,1-Trichloroethane)	71556
Methyl ethyl ketone (2-Butanone)	78933
Methylhydrazine	60344
Methyl iodide (Iodomethane)	74884
Methyl isobutyl ketone (Hexone)	108101
Methyl isocyanate	624839
Methyl methacrylate	80626
Methyl tert-butyl ether	1634044
4,4'-Methylenebis (2-chloroaniline) Methylene chloride (Dichloromethane)	75092
4,4'-Methylenediphenyl diisocyanate (MDI)	101688
4,4'-Methylenedianiline	101779
Naphthalene	91203
Nitrobenzene	98953
4-Nitrobiphenyl	92933
4-Nitrophenol	100027
2-Nitropropane	79469
N-Nitroso-N-methylurea	684935
N-Nitrosodimethylamine	62759
N-Nitrosomorpholine	59892
Phenol	108952
p-Phenylenediamine	106503
Phosgene	75445
Phthalic anhydride	85449
Polychlorinated biphenyls (Aroclors)	1336363
Polycyclic Organic Matter ^b	
1,3-Propane sultone	1120714
beta-Propiolactone	57578
Propionaldehyde	123386
Propoxur (Baygon)	114261
Propylene dichloride (1,2-Dichloropropane)	78875
Propylene oxide	75569
1,2-Propylenimine (2-Methyl aziridine)	75558
Quinone	106514
Styrene	100425
Styrene oxide	96093
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746016
1,1,2,2-Tetrachloroethane	79345
Tetrachloroethylene (Perchloroethylene)	127184
Toluene	108883
2,4-Toluenediamine	95807
Toluene-2,4-diisocyanate	584849
o-Toluidine	95534
1,2,4-Trichlorobenzene	120821
1,1,2-Trichloroethane	79005
Trichloroethylene	79016
2,4,5-Trichlorophenol	95954
2,4,6-Trichlorophenol	88062
Triethylamine	121448
Trifluralin	1582098
2,2,4-Trimethylpentane	540841
Vinyl acetate	108054
Vinyl bromide	593602
Vinyl chloride	75014
Vinylidene chloride (1,1-Dichloroethylene)	75354
Xylenes (isomers and mixture)	1330207
o-Xylene	95476
m-Xylene	108383

TABLE 2.—LIST OF VOLATILE HAZARDOUS AIR POLLUTANTS—Continued

Chemical name	CAS No.
p-Xylene	106423

^aIncludes mono- and di-ethers of ethylene glycol, diethylene glycols and triethylene glycol; R-(OCH₂CH₂)_n-OR where:

n = 1, 2, or 3,
R = alkyl or aryl groups
R' = R, H, or groups which, when removed, yield glycol ethers with the structure: R-(OCH₂CH₂)_n-OH. Polymers are excluded from the glycol category.

^bIncludes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C.

5. Table 4 of subpart JJ is revised to read as follows:

TABLE 4.—POLLUTANTS EXCLUDED FROM USE IN CLEANING AND WASHOFF SOLVENTS

Chemical name	CAS No.
4-Aminobiphenyl	92671
Styrene oxide	96093
Diethyl sulfate	64675
N-Nitrosomorpholine	59892
Dimethyl formamide	68122
Hexamethylphosphoramide	680319
Acetamide	60355
4,4'-Methylenedianiline	101779
o-Anisidine	90040
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746016
Beryllium salts .....	.....
Benzidine	92875
N-Nitroso-N-methylurea	684935
Bis (chloromethyl) ether	542881
Dimethyl carbamoyl chloride	79447
Chromium compounds (hexavalent) .....	.....
1,2-Propylenimine (2-Methyl aziridine)	75558
Arsenic and inorganic arsenic compounds	99999904

TABLE 4.—POLLUTANTS EXCLUDED FROM USE IN CLEANING AND WASHOFF SOLVENTS—Continued

Chemical name	CAS No.
Hydrazine	302012
1,1-Dimethyl hydrazine	57147
Beryllium compounds	7440417
1,2-Dibromo-3-chloropropane	96128
N-Nitrosodimethylamine	62759
Cadmium compounds .....	.....
Benzo (a) pyrene	50328
Polychlorinated biphenyls (Aroclors)	1336363
Heptachlor	76448
3,3'-Dimethyl benzidine	119937
Nickel subsulfide	12035722
Acrylamide	79061
Hexachlorobenzene	118741
Chlordane	57749
1,3-Propane sultone	1120714
1,3-Butadiene	106990
Nickel refinery dust .....	.....
2-Acetylaminofluorene	53063
3,3'-Dichlorobenzidine	53963
Lindane (hexachlorocyclohexane, gamma)	58899
2,4-Toluene diamine	95807
Dichloroethyl ether (Bis(2-chloroethyl) ether)	111444
1,2-Diphenylhydrazine	122667
Toxaphene (chlorinated camphene)	8001352
2,4-Dinitrotoluene	121142
3,3'-Dimethoxybenzidine	119904
Formaldehyde	50000
4,4'-Methylene bis (2-chloroaniline)	101144
Acrylonitrile	107131
Ethylene dibromide (1,2-Dibromoethane)	106934
DDE (1,1-p-chlorophenyl 1-2 dichloroethylene)	72559
Chlorobenzilate	510156
Dichlorvos	62737
Vinyl chloride	75014
Coke Oven Emissions .....	.....
Ethylene oxide	75218

TABLE 4.—POLLUTANTS EXCLUDED FROM USE IN CLEANING AND WASHOFF SOLVENTS—Continued

Chemical name	CAS No.
Ethylene thiourea	96457
Vinyl bromide (bromoethene)	593602
Selenium sulfide (mono and di)	7488564
Chloroform	67663
Pentachlorophenol	87865
Ethyl carbamate (Urethane)	51796
Ethylene dichloride (1,2-Dichloroethane)	107062
Propylene dichloride (1,2-Dichloropropane)	78875
Carbon tetrachloride	56235
Benzene	71432
Methyl hydrazine	60344
Ethyl acrylate	140885
Propylene oxide	75569
Aniline	62533
1,4-Dichlorobenzene(p)	106467
2,4,6-Trichlorophenol	88062
Bis (2-ethylhexyl) phthalate (DEHP)	117817
o-Toluidine	95534
Propoxur	114261
1,4-Dioxane (1,4-Diethyleneoxide)	123911
Acetaldehyde	75070
Bromoform	75252
Captan	133062
Epichlorohydrin	106898
Methylene chloride (Dichloromethane)	75092
Dibenz (ah) anthracene	53703
Chrysene	218019
Dimethyl aminoazobenzene	60117
Benzo (a) anthracene	56553
Benzo (b) fluoranthene	205992
Antimony trioxide	1309644
2-Nitropropane	79469
1,3-Dichloropropene	542756
7, 12-Dimethylbenz(a) anthracene	57976
Benz(c) acridine	225514
Indeno(1,2,3-cd)pyrene	193395
1,2:7,8-Dibenzopyrene	189559

6. Table 5 of subpart JJ is revised to read as follows:

TABLE 5.—LIST OF VHAP OF POTENTIAL CONCERN IDENTIFIED BY INDUSTRY

CAS No.	Chemical name	EPA de minimis, tons/yr
68122	Dimethyl formamide	1.0
50000	Formaldehyde	0.2
75092	Methylene chloride	4.0
79469	2-Nitropropane	1.0
78591	Isophorone	0.7
1000425	Styrene monomer	1.0
108952	Phenol	0.1
111422	Dimethanolamine	5.0
109864	2-Methoxyethanol	10.0
111159	2-Ethoxyethyl acetate	10.0

7. Table 6 of subpart JJ is revised to read as follow:

TABLE 6.—VHAP OF POTENTIAL CONCERN

CAS No.	Chemical name	EPA de minimis, tons/yr*
92671	4-Aminobiphenyl	1.0
96093	Styrene oxide	1.0
64675	Diethyl sulfate	1.0
59892	N-Nitrosomorpholine	1.0
68122	Dimethyl formamide	1.0
680319	Hexamethylphosphoramide	0.01
60355	Acetamide	1.0
101779	4,4'-Methylenedianiline	1.0
90040	o-Anisidine	1.0
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.0000006
92875	Benzidine	0.00003
684935	N-Nitroso-N-methylurea	0.00002
542881	Bis(chloromethyl) ether	0.00003
79447	Dimethyl carbamoyl chloride	0.002
75558	1,2-Propylenimine (2-Methyl aziridine)	0.0003
57147	1,1-Dimethyl hydrazine	0.0008
96128	1,2-Dibromo-3-chloropropane	0.001
62759	N-Nitrosodimethylamine	0.0001
50328	Benzo (a) pyrene	0.001
1336363	Polychlorinated biphenyls (Aroclors)	0.0009
76448	Heptachlor	0.002
119937	3,3'-Dimethyl benzidine	0.001
79061	Acrylamide	0.002
118741	Hexachlorobenzene	0.004
57749	Chlordane	0.005
1120714	1,3-Propane sultone	0.003
106990	1,3-Butadiene	0.007
53963	2-Acetylaminothiourea	0.0005
91941	3,3'-Dichlorobenzidine	0.02
58899	Lindane (hexachlorocyclohexane, gamma)	0.005
95807	2,4-Toluene diamine	0.002
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)	0.006
122667	1,2-Diphenylhydrazine	0.009
8001352	Toxaphene (chlorinated camphene)	0.006
121142	2,4-Dinitrotoluene	0.002
119904	3,3'-Dimethoxybenzidine	0.01
50000	Formaldehyde	0.2
101144	4,4'-Methylene bis(2-chloroaniline)	0.02
107131	Acrylonitrile	0.03
106934	Ethylene dibromide(1,2-Dibromoethane)	0.01
72559	DDE (1,1-p-chlorophenyl 1-2 dichloroethylene)	0.01
510156	Chlorobenzilate	0.04
62737	Dichlorvos	0.02
75014	Vinyl chloride	0.02
75218	Ethylene oxide	0.09
96457	Ethylene thiourea	0.06
593602	Vinyl bromide (bromoethene)	0.06
67663	Chloroform	0.09
87865	Pentachlorophenol	0.07
51796	Ethyl carbamate (Urethane)	0.08
107062	Ethylene dichloride (1,2-Dichloroethane)	0.08
78875	Propylene dichloride (1,2-Dichloropropane)	0.1
56235	Carbon tetrachloride	0.1
71432	Benzene	0.2
140885	Ethyl acrylate	0.1
75569	Propylene oxide	0.5
62533	Aniline	0.1
106467	1,4-Dichlorobenzene(p)	0.3
88062	2,4,6-Trichlorophenol	0.6
117817	Bis (2-ethylhexyl) phthalate (DEHP)	0.5
95534	o-Toluidine	0.4
114261	Propoxur	2.0
79016	Trichloroethylene	1.0
123911	1,4-Dioxane (1,4-Diethyleneoxide)	0.6
75070	Acetaldehyde	0.9
75252	Bromoform	2.0
133062	Captan	2.0
106898	Epichlorohydrin	2.0
75092	Methylene chloride (Dichloromethane)	4.0
127184	Tetrachloroethylene (Perchloroethylene)	4.0
53703	Dibenz (ah) anthracene	0.01

TABLE 6.—VHAP OF POTENTIAL CONCERN—Continued

CAS No.	Chemical name	EPA de minimis, tons/yr*
218019	Chrysene	0.01
60117	Dimethyl aminoazobenzene	1.0
56553	Benzo (a) anthracene	0.01
205992	Benzo (b) fluoranthene	0.01
79469	2-Nitropropane	1.0
542756	1,3-Dichloropropene	1.0
57976	7,12-Dimethylbenz (a) anthracene	0.01
225514	Benz(c)acridine	0.01
193395	Indeno(1,2,3-cd)pyrene	0.01
189559	1,2:7,8-Dibenzopyrene	0.01
79345	1,1,2,2-Tetrachloroethane	0.03
91225	Quinoline	0.0006
75354	Vinylidene chloride (1,1-Dichloroethylene)	0.04
87683	Hexachlorobutadiene	0.09
82688	Pentachloronitrobenzene (Quintobenzene)	0.03
78591	Isophorone	0.7
79005	1,1,2-Trichloroethane	0.1
74873	Methyl chloride (Chloromethane)	1.0
67721	Hexachloroethane	0.5
1582098	Trifluralin	0.9
1319773	Cresols/Cresylic acid (isomers and mixture)	1.0
108394	m-Cresol	1.0
75343	Ethylidene dichloride (1,1-Dichloroethane)	1.0
95487	o-Cresol	1.0
106445	p-Cresol	1.0
74884	Methyl iodide (Iodomethane)	1.0
100425	Styrene	1.0
107051	Allyl chloride	1.0
334883	Diazomethane	1.0
95954	2,4,5-Trichlorophenol	1.0
133904	Chloramben	1.0
106887	1,2-Epoxybutane	1.0
108054	Vinyl acetate	1.0
126998	Chloroprene	1.0
123319	Hydroquinone	1.0
92933	4-Nitrobiphenyl	1.0
56382	Parathion	0.1
13463393	Nickel Carbonyl	0.1
60344	Methyl hydrazine	0.006
151564	Ethylene imine	0.0003
77781	Dimethyl sulfate	0.1
107302	Chloromethyl methyl ether	0.1
57578	beta-Propiolactone	0.1
100447	Benzyl chloride	0.04
98077	Benzotrichloride	0.0006
107028	Acrolein	0.04
584849	2,4-Toluene diisocyanate	0.1
75741	Tetramethyl lead	0.01
78002	Tetraethyl lead	0.01
12108133	Methylcyclopentadienyl manganese	0.1
624839	Methyl isocyanate	0.1
77474	Hexachlorocyclopentadiene	0.1
62207765	Fluomine	0.1
10210681	Cobalt carbonyl	0.1
79118	Chloroacetic acid	0.1
534521	4,6-Dinitro-o-cresol, and salts	0.1
101688	Methylene diphenyl diisocyanate	0.1
108952	Phenol	0.1
62384	Mercury, (acetato-o) phenyl	0.01
98862	Acetophenone	1.0
108316	Maleic anhydride	1.0
532274	2-Chloroacetophenone	0.06
51285	2,4-Dinitrophenol	1.0
109864	2-Methoxy ethanol	10.0
98953	Nitrobenzene	1.0
74839	Methyl bromide (Bromomethane)	10.0
75150	Carbon disulfide	1.0
121697	N,N-Dimethylaniline	1.0
106514	Quinone	5.0
123386	Propionaldehyde	5.0
120809	Catechol	5.0

TABLE 6.—VHAP OF POTENTIAL CONCERN—Continued

CAS No.	Chemical name	EPA de minimis, tons/yr*
85449	Phthalic anhydride	5.0
463581	Carbonyl sulfide	5.0
132649	Dibenzofurans	5.0
100027	4-Nitrophenol	5.0
540841	2,2,4-Trimethylpentane	5.0
111422	Diethanolamine	5.0
822060	Hexamethylene-1,6-diisocyanate	5.0
	Glycol ethers ^a	5.0
	Polycyclic organic matter ^b	0.01

* These values are based on the de minimis levels provided in the proposed rulemaking pursuant to section 112(g) of the Act using a 70-year lifetime exposure duration for all VHAP. Default assumptions and the de minimis values based on inhalation reference doses (RfC) are not changed by this adjustment.

^a Except for ethylene glycol butyl ether, ethylene glycol ethyl ether (2-ethoxy ethanol), ethylene glycol hexyl ether, ethylene glycol methyl ether (2-methoxyethanol), ethylene glycol phenyl ether, ethylene glycol propyl ether, ethylene glycol mono-2-ethylhexyl ether, diethylene glycol butyl ether, diethylene glycol ethyl ether, diethylene glycol methyl ether, diethylene glycol hexyl ether, diethylene glycol phenyl ether, diethylene glycol propyl ether, triethylene glycol butyl ether, triethylene glycol ethyl ether, triethylene glycol methyl ether, triethylene glycol propyl ether, ethylene glycol butyl ether acetate, ethylene glycol ethyl ether acetate, and diethylene glycol ethyl ether acetate.

^b Except for benzo(b)fluoranthene, benzo(a)anthracene, benzo(a)pyrene, 7,12-dimethylbenz(a)anthracene, benz(c)acridine, chrysene, dibenz(ah)anthracene, 1,2,7,8-dibenzopyrene, indeno(1,2,3-cd)pyrene, but including dioxins and furans.

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AD-FRL-6210-5]

RIN 2060-AH74

National Emission Standards for Hazardous Air Pollutants for Source Categories: Pulp and Paper Production

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: Under the authority of the Clean Air Act, as amended, the EPA has promulgated standards (63 FR 18504, April 15, 1998) to reduce hazardous air pollutant (HAP) emissions from the pulp and paper production source category. This rule is known as the Pulp and Paper national emission standards for hazardous air pollutants (NESHAP) and is the air component of the integrated air and water rules for the pulp and paper industry, commonly known as the Pulp and Paper Cluster Rules. The rule applies to pulp and

paper production processes included under the Standard Industrial Classification (SIC) code 26.

In this action, the EPA is taking direct final action amending the interim NESHAP for chloroform emissions from mills which have enrolled in the Voluntary Advanced Technology Incentives Program (VATIP) to include, as a compliance alternative, meeting the baseline Best Available Technology (BAT) requirements for 2,3,7,8-tetrachloro-dibenzo-p-dioxin (TCDD) and adsorbable organic halides (AOX). This standard could apply instead of the present, exclusive requirement of no increase in application rate of chlorine or hypochlorite above a specified baseline.

DATES: Effective Date. These amendments will be effective without further notice on February 26, 1999, unless the EPA receives adverse comments by January 27, 1999. Should the Agency receive such comments, the EPA will publish a timely withdrawal in the *Federal Register* informing the public that this rule will not take effect.

ADDRESSES: Comments. Interested parties having adverse comments on this action may submit these comments in writing (in duplicate, if possible) to

Docket No. A-92-40 at the following address: Air and Radiation Docket and Information Center (MC-6102), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460. The EPA requests that a separate copy of the comments also be sent to the contact person listed below.

Today's document and other materials related to this direct final rulemaking are available for review in the docket. Copies of this information may be obtained by request from the Air Docket by calling (202) 260-7548. A reasonable fee may be charged for copying docket materials.

FOR FURTHER INFORMATION CONTACT: Mr. Steven Silverman, Office of General Counsel, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460, telephone number (202) 260-7716. For technical information regarding the NESHAP, contact Mr. Stephen Shedd, Emissions Standards Division, U.S. Environmental Protection Agency, Research Triangle Park, NC 27711, telephone number (919) 541-5397 or e-mail at shedd.steve@epa.gov.

SUPPLEMENTARY INFORMATION: *Regulated entities.* Entities potentially regulated by this action include:

Category	SIC code	Examples of regulated entities
Industry	26	Pulp mills and integrated mills (mills that manufacture pulp and paper/paperboard) that chemically pulp wood fiber.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be interested in the amendments to the regulation affected by this action. This

table lists the types of entities that the EPA is now aware could potentially be regulated by this action. To determine whether your facility is regulated by this action, you should carefully examine

the applicability criteria in part 63, subparts A and S of Title 40 of the Code of Federal Regulations.

Information contacts. If you have questions regarding the applicability of

this action to a particular situation or questions about compliance approaches, permitting, enforcement, and rule determinations, please contact the appropriate regional representative below.

Region I

Greg Roscoe, Chief, Air Pesticides and Toxics Enforcement Office, Office of Environmental Stewardship, U.S. EPA, Region I, JFK Federal Building (SEA), Boston, MA 02203, (617) 565-3221. Technical Contact for Applicability Determination, Susan Lancey, (617) 565-3587, (617) 565-4940 (Fax)

Region II

Mosey Ghaffari, Air Compliance Branch, U.S. EPA, Region II, 290 Broadway, New York, NY 10007-1866, (212) 637-3925, (212) 637-3998 (Fax)

Region III

Makeba Morris, U.S. EPA, Region III, 3AT10, 1650 Arch Street, Philadelphia, PA 19103, (215) 814-2187

Region IV

Lee Page, U.S. EPA, Region IV, Atlanta Federal Center, 100 Alabama Street, Atlanta, GA 30303, (404) 562-9131

Region V

Christina Prasinos (AE-17J), U.S. EPA, Region V, 77 West Jackson Street, Chicago, IL 60604-3590, (312) 886-6819, (312) 353-8289 (Fax)

Region VI

Michelle Kelly, Air Enforcement Branch (6EN-AA), U.S. EPA, Region VI, Suite 1200, 1445 Ross Avenue, Dallas, TX 75202-2733, (214) 665-7580, (214) 665-7446 (Fax)

Region VII

Gary Schlicht, Air Permits and Compliance Branch, U.S. EPA, Region VII, ARTD/APCO, 726 Minnesota Avenue, Kansas City, KS 66101, (913) 551-7097

Region VIII

Tami Thomas-Burton, Air Toxics Coordinator, U.S. EPA, Region VIII, Suite 500, 999 18th Street, Denver, CO 80202-2466, (303) 312-6581, (303) 312-6064 (Fax)

Region IX

Ken Bigos, U.S. EPA, Region IX, A-5, 75 Hawthorne Street, San Francisco, CA 94105, (415) 744-1240

Region X

Andrea Wallenweber, Office of Air Quality, U.S. EPA, Region X, OAQ-

107, 1200 Sixth Avenue, Seattle, WA 98101, (206) 553-8760, (206) 553-0404 (Fax)

Technology Transfer Network. The Technology Transfer Network (TTN) is a network of the EPA's electronic bulletin boards. The TTN provides information and technology exchange in various areas of air pollution control. Information regarding the basis and purpose of this rule and other relevant documents can be found on the pulp and paper page of the EPA's Unified Air Toxics website (UATW) at "www.epa.gov/ttn/uatw/pulp/pulppg.html". For more information on the TTN, call the HELP line at (919) 541-5384.

Docket. Docket A-92-40 contains the supporting information for the original NESHAP and this action. Today's notice and other materials related to this proposal are available for review in the docket. The docket is available for public inspection and copying between 8:00 a.m. and 5:30 p.m., Monday through Friday except for Federal holidays at the Air and Radiation Docket and Information Center (MC-6102), U.S. Environmental Protection Agency, 401 M Street, SW, Room M-1500, Washington, DC 20460. Copies of docket information also may be obtained by request from the Air Docket by calling (202) 260-7548. A reasonable fee may be charged for copying docket materials.

I. Description of Amendments

In today's action, the EPA is amending certain regulatory text in the NESHAP regarding the interim standard for chloroform emissions from bleaching systems at mills that have enrolled in the Voluntary Advanced Technology Incentives Program (VATIP). The EPA is publishing this rule without prior proposal because we view this as a noncontroversial amendment and anticipate no adverse comment. However, in the **PROPOSED RULES** section of today's **Federal Register**, we are publishing a separate document that will serve as the proposal to this action if adverse comments are filed. This rule will be effective on February 26, 1999 without further notice unless we receive adverse comment by January 27, 1999. If the EPA receives adverse comment, we will publish a timely withdrawal in the **Federal Register** informing the public that the rule will not take effect. We will address all public comments in a subsequent final rule based on the proposed rule. We will not institute a second comment period on this action. Any parties interested in commenting must do so at this time.

Under the authority of the Clean Air Act (CAA), as amended, the EPA has promulgated standards (63 FR 18504, April 15, 1998) to reduce HAP emissions from the pulp and paper production source category. This rule is known as the Pulp and Paper NESHAP and is the air component of the integrated air and water rules for the pulp and paper industry, commonly known as the Pulp and Paper Cluster Rules. Both the air and effluent standards work together to reduce pollutant releases to air and water. There are close connections throughout the rule between the CAA NESHAP for air emissions and the Clean Water Act (CWA) effluent limitations guidelines for aqueous discharges.

An instance where this connection is particularly close is the standards for bleaching systems. Reducing chlorine used to bleach pulp will reduce HAP emissions from the bleach plant equipment vents and the wastewater treatment system, and will also reduce pollutants discharged in the water. The maximum achievable control technology (MACT) standard for bleaching system chloroform emissions requires mills to achieve the BAT requirements for dioxin, furan, chloroform, 12 chlorinated phenolic compounds, and AOX, in order to ensure that the removals represented by the MACT technology are attained. See 40 CFR 63.445(d)(1)(ii); 63 FR 18527 and 18551. This is because the control technologies upon which the BAT effluent limitations guidelines are based are identical to the control technologies used to comply with MACT; therefore, compliance with BAT will control air emissions to the MACT level of control. *Id.*

The CWA rules also create a voluntary incentive program—the Voluntary Advanced Technology Incentives Program—to encourage mills to install systems to achieve pollutant reductions at levels surpassing BAT requirements. The MACT standards, in a number of instances, establish alternatives to encourage mills to make this election. Of direct relevance here, the MACT standards for chloroform emissions from bleaching systems are structured to accommodate mills that have made the binding election to participate in the incentives program. Thus, MACT for chloroform emissions from participating fiber lines at such mills' bleaching systems is established in two parts. Under the incentives program, mills must achieve, among other requirements, the ultimate VATIP limitations for the tier they select by the dates prescribed in the rule, as well as enforceable interim milestones imposed

by the permit writer. See 40 CFR 430.24(b) (2), (3), and (4). For example, by April 16, 2004, all VATIP mills must achieve interim BAT limitations equivalent to the baseline BAT limitations. See 40 CFR 430.24(b)(3). As explained above, achievement of those limitations equals MACT. See 63 FR 18528 and § 63.440(d) (ii) (A). There is also an interim MACT standard which takes effect on April 15, 2001 (and is in effect until the ultimate MACT standard takes effect on April 15, 2004): VATIP fiber lines are not allowed to increase their application rates of chlorine or hypochlorite above the average rates determined for the 3-month period prior to June 15, 1998 (so called "anti-backsliding" provision). See § 63.440(d) (3) (ii) (B) at 63 FR 18617. It is this last provision that is affected by the present rule.

This amendment creates a third alternative to the interim MACT standards in § 63.440(d) (3) for chloroform emissions from bleach plants at VATIP facilities. Specifically, the amendment provides an alternative to the current exclusive requirement of no increase in chlorine or hypochlorite application rate. Under the alternative, mills participating in the incentives program would be required to comply with the baseline BAT provisions for two of the regulated pollutant parameters, specifically the chlorinated dioxin regulated under the rules (namely, 2,3,7,8-tetrachloro-dibenzo-p-dioxin, or TCDD) and AOX. The CWA requirements would be expressed as permit conditions imposed as a form of best professional judgment milestones required by 40 CFR 430.24(b) (2). (If the permitting authority determines that the mill can achieve the baseline limitations for TCDD and AOX sooner than April 15, 2001, then it may impose a more expeditious deadline.) Section 430.24(e) requires compliance with the baseline BAT limit for TCDD to be demonstrated at the bleach plant itself, and requires that TCDD be below the analytical minimum level of 10 parts per quadrillion. Compliance with the baseline AOX limitation is measured at end-of-pipe, and must reflect the end-of-pipe AOX contribution from pulp production bleached in the participating fiber line.

Control of TCDD and (to a lesser degree) AOX in bleaching plant effluent will likewise assure that chloroform air emissions are incidentally controlled during the transition period prior to April 15, 2004. This is because, first, control of TCDD and AOX will likewise control formation of other chlorinated compounds given the similarities of formation mechanisms of chlorinated

organic compounds. Second, as the EPA noted when promulgating the Cluster Rules, control of chlorinated chemicals to BAT levels will almost certainly mean that mills will be applying some type of MACT technology such as process substitution. See 63 FR 18528. This conclusion holds true for control of TCDD (and AOX) to BAT levels. The Agency thus expects that to achieve the TCDD limit, there will have to be at least reduced usage, if not elimination, of hypochlorite usage, and very careful control and minimized use of elemental chlorine, or use of chlorine dioxide, or other alternative bleaching chemicals. This process substitution will in turn control chloroform formation and hence potential emission. See 63 FR 18527.

Thus, today's amendment is consistent with the basis for the existing bleaching system MACT standards for chloroform emissions: MACT and BAT to control bleaching system emissions are the same. By applying BAT-types of technologies to TCDD and AOX, therefore, will also achieve interim control of chloroform emissions. Although elemental chlorine usage could increase under this alternative, the EPA does not expect that it will increase significantly, since other chlorinated constituents in water discharges similarly would increase and the TCDD or AOX limits could be exceeded.

In addition, and importantly, this amendment achieves BAT level of control for TCDD and AOX, and interim control of chloroform emissions during the transition period leading to the ultimate VATIP limits. As explained earlier, mills participating in the incentives program are not required to achieve the baseline BAT level control for TCDD or AOX until April 15, 2004. Mills wishing to use the alternative in today's rule would have to meet baseline BAT limitations for TCDD and AOX no later than April 15, 2001. Chloroform emissions will necessarily be limited incidentally at the same time. The EPA believes that this more rapid compliance with BAT for TCDD and AOX, make this an appropriate alternative from an environmental standpoint. Although bleaching systems at such mills could increase chlorine or hypochlorite usage (until April 15, 2004 when the final MACT standard takes effect), the EPA believes the alternative is appropriate in light of the earlier compliance with BAT limits for TCDD and AOX, as well as the interim incidental control of chloroform emissions these limits will provide.

Finally, the EPA believes that this amendment is justified to encourage plants to participate in the incentives

program. As noted throughout the rulemaking, this program has the potential to lead to significant and long-term decreases in pollutant discharges beyond the significant reductions required by BAT. See 63 FR 18514. One company which has stated that it otherwise would elect to participate in the program has identified the anti-backsliding provision in the MACT rules as an impediment to doing so because the provision may foreclose desirable business opportunities. The company has already achieved control surpassing baseline BAT on a portion of its production so that the company is in a good position to comply with the conditions established in this rule, as well as the Tier I VATIP provisions. Since the EPA views today's amendment as environmentally desirable in the long term in any case, and also wishes to encourage maximum participation in the incentives program in order to achieve further reductions in pollutant discharges, the Agency believes amending the rules to encourage the VATIP election further supports today's amendment. The EPA emphasizes that today's amendment is generally applicable so that any mill meeting the conditions specified can take advantage of the new MACT compliance alternative.

II. Administrative Requirements

A. Docket

The docket is an organized and complete file of all the information considered by the EPA in the development of this rulemaking. The docket is a dynamic file, because material is added throughout the rulemaking development. The docketing system is intended to allow members of the public and industries involved to readily identify and locate documents so that they can effectively participate in the rulemaking process. Along with the proposed and promulgated standards and their preambles, the contents of the docket, except for certain interagency documents, will serve as the record in case of judicial review. See CAA § 307(d) (7) (A).

B. Paperwork Reduction Act

The information requirements of the previously promulgated NESHAP were submitted for approval to the Office of Management and Budget (OMB) on April 27, 1998 under the *Paperwork Reduction Act*, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document has been prepared by the EPA (ICR No. 1657.03), and a copy may be obtained from Sandy Farmer, OPPE Regulatory Information Division; U.S.

Environmental Protection Agency (2137); 401 M St., SW., Washington, DC 20460 or by calling (202) 260-2740. The information requirements are not effective until OMB approves them.

Today's amendments to the NESHAP will have no impact on the information collection burden estimates made previously. The amendments establish no new information collection requirements. Consequently, the ICR has not been revised.

C. Executive Order 12866: "Significant Regulatory Action" Determination

Under Executive Order 12866, the EPA must determine whether the regulatory action is "significant" and, therefore, subject to OMB review and the requirements of the Executive Order. The order defines a "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, public health or safety in State, local, or tribal governments or communities;
- (2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, 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.

The NESHAP subpart S rule published on April 15, 1998 was considered significant under Executive Order 12866, and EPA accordingly prepared a regulatory impact analysis (RIA). Today's amendments provide an additional means of complying with one of the rule's requirements. The OMB has evaluated this action and determined it to be nonsignificant; thus, it did not require OMB review.

D. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions. The EPA determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this action. These amendments would not result in increased impacts to small entities and

the changes to the rule in today's action do not add new control requirements to the April 15, 1998 rule. The amendments in fact create a compliance alternative and to that degree lessen the impact of the April 15, 1998 rule.

E. Unfunded Mandates Reform Act

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

The EPA has determined that today's action does not include a Federal mandate that may result in estimated costs of \$100 million or more to either State, local, or tribal governments in the aggregate or to the private sector. The action in fact somewhat lessens the impacts of the rule, as explained above. Therefore, the requirements of the Unfunded Mandates Act do not apply to today's action.

F. Executive Order 12875: Enhancing the Intergovernmental Partnership

Under Executive Order 12875, the 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 the EPA complies by consulting, Executive Order 12875 requires EPA to provide to the OMB a description of the extent of the 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 the 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."

While the final rule published on April 15, 1998 does not create mandates upon State, local, or tribal governments, the EPA involved State and local governments in its development. Because today's action amends the existing rule to establish more compliance flexibility to achieve MACT, today's action does not impose any mandate upon State, local, or tribal governments.

G. Applicability of Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

Executive Order 13045 applies to any rule that the EPA determines (1) is economically significant as defined under Executive Order 12866, and (2) the environmental health or safety risk addressed by the rule has a disproportionate effect on children. If the regulatory action meets both criteria, the EPA must evaluate the environmental health or safety effects of the planned rule on children and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the EPA.

Today's action is not subject to Executive Order 13045 because it does not involve decisions on environmental health risks or safety risks that may disproportionately affect children.

H. Executive Order 13084: Consultation and Coordination With Indian Tribal Governments

Under Executive Order 13084, the 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 the EPA consults with those governments. If the EPA complies by consulting, Executive Order 13084 requires the EPA to provide to the OMB, in a separately identified section of the preamble to the rule, a description of the extent of the 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 the 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 action does not significantly or uniquely affect the communities of Indian tribal governments. The final rule published on April 15, 1998 does not create mandates upon tribal governments. Because today's action amends the rule to establish another means of complying with MACT standards, today's action does not create a mandate on tribal governments. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this action.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) directs all Federal agencies to use voluntary consensus standards instead of government-unique standards in their regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices) that are developed or adopted by one or more voluntary consensus standards bodies. Examples of organizations generally regarded as voluntary consensus standards bodies include the American Society for Testing and Materials (ASTM), the National Fire Protection Association (NFPA), and the Society of Automotive Engineers (SAE). The NTTAA requires Federal agencies like the EPA to provide Congress, through the OMB, with explanations when an agency decides not to use available and applicable voluntary consensus standards.

This action does not involve any new technical standards or the incorporation by reference of existing technical standards. Therefore, consideration of voluntary consensus standards is not relevant to this action.

J. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller

General of the United States prior to publication of the rule in the **Federal Register**. This rule is not a "major rule" as defined by 5 U.S.C. 804(2).

III. Legal Authority

These regulations are amended under the authority of sections 112, 114, and 301 of the Clean Air Act, as amended (42 U.S.C. sections 7412, 7414, and 7601).

List of Subjects in 40 CFR Part 63

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

Dated: December 18, 1998.

Carol M. Browner,
Administrator.

For the reasons set out in the preamble, title 40, Chapter I of the Code of Federal Regulations is amended as follows:

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

1. The authority citation for part 63 continues to read as follows:

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

Subpart S—National Emission Standards for Hazardous Air Pollutants From the Pulp and Paper Industry

2. Amend § 63.440 by revising paragraphs (d)(3)(ii) introductory text and (d)(3)(ii)(B), as follows:

§ 63.440 Applicability.

* * * * *

(d) * * *

(3) * * *

(ii) Comply with paragraphs (d)(3)(ii)(A), (d)(3)(ii)(B), and (d)(3)(ii)(C) of this section.

* * * * *

(B) The owner or operator of a bleaching system shall comply with the requirements specified in either paragraph (d)(3)(ii)(B)(1) or (d)(3)(ii)(B)(2) of this section.

(1) Not increase the application rate of chlorine or hypochlorite in kilograms (kg) of bleaching agent per megagram of ODP, in the bleaching system above the average daily rates used over the three months prior to June 15, 1998 until the requirements of paragraph (d)(3)(ii)(A) of this section are met and record application rates as specified in § 63.454(c).

(2) Comply with enforceable effluent limitations guidelines for 2,3,7,8-tetrachloro-dibenzo-p-dioxin and adsorbable organic halides at least as

stringent as the baseline BAT levels set out in 40 CFR 430.24(a)(1) as expeditiously as possible, but in no event later than April 16, 2001.

* * * * *

[FR Doc. 98-34306 Filed 12-24-98; 8:45 am]
BILLING CODE 6560-50-P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 73

[MM Docket No. 95-49, RM-8558]

Radio Broadcasting Services; Llano and Marble Falls, TX

AGENCY: Federal Communications Commission.

ACTION: Final Rule; petition for reconsideration.

SUMMARY: This document denies the joint petition for reconsideration filed by Roy E. Henderson and Tichenor License Corporation and affirms our action in the *Report and Order*, 62 FR 31008 (June 6, 1997), which substituted Channel 285C3 for Channel 284C3 at Llano, Texas, reallocated Channel 285C3 to Marble Falls, Texas, and modified the license of Station KBAE(FM), Llano, to specify operation on Channel 285C3 at Marble Falls. In reaching this result, the document explains that the staff properly dismissed the petitioners' counterproposal as violating Section 1.420(i) of the Commission's Rules. With this action this proceeding is terminated.

EFFECTIVE DATE: December 28, 1998.

FOR FURTHER INFORMATION CONTACT: Arthur D. Scrutchins, Mass Media Bureau, (202) 418-2180.

SUPPLEMENTARY INFORMATION: This is a synopsis of the Commission's Memorandum Opinion and Order, MM Docket No. 95-49, adopted December 14, 1998, and released December 18, 1998. The full text of this Commission decision is available for inspection and copying during normal business hours in the FCC Reference Center (Room 239), 1919 M St., N.W., Washington D.C. The complete text of this decision may also be purchased from the Commission's copy contractors, International Transcription Service, Inc., (202) 857-3800, 1231 20th Street, N.W. Washington D.C. 20036.

List of Subjects in 47 CFR Part 73

Radio Broadcasting.

significant" as defined under E.O. 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This rule is not subject to E.O. 13045 because it is not economically significant under E.O. 12866 and it does not involve decisions intended to mitigate environmental health or safety risks.

E. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions. This final rule will not have a significant impact on a substantial number of small entities because SIP approvals under section 110 and subchapter I, part D of the Clean Air Act do not create any new requirements but simply approve requirements that the State is already imposing. Therefore, because the Federal SIP approval does not create any new requirements, I certify that this action will not have a significant economic impact on a substantial number of small entities. Moreover, due to the nature of the Federal-State relationship under the Clean Air Act, preparation of flexibility analysis would constitute Federal inquiry into the economic reasonableness of state action. The Clean Air Act forbids EPA to base its actions concerning SIPs on such grounds. *Union Electric Co., v. U.S. EPA*, 427 U.S. 246, 255-66 (1976); 42 U.S.C. 7410(a)(2).

F. Unfunded Mandates

Under Section 202 of the Unfunded Mandates Reform Act of 1995 ("Unfunded Mandates Act"), signed into law on March 22, 1995, EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in estimated annual costs to State, local, or tribal governments in the aggregate; or to private sector, of \$100 million or more. Under Section 205, EPA must select the most cost-effective

and least burdensome alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

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

G. Submission to Congress and the Comptroller General

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

H. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by March 30, 1999. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

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

Dated: January 13, 1999.

A. Stanley Meiburg,

Acting Regional Administrator, Region 4.

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 *et seq.*

Subpart L—Georgia

2. Section 52.582 is amended by adding paragraph (c) to read as follows:

§ 52.582 Control Strategy: Ozone.

* * * * *

(c) EPA is giving final interim approval to the Georgia Inspection and Maintenance (I/M) Program submitted on March 27, 1996, with supplemental information submitted on January 31, 1997, until November 11, 1999.

* * * * *

[FR Doc. 99-2194 Filed 1-28-99; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AD-FRL-6227-5]

RIN 2060-AE04

National Emission Standards for Hazardous Air Pollutants From Secondary Lead Smelting

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; correction.

SUMMARY: This action corrects the national emission standards for hazardous air pollutants (NESHAP) for new and existing secondary lead smelters. Specifically, the compliance date is corrected to December 23, 1997, and a 5-year Title V permitting deferral for non-major sources is reinstated.

DATES: *Effective Date:* January 29, 1999.

Judicial Review. Under section 307(b)(1) of the Act, judicial review of a NESHAP 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 the publication of this final rule. Under section 307(b)(2) of the Act, the requirements that are the subject of this document may not be challenged later in civil or criminal proceedings brought by the EPA to enforce these requirements.

ADDRESSES: Docket. Docket No. A-92-43, containing information considered by the EPA in development of the promulgated standards, is available for public inspection and copying between 8:00 a.m. and 5:30 p.m., Monday through Friday except for Federal holidays, at the following address: U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center (MC-6102), 401 M Street, SW, Washington, DC 20460; telephone (202) 260-7548. The docket is located at the above address in Room M-1500, Waterside Mall (ground floor). A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Mr. Kevin Cavender, Metals Group, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone (919) 541-2364.

SUPPLEMENTARY INFORMATION:

I. Overview

The EPA promulgated the NESHAP for new and existing secondary lead smelters on June 23, 1995 (60 FR 32587). The compliance date was set at June 23, 1997. On December 12, 1996 (61 FR 65334), the EPA extended the compliance date to December 23, 1997. On June 13, 1997, the EPA amended the rule, and inadvertently reset the compliance date to June 23, 1997. This action corrects the compliance date to December 23, 1997, as extended in the December 12, 1996 amendment to the rule.

On June 3, 1996, a 5-year Title V permitting deferral for area sources was added (61 FR 27785). Again, when the rule was amended on June 13, 1997, the deferral was inadvertently removed. This action reinstates the 5-year Title V permitting deferral for area sources.

II. Administrative Requirements

The Administrative Procedure Act

Consistent with section 553(b) of the Administrative Procedure Act (APA), the EPA has found good cause that notice and an opportunity to comment on this action is unnecessary because this action merely corrects a typographical error and would not benefit from public comment. In addition, the EPA has found good cause under APA section 553(d)(3) for waiving the APA's 30-day delay in effectiveness as to this final rule. It is important that this minor correction becomes effective immediately because it corrects a regulatory requirement that is currently applicable to affected facilities.

Docket

The docket is an organized and complete file of all the information considered by the EPA in the development of this rulemaking. The docket is a dynamic file, since material is added throughout the rulemaking development. The docket system is intended to allow members of the public and affected industries to readily identify and locate documents so that they can effectively participate in the rulemaking process. Along with the background information documents (BIDs) and preambles to the proposed and promulgated standards, the contents of the docket, excluding interagency review materials, will serve as the official record in case of judicial review (section 307(d)(7)(A) of the Act).

Executive Order 12866

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether a regulatory action is "significant" and therefore subject to OMB review and the requirements of the Executive Order. The EPA has determined that this correction to the final rule is not a "significant regulatory action" under the terms of the Executive Order and is therefore not subject to OMB review.

Executive Order 12875

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 consults 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 correction does not create a mandate on State, local or tribal governments. The correction does not impose any enforceable duties on these entities. Accordingly, the requirements

of section 1(a) of Executive Order 12875 do not apply to this correction.

Executive Order 13084

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 action does not significantly or uniquely affect the communities of Indian tribal governments. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this action.

Paperwork Reduction Act

Under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*, EPA must consider the paperwork burden imposed by any information collection request in a proposed or final rule. This action will not impose any new information collection requirements.

Regulatory Flexibility Act

The Regulatory Flexibility Act (or RFA, Public Law 96-354, September 19, 1980) requires Federal agencies to give special consideration to the impact of regulation on small businesses. The RFA specifies that a regulatory flexibility analysis must be prepared if a screening analysis indicates a regulation will have a significant economic impact on a substantial number of small entities. This action will not result in increased economic impacts to small entities.

Submission to Congress and the General Accounting Office

Under 5 U.S.C. 801(a)(1)(A) as added by the Small Business Regulatory Enforcement Fairness Act of 1996, EPA submitted a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives and the Comptroller General of the General Accounting Office prior to publication of the rule in today's **Federal Register**. This rule is not a "major rule" as defined by 5 U.S.C. 804(2).

National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Pub. L. No. 104-113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. This action does not involve technical standards.

Protection of Children from Environmental Health Risks and Safety Risk Under Executive Order 13045

Executive Order 13045: "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that: (1) is determined to be "economically significant" as defined under E.O. 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency. This action is not subject to E.O. 13045 because it is not economically significant, nor does it involve decisions based on environmental health or safety risks.

List of Subjects in 40 CFR Part 63

Environmental protection, Compliance dates, Secondary lead smelters.

Dated: January 22, 1999.

Robert Perciasepe,
Assistant Administrator for Air and Radiation.

For the reasons set out in the preamble, title 40, chapter I, of the Code of Federal Regulations is amended as follows:

PART 63—[AMENDED]

1. The authority citation for part 63 continues to read as follows:

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

2. Section 63.541 is amended by adding paragraph (c) to read as follows:

§ 63.541 Applicability.

* * * * *

(c) The owner or operator of any source subject to the provisions of this subpart X is subject to title V permitting requirements. These affected sources, if not major or located at major sources as defined under 40 CFR 70.2, may be deferred by the applicable title V permitting authority from title V permitting requirements for 5 years after the date on which the EPA first approves a part 70 program (i.e., until December 9, 1999). All sources receiving deferrals shall submit title V permit applications within 12 months of such date (by December 9, 2000). All sources receiving deferrals still must meet the compliance schedule as stated in § 63.546.

3. Section 63.546 is amended by revising paragraph (a) as follows:

§ 63.546 Compliance dates.

(a) Each owner or operator of an existing secondary lead smelter shall achieve compliance with the requirements of this subpart no later than December 23, 1997. Existing sources wishing to apply for an extension of compliance pursuant to section § 63.6(i) of this part must do so no later than June 23, 1997.

* * * * *

[FR Doc. 99-2196 Filed 1-28-99; 8:45 am]

BILLING CODE 6560-50-U

ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 180**

[OPP-300772; FRL-6050-6]

RIN 2070-AB78

Azoxystrobin; Pesticide Tolerances for Emergency Exemptions

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This regulation establishes a time-limited tolerance for combined residues or residues of azoxystrobin or methyl (E)-2-[2-[6-(2-cyanophenoxy)pyrimidin-4-ylloxy]phenyl]-3-methoxyacrylate and its Z isomer in or on strawberries. This action is in response to EPA's granting

of an emergency exemption under section 18 of the Federal Insecticide, Fungicide, and Rodenticide Act authorizing use of the pesticide on strawberries in Florida. This regulation establishes a maximum permissible level for residues of Azoxystrobin in this food commodity pursuant to section 408(l)(6) of the Federal Food, Drug, and Cosmetic Act, as amended by the Food Quality Protection Act of 1996. The tolerance will expire and is revoked on July 30, 2000.

DATES: This regulation is effective January 29, 1999. Objections and requests for hearings must be received by EPA on or before March 30, 1999.

ADDRESSES: Written objections and hearing requests, identified by the docket control number, [OPP-300772], must be submitted to: Hearing Clerk (1900), Environmental Protection Agency, Rm. M3708, 401 M St., SW., Washington, DC 20460. Fees accompanying objections and hearing requests shall be labeled "Tolerance Petition Fees" and forwarded to: EPA Headquarters Accounting Operations Branch, OPP (Tolerance Fees), P.O. Box 360277M, Pittsburgh, PA 15251. A copy of any objections and hearing requests filed with the Hearing Clerk identified by the docket control number, [OPP-300772], must also be submitted to: Public Information and Records Integrity Branch, Information Resources and Services Division (7502C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460. In person, bring a copy of objections and hearing requests to Rm. 119, Crystal Mall 2 (CM #2), 1921 Jefferson Davis Hwy., Arlington, VA.

A copy of objections and hearing requests filed with the Hearing Clerk may also be submitted electronically by sending electronic mail (e-mail) to: opp-docket@epamail.epa.gov. Copies of objections and hearing requests must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. Copies of objections and hearing requests will also be accepted on disks in WordPerfect 5.1/6.1 file format or ASCII file format. All copies of objections and hearing requests in electronic form must be identified by the docket control number [OPP-300772]. No Confidential Business Information (CBI) should be submitted through e-mail. Electronic copies of objections and hearing requests on this rule may be filed online at many Federal Depository Libraries.

FOR FURTHER INFORMATION CONTACT: By mail: Jacqueline E. Gwaltney, Registration Division (7505C), Office of

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 semi-

annual 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 effect, the agency promulgating the rule must

submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. This 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, PM₁₀, 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 PM₁₀ 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_p) 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_p) 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 SO₂ 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 SO₂ 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 SO₂ 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 SO₂ 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 or 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.

* * * * *

[FR Doc. 99-3252 Filed 2-11-99; 8:45 am]

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Federal Register

Tuesday
March 9, 1999

Part II

Environmental Protection Agency

40 CFR Parts 60 and 63

Polymer and Resin Production Facilities
(Groups I and IV) and Volatile Organic
Compound (VOC) From the Polymer
Manufacturing Industry; Final Rule and
Proposed Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 60 and 63

[AD-FRL-6301-6]

RIN 2060-AH-47

National Emission Standards for Hazardous Air Pollutants Emissions: Group I Polymers and Resins and Group IV Polymers and Resins and Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: On September 5, 1996, the EPA issued the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Group I Polymers and Resins (61 FR 46906); on September 12, 1996, the EPA issued the Group IV Polymers and Resins NESHAP (61 FR 48208); and on December 11, 1990, the EPA issued the Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry (55 FR 51035). This action revises the promulgated rules by adding provisions, correcting errors, and making clarifications in all of the above-

mentioned rulemakings, as described in the remainder of this document.

DATES: The direct final rule is effective May 10, 1999 without further notice unless the Agency receives relevant adverse comments by April 8, 1999. (However, see information on the public hearing below.) Should the Agency receive such comments, it will publish a timely withdrawal informing the public that this rule will not take effect.

Public Hearing. If anyone contacts the EPA requesting to speak at a public hearing by March 19, 1999, a public hearing will be held in Research Triangle Park, North Carolina, beginning at 10 a.m. on March 23, 1999. Persons interested in attending the hearing should call Ms. Marguerite Thweatt at (919) 541-5673 to verify that a hearing will be held. If a hearing is requested, written comments must be received by April 23, 1999.

ADDRESSES: Written comments should be submitted (in duplicate, if possible) to: Air and Radiation Docket and Information Center (6102), Attention Docket Number A-92-44 (Group I Polymers and Resins) and/or Docket Number A-92-45 (Group IV Polymers and Resins), Room M-1500, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460. The EPA requests that a separate copy of each public comment be sent to the contact person listed below (see **FOR**

FURTHER INFORMATION CONTACT). Comments may also be submitted electronically by following the instructions provided in **SUPPLEMENTARY INFORMATION**.

Docket. Docket numbers A-92-44 and A-92-45, containing information relevant to this Direct Final Rule, are available for public inspection between 8 a.m. and 5:30 p.m., Monday through Friday (except for Federal holidays) at the following address: U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center (MC-6102), 401 M Street, SW, Washington, DC 20460. The docket is located at the above address in Room M-1500, Waterside Mall (ground floor). Alternatively, a docket index, as well as individual items contained within the docket, may be obtained by calling (202) 260-7548 or (202) 260-7549. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Mr. Robert E. Rosensteel, Organic Chemicals Group, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541-5608.

SUPPLEMENTARY INFORMATION:

Regulated Entities

Entities potentially regulated by this direct final rule include:

Category	Examples of regulated entities
Industry	Butyl Rubber, Halobutyl Rubber, Epichlorohydrin Elastomer, Ethylene Propylene Rubber, Hypalon™, Neoprene, Nitrile Butadiene Rubber, Nitrile Butadiene Latex, Polybutadiene Rubber, Styrene-Butadiene Rubber or Latex, Acrylonitrile Butadiene Styrene Resin, Styrene Acrylonitrile Resin, Methyl Methacrylate Acrylonitrile Butadiene Styrene Resin, Methyl Methacrylate Butadiene Styrene Resin, Poly(ethylene terephthalate) Resin, Polystyrene Resin, Nitrile Resin, Polypropylene and polyethylene producers

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. To determine whether your facility is regulated by this direct final rule, you should carefully examine the applicability criteria in §§ 63.480 and 63.1310 of the promulgated rules. If you have any questions regarding the applicability of this direct final rule to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

Electronic Access and Filing Addresses

This document, the promulgated texts, and other background information are available in Docket Numbers A-92-44 and A-92-45 or by request from the EPA's Air and Radiation Docket and Information Center (see **ADDRESSES**).

These documents can also be accessed through the EPA web site at: <http://www.epa.gov/ttn/oarpg>. For further information and general questions regarding the Technology Transfer Network (TTN), call Mr. Hersch Rorex (919) 541-5637 or Mr. Phil Dickerson (919) 541-4814.

Electronic comments and data may be submitted by sending electronic mail (e-mail) to: a-and-r-docket@epamail.epa.gov. Submit comments as an ASCII file, avoiding the use of special characters and any form of encryption. Comments and data will also be accepted on diskette in Word Perfect 5.1 or 6.1 or ACSII file format. Identify all comments and data in electronic form by the docket numbers A-92-44 and/or A-92-45. No Confidential Business Information (CBI) should be submitted through electronic

mail. Electronic comments may be filed online at many Federal Depository Libraries. For additional information concerning comments, see the parallel proposal action found in the Proposed Rules section of this **Federal Register**.

Outline

The information presented in this preamble is organized as follows:

- I. Background
- II. Summary of and Rationale for Revisions
 - A. Correction to Equation in § 60.564
 - B. Modification of Compressors
 - C. Compliance Extension for Compressors
 - D. Changes to the 20 ppmv Organic HAP Outlet Concentration Option for Group 1 Continuous Process Vents
 - E. Addition of New PET Compliance Options
 - F. Clarification of the Term "Primary Condenser"

- C. References to Test Methods for the Polymers and Resins I Rule
 - H. Cross-reference and Grammatical Corrections in Emissions Averaging Provisions
 - I. Removal of Reference to Obsolete HON Table
 - J. Clarification to Group 1 Storage Vessel Requirements in Subpart JJJ
 - K. Process Vent Provisions for Affected Sources Producing Acrylonitrile Styrene Acrylate Resin/Alpha Methyl Styrene Acrylonitrile Resin (ASA/AMSAN)
 - L. Exemptions from Wastewater Provisions in Subpart JJJ
 - M. Amendments to Tables 3 and 5 of Subpart JJJ
- III. Impacts
- IV. Administrative Requirements
- A. Docket
 - B. Executive Order 12866
 - C. Executive Order 12875: Enhancing Intergovernmental Partnerships
 - D. Executive Order 13084: Consultation and Coordination with Indian Tribal Governments
 - E. Unfunded Mandates Reform Act
 - F. Regulatory Flexibility
 - G. Paperwork Reduction Act
 - H. Applicability of Executive Order 13045
 - I. Submission to Congress and the Comptroller General
 - J. National Technology Transfer and Advancement Act

I. Background

On September 5, 1996 (61 FR 46906), and September 12, 1996 (61 FR 48208), the EPA published the Group I Polymers and Resins NESHAP and the Group IV Polymers and Resins NESHAP, respectively. These regulations were promulgated as subparts U and JJJ in 40 CFR part 63. On November 25, 1996 the EPA published an Advance Notice of Proposed Rulemaking (ANPR) (61 FR 59849) informing the public of the intent to propose amendments to the recently promulgated Group I Polymers and Resins NESHAP and Group IV Polymers and Resins NESHAP.

Although it is anticipated that the amendments to the Group I and Group IV Polymers and Resins NESHAP will be published simultaneously with this Direct Final Rule, it is not likely that those amendments will be finalized prior to Spring 1999. For that reason, the EPA is publishing this direct final rule, which, as long as no relevant adverse comments are received by April 8, 1999, will become effective immediately (without further rulemaking action) on May 10, 1999. If adverse comments are received on one or more of the distinct amendments, paragraphs, or sections in this rulemaking, the EPA will publish a timely withdrawal in the **Federal Register** withdrawing the specific provisions that are the subject of adverse comment. Any provision in

today's rulemaking that does not receive adverse comment will become effective on the date set out above, notwithstanding any adverse comment on any other distinct provision in today's rulemaking. The EPA is publishing this rule as a direct final rule because the EPA views this as a noncontroversial amendment and anticipates no adverse comments. However, should adverse comments be received on a distinct provision in this rulemaking, the EPA will publish a timely withdrawal in the **Federal Register** indicating which provisions will become effective and which provisions are being withdrawn. If part or all of this Direct Final Rule is withdrawn, all public comments received will be addressed in a subsequent final rule based on today's proposal. The nature of the changes contained in today's direct final rule are such that it will be of great benefit to industry and the States for these changes to become effective sooner rather than later, as will be described in more detail below.

II. Summary of and Rationale for Revisions

A. Correction to Equation in § 60.564

The first correction that this direct final rule makes is to an equation in § 60.564 of the Standards for Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry (subpart DDD). The equation in § 60.564(h) is being corrected so that the emission rate determined by the equation is actually in kg total organic compound (TOC) per Mg product. During work on the other changes contained in this direct final rule, the EPA became aware that the promulgated version of the equation in § 60.564(h) misplaced the conversion factor between kilograms and megagrams, resulting in an erroneous production rate of polymer. The corrected equation results in the correct units for the emission rate of TOC (i.e., kg TOC/Mg product).

B. Modification of Compressors

The remainder of the changes contained in this Direct Final Rule are either in the Group I Polymers and Resins NESHAP, in the Group IV Polymers and Resins NESHAP, or both. The NESHAP for Group I Polymers and Resins and for Group IV Polymers and Resins omitted a provision that is contained in the Hazardous Organics NESHAP (HON), 40 CFR part 63, subpart H, on which these provisions are based. This provision, as added at

§§ 63.481(d)(1)(iv) and 63.1311(d)(1)(iv), specifies another criterion to be considered in determining the compliance data for compressors.

C. Compliance Extension for Compressors

This direct final rule includes new language in § 63.1311(d)(4), as § 63.1311(d)(4)(ii), which corrects an error in the promulgated paragraph. At promulgation, this paragraph identified two situations in which a compliance extension could be requested. These situations are if the compressor must be replaced or the distance piece must be recast. A third situation (which was included in subpart U, as § 63.481(d)(4)(iii)) should have been included, which is if a design modification is required to connect the compressor to a closed-vent or recovery system. As part of adding this third situation, the paragraph was reorganized to improve the clarity.

D. Changes to the 20 ppmv Organic HAP Outlet Concentration Option for Group 1 Continuous Process Vents

Several changes have been made related to the 20 ppmv organic HAP outlet concentration compliance option for Group 1 continuous process vents subject to §§ 63.485 or 63.1315, which reference to the HON process vent requirements in §§ 63.113 through 63.118. The outlet concentration limit of 20 ppmv represents the performance limit of the control technology (see 61 FR 43698, August 26, 1996, pg. 43704 for more details). When determining compliance with the 20 ppmv outlet concentration standard under §§ 63.485 or 63.1315, the promulgated rule required that the outlet concentration be corrected to 3 percent oxygen. The changes made in this direct final rule only require a correction to 3 percent oxygen if supplemental combustion air is used to combust the emissions. A definition of supplemental combustion air has also been added. Finally, similar language has been added as part of adding a 20 ppmv outlet concentration compliance option to the aggregate batch vent stream provisions. The addition of a 20 ppmv organic HAP outlet concentration compliance option for aggregate batch vent streams is discussed later in this preamble.

The Polymers and Resins I and IV rules refer directly to the HON for control of continuous process vents subject to §§ 63.485 or 63.1315. Both rules (Polymers and Resins I and IV) refer to, and are based on, the HON process vent requirements for aggregate batch vent streams. Under the HON, the correction to 3 percent oxygen is

required for purposes of demonstrating compliance with the 20 ppmv outlet concentration standard. The purpose of correcting an outlet concentration to 3 percent oxygen is to prevent owners or operators from diluting streams to meet the 20 ppmv outlet concentration standard; dilution as a means of complying with a part 63 standard is prohibited by the General Provisions (see § 63.4(b)). The value of 3 percent originates from good engineering practices. Synthetic Organic Chemical Manufacturing (SOCMI) facilities subject to the HON do not typically have high oxygen, low VOC/HAP concentration streams; streams from SOCMI unit operations are typically low oxygen, high VOC/HAP concentration streams that require supplemental combustion air for purposes of combusting the emissions. For such oxygen deficient vent streams, adding the proper amount of supplemental combustion air would result in the outlet stream containing approximately 3 percent oxygen. The HON continuous process vent provisions are written assuming that continuous process vents will require supplemental combustion air when they are combusted, and therefore requires a 3 percent oxygen correction for all continuous process vents to prevent dilution.

The concept of requiring the correction to 3 percent oxygen only when supplemental combustion air is used, as is done in this direct final rule has a precedent in the Polymer Manufacturing New Source Performance Standards (NSPS). During development of the Polymer Manufacturing NSPS, the issue of requiring a high oxygen, low VOC concentration stream to correct the outlet concentration to 3 percent oxygen was raised. Commenters made the point that an oxygen correction may be appropriate for oxygen deficient streams where supplemental combustion air has been added in order to ensure combustion of the emissions, but such a correction is not appropriate for high oxygen, low VOC concentration streams. Review of this concern revealed that requiring an oxygen correction for processes with inherently high oxygen concentration streams would amount to taking away the compliance option of reaching the 20 ppmv outlet concentration. Because the combination of low VOC/HAP concentration and technology limitations of control devices sometimes make it impossible to achieve a 98 percent emission reduction, the 20 ppmv outlet concentration may be necessary for some streams. For the group of streams that cannot demonstrate a 98 percent

emission reduction, failure to address this issue would make it impossible for owners or operators to demonstrate compliance. As a result of these considerations, the final rule for the Polymer Manufacturing NSPS was changed to require a correction to 3 percent oxygen only if supplemental combustion air was used to combust the emissions.

The EPA has determined that a similar amendment is appropriate for the Polymers and Resins I and IV rules. Accordingly, the EPA has conducted a technical analysis to provide additional support for this decision. The technical analysis is documented in a memorandum to the project docket. The analysis found that an oxygen correction had not been applied to the data used to develop the 20 ppmv outlet concentration standard. Therefore, the 20 ppmv value is appropriate as an outlet concentration standard for uncorrected outlet concentrations (i.e., streams that do not require supplemental combustion air). This amendment does not alter the use of the 20 ppmv value compliance option where supplemental combustion air is used, provided, as with the promulgated rule, a 3 percent oxygen correction is made. Because the proper addition of supplemental combustion air should result in an oxygen outlet concentration of approximately 3 percent, requiring a correction to 3 percent oxygen should not change the outlet concentration of VOC/HAP significantly, and will ensure that the 20 ppmv outlet concentration standard will not be met through dilution.

In conclusion, the Polymers and Resins I and IV rules regulate industries (i.e., elastomer producers and thermoplastic producers, respectively) that may contain high oxygen, low VOC/HAP concentration process vent streams (e.g., streams that do not require supplemental combustion air such as vent streams from dryers), as well as low oxygen concentration streams. Therefore, for the same reason that a change was made to the Polymer Manufacturing NSPS and based on the support provided by the technical analysis described above, a provision to require an outlet concentration oxygen correction only when supplemental combustion air is used has been added to the continuous process vent provisions (i.e., §§ 63.485 and 63.1315) for the Polymers and Resins I and IV rules. Similar changes have been made to the aggregate batch vent stream provisions, as part of adding a 20 ppmv outlet concentration compliance option to those provisions.

Definitions of "supplemental combustion air" and "combustion device burner". The EPA has added a definition of supplemental combustion air that reads as follows:

Supplemental combustion air means the air that is added to a vent stream after the vent stream leaves the unit operation. Air that is part of the vent stream as a result of the nature of the unit operation is not considered supplemental combustion air. Air required to operate combustion device burner(s) is not considered supplemental combustion air.

In adding this definition, the EPA is distinguishing supplemental combustion air from dilution air and from air required to operate the combustion device burner(s). The second sentence of the definition clarifies that a vent stream can contain air that is *not* considered to be "supplemental combustion air," as long as the air is part of the vent stream prior to the vent stream leaving the unit operation. This clarification ensures that processes operating at ambient or near ambient oxygen levels are not considered to be using supplemental combustion air. An example of this kind of process is a dryer, where very high flow rates of ambient air are heated and blown over/through/around polymer that is being dried and very low levels of HAP are picked up as part of the drying process. The third sentence of the definition clarifies that air used to operate combustion device burner(s) is not considered supplemental combustion air. Failure to include this clarification could allow the interpretation that every combustion device uses supplemental combustion air. To further clarify the meaning of this third sentence, the EPA has added a definition of combustion device burner that reads as follows:

Combustion device burner means a device designed to mix and ignite fuel and air to provide a flame to heat and oxidize waste organic vapors in a combustion device.

The EPA is not amending the reference in these rules to the General Provisions prohibition against dilution to prevent compliance through dilution. Section 63.4(b). Circumvention, discusses the prohibition against dilution, and specifically prohibits "the use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere."

E. Addition of New PET Compliance Options

Section 63.1316(b), which specifies control requirements for certain continuous process vents at

poly(ethylene terephthalate) (PET) affected sources, has been amended to add compliance options based on the use of combustion devices; combustion controls allowed in other sections of this rule assure highly efficient reduction of emissions. The changes to § 63.1316(b) contained in this direct final rule will provide the same option for owners or operators of continuous dimethyl terephthalate (DMT) PET processes and continuous terephthalic acid (TPA) PET processes.

The need for these changes became apparent when a request was received from a company (Docket A-92-45, item VI-A-12) that wanted to comply with the continuous process vent requirements of § 63.1316(b) using combustion controls. In one situation, the company is controlling continuous process vents from a continuous DMT PET process with a boiler that achieves a 99.99 percent emission reduction, based on emission tests conducted by the EPA. In this case, emissions are reduced to a much greater extent than the promulgated rule requires, and wastewater streams from the process are also eliminated. In the second case, the company is controlling continuous process vents from a continuous TPA PET process with a catalytic incinerator that achieves 98 percent emission reduction. Wastewater discharges from the process are eliminated in the second case, as well. Analysis shows that emissions are reduced to a greater extent with the control systems described above than would be achieved through compliance with the separate, promulgated process vent and wastewater provisions (Docket A-92-45, Item VI-B-22).

Therefore, the EPA believes that the same combustion control options (including, but not limited to, thermal incinerators, catalytic incinerators, boilers, or process heaters) that are allowed elsewhere in this rule (for example in § 63.1316(c) for polystyrene affected sources) should be provided in § 63.1316(b), since these combustion devices are highly efficient techniques for reducing organic HAP emissions. Also, the application of these combustion techniques allows innovative control strategies, including pollution prevention measures such as those described above, which might otherwise be discouraged under the promulgated rule.

F. Clarification of the Term "Primary Condenser"

In both the Group I and the Group IV Polymers and Resins NESHAP, this Direct Final Rule is amending language in order to clarify what these rules mean

by the term "primary condenser." This change is being made in §§ 63.488(a)(2) and 63.1323(a)(2). There was some confusion over the language contained in those paragraphs at promulgation (partially due to an inconsistency between the promulgated preambles and the promulgated rules), and with the new language the EPA hopes to eliminate any such confusion. As §§ 63.488(a)(2) and 63.1323(a)(2) should make clear, a primary condenser can be a condenser operating as a reflux condenser on either a reactor or distillation column, or can be a condenser operating on a stripper or distillation operation to recover monomer, reaction products, by-products, or solvent.

G. References to Test Methods for the Polymers and Resins I Rule

This direct final rule is also adding references to the Test Methods for the Polymers and Resins I Rule, which were finalized on March 17, 1997 (62 FR 12546), and are contained in Appendix A of part 63. The newly added references to those Test Methods are contained in §§ 63.495(b)(3) and (e) and 63.505(e)(1)(ii).

H. Cross-Reference and Grammatical Corrections in Emissions Averaging Provisions

This direct final rule is making cross-reference and grammatical corrections (e.g., changing "can" to "may," where appropriate) throughout §§ 63.503 and 63.1332. No substantive changes have been made to either of those two sections.

I. Removal of Reference to Obsolete HON Table

In §§ 63.506(e)(4)(ii)(H)(I) and 63.1335(e)(4)(ii)(L)(I), a reference to Table 14b of subpart G has been removed, because that table was removed in the promulgated amendments to the HON.

J. Clarification to Group 1 Storage Vessel Requirements in Subpart JJJ

A new paragraph is being introduced with this direct final rule (§ 63.1314(b)(3)), in order to clarify that, for all storage vessels that are not described in § 63.1314(b)(1) or (2), the owner or operator must control emissions to the level specified in § 63.119.

K. Process Vent Provisions for Affected Sources Producing Acrylonitrile Styrene Acrylate Resin/Alpha Methyl Styrene Acrylonitrile Resin (ASA/AMSAN)

This direct final rule includes a new paragraph at § 63.1315(e), which states

the special control level for process vents at affected sources that produce acrylonitrile styrene acrylate resin (ASA) or alpha methyl styrene acrylonitrile resin (AMSAN). In addition, a reference to the new provisions in § 63.1315(e) has been added in § 63.1321, as § 63.1321(d).

L. Exemptions from Wastewater Provisions in Subpart JJJ

This direct final rule adds two paragraphs to § 63.1330, both of which act as exemptions from certain wastewater provisions in that section. The new paragraphs are § 63.1330(d) and (e), and pertain to affected sources producing ASA/AMSAN and affected sources producing polystyrene using a continuous or batch process.

M. Amendments to Tables 3 and 5 of Subpart JJJ

This direct final rule makes corrections and clarifications to both Tables 3 and 5. In the amended Table 5, the entry for Group 1 storage vessels associated with the production of styrene acrylonitrile resin (SAN) was clarified and footnote "d" was added. Because there are different control levels for different sets of storage vessels, the promulgated table appeared to present overlapping capacity and vapor pressure criteria, which was not the EPA's intent.

III. Impacts

The changes contained in this direct final rule are corrections and clarifications of the EPA's intent at the promulgation of subparts U and JJJ, and will not affect the estimated emissions reduction or the control cost for these rules. These clarifications and corrections should make it easier for owners and operators of affected sources, and for local and State authorities, to understand and implement the requirements found in subparts U and JJJ.

IV. Administrative Requirements

A. Docket

The docket is an organized and complete file of all the information considered by the EPA in the development of this rulemaking. The docket is a dynamic file, because material is added throughout the rulemaking development. The docketing system is intended to allow members of the public and industries involved to readily identify and locate documents so that they can effectively participate in the rulemaking process. Along with the proposed and promulgated standards and their preambles, the contents of the docket will serve as the

record in the case of judicial review. (See section 307(d)(7)(A) of the Act.)

B. Executive Order 12866

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the EPA must submit to the Office of Management and Budget (OMB) for review significant regulatory actions. The Executive Order defines "significant regulatory action" as one that OMB determines is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, 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.

It has been determined that this Direct Final Rule does not qualify as a "significant regulatory action" under the terms of Executive Order 12866 and, therefore, is not subject to review by the Office of Management and Budget.

C. Executive Order 12875: Enhancing Intergovernmental Partnerships

Under Executive Order 12875, the 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 direct final rule does not create a mandate on State, local, or tribal governments. This direct final rule does not impose any enforceable duties on these entities. Accordingly, the requirements of section 1(a) of Executive Order 12875 do not apply to this direct final rule.

D. Executive Order 13084: Consultation and Coordination With Indian Tribal Governments

Under Executive Order 13084, the 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 the EPA to develop an effective process permitting elected and other representatives of Indian tribal governments "to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities."

This direct final rule does not impose any duties or compliance costs on Indian tribal governments. Further, the direct final rule provided herein does not significantly alter the control standards imposed by subpart U or subpart JJJ for any source, including any that may affect communities of the Indian tribal governments. Hence, today's direct final rule does not significantly or uniquely affect the communities of Indian tribal governments. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this direct final rule.

E. Unfunded Mandates Reform Act

Section 202 of the Unfunded Mandates Reform Act of 1995 (UMRA), 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 the aggregate, or by the private sector, of more than \$100 million in any one year. 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.

The EPA has determined that this direct final rule does not include a Federal mandate that may result in estimated costs of, in the aggregate, \$100 million or more to either State, local, or tribal governments in the aggregate, or to the private sector, and that this direct final rule does not significantly or uniquely impact small governments, because it contains no requirements that apply to such governments or impose obligations upon them. The EPA has not prepared a budgetary impact statement or specifically addressed the selection of the least costly, most cost-effective, or least burdensome alternative. In addition, 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. Therefore, the requirements of the Unfunded Mandates Act do not apply to this direct final rule.

F. Regulatory Flexibility

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small business, small not-for-profit enterprises, and small governmental jurisdictions. This direct final rule would not have a significant impact on a substantial number of small entities, because it clarifies and makes corrections to the promulgated versions of the Group I and IV Polymers and Resins NESHAP, but imposes no additional regulatory requirements on owners or operators of affected sources.

G. Paperwork Reduction Act

For both the Group I and Group IV Polymers and Resins NESHAP, the information collection requirements (ICRs) were submitted to the OMB under the *Paperwork Reduction Act*. At promulgation, OMB had already approved the ICRs for the Group IV Polymers and Resins NESHAP and assigned those standards the OMB control number 2060-0351. Subsequently, the OMB approved the ICRs for the Group I Polymers and Resins NESHAP, and on July 15, 1997 (62 FR 37720) the OMB control number

2060-0356 was assigned to the Group I Polymers and Resins NESHAP. An Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations are listed in 40 CFR part 9 and 48 CFR Chapter 15. The EPA has amended 40 CFR part 9, § 9.1, to indicate the ICRs contained in the Group I and IV Polymers and Resins NESHAP.

The amendments to the NESHAP contained in this direct final rule should have no impact on the information collection burden estimates made previously. Therefore, the ICRs have not been revised.

H. Applicability of Executive Order 13045

Executive Order 13045: "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that the EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Order has the potential to influence the regulation. This direct final rule is not subject to Executive Order 13045 because it does not establish an environmental standard intended to mitigate health or safety risks.

I. Submission to Congress and the Comptroller General

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

J. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA) directs all Federal agencies to use voluntary consensus standards instead of government-unique standards in their regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., material specifications, test methods, sampling and analytical procedures, business practices, etc.) that are developed or adopted by one or more voluntary consensus standards bodies. Examples of organizations generally regarded as voluntary consensus standards bodies include the American Society for Testing and Materials (ASTM), the National Fire Protection Association (NFPA), and the Society of Automotive Engineers (SAE). The NTTAA requires Federal agencies like EPA to provide Congress, through OMB, with explanations when an agency decides not to use available and applicable voluntary consensus standards.

This action does not involve the proposal of any new technical standards. The EPA welcomes comments on this aspect of the Direct Final Rule and, specifically, invites the public to identify potentially-applicable voluntary consensus standards and to explain why such standards should be used in this regulation.

As part of a larger effort, the EPA is undertaking a project to cross-reference existing voluntary consensus standards on testing, sampling, and analysis with current and future EPA test methods. When completed, this project will assist the EPA in identifying potentially-applicable voluntary consensus standards which can then be evaluated for equivalency and applicability in determining compliance with future regulations.

List of Subjects

40 CFR Part 60

Environmental protection, Air pollution control, Volatile organic compounds.

40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances.

Dated: February 10, 1999.

Carol M. Browner,
Administrator.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows.

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

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

Authority: 42 U.S.C. 7401, 7411, 7413, 7414, 7416, 7429, 7601, and 7602.

Subpart DDD—Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Polymer Manufacturing Industry

* * * * *

2. Amend § 60.564 by revising paragraph (h) introductory text to read as follows:

§ 60.564 Test Methods and procedures.

* * * * *

(h) The owner or operator shall determine compliance with the mass emission per mass product standards in §§ 60.560(d) and (e) and in §§ 60.562-1(b)(1)(i), (c)(1)(i)(A), (c)(1)(ii)(A), (c)(2)(i), and (c)(2)(ii)(A).

The emission rate of TOC shall be computed using the following equation:

$$ER_{TOC} = \frac{E_{TOC}}{P_p * Mg/1000kg}$$

Where:

ER_{TOC} = Emission rate of total organic compounds (minus methane and ethane), kg TOC/Mg product.

E_{TOC} = Emission rate of total organic compounds (minus methane and ethane) in the sample, kg/hr.

P_p = The rate of polymer produced, kg/hr.
Mg/1000 kg = Mg of polymer produced per kg of polymer produced.

* * * * *

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

3. The authority citation for part 63 continues to read as follows:

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

Subpart U—National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins

4. Amend § 63.481 by revising paragraphs (d)(1)(ii), and (d)(1)(iii); and by adding paragraph (d)(1)(iv), to read as follows:

§ 63.481 Compliance schedule and relationship to existing applicable rules.

* * * * *

(d) * * *
(1) * * *
(ii) A barrier fluid system will be installed;

(iii) A new barrier fluid will be utilized which requires changes to the existing barrier fluid system; or

(iv) The compressor will be modified to permit connecting the compressor to a fuel gas system or closed vent system, or be modified so that emissions from the compressor can be routed to a process.

* * * * *

5. Amend § 63.482 by adding, in alphabetical order, definitions for "combustion device burner" and "supplemental combustion air," to paragraph (b), to read as follows:

§ 63.482 Definitions.

* * * * *

(b) * * *
Combustion device burner means a device designed to mix and ignite fuel and air to provide a flame to heat and oxidize waste organic vapors in a combustion device.

* * * * *

Supplemental combustion air means the air that is added to a vent stream after the vent stream leaves the unit operation. Air that is part of the vent stream as a result of the nature of the unit operation is not considered supplemental combustion air. Air required to operate combustion device burner(s) is not considered supplemental combustion air.

* * * * *

6. Amend § 63.485 by revising paragraph (a); by adding and reserving paragraphs (t) and (u); and by adding paragraph (v), to read as follows:

§ 63.485 Continuous front-end process vent provisions.

(a) For each continuous front-end process vent located at an affected source, the owner or operator shall comply with the requirements of §§ 63.113 through 63.118, except as provided for in paragraphs (b) through (v) of this section. The owner or operator of continuous front-end process vents that are combined with

one or more batch front-end process vents shall comply with paragraph (o) or (p) of this section.

* * * * *

(v) When a combustion device is used to comply with the 20 parts per million by volume outlet concentration standard specified in § 63.113(a)(2), the correction to 3 percent oxygen is only required when supplemental combustion air is used to combust the emissions, for the purposes of this subpart. In addition, the correction to 3 percent oxygen specified in § 63.116(c)(3) and (c)(3)(iii) is only required when supplemental combustion air is used to combust the emissions, for the purposes of this subpart. Finally, when a combustion device is used to comply with the 20 parts per million by volume outlet concentration standard specified in § 63.113(a)(2), an owner or operator shall record and report the outlet concentration required in § 63.117(a)(4)(ii) and (a)(4)(iv) corrected to 3 percent oxygen when supplemental combustion air is used to combust the emissions, for the purposes of this subpart. When supplemental combustion air is not used to combust the emissions, an owner or operator may record and report the outlet concentration required in § 63.117(a)(4)(ii) and (a)(4)(iv) on an uncorrected basis or corrected to 3 percent oxygen, for the purposes of this subpart.

7. Amend § 63.487 by revising paragraph (b)(2), to read as follows:

§ 63.487 Batch front-end process vents—reference control technology.

* * * * *

(b) * * *
(2) For each aggregate batch vent stream, reduce organic HAP emissions by 90 weight percent or to a concentration of 20 parts per million by volume, whichever is less stringent, on a continuous basis using a control device. For purposes of complying with the 20 parts per million by volume outlet concentration standard, the outlet concentration shall be calculated on a dry basis. When a combustion device is used for purposes of complying with the 20 parts per million by volume outlet concentration standard, the concentration shall be corrected to 3 percent oxygen if supplemental combustion air is used to combust the emissions. If supplemental combustion air is not used, a correction to 3 percent oxygen is not required.

* * * * *

8. Amend § 63.488 by revising paragraph (a)(2), to read as follows:

§ 63.488 Methods and procedures for batch front-end process vent group determination.

(a) * * *

(2) The annual uncontrolled organic HAP or TOC emissions and annual average batch vent flow rate shall be determined at the exit from the batch unit operation. For the purposes of these determinations, the primary condenser operating as a reflux condenser on a reactor or distillation column, the primary condenser recovering monomer, reaction products, by-products, or solvent from a stripper operated in batch mode, and the primary condenser recovering monomer, reaction products, by-products, or solvent from a distillation operation operated in batch mode shall be considered part of the batch unit operation. All other devices that recover or oxidize organic HAP or TOC vapors shall be considered control devices as defined in § 63.482.

* * * * *

9. Amend § 63.490 by revising paragraph (e) introductory text and by adding paragraph (e)(3), to read as follows:

§ 63.490 Batch front-end process vents—performance test methods and procedures to determine compliance.

* * * * *

(e) *Aggregate batch vent stream testing for compliance with § 63.487(b)(2)*. Except as specified in paragraphs (e)(1) through (e)(3) of this section, owners or operators of aggregate batch vent streams complying with § 63.487(b)(2) shall conduct a performance test using the performance testing procedures for continuous front-end process vents in § 63.116(c).

* * * * *

(3) When a combustion device is used to comply with the 20 parts per million by volume outlet concentration standard specified in § 63.487(b)(2), the correction to 3 percent oxygen specified in the performance testing procedures of § 63.116(c)(3) and (c)(3)(iii) is only required when supplemental combustion air is used to combust the emissions, for the purposes of this subpart.

* * * * *

10. Amend § 63.491 by revising paragraph (b)(4) introductory text and adding paragraph (b)(5), to read as follows:

§ 63.491 Batch front-end process vents—recordkeeping requirements.

* * * * *

(b) * * *

(4) The following information when using a control device to meet the

percent reduction requirement specified in § 63.487 (a)(2) or (b)(2):

* * * * *

(5) When complying with the 20 parts per million by volume outlet concentration standard specified in § 63.487(b)(2), records of the outlet concentration of organic HAP or TOC on a dry basis. If supplemental combustion air is used to combust the emissions, the outlet concentration shall be corrected to 3 percent oxygen. If supplemental combustion air is not used, a correction to 3 percent oxygen is not required.

* * * * *

11. Amend § 63.495 by revising paragraph (b)(3) and adding paragraph (e) to read as follows:

§ 63.495 Back-end process provisions—procedures to determine compliance using stripping technology.

* * * * *

(b) * * *

(3) The residual organic HAP content in each sample is to be determined using the Methods specified in paragraph (e) of this section.

* * * * *

(e) The residual organic HAP content in each sample is to be determined using the methods specified in paragraphs (e)(1) through (e)(5) of this section, as applicable.

(1) For styrene butadiene rubber produced by the emulsion process, either Method 312a, 312b, or 312c of 40 CFR part 63, appendix A, shall be used.

(2) For styrene butadiene rubber produced by the solution process, either Method 313a or 313b of 40 CFR part 63, appendix A, shall be used.

(3) For polybutadiene rubber produced by the solution process, either Method 313a or 313b of 40 CFR part 63, appendix A, shall be used.

(4) For ethylene-propylene rubber produced by the solution process, either Method 310a, 310b, or 310c of 40 CFR part 63, appendix A, shall be used.

(5) Alternatively, any other method that has been validated according to the applicable procedures in Method 301 of 40 CFR part 63, appendix A, may be used.

* * * * *

12. Amend § 63.503 by revising paragraphs (a) introductory text, (a)(2), (a)(3), (c) introductory text, (c)(2), (c)(5)(i), (c)(5)(ii), (d)(5), (e)(3)(ii), (e)(5), (g)(1), (g)(2)(ii)(A), (g)(2)(iii)(B)(1), (g)(2)(iii)(B)(2), (g)(3), (g)(5), (g)(7)(ii)(A), (h)(1) introductory text, (h)(3), (h)(5), (h)(6)(ii) introductory text (the Equation remains unchanged), (h)(7)(ii) introductory text, (i) introductory text, (i)(1) introductory text, (i)(1)(iii), (i)(2), (i)(3), (i)(5) introductory text, (i)(5)(i),

(j)(2) introductory text, (j)(2)(ii)(B),

(j)(2)(ii)(D), (j)(2)(ii)(E), (j)(2)(iv),

(j)(2)(v), (k) introductory text, (k)(4)

introductory text, (m)(1)(i), (m)(1)(ii),

(m)(1)(iii), (m)(2)(i), (m)(2)(ii), (m)(3)(i),

(m)(3)(ii), (m)(3)(iii), (m)(4)(ii), (m)(5)(i),

(m)(5)(ii), (m)(5)(iii), and (m)(5)(iv), to

read as follows:

§ 63.503 Emissions averaging provisions.

(a) This section applies to owners or operators of existing affected sources who seek to comply with § 63.483(b) by using emissions averaging rather than following the provisions of §§ 63.484, 63.485, 63.486, 63.494, and 63.501.

* * * * *

(2) Compliance with the provisions of this section may be based on either organic HAP or TOC.

(3) For the purposes of the provisions in this section, whenever Method 18, 40 CFR part 60, appendix A, is specified within the paragraphs of this section or is specified by reference through provisions outside this section, Method 18 or Method 25A, 40 CFR part 60, appendix A, may be used. The use of Method 25A, 40 CFR part 60, appendix A, shall conform with the requirements in paragraphs (a)(3)(i) and (a)(3)(ii) of this section.

(i) The organic HAP used as the calibration gas for Method 25A, 40 CFR part 60, appendix A, shall be the single organic HAP representing the largest percent by volume of the emissions.

(ii) The use of Method 25A, 40 CFR part 60, appendix A, is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

* * * * *

(c) Paragraphs (c)(1) through (c)(4) of this section describe the emission points that may be used to generate emissions averaging credits if control was applied after November 15, 1990 and if sufficient information is available to determine the appropriate value of credits for the emission point. Paragraph (c)(5) of this section discusses the use of pollution prevention in generating emissions averaging credits.

* * * * *

(2) Storage vessels, continuous front-end process vents, and process wastewater streams that are determined to be Group 1 emission points and that are controlled by a technology that the Administrator or permitting authority agrees has a higher nominal efficiency than the reference control technology. Information on the nominal efficiencies for such technologies shall be submitted

and approved as provided in paragraph (i) of this section.

* * * * *

(5) * * *

(i) For a Group 1 storage vessel, batch front-end process vent, aggregate batch vent stream, continuous front-end process vent, or process wastewater stream, the pollution prevention measure shall reduce emissions more than if the reference control technology or standard had been applied to the emission point instead of the pollution prevention measure, except as provided in paragraph (c)(5)(ii) of this section.

(ii) If a pollution prevention measure is used in conjunction with other controls for a Group 1 storage vessel, batch front-end process vent, aggregate batch vent stream, continuous front-end process vent, or process wastewater stream, the pollution prevention measure alone does not have to reduce emissions more than the reference control technology or standard, but the combination of the pollution prevention measure and other controls shall reduce emissions more than if the applicable reference control technology or standard had been applied instead of the pollution prevention measure.

(d) * * *

(5) Emission points controlled to comply with a State or Federal rule other than this subpart cannot be used to generate credits, unless the level of control has been increased after November 15, 1990 to a level above what is required by the other State or Federal rule. Only the control above what is required by the other State or Federal rule will be credited. However, if an emission point has been used to generate emissions averaging credit in an approved emissions average, and the emission point is subsequently made subject to a State or Federal rule other than this subpart, the emission point may continue to generate emissions averaging credit for the purpose of complying with the previously approved emissions average.

(e) * * *

(3) * * *

(ii) The initial demonstration in the Emissions Averaging Plan or operating permit application that credit-generating emission points will be capable of generating sufficient credits to offset the debits from the debit-generating emission points shall be made under representative operating conditions. After the compliance date, actual operating data will be used for all debit and credit calculations.

* * * * *

(5) Record and report quarterly and annual credits and debits in the Periodic

Reports as specified in § 63.506(e)(6). Every fourth Periodic Report shall include a certification of compliance

with the emissions averaging provisions as required by § 63.506(e)(6)(x)(C)(2).

(1) Source-wide debits shall be calculated using Equation 33. Debits and all terms of the equation are in units of megagrams per month (Mg/month):

$$\begin{aligned} \text{Debits} = & \sum_{i=1}^n (\text{ECFEPV}_{i\text{ACTUAL}} - (0.02) \text{ECFEPV}_{i\text{u}}) + \sum_{i=1}^n (\text{ES}_{i\text{ACTUAL}} - (0.05) \text{ES}_{i\text{u}}) \\ & + (\text{EBEP}_{\text{ACTUAL}} - \text{EBEP}_{\text{c}}) + \sum_{i=1}^n (\text{EWW}_{i\text{ACTUAL}} - \text{EWW}_{i\text{c}}) \\ & + \sum_{i=1}^n (\text{EBFEPV}_{i\text{ACTUAL}} - (0.1) \text{EBFEPV}_{i\text{u}}) + \sum_{i=1}^n (\text{EABV}_{i\text{ACTUAL}} - (0.1) \text{EABV}_{i\text{u}}) \quad [\text{Eq. 33}] \end{aligned}$$

Where:

- ECFEPV_{iACTUAL} = Emissions from each Group 1 continuous front-end process vent i that is uncontrolled or is controlled to a level less stringent than the applicable reference control technology. ECFEPV_{iACTUAL} is calculated according to paragraph (g)(2)(iii) of this section.
- (0.02)ECFEPV_i = Emissions from each Group 1 continuous front-end process vent i if the applicable reference control technology had been applied to the uncontrolled emissions. ECFEPV_i is calculated according to paragraph (g)(2)(ii) of this section.
- ES_{iACTUAL} = Emissions from each Group 1 storage vessel i that is uncontrolled or is controlled to a level less stringent than the applicable reference control technology or standard. ES_{iACTUAL} is calculated according to paragraph (g)(3) of this section.
- (0.05)ES_i = Emissions from each Group 1 storage vessel i if the applicable reference control technology or standard had been applied to the uncontrolled emissions. ES_i is calculated according to paragraph (g)(3) of this section.
- EBEP_{ACTUAL} = Emissions from back-end process operations that do not meet the residual organic HAP limits in § 63.494. EBEP_{ACTUAL} is calculated according to paragraph (g)(4)(i) of this section.
- EBEP_c = Emissions from back-end process operations if the residual organic HAP limits in § 63.494(a) were met. EBEP_c is calculated according to paragraph (g)(4)(ii) of this section.
- EWW_{iACTUAL} = Emissions from each Group 1 wastewater stream i that is uncontrolled or is controlled to a level less stringent than the applicable reference control technology. EWW_{iACTUAL} is calculated according to paragraph (g)(5) of this section.
- EWW_i = Emissions from each Group 1 wastewater stream i if the reference control technology had been applied to the uncontrolled emissions. EWW_i is calculated according to paragraph (g)(5) of this section.
- EBFEPV_{iACTUAL} = Emissions from each Group 1 batch front-end process vent stream i that is uncontrolled or is controlled to a level less stringent than the applicable standard. EBFEPV_{iACTUAL} is

- calculated according to paragraph (g)(6)(ii) of this section.
- (0.1) EBFEPV_i = Emissions from each Group 1 batch front-end process vent i if the applicable standard had been applied to the uncontrolled emissions. EBFEPV_i is calculated according to paragraph (g)(6)(i) of this section.
- EABV_{iACTUAL} = Emissions from each Group 1 aggregate batch vent stream i that is uncontrolled or is controlled to a level less stringent than the applicable standard. EABV_{iACTUAL} is calculated according to paragraph (g)(7)(iii) of this section.
- (0.1) EABV_i = Emissions from each Group 1 aggregate batch vent stream i if the applicable standard had been applied to the uncontrolled emissions. EABV_i is calculated according to paragraph (g)(7)(ii) of this section.
- n = The number of emission points being included in the emissions average.
- (2) * * *
- (ii) * * *
- (A) The values of Q and C_j shall be determined during a performance test conducted under representative operating conditions. The values of Q and C_j shall be established in the Notification of Compliance Status and shall be updated as provided in paragraph (g)(2)(ii)(B) of this section.
- * * * * *
- (iii) * * *
- * * * * *
- (B) * * *
- (I) The percent reduction shall be measured according to the procedures in § 63.116 if a combustion control device is used. For a flare meeting the criteria in § 63.116(a), or a boiler or process heater meeting the criteria in § 63.116(b), the percent reduction shall be 98 percent. If a noncombustion control device is used, percent reduction shall be demonstrated by a performance test at the inlet and outlet of the device, or, if testing is not feasible, by a control design evaluation and documented engineering calculations.

- (2) For determining debits from Group 1 continuous front-end process vents, product recovery devices shall not be considered control devices and cannot be assigned a percent reduction in calculating ECFEPV_{iACTUAL}. The sampling site for measurement of uncontrolled emissions is after the final product recovery device. However, as provided in § 63.113(a)(3), a Group 1 continuous front-end process vent may add sufficient product recovery to raise the TRE index value above 1.0, thereby becoming a Group 2 continuous front-end process vent. Such a continuous front-end process vent would not be a Group 1 continuous front-end process vent and would, therefore, not be included in determining debits under this paragraph.
- * * * * *
- (3) Emissions from storage vessels shall be calculated using the procedures specified in § 63.150(g)(3).
- * * * * *
- (5) Emissions from wastewater shall be calculated using the procedures specified in § 63.150(g)(5).
- * * * * *
- (7) * * *
- (ii) * * *
- (A) The values of Q and C_j shall be determined during a performance test conducted under representative operating conditions. The values of Q and C_j shall be established in the Notification of Compliance Status and shall be updated as provided in paragraph (g)(7)(ii)(B) of this section.
- * * * * *
- (h) * * *
- (1) Source-wide credits shall be calculated using Equation 41. Credits and all terms of the equation are in units of Mg/month, and the baseline date is November 15, 1990:

$$\begin{aligned}
\text{Credits} = & D \sum_{i=1}^n ((0.02) \text{ECFEPV1}_{iu} - \text{ECFEPV1}_{i\text{ACTUAL}}) + D \sum_{i=1}^m (\text{ECFEPV2}_{i\text{BASE}} - \text{ECFEPV2}_{i\text{ACTUAL}}) \\
& + D \sum_{i=1}^n ((0.05) \text{ES1}_{iu} - \text{ES1}_{i\text{ACTUAL}}) + D \sum_{i=1}^m (\text{ES2}_{i\text{BASE}} - \text{ES2}_{i\text{ACTUAL}}) + D (\text{EBEP}_c - \text{EBEP}_{\text{ACTUAL}}) \\
& + D \sum_{i=1}^n (\text{EWW1}_{ic} - \text{EWW1}_{i\text{ACTUAL}}) + D \sum_{i=1}^m (\text{EWW2}_{i\text{BASE}} - \text{EWW2}_{i\text{ACTUAL}}) \\
& + D \sum_{i=1}^n ((0.1) \text{EBFEPV1}_{iu} - \text{EBFEPV1}_{i\text{ACTUAL}}) + D \sum_{i=1}^m ((0.1) \text{EABV1}_{iu} - \text{EABV1}_{i\text{ACTUAL}}) \\
& + D \sum_{i=1}^m (\text{EBFEPV2}_{i\text{BASE}} - \text{EBFEPV2}_{i\text{ACTUAL}}) + D \sum_{i=1}^m (\text{EABV2}_{i\text{BASE}} - \text{EABV2}_{i\text{ACTUAL}}) \quad [\text{Eq. 41}]
\end{aligned}$$

Where:

D = Discount factor = 0.9 for all credit generating emission points, except those controlled by a pollution prevention measure; discount factor = 1.0 for each credit generating emission point controlled by a pollution prevention measure (i.e., no discount provided).

ECFEPV1_{ACTUAL} = Emissions for each Group 1 continuous front-end process vent i that is controlled to a level more stringent than the reference control technology.

ECFEPV1_{ACTUAL} is calculated according to paragraph (h)(2)(ii) of this section.

(0.02)ECFEPV1_{iu} = Emissions from each Group 1 continuous front-end process vent i if the reference control technology had been applied to the uncontrolled emissions. ECFEPV1_{iu} is calculated according to paragraph (h)(2)(i) of this section.

ECFEPV2_{ACTUAL} = Emissions from each Group 2 continuous front-end process vent i that is controlled. ECFEPV2_{ACTUAL} is calculated according to paragraph (h)(2)(iii) of this section.

ECFEPV2_{BASE} = Emissions from each Group 2 continuous front-end process vent i at the baseline date. ECFEPV2_{BASE} is calculated in paragraph (h)(2)(iv) of this section.

ES1_{ACTUAL} = Emissions from each Group 1 storage vessel i that is controlled to a level more stringent than the reference control technology or standard. ES1_{ACTUAL} is calculated according to paragraph (h)(3) of this section.

(0.05) ES1_{iu} = Emissions from each Group 1 storage vessel i if the reference control technology had been applied to the uncontrolled emissions. ES1_{iu} is calculated according to paragraph (h)(3) of this section.

ES2_{ACTUAL} = Emissions from each Group 2 storage vessel i that is controlled.

ES2_{ACTUAL} is calculated according to paragraph (h)(3) of this section.

ES2_{BASE} = Emissions from each Group 2 storage vessel i at the baseline date. ES2_{BASE} is calculated in paragraph (h)(3) of this section.

EBEP_{ACTUAL} = Actual emissions from back-end process operations, Mg/month.

EBEP_{ACTUAL} is calculated in paragraph (h)(4)(i) of this section.

EBEP_c = Emissions from back-end process operations if the residual organic HAP limits in § 63.494(a) were met, Mg/month. EBEP_c is calculated in paragraph (h)(4)(ii) of this section.

EWW1_{ACTUAL} = Emissions from each Group 1 wastewater stream i that is controlled to a level more stringent than the reference control technology. EWW1_{ACTUAL} is calculated according to paragraph (h)(5) of this section.

EWW1_{ic} = Emissions from each Group 1 wastewater stream i if the reference control technology had been applied to the uncontrolled emissions. EWW1_{ic} is calculated according to paragraph (h)(5) of this section.

EWW2_{ACTUAL} = Emissions from each Group 2 wastewater stream i that is controlled. EWW2_{ACTUAL} is calculated according to paragraph (h)(5) of this section.

EWW2_{BASE} = Emissions from each Group 2 wastewater stream i at the baseline date. EWW2_{BASE} is calculated according to paragraph (h)(5) of this section.

(0.1) EBFEPV1_{iu} = Emissions from each Group 1 batch front-end process vent i if the applicable standard had been applied to the uncontrolled emissions. EBFEPV1_{iu} is calculated according to paragraph (h)(6)(i) of this section.

EBFEPV1_{ACTUAL} = Emissions from each Group 1 batch front-end process vent i that is controlled to a level more stringent than the applicable standard. EBFEPV1_{ACTUAL} is calculated according to paragraph (h)(6)(ii) of this section.

(0.1) EABV1_{iu} = Emissions from each Group 1 aggregate batch vent stream i if the applicable standard had been applied to the uncontrolled emissions. EABV1_{iu} is calculated according to paragraph (h)(7)(i) of this section.

EABV1_{ACTUAL} = Emissions from each Group 1 aggregate batch vent stream i that is controlled to a level more stringent than the applicable standard. EABV1_{ACTUAL} is calculated according to paragraph (h)(7)(ii) of this section.

EBFEPV2_{BASE} = Emissions from each Group 2 batch front-end process vent i at the baseline date.

EBFEPV2_{BASE} is calculated according to paragraph (h)(6)(iv) of this section.

EBFEPV2_{ACTUAL} = Emissions from each Group 2 batch front-end process vent i that is controlled. EBFEPV2_{ACTUAL} is calculated according to paragraph (h)(6)(iii) of this section.

EABV2_{BASE} = Emissions from each Group 2 aggregate batch vent stream i at the baseline date. EABV2_{BASE} is calculated according to paragraph (g)(7)(iv) of this section.

EABV2_{ACTUAL} = Emissions from each Group 2 aggregate batch vent stream i that is controlled. EABV2_{ACTUAL} is calculated according to paragraph (h)(7)(iii) of this section.

n = Number of Group 1 emission points included in the emissions average. The value of n is not necessarily the same for continuous front-end process vents, batch front-end process vents, aggregate batch vent streams, storage vessels, wastewater streams, or the collection of process sections within the affected source.

m = Number of Group 2 emission points included in the emissions average. The value of m is not necessarily the same for continuous front-end process vents, batch front-end process vents, aggregate batch vent streams, storage vessels, wastewater streams, or the collection of process sections within the affected source.

* * * * *

(3) Emissions from storage vessels shall be calculated using the procedures specified in § 63.150(h)(3).

* * * * *

(5) Emissions from wastewater streams shall be calculated using the procedures specified in § 63.150(h)(5).

(6) * * *

(ii) Actual emissions from Group 1 batch front-end process vents controlled to a level more stringent than the standard (EBFEPV1_{ACTUAL}) shall be calculated using Equation 46, where percent reduction is for the batch cycle: [Equation 46 is unchanged.]

* * * * *

(7) * * *

(ii) Actual emissions from Group 1 aggregate batch vent streams controlled

to a level more stringent than the

standard ($EABV_{iACTUAL}$) shall be calculated using Equation 49:

$$EABV_{iACTUAL} = EABV_{iu} \left(1 - \frac{\text{Percent reduction}}{100\%} \right) \quad [\text{Eq. 49}]$$

* * * * *

(i) The following procedures shall be followed to establish nominal efficiencies for emission controls for storage vessels, continuous front-end process vents, and process wastewater streams. The procedures in paragraphs (i)(1) through (i)(6) of this section shall be followed for control technologies that are different in use or design from the reference control technologies and achieve greater percent reductions than the percent efficiencies assigned to the reference control technologies in § 63.111.

(1) In those cases where the owner or operator is seeking permission to take credit for use of a control technology that is different in use or design from the reference control technology, and the different control technology will be used in more than three applications at a single plant-site, the owner or operator shall submit the information specified in paragraphs (i)(1)(i) through (i)(1)(iv) of this section, as specified in § 63.1335(e)(7)(ii), to the Director of the EPA Office of Air Quality Planning and Standards, in writing.

* * * * *

(iii) Documentation demonstrating to the Administrator's satisfaction the control efficiency of the control technology. This may include performance test data collected using an appropriate EPA Method or any other method validated according to Method 301, 40 CFR part 63, appendix A. If it is infeasible to obtain test data, documentation may include a design evaluation and calculations. The engineering basis of the calculation procedures and all inputs and assumptions made in the calculations shall be documented.

* * * * *

(2) The Administrator shall determine within 120 days whether an application presents sufficient information to determine nominal efficiency. The Administrator reserves the right to request specific data in addition to the items listed in paragraph (i)(1) of this section.

(3) The Administrator shall determine within 120 days of the submittal of sufficient data whether a control technology shall have a nominal efficiency and the level of that nominal efficiency. If, in the Administrator's

judgment, the control technology achieves a level of emission reduction greater than the reference control technology for a particular kind of emission point, the Administrator will publish a **Federal Register** notice establishing a nominal efficiency for the control technology.

* * * * *

(5) In those cases where the owner or operator is seeking permission to take credit for use of a control technology that is different in use or design from the reference control technology and the different control technology will be used in no more than three applications at a single plant site, the owner or operator shall submit the information listed in paragraph (i)(1)(i) as specified in § 63.506(e)(7)(ii) to the Administrator.

(i) In these instances, use and conditions for use of the control technology may be approved by the permitting authority as part of an operating permit application or modification. The permitting authority shall follow the procedures specified in paragraphs (i)(2) through (i)(4) of this section except that, in these instances, a **Federal Register** notice is not required to establish the nominal efficiency for the different technology.

* * * * *

(j) * * *

(2) The emission reduction efficiency of pollution prevention measures implemented after November 15, 1990, may be used in calculating the actual emissions from an emission point in the debit and credit equations in paragraphs (g) and (h) of this section.

* * * * *

(ii) * * *

(B) For wastewater, E_B shall be calculated according to § 63.150(j)(2)(ii)(B).

* * * * *

(D) The monthly emissions after the pollution prevention measure, E_{pp} , may be determined during a performance test or by a design evaluation and documented engineering calculations. Once an emissions-to-production ratio has been established, the ratio may be used to estimate monthly emissions from monthly production records.

(E) For wastewater, E_{pp} shall be calculated according to § 63.150(j)(2)(ii)(E).

* * * * *

(iv) The same pollution prevention measure may reduce emissions from multiple emission points. In such cases, the percent reduction in emissions for each emission point shall be calculated.

(v) For the purposes of the equations in paragraphs (h)(2) through (h)(7) of this section, used to calculate credits for emission points controlled more stringently than the reference control technology or standard, the nominal efficiency of a pollution prevention measure is equivalent to the percent reduction of the pollution prevention measure. When a pollution prevention measure is used, the owner or operator of an affected source is not required to apply to the Administrator for a nominal efficiency and is not subject to paragraph (i) of this section.

(k) The owner or operator shall demonstrate that the emissions from the emission points proposed to be included in the emissions average will not result in greater hazard, or at the option of the Administrator, greater risk to human health or the environment than if the emission points were controlled according to the provisions in §§ 63.484, 63.485, 63.486, 63.493, and 63.501.

* * * * *

(4) A hazard or risk equivalency demonstration shall:

* * * * *

(m) * * *

(1) * * *

(i) Determine whether the continuous front-end process vent is Group 1 or Group 2 according to the procedures specified in § 63.115 and as required by § 63.485;

(ii) Conduct initial performance tests to determine percent reduction as specified in § 63.116 and as required by § 63.485; and

(iii) Monitor the operating parameters, keep records, and submit reports as specified in §§ 63.114, 63.117(a), and 63.118(a) and (f), as required, for the specific control device as required by § 63.485.

(2) * * *

(i) Determine the flow rate, organic HAP concentration, and TRE index

value according to the procedures specified in § 63.115; and
 (ii) Monitor the operating parameters, keep records, and submit reports according to the procedures specified in §§ 63.114, 63.117(a), and 63.118(b) and (f), as required, for the specific recovery device, and as required by § 63.485.

(3) * * *
 (i) Perform the monitoring or inspection procedures according to the procedures specified in § 63.120, and as required by § 63.484;

(ii) Perform the reporting and recordkeeping procedures according to the procedures specified in §§ 63.122 and 63.123, and as required by § 63.484; and

(iii) For closed vent systems with control devices, conduct an initial design evaluation and submit an operating plan according to the procedures specified in § 63.120(d) and (b), and as required by § 63.484.

(4) * * *
 (ii) If a control or recovery device is used to reduce back-end process operation emissions, the owner or operator of the affected source shall comply with §§ 63.496, 63.497, 63.498(d), and the applicable provisions of 63.499, and shall implement the provisions of these sections.

(5) * * *
 (i) For wastewater treatment processes, conduct tests according to the procedures specified in § 63.138(i) and (j), and as required by § 63.501;

(ii) Conduct inspections and monitoring according to the procedures specified in § 63.143, and as required by § 63.501;

(iii) Implement a recordkeeping program according to the procedures specified in § 63.147, and as required by § 63.501; and

(iv) Implement a reporting program according to the procedures specified in § 63.146, and as required by § 63.501.

* * * * *
 13. Amend § 63.505 by revising paragraph (e)(1)(ii), to read as follows:

§ 63.505 Parameter monitoring levels and excursions.

* * * * *
 (e) * * *
 (1) * * *
 (ii) The residual organic HAP content in each sample is to be determined using Methods specified in § 63.495(e).

* * * * *
 14. Amend § 63.506 by revising paragraph (e)(4)(ii)(H)(I), to read as follows:

§ 63.506 General recordkeeping and reporting provisions.

* * * * *

(e) * * *
 (4) * * *
 (ii) * * *
 (H) * * *
 (I) The required documentation shall include the data used to determine whether the wastewater stream is a Group 1 or Group 2 wastewater stream.
 * * * * *

Subpart JJJ—National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins

15. Amend § 63.1311 by revising paragraphs (d)(1)(ii), (d)(1)(iii), and (d)(4), and adding paragraph (d)(1)(iv), to read as follows:

§ 63.1311 Compliance schedule and relationship to existing applicable rules.

* * * * *
 (d) * * *
 (1) * * *
 (ii) A barrier fluid system will be installed;
 (iii) A new barrier fluid will be utilized which requires changes to the existing barrier fluid system; or
 (iv) The compressor will be modified to permit connecting the compressor to a fuel gas system or a closed vent system or modified so that emissions from the compressor can be routed to a process.
 * * * * *

(4) Compliance with the compressor provisions of § 63.164 shall occur not later than September 12, 1999 for any compressor meeting one or more of the criteria in paragraphs (d)(4)(i) through (d)(4)(iii) of this section. The owner or operator who elects to use these provisions shall submit a request for an extension of compliance in accordance with the requirements of paragraph (d)(2)(iv) of this section.

(i) Compliance cannot be achieved without replacing the compressor;
 (ii) Compliance cannot be achieved without recasting the distance piece; or
 (iii) Design modifications are required to connect to a closed-vent or recovery system.
 * * * * *

16. Amend § 63.1312 by adding, in alphabetical order, definitions for "combustion device burner" and "supplemental combustion air," to paragraph (b), to read as follows:

§ 63.1312 Definitions.

* * * * *
 (b) * * *
Combustion device burner means a device designed to mix and ignite fuel and air to provide a flame to heat and oxidize waste organic vapors in a combustion device.
 * * * * *

Supplemental combustion air means the air that is added to a vent stream after the vent stream leaves the unit operation. Air that is part of the vent stream as a result of the nature of the unit operation is not considered supplemental combustion air. Air required to operate combustion device burner(s) is not considered supplemental combustion air.
 * * * * *

17. Amend § 63.1314 by adding paragraph (b)(3), to read as follows:

§ 63.1314 Storage vessel provisions.

* * * * *
 (b) * * *
 (3) For all other storage vessels designated as Group 1 storage vessels, emissions shall be controlled to the level designated in § 63.119.
 * * * * *

18. Amend § 63.1315 by revising paragraph (a) introductory text; adding and reserving paragraphs (a)(16) and (a)(17); and adding paragraphs (a)(18) and (e), to read as follows:

§ 63.1315 Continuous process vents provisions.

(a) For each continuous process vent located at an affected source, the owner or operator shall comply with the requirements of §§ 63.113 through 63.118, with the differences noted in paragraphs (a)(1) through (a)(18) of this section for the purposes of this subpart, except as provided in paragraphs (b) through (e) of this section.
 * * * * *

(16) [Reserved]
 (17) [Reserved]

(18) When a combustion device is used to comply with the 20 parts per million by volume outlet concentration standard specified in § 63.113(a)(2), the correction to 3 percent oxygen is only required when supplemental combustion air is used to combust the emissions, for the purposes of this subpart. Finally, when a combustion device is used to comply with the 20 parts per million by volume outlet concentration standard specified in § 63.113(a)(2), an owner or operator shall record and report the outlet concentration required in § 63.117(a)(4)(ii) and (a)(4)(iv) corrected to 3 percent oxygen when supplemental combustion air is used to combust the emissions, for the purposes of this subpart. When supplemental combustion air is not used to combust

the emissions, an owner or operator may record and report the outlet concentration required in § 63.117(a)(4)(ii) and (a)(4)(iv) on an uncorrected basis or corrected to 3 percent oxygen, for the purposes of this subpart.

* * * * *

(e) Owners or operators of affected sources producing ASA/AMSAN shall reduce organic HAP emissions from each continuous process vent, each batch process vent, and each aggregate batch vent stream by 98 weight-percent and shall comply with either paragraph (e)(1), (e)(2), or (e)(3), as appropriate. Where batch process vents or aggregate batch vent streams are combined with continuous process vents, the provisions of paragraph (a)(13) of this section shall apply for the purposes of this paragraph (e).

(1) For each continuous process vent, comply with paragraph (a) of this section as specified in paragraphs (e)(1)(i) through (e)(1)(ii) of this section.

(i) For purpose of this section, each continuous process vent shall be considered to be a Group 1 continuous process vent and the owner or operator of that continuous process vent shall comply with the requirements for a Group 1 continuous process vent.

(ii) For purposes of this section, the group determination procedure required by § 63.115 shall not apply.

(2) For each batch process vent, comply with §§ 63.1321 through 63.1327 as specified in paragraphs (e)(2)(i) through (e)(2)(ii) of this section.

(i) For purpose of this section, each batch process vent shall be considered to be a Group 1 batch process vent and the owner or operator of that batch process vent shall comply with the requirements for a Group 1 batch process vent contained in §§ 63.1321 through 63.1327, except that each batch process vent shall be controlled to reduce organic HAP emissions by 98 weight-percent.

(ii) For purposes of this section, the group determination procedure required by § 63.1323 shall not apply.

(3) For each aggregate batch vent stream, comply with §§ 63.1321 through 63.1327 as specified in paragraphs (e)(3)(i) through (e)(3)(ii) of this section.

(i) For purpose of this section, each aggregate batch vent stream shall be considered to be a Group 1 aggregate batch vent stream and the owner or operator of that aggregate batch vent stream shall comply with the requirements for a Group 1 aggregate batch vent stream contained in §§ 63.1321 through 63.1327, except that each aggregate batch vent stream shall

be controlled to reduce organic HAP emissions by 98 weight-percent.

(ii) For purposes of this section, the group determination procedure required by § 63.1323 shall not apply.

19. Amend § 63.1316 by revising the section title, paragraphs (b)(1)(i), (b)(1)(ii), (b)(2)(i), and (b)(2)(ii); and adding paragraphs (b)(1)(v) and (b)(2)(v), to read as follows:

§ 63.1316 PET and polystyrene affected sources—emissions control provisions.

* * * * *

(b) * * *

(1) * * *

(i) The owner or operator of an existing affected source with organic HAP emissions greater than 0.12 kg organic HAP per Mg of product from continuous process vents in the collection of material recovery sections (i.e., methanol recovery) within the affected source shall comply with either paragraph (b)(1)(i)(A), (b)(1)(i)(B), or (b)(1)(i)(C) of this section. Emissions from continuous process vents in the collection of material recovery sections within the affected source shall be determined by the procedures specified in § 63.1318(b). The owner or operator of a new affected source shall comply with either paragraph (b)(1)(i)(A), (b)(1)(i)(B), or (b)(1)(i)(C) of this section.

(A) Organic HAP emissions from all continuous process vents in each individual material recovery section shall, as a whole, be no greater than 0.018 kg organic HAP per Mg of product from the associated TPPU(s); or alternatively, organic HAP emissions from all continuous process vents in the collection of material recovery sections within the affected source shall, as a whole, be no greater than 0.018 kg organic HAP per Mg product from all associated TPPU(s);

(B) As specified in § 63.1318(d), the owner or operator shall maintain the daily average outlet gas stream temperature from each final condenser in a material recovery section at a temperature of +3°C (+37°F) or less (i.e., colder); or

(C) Comply with paragraph (b)(1)(v) of this section.

(ii) Limit organic HAP emissions from continuous process vents in the collection of polymerization reaction sections within the affected source by complying with either paragraph (b)(1)(ii)(A) or (b)(1)(ii)(B) of this section.

(A) Organic HAP emissions from all continuous process vents in each individual polymerization reaction section within the affected source (including emissions from any equipment used to further recover

ethylene glycol, but excluding emissions from process contact cooling towers) shall, as a whole, be no greater than 0.02 kg organic HAP per Mg of product from the associated TPPU(s); or alternatively, organic HAP emissions from all continuous process vents in the collection of polymerization reaction sections within the affected source shall, as a whole, be no greater than 0.02 kg organic HAP per Mg product from all associated TPPU(s); or

(B) Comply with paragraph (b)(1)(v) of this section.

* * * * *

(v) Comply with one of the following:

(A) Reduce the emissions in a combustion device to achieve 98 weight percent reduction or to achieve a concentration of 20 parts per million by volume (ppmv) on a dry basis, whichever is less stringent. If an owner or operator elects to comply with the 20 ppmv standard, the concentration shall include a correction to 3 percent oxygen only when supplemental combustion air is used to combust the emissions;

(B) Combust the emissions in a boiler or process heater with a design heat input capacity of 150 million Btu/hr or greater by introducing the emissions into the flame zone of the boiler or process heater; or

(C) Combust the emissions in a flare that complies with the requirements of § 63.1333(e).

(2) * * *

(i) Limit organic HAP emissions from continuous process vents in the collection of raw material preparation sections within the affected source by complying with either paragraph (b)(2)(i)(A) or (b)(2)(i)(B) of this section.

(A) Organic HAP emissions from all continuous process vents associated with the esterification vessels in each individual raw materials preparation section shall, as a whole, be no greater than 0.04 kg organic HAP per Mg of product from the associated TPPU(s); or alternatively, organic HAP emissions from all continuous process vents associated with the esterification vessels in the collection of raw material preparation sections within the affected source shall, as a whole, be no greater than 0.04 kg organic HAP per Mg of product from all associated TPPU(s). Other continuous process vents (i.e., those not associated with the esterification vessels) in the collection of raw materials preparation sections within the affected source shall comply with § 63.1315; or

(B) Comply with paragraph (b)(2)(v) of this section.

(ii) Limit organic HAP emissions from continuous process vents in the

collection of polymerization reaction sections within the affected source by complying with either paragraph (b)(2)(ii)(A) or (b)(2)(ii)(B) of this section.

(A) Organic HAP emissions from all continuous process vents in each individual polymerization reaction section (including emissions from any equipment used to further recover ethylene glycol, but excluding emissions from process contact cooling towers) shall, as a whole, be no greater than 0.02 kg organic HAP per Mg of product from the associated TPPU(s); or alternatively, organic HAP emissions from all continuous process vents in the collection of polymerization reaction sections within the affected source shall, as a whole, be no greater than 0.02 kg organic HAP per Mg of product from all associated TPPU(s); or

(B) Comply with paragraph (b)(2)(v) of this section.

* * * * *

(v) Comply with one of the following:

(A) Reduce the emissions in a combustion device to achieve 98 weight percent reduction or to achieve a concentration of 20 parts per million by volume (ppmv) on a dry basis, whichever is less stringent. If an owner or operator elects to comply with the 20 ppmv standard, the concentration shall include a correction to 3 percent oxygen only when supplemental combustion air is used to combust the emissions;

(B) Combust the emissions in a boiler or process heater with a design heat input capacity of 150 million Btu/hr or greater by introducing the emissions into the flame zone of the boiler or process heater; or

(C) Combust the emissions in a flare that complies with the requirements of § 63.1333(e).

* * * * *

20. Amend § 63.1321 by adding paragraph (d), to read as follows:

§ 63.1321 Batch process vents provisions.

* * * * *

(d) Owners and operators of affected sources producing ASA/AMSAN shall comply with the provisions of § 63.1315(e).

21. Amend § 63.1322 by revising paragraph (b)(2), to read as follows:

§ 63.1322 Batch process vents—reference control technology.

* * * * *

(b) * * *

(2) For each aggregate batch vent stream, reduce organic HAP emissions by 90 weight percent or to a concentration of 20 parts per million by volume, whichever is less stringent, on a continuous basis using a control

device. For purposes of complying with the 20 parts per million by volume outlet concentration standard, the outlet concentration shall be calculated on a dry basis. When a combustion device is used for purposes of complying with the 20 parts per million by volume outlet concentration standard, the concentration shall be corrected to 3 percent oxygen if supplemental combustion air is used to combust the emissions. If supplemental combustion air is not used, a correction to 3 percent oxygen is not required.

* * * * *

22. Amend § 63.1323 by revising paragraph (a)(2), to read as follows:

§ 63.1323 Batch process vents—methods and procedures for group determination.

(a) * * *

(2) The annual uncontrolled organic HAP or TOC emissions and annual average batch vent flow rate shall be determined at the exit from the batch unit operation. For the purposes of these determinations, the primary condenser operating as a reflux condenser on a reactor or distillation column, the primary condenser recovering monomer, reaction products, by-products, or solvent from a stripper operated in batch mode, and the primary condenser recovering monomer, reaction products, by-products, or solvent from a distillation operation operated in batch mode shall be considered part of the batch unit operation. All other devices that recover or oxidize organic HAP or TOC vapors shall be considered control devices as defined in § 63.1312.

* * * * *

23. Amend § 63.1325 by revising paragraph (e) introductory text and adding paragraph (e)(3), to read as follows:

§ 63.1325 Batch process vents—performance test methods and procedures to determine compliance.

* * * * *

(e) *Aggregate batch vent stream testing for compliance with § 63.1322(b)(2) or (b)(3).* Except as specified in paragraphs (e)(1) through (e)(3) of this section, owners or operators of aggregate batch vent streams complying with § 63.1322(b)(2) or (b)(3) shall conduct a performance test using the performance testing procedures for continuous process vents in § 63.116(c).

* * * * *

(3) When a combustion device is used to comply with the 20 parts per million by volume outlet concentration standard specified in § 63.1322(b)(2), the correction to 3 percent oxygen specified

in the performance testing procedures of § 63.116(c)(3) and § 63.116(c)(3)(iii) is only required when supplemental combustion air is used to combust the emissions, for the purposes of this subpart.

* * * * *

24. Amend § 63.1326 by revising paragraph (b)(4) introductory text and adding paragraph (b)(5), to read as follows:

§ 63.1326 Batch process vents—recordkeeping provisions.

* * * * *

(b) * * *

(4) The following information when using a control device to meet the percent reduction requirement specified in § 63.1322(a)(2), (a)(3), (b)(2), or (b)(3):

* * * * *

(5) When complying with the 20 parts per million by volume outlet concentration standard specified in § 63.1322(b)(2), records of the outlet concentration of organic HAP or TOC on a dry basis. If supplemental combustion air is used to combust the emissions, the outlet concentration shall be corrected to 3 percent oxygen. If supplemental combustion air is not used, a correction to 3 percent oxygen is not required.

* * * * *

25. Amend § 63.1330 by adding and reserving paragraph (c), and paragraphs (d) and (e), to read as follows:

§ 63.1330 Wastewater provisions.

* * * * *

(c) *Reserved*

(d) The provisions of paragraph (b) of this section do not apply to each affected source producing ASA/AMSAN.

(e) The provisions of paragraphs (a), (b), and (c) of this section do not apply to each affected source producing polystyrene using either a continuous or batch process.

26. Amend § 63.1332 by revising paragraphs (a)(2), (a)(3) introductory text, (c) introductory text, (c)(3), (d)(5), (e)(3)(ii), (e)(5), (g)(1), (g)(2)(ii)(A), (g)(7)(ii)(A), (h)(1) introductory text, (h)(6)(ii) introductory text, (h)(7)(ii) introductory text (the equation remains unchanged), (i)(1) introductory text, (i)(1)(iii), (i)(2), (i)(3), (i)(5) introductory text, (i)(5)(i), (j)(2) introductory text, (j)(2)(ii)(B), (j)(2)(iv), (j)(2)(v), (k) introductory text, (k)(4) introductory text, and (l) introductory text, to read as follows:

§ 63.1332 Emissions averaging provisions.

(a) * * *

(2) Compliance with the provisions of this section may be based on either organic HAP or TOC.

(3) For the purposes of these provisions, whenever Method 18, 40 CFR part 60, appendix A, is specified within the paragraphs of this section or is specified by reference through provisions outside this section, Method 18 or Method 25A, 40 CFR part 60, appendix A, may be used. The use of Method 25A, 40 CFR part 60, appendix A, shall conform with the requirements in paragraphs (a)(3)(i) and (a)(3)(ii) of this section.

(c) Paragraphs (c)(1) through (c)(5) of this section describe the emission points that may be used to generate emissions averaging credits if control was applied after November 15, 1990, and if sufficient information is available to determine the appropriate value of credits for the emission point. Paragraph (c)(6) of this section discusses the use of pollution prevention in generating emissions averaging credits.

(3) Storage vessels, continuous process vents subject to § 63.1315, and process wastewater streams that are determined to be Group 1 emission points and that are controlled by a

technology that the Administrator or permitting authority agrees has a higher nominal efficiency than the reference control technology. Information on the nominal efficiencies for such technologies shall be submitted and approved as provided in paragraph (i) of this section.

(d) * * *
 (5) Emission points controlled to comply with a State or Federal rule other than this subpart cannot be used to generate credits, unless the level of control has been increased after November 15, 1990, to a level above what is required by the other State or Federal rule. Only the control above what is required by the other State or Federal rule will be credited. However, if an emission point has been used to generate emissions averaging credit in an approved emissions average, and the emission point is subsequently made subject to a State or Federal rule other than this subpart, the emission point may continue to generate emissions averaging credit for the purpose of complying with the previously approved emissions average.

(e) * * *
 (3) * * *

(ii) The initial demonstration in the Emissions Averaging Plan or operating permit application that credit-generating emission points will be capable of generating sufficient credits to offset the debits from the debit-generating emission points shall be made under representative operating conditions. After the compliance date, actual operating data will be used for all debit and credit calculations.

(4) * * *

(5) Record and report quarterly and annual credits and debits in the Periodic Reports as specified in § 63.1335(e)(6). Every fourth Periodic Report shall include a certification of compliance with the emissions averaging provisions as required by § 63.1335(e)(6)(x)(C)(2).

* * * * *

(g) * * *

(1) Source-wide debits shall be calculated using Equation 28 of this subpart. Debits and all terms of Equation 28 of this subpart are in units of megagrams per month:

$$\begin{aligned} \text{Debits} = & \sum_{i=1}^n (ECPV_{iACTUAL} - (0.02) ECPV_{iu}) + \sum_{j=1}^n (ECPVS_{jACTUAL} - ECPVS_{jSTD}) \\ & + \sum_{i=1}^n (ES_{iACTUAL} - (b) ES_{iu}) + \sum_{i=1}^n (EWW_{iACTUAL} - EWW_{ic}) \\ & + \sum_{i=1}^n (EBPV_{iACTUAL} - (0.10) EBPV_{iu}) + \sum_{i=1}^n (EABV_{iACTUAL} - (0.10) EABV_{iu}) \end{aligned} \quad [\text{Eq. 28}]$$

Where:

$ECPV_{iACTUAL}$ = Emissions from each Group 1 continuous process vent i subject to § 63.1315 that is uncontrolled or is controlled to a level less stringent than the applicable reference control technology.

$ECPV_{iACTUAL}$ is calculated according to paragraph (g)(2) of this section.

$(0.02)ECPV_{iu}$ = Emissions from each Group 1 continuous process vent i subject to § 63.1315 if the applicable reference control technology had been applied to the uncontrolled emissions. $ECPV_{iu}$ is calculated according to paragraph (g)(2) of this section.

$ECPVS_{jACTUAL}$ = Emissions from Group 1 continuous process vents subject to § 63.1316(b)(1)(i), (b)(1)(ii), (b)(2)(i), (b)(2)(ii), or (c)(1) located in the collection of process sections j within the affected source that are uncontrolled or controlled to a level less stringent than the applicable standard. $ECPVS_{jACTUAL}$ is calculated according to paragraph (g)(3) of this section.

$ECPVS_{jSTD}$ = Emissions from Group 1 continuous process vents subject to

§ 63.1316(b)(1)(i), (b)(1)(ii), (b)(2)(i), (b)(2)(ii), or (c)(1) located in the collection of process sections j within the affected source if the applicable standard had been applied to the uncontrolled emissions. $ECPVS_{jSTD}$ is calculated according to paragraph (g)(3) of this section.

$ES_{iACTUAL}$ = Emissions from each Group 1 storage vessel i that is uncontrolled or is controlled to a level less stringent than the applicable reference control technology or standard. $ES_{iACTUAL}$ is calculated according to paragraph (g)(4) of this section.

$(BL)ES_{iu}$ = Emissions from each Group 1 storage vessel i if the applicable reference control technology or standard had been applied to the uncontrolled emissions. ES_{iu} is calculated according to paragraph (g)(4) of this section. For calculating emissions, $BL = 0.05$ for each Group 1 storage vessel i subject to § 63.1314(a); and $BL = 0.02$ for each storage vessel i subject to § 63.1314(c).

$EWW_{iACTUAL}$ = Emissions from each Group 1 wastewater stream i that is uncontrolled or is controlled to a level less stringent than the applicable reference control technology. $EWW_{iACTUAL}$ is calculated

according to paragraph (g)(5) of this section.

EWW_{ic} = Emissions from each Group 1 wastewater stream i if the reference control technology had been applied to the uncontrolled emissions. EWW_{ic} is calculated according to paragraph (g)(5) of this section.

$EBPV_{iACTUAL}$ = Emissions from each Group 1 batch process vent i that is uncontrolled or is controlled to a level less stringent than the applicable standard. $EBPV_{iACTUAL}$ is calculated according to paragraph (g)(6) of this section.

$(0.10)EBPV_{iu}$ = Emissions from each Group 1 batch process vent i if the applicable standard had been applied to the uncontrolled emissions. $EBPV_{iu}$ is calculated according to paragraph (g)(6) of this section.

$EABV_{iACTUAL}$ = Emissions from each Group 1 aggregate batch vent stream i that is uncontrolled or is controlled to a level less stringent than the applicable standard. $EABV_{iACTUAL}$ is calculated according to paragraph (g)(7) of this section.

(0.10)EABV_{iu} = Emissions from each Group 1 aggregate batch vent stream i if the applicable standard had been applied to the uncontrolled emissions. EABV_{iu} is calculated according to paragraph (g)(7) of this section.

n = The number of emission points being included in the emissions average.

(2) * * *

(ii) * * *

(A) The values of Q and C_j shall be determined during a performance test conducted under representative

operating conditions. The values of Q and C_j shall be established in the Notification of Compliance Status and shall be updated as provided in paragraph (g)(2)(ii)(B) of this section.

* * * * *

(7) * * *

(ii) * * *

(A) The values of Q and C_j shall be determined during a performance test conducted under representative operating conditions. The values of Q

and C_j shall be established in the Notification of Compliance Status and shall be updated as provided in paragraph (g)(7)(ii)(B) of this section.

* * * * *

(h) * * *

(1) Sourcewide credits shall be calculated using Equation 35 of this subpart. Credits and all terms of Equation 35 of this subpart are in units of megagrams per month, and the baseline date is November 15, 1990:

$$\begin{aligned} \text{Credits} = & D \sum_{i=1}^n ((0.02) \text{ECPV1}_{iu} - \text{ECPV1}_{i\text{ACTUAL}}) + D \sum_{j=1}^n (\text{ECPVS1}_{j\text{STD}} - \text{ECPVS1}_{j\text{ACTUAL}}) \\ & + D \sum_{i=1}^m (\text{ECPV2}_{i\text{BASE}} - \text{ECPV2}_{i\text{ACTUAL}}) + D \sum_{j=1}^m (\text{ECPVS2}_{j\text{BASE}} - \text{ECPVS2}_{j\text{ACTUAL}}) \\ & + D \sum_{i=1}^n ((\text{BL}) \text{ES1}_{iu} - \text{ES1}_{i\text{ACTUAL}}) + D \sum_{i=1}^m (\text{ES2}_{i\text{BASE}} - \text{ES2}_{i\text{ACTUAL}}) \\ & + D \sum_{i=1}^n (\text{EWW1}_{ic} - \text{EWW1}_{i\text{ACTUAL}}) + D \sum_{i=1}^m (\text{EWW2}_{i\text{BASE}} - \text{EWW2}_{i\text{ACTUAL}}) \\ & + D \sum_{i=1}^n ((0.10) \text{EBPV1}_{iu} - \text{EBPV1}_{i\text{ACTUAL}}) + D \sum_{i=1}^n ((0.10) \text{EABV1}_{iu} - \text{EABV1}_{i\text{ACTUAL}}) \\ & + D \sum_{i=1}^m (\text{EBPV2}_{i\text{BASE}} - \text{EBPV2}_{i\text{ACTUAL}}) + D \sum_{i=1}^m (\text{EABV2}_{i\text{BASE}} - \text{EABV2}_{i\text{ACTUAL}}) \end{aligned} \quad [\text{Eq. 35}]$$

Where:

D = Discount factor = 0.9 for all credit generating emission points except those controlled by a pollution prevention measure: discount factor = 1.0 for each credit generating emission point controlled by a pollution prevention measure (i.e., no discount provided).

ECPV1_{iACTUAL} = Emissions from each Group 1 continuous process vent i subject to § 63.1315 that is controlled to a level more stringent than the reference control technology. ECPV1_{iACTUAL} is calculated according to paragraph (h)(2) of this section.

(0.02)ECPV1_{iu} = Emissions from each Group 1 continuous process vent i subject to § 63.1315 if the applicable reference control technology had been applied to the uncontrolled emissions. ECPV1_{iu} is calculated according to paragraph (h)(2) of this section.

ECPVS1_{jSTD} = Emissions from Group 1 continuous process vents subject to § 63.1316(b)(1)(i), (b)(1)(ii), (b)(2)(i), (b)(2)(ii), or (c)(1) located in the collection of process sections j within the affected source if the applicable standard had been applied to the uncontrolled emissions. ECPVS1_{jSTD} is calculated according to paragraph (h)(3) of this section.

ECPVS1_{jACTUAL} = Emissions from Group 1 continuous process vents subject to § 63.1316(b)(1)(i), (b)(1)(ii), (b)(2)(i),

(b)(2)(ii), or (c)(1) located in the collection of process sections j within the affected source that are controlled to a level more stringent than the applicable standard.

ECPVS1_{jACTUAL} is calculated according to paragraph (h)(3) of this section.

ECPV2_{iACTUAL} = Emissions from each Group 2 continuous process vent i subject to § 63.1315 that is controlled. ECPV2_{iACTUAL} is calculated according to paragraph (h)(2) of this section.

ECPV2_{iBASE} = Emissions from each Group 2 continuous process vent i subject to § 63.1315 at the baseline date. ECPV2_{iBASE} is calculated according to paragraph (h)(2) of this section.

ECPVS2_{jBASE} = Emissions from Group 2 continuous process vents subject to § 63.1316(b)(1)(i) located in the collection of material recovery sections j within the affected source at the baseline date. ECPVS2_{jBASE} is calculated according to paragraph (h)(3) of this section.

ECPVS2_{jACTUAL} = Emissions from Group 2 continuous process vents subject to § 63.1316(b)(1)(i) located in the collection of material recovery sections j within the affected source that are controlled.

ECPVS2_{jACTUAL} is calculated according to paragraph (h)(3) of this section.

ES1_{iACTUAL} = Emissions from each Group 1 storage vessel i that is controlled to a level more stringent than the applicable reference control technology or standard.

ES1_{iACTUAL} is calculated according to paragraph (h)(4) of this section.

(BL)ES1_{iu} = Emissions from each Group 1 storage vessel i if the applicable reference control technology or standard had been applied to the uncontrolled emissions.

ES1_{iu} is calculated according to paragraph (h)(4) of this section. For calculating these emissions, BL = 0.05 for each Group 1 storage vessel i subject to § 63.1314(a); and BL = 0.02 for each storage vessel i subject to § 63.1314(c).

ES2_{iACTUAL} = Emissions from each Group 2 storage vessel i that is controlled.

ES2_{iACTUAL} is calculated according to paragraph (h)(4) of this section.

ES2_{iBASE} = Emissions from each Group 2 storage vessel i at the baseline date.

ES2_{iBASE} is calculated according to paragraph (h)(4) of this section.

EWW1_{iACTUAL} = Emissions from each Group 1 wastewater stream i that is controlled to a level more stringent than the reference control technology. EWW1_{iACTUAL} is calculated according to paragraph (h)(5) of this section.

EWW1_{ic} = Emissions from each Group 1 wastewater stream i if the reference control technology had been applied to the uncontrolled emissions. EWW1_{ic} is calculated according to paragraph (h)(5) of this section.

EWW2_{iACTUAL} = Emissions from each Group 2 wastewater stream i that is controlled.

EWV2_{iACTUAL} is calculated according to paragraph (h)(5) of this section.
 EWW2_{iBASE} = Emissions from each Group 2 wastewater stream i at the baseline date.
 EWW2_{iBASE} is calculated according to paragraph (h)(5) of this section.
 (0.10)EBPV1_{iu} = Emissions from each Group 1 batch process vent i if the applicable standard had been applied to the uncontrolled emissions. EBPV1_{iu} is calculated according to paragraph (h)(6) of this section.
 EBPV1_{iACTUAL} = Emissions from each Group 1 batch process vent i that is controlled to a level more stringent than the applicable standard. EBPV1_{iACTUAL} is calculated according to paragraph (h)(6) of this section.
 (0.10)EABV1_{iu} = Emissions from each Group 1 aggregate batch vent stream i if the applicable standard had been applied to the uncontrolled emissions. EABV1_{iu} is calculated according to paragraph (h)(7) of this section.

EABV1_{iACTUAL} = Emissions from each Group 1 aggregate batch vent stream i that is controlled to a level more stringent than the applicable standard. EABV1_{iACTUAL} is calculated according to paragraph (h)(7) of this section.
 EBPV2_{iBASE} = Emissions from each Group 2 batch process vent i at the baseline date. EBPV2_{iBASE} is calculated according to paragraph (h)(6) of this section.
 EBPV2_{iACTUAL} = Emissions from each Group 2 batch process vent i that is controlled. EBPV2_{iACTUAL} is calculated according to paragraph (h)(6) of this section.
 EABV2_{iBASE} = Emissions from each Group 2 aggregate batch vent stream i at the baseline date. EABV2_{iBASE} is calculated according to paragraph (h)(7) of this section.
 EABV2_{iACTUAL} = Emissions from each Group 2 aggregate batch vent stream i that is controlled. EABV2_{iACTUAL} is calculated according to paragraph (h)(7) of this section.

n = Number of Group 1 emission points included in the emissions average. The value of n is not necessarily the same for continuous process vents, batch process vents, aggregate batch vent streams, storage vessels, wastewater streams, or the collection of process sections within the affected source.
 m = Number of Group 2 emission points included in the emissions average. The value of m is not necessarily the same for continuous process vents, batch process vents, aggregate batch vent streams, storage vessels, wastewater streams, or the collection of process sections within the affected source.

* * * * *
 (6) * * *
 (ii) Actual emissions from Group 1 batch process vents controlled to a level more stringent than the standard (EBPV1_{iACTUAL}) shall be calculated using Equation 40 of this subpart, where percent reduction is for the batch cycle:

$$EBPV1_{iACTUAL} = EBPV1_{iu} \left(1 - \frac{\text{Percent reduction}}{100\%} \right) \quad [\text{Eq. S 40}]$$

* * * * *
 (7) * * *
 (ii) Actual emissions from Group 1 aggregate batch vent streams controlled to a level more stringent than the standard (EABV1_{iACTUAL}) shall be calculated using Equation 43 of this subpart:
 [Equation 43 is unchanged.]
 * * * * *
 (i) * * *
 (1) In those cases where the owner or operator is seeking permission to take credit for use of a control technology that is different in use or design from the reference control technology, and the different control technology will be used in more than three applications at a single plant-site, the owner or operator shall submit the information specified in paragraphs (i)(1)(i) through (i)(1)(iv) of this section, as specified in § 63.1335(e)(7)(ii), to the Director of the EPA Office of Air Quality Planning and Standards in writing:
 * * * * *
 (iii) Documentation demonstrating to the Administrator's satisfaction the control efficiency of the control technology. This may include performance test data collected using an appropriate EPA Method or any other method validated according to Method 301, 40 CFR part 63, appendix A, of this

part. If it is infeasible to obtain test data, documentation may include a design evaluation and calculations. The engineering basis of the calculation procedures and all inputs and assumptions made in the calculations shall be documented.
 * * * * *
 (2) The Administrator shall determine within 120 days whether an application presents sufficient information to determine nominal efficiency. The Administrator reserves the right to request specific data in addition to the items listed in paragraph (i)(1) of this section.
 (3) The Administrator shall determine within 120 days of the submittal of sufficient data whether a control technology shall have a nominal efficiency and the level of that nominal efficiency. If, in the Administrator's judgment, the control technology achieves a level of emission reduction greater than the reference control technology for a particular kind of emission point, the Administrator will publish a **Federal Register** notice establishing a nominal efficiency for the control technology.
 * * * * *
 (5) In those cases where the owner or operator is seeking permission to take credit for use of a control technology that is different in use or design from

the reference control technology and the different control technology will be used in no more than three applications at a single plant site, the owner or operator shall submit the information listed in paragraphs (i)(1)(i) through (i)(1)(iv) of this section, as specified in § 63.1335(e)(7)(ii), to the Administrator.
 (i) In these instances, use and conditions for use of the control technology may be approved by the permitting authority as part of an operating permit application or modification. The permitting authority shall follow the procedures specified in paragraphs (i)(2) through (i)(4) of this section except that, in these instances, a **Federal Register** notice is not required to establish the nominal efficiency for the different technology.
 * * * * *
 (j) * * *
 (2) The emission reduction efficiency of pollution prevention measures implemented after November 15, 1990, may be used in calculating the actual emissions from an emission point in the debit and credit equations in paragraphs (g) and (h) of this section.
 * * * * *
 (ii) * * *
 (B) For wastewater, E_B shall be calculated using Equation 47 of this subpart:

$$E_B = \sum_{i=1}^n \left[(6.0 \cdot 10^{-8}) Q_{Bi} H_{Bi} \sum_{m=1}^s F_{em} HAP_{Bim} \right] \quad [\text{Eq. 47}]$$

Where:

- n = Number of wastewater streams.
- Q_{Bi} = Annual average flow rate for wastewater stream i before the pollution prevention measure, defined and determined according to § 63.144(c)(3), liters per minute, before implementation of the pollution prevention measure.
- H_{Bi} = Number of hours per month that wastewater stream i was discharged before the pollution prevention measure, hours per month.
- s = Total number of organic HAP in wastewater stream i.
- F_{em} = Fraction emitted of organic HAP m in wastewater from Table 34 of subpart C of this part, dimensionless.
- HAP_{Bim} = Annual average concentration of organic HAP m in wastewater stream i, defined and determined according to paragraph § 63.150(g)(5)(i) of this section, before the pollution prevention measure, parts per million by weight, as measured before the implementation of the pollution measure.

(iv) The same pollution prevention measure may reduce emissions from multiple emission points. In such cases, the percent reduction in emissions for each emission point shall be calculated.

(v) For the purposes of the equations in paragraphs (h)(2) through (h)(7) of this section used to calculate credits for emission points controlled more stringently than the reference control technology or standard, the nominal efficiency of a pollution prevention measure is equivalent to the percent reduction of the pollution prevention measure. When a pollution prevention measure is used, the owner or operator of an affected source is not required to apply to the Administrator for a nominal efficiency and is not subject to paragraph (i) of this section.

(k) The owner or operator shall demonstrate that the emissions from the emission points proposed to be included in the emissions average will not result in greater hazard or, at the option of the Administrator, greater risk to human health or the environment than if the emission points were controlled according to the provisions in §§ 63.1314, 63.1315, 63.1316 through 63.1320, 63.1321, and 63.1330.

(4) A hazard or risk equivalency demonstration shall:

(l) For periods of parameter monitoring excursions, an owner or operator may request that the provisions of paragraphs (l)(1) through (l)(4) of this section be followed instead of the procedures in paragraphs (f)(2)(i) and (f)(2)(ii) of this section.

27. Amend § 63.1335 by revising paragraph (e)(4)(ii)(L)(1), to read as follows:

§ 63.1335 General recordkeeping and reporting provisions.

- (e) * * *
- (4) * * *
- (ii) * * *
- (L) * * *

(1) The required documentation shall include the data used to determine whether the wastewater stream is a Group 1 or Group 2 wastewater stream.

28. Revise Tables 3 and 5 to subpart JJJ of Part 63, to read as follows:

TABLE 3 OF SUBPART JJJ.—GROUP 1 STORAGE VESSELS AT EXISTING AFFECTED SOURCES PRODUCING THE LISTED THERMOPLASTICS

Thermoplastic	Chemical ^a	Vessel capacity (cubic meters)	Vapor pressure ^b (kilopascals)
ASA/AMSAN ^c	styrene/acrylonitrile mixture	≥ 3.78	≥ 0.47
	acrylonitrile	≥ 75.7	≥ 1.62
Polystyrene, continuous processes	all chemicals	< 75.7	≥ 14.2
		≥ 75.7	
Nitrile ^c	acrylonitrile	≥ 13.25	≥ 1.9
			≥ 1.8

^a Vessel capacity and vapor pressure criteria are specific to the listed chemical or to "all chemicals," as indicated.

^b Maximum true vapor pressure of total organic HAP at storage temperature.

^c The applicability criteria in Table 2 of this subpart shall be used for chemicals not specifically listed in this table (i.e., Table 3).

TABLE 5 OF SUBPART JJJ.—GROUP 1 STORAGE VESSELS AT NEW AFFECTED SOURCES PRODUCING THE LISTED THERMOPLASTICS

Thermoplastic	Chemical ^a	Vessel capacity (cubic meters)	Vapor pressure ^b (kilopascals)
ASA/AMSAN ^c	Styrene/ acrylonitrile mixture	≥ 3.78	≥ 0.47
		Acrylonitrile	≥ 1.62
SAN, continuous ^d	All chemicals	≥ 2,271	≥ 0.5 and < 0.7
		< 151	≥ 10
		≥ 151	≥ 0.7
		≥ 13.25	≥ 1.8
Nitrile ^c	Acrylonitrile	≥ 19.6 and < 45.4	≥ 7.48
		≥ 45.4 and < 109.8	≥ 0.61
		≥ 109.8	≥ 0.53
Polystyrene, continuous processes	All chemicals		

TABLE 5 OF SUBPART JJJ.—GROUP 1 STORAGE VESSELS AT NEW AFFECTED SOURCES PRODUCING THE LISTED THERMOPLASTICS—Continued

Thermoplastic	Chemical ^a	Vessel capacity (cubic meters)	Vapor pressure ^b (kilopascals)
ABS, continuous mass	Styrene	≥ 45.43	≥ 0.078
	All other chemicals	≥ 38 and < 45.43	≥ 13.1
		≥ 45.43	≥ 0.53

^a Vessel capacity and vapor pressure criteria are specific to the listed chemical, to "all chemicals," or to "all other chemicals," as indicated.

^b Maximum true vapor pressure of total organic HAP at storage temperature.

^c The applicability criteria in Table 4 of this subpart shall be used for chemicals not specifically listed in this table (i.e., Table 5).

^d The control level for the first two sets of applicability criteria are specified in 63.1314 as 90% and 98%, respectively. The control level for the third set of applicability criteria is the HON control level of 95%.

* * * * *

[FR Doc. 99-3799 Filed 3-8-99; 8:45 am]

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Federal Register

Friday
April 9, 1999

Part III

Environmental Protection Agency

40 CFR Part 63

National Emission Standards for
Hazardous Air Pollutants for Source
Categories: Amendment for Hazardous
Air Pollutants Emissions From Magnetic
Tape Manufacturing Operations; Direct
Final Rule and Proposed Rule

**ENVIRONMENTAL PROTECTION
AGENCY**

40 CFR Part 63

[FRL-6321-8]

RIN 2060-AH71

**National Emission Standards for
Hazardous Air Pollutants for Source
Categories: Amendment for Hazardous
Air Pollutants Emissions From
Magnetic Tape Manufacturing
Operations**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: The EPA is taking direct final action to amend National Emission Standards for Hazardous Air Pollutants (NESHAP) From Magnetic Tape Manufacturing Operations, codified as subpart EE to 40 CFR part 63. The existing standards allow facility owners or operators to leave a limited number of solvent storage tanks uncontrolled if they control coating operations at a level greater than the standards otherwise require. EPA is publishing this final amendment to provide another compliance option for facility owners and operators. If facility owners or operators increase the control of hazardous air pollutant (HAP) emissions from coating operations beyond what the standards otherwise require, this final amendment gives them the choice of leaving a limited number of solvent storage tanks and/or a limited number of pieces of mix preparation equipment uncontrolled. EPA believes this final amendment will not decrease the stringency of the existing standards.

DATES: Effective Date. This final rule amendment is effective on June 8, 1999 without further notice, unless EPA receives adverse comments on this rulemaking by May 10, 1999 or a request for a hearing concerning the accompanying proposed rule is received by EPA by April 19, 1999. If EPA receives timely adverse comment or a timely hearing request, EPA will publish a withdrawal in the **Federal Register** informing the public that this direct final rule will not take effect.

ADDRESSES: Comments. Interested parties may submit comments on this rulemaking in writing (original and two copies, if possible) to Docket No. A-91-31 to the following address: Air and Radiation Docket and Information Center (6102), US Environmental Protection Agency, 401 M Street, S.W., Room 1500, Washington, D.C. 20460. Public comments on this rulemaking will be accepted until May 10, 1999.

Docket. A docket containing supporting information used in developing this direct final rule amendment is available for public inspection and copying at the EPA's docket office located at the above address in Room M-1500, Waterside Mall (ground floor). The public is encouraged to phone in advance to review docket materials. Appointments can be scheduled by phoning the Air Docket Office at (202) 260-7548. Refer to Docket No. A-91-31. A reasonable fee may be charged for copying docket materials.

FOR FURTHER INFORMATION CONTACT: Michele Aston, U.S. Environmental Protection Agency, Policy, Planning, and Standards Group, Emission Standards Division, Mail Drop 13, Research Triangle Park, NC 27711; electronic mail address aston.michele@epa.gov; telephone number (919) 541-2363; facsimile number (919) 541-0942.

SUPPLEMENTARY INFORMATION: We are publishing this rule amendment without prior proposal because we consider this to be a noncontroversial amendment, and we do not expect to receive any adverse comment. We believe that this change to the previously promulgated rule will increase compliance flexibility for affected sources without any adverse environmental consequences. However, in the "Proposed Rules" section of this **Federal Register** publication, we are publishing a separate document that will serve as the proposal for this amendment, in the event we receive adverse comment or a hearing request and this direct final rule is subsequently withdrawn. This final rule amendment will be effective on June 8, 1999 without further notice, unless we receive adverse comment on this rulemaking by May 10, 1999 or a request for a hearing concerning the accompanying proposed rule is received by EPA by April 19, 1999. If EPA receives timely adverse comment or a timely hearing request, we will publish a withdrawal in the **Federal Register** informing the public that this direct final rule will not take effect. In that event, we will address all public comments in a subsequent final rule, based on the proposed rule amendment published in the "Proposed Rules" section of this **Federal Register** document. The EPA will not provide further opportunity for public comment on this action. Any parties interested in commenting on this amendment must do so at this time.

Regulated entities. Entities potentially regulated by this action include any facility engaged in the surface coating of magnetic tape. This includes, but is not

limited to, the following magnetic tape products: audio and video recording tape, computer tape, the magnetic stripes of media involved in credit cards and toll tickets, bank transfer ribbons, instrumentation tape, and dictation tape. Regulated categories and entities are shown in Table 1.

TABLE 1.—REGULATED CATEGORIES AND ENTITIES

Entity category	Description
Industrial	Any facility that is engaged in the surface coating of magnetic tape (SIC 3695 & 2675).
Federal Government: Not affected	
State/Local/Tribal Government: Not affected	

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that the EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated.

Internet. The text of this **Federal Register** document is also available on the EPA's web site on the Internet under recently signed rules at the following address: <http://www.epa.gov/ttn/oarpg/rules.html>. The EPA's Office of Air and Radiation (OAR) homepage on the Internet also contains a wide range of information on the air toxics program and many other air pollution programs and issues. The OAR's homepage address is: <http://www.epa.gov/oar/>.

Electronic Access and Filing Addresses. The official record for this rulemaking, as well as the public version, has been established for this rulemaking under Docket No. A-91-31 (including comments and data submitted electronically). A public version of this record, including printed, paper versions of electronic comments, which does not include any information claimed as confidential business information (CBI), is available for inspection from 8 a.m. to 5:30 p.m., Monday through Friday, excluding legal holidays. The official rulemaking record is located at the address listed in the **ADDRESSES** section at the beginning of this preamble.

Interested parties may submit comments on this rulemaking electronically to the EPA's Air and

Radiation Docket and Information Center at: "A-and-R-Docket@epamail.epa.gov." Electronic comments must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. Comments and data will also be accepted on disks in WordPerfect in 6.1 file format or ASCII file format. All comments and data in electronic form must be identified by the docket number (A-91-31). No CBI should be submitted through electronic mail. Electronic comments may be filed online at many Federal Depository Libraries.

Outline. The information in this preamble is organized as follows:

- I. Authority
- II. Background
- III. Regulatory Requirements and Performance Standards
 - A. Original compliance option for solvent storage tanks
 - B. What information we used to establish the new compliance option
 - C. Why we chose to allow the new compliance option
 - D. How the new compliance option affects you as a manufacturer
- IV. Administrative Requirements
 - A. Executive Order 12866: "Significant Regulatory Action Determination"
 - B. Regulatory Flexibility
 - C. Paperwork Reduction Act
 - D. Unfunded Mandates Reform Act
 - E. Docket
 - F. Executive Order 12875: Enhancing the Intergovernmental Partnership
 - G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks
 - H. Executive Order 13084: Consultation and Coordination with Indian Tribal Governments
 - I. Submission to Congress and the General Accounting Office
 - J. National Technology Transfer and Advancement Act

I. 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).

II. Background

On December 15, 1994, we published in the **Federal Register** the final rule containing national standards for reducing HAP in facilities that manufacture magnetic tape (see 59 FR 64580). Since then, a regulated facility has asked us to consider alternative compliance options for a narrow aspect of the regulation.

This amendment is very similar to the existing provision at 40 CFR 63.703(c)(4), but adds an optional approach for compliance. The new approach requires the same enhanced control efficiency for coating operations

as required by the provisions published in 1994. We expect this amendment to protect the environment as well as the rule published in 1994, while offering the regulated community more flexibility for compliance.

III. Regulatory Requirements and Performance Standards

A. Original Compliance Option for Solvent Storage tanks

In the final rule published in 1994, we included a compliance option for owners or operators of facilities that manufacture magnetic tape (referred to as operators in the rest of this preamble). It allows them to leave uncontrolled the emissions from certain solvent storage tanks in return for better controlling the largest emissions source at their facilities. Through that alternative compliance provision, we allow operators to vent emissions from these tanks to the atmosphere, rather than routing them through a control device. (See 40 CFR 63.703(c)(4)—as published December 15, 1994—for this option.) As explained in the 1994 preamble, we concluded then that added control at the coating operations would offset emissions from the uncontrolled storage tanks (see 59 FR 64590-64592, December 15, 1994.)

B. What Information We Used To Establish the New Compliance Option

Since 1994, we've received detailed technical information from a facility that manufactures magnetic tape (see Docket No. A-91-31). It compares estimates for HAP emissions from uncontrolled solvent storage tanks to those for uncontrolled pieces of mix preparation equipment. The facility asked us to allow more flexibility in the types of equipment that can be left uncontrolled in exchange for a higher level of control of the coating operations at the facility. In evaluating this request, we've generally compared the amount of HAP emissions that may be uncontrolled under the 1994 published rule's alternative provision with those HAP emissions that may be uncontrolled under the added options in today's rule. For this analysis, we incorporate by reference our rationale for the existing alternative compliance options which was included in our preamble for the 1994 published rule.

At magnetic tape manufacturing facilities, solvent storage tanks and mix preparation equipment are typically covered, even if the headspace vapors aren't vented to a control device. Emissions from a given solvent storage tank at a manufacturing facility vary depending on throughput, tank size,

solvents stored in the tanks, and other factors. Emissions from a given piece of mix preparation equipment vary for similar reasons, and also vary based on the amount that the temperature of the mix increases during mixing.

The facility's detailed technical information estimates their maximum potential emissions under process constraints in the milling operations. The facility's solvent storage tanks and mix preparation equipment have varying characteristics, including capacity. Their largest tanks and mix preparation equipment are 20,000 gallons and 1200 gallons, respectively. The solvent storage tanks have fixed roofs with conservation vents, so the facility used standard calculations for these tanks to estimate emissions. For solvent recovery tanks, they believed this method may not be appropriate because they maintain most tanks at nearly constant levels with a mechanical weir. However, we don't know of a better way to calculate emissions for these tanks, so we'd use the same method unless rigorous monitoring ensured a constant level of liquid in the tank. Therefore, we decided to include tanks from the solvent recovery unit in our evaluation of the data.

The facility estimated emissions for their mix preparation equipment using our calculation methods for batch processes, which we believe is appropriate for this application. In developing the regulations, we estimated emissions from the entire mix preparation operation. But their method estimates emissions for pieces of mix equipment, which requires more detailed information than we had while developing the regulations. At the same time, we believe this facility's solvent storage tanks and mix preparation equipment are representative of the tanks and equipment used by the rest of the regulated magnetic tape industry, so we used their data to analyze the requested alternative compliance approach.

C. Why We Chose To Allow the New Compliance Option

The 1994 published rule restricts the capacity of the solvent storage tanks we allowed to be uncontrolled to 20,000 gallons each but doesn't restrict other parameters that affect emissions. Therefore, we believe it's reasonable to use the highest emitting tanks in this comparison if they don't exceed the capacity restriction. For the magnetic tape manufacturing facility we studied, we found the maximum potential HAP emissions from a solvent storage tank and from a piece of mix preparation

equipment were 1.6 tons/yr (tpy) and 1.9 tpy, respectively.

Because maximum emissions are similar, we believe it's reasonable for facility operators to leave uncontrolled some mix preparation equipment and some solvent storage tanks, if they better control their coating operations. But they must leave fewer pieces of mix preparation equipment uncontrolled because the maximum emissions from mix preparation equipment are greater than those from solvent storage tanks. Also, some tanks had emissions as low as 0.01 tpy, whereas the lowest level for mix preparation equipment was 0.1 tpy. Based on all the data, it's reasonable to allow manufacturers to leave uncontrolled half as many pieces of mix preparation equipment as of solvent storage tanks. This 2-to-1 ratio makes up for the wider range of HAP emissions in the tanks.

As noted above, the 1994 published rule's alternative compliance approach limits the capacity of solvent storage tanks that can be left uncontrolled. Our amendment also uses a capacity limit of 1,200 gallons for each piece of mix preparation equipment that can be left uncontrolled. We believe the equipment at this facility is representative of equipment in the industry. In any case, limiting maximum capacity makes sure the size of uncontrolled mix preparation equipment is no larger than the size used for the estimates supporting this amendment.

D. How the New Compliance Option Affects You as a Manufacturer

Today's final rule amendment affects you if, as a facility owner or operator, you choose to increase the overall control efficiency of your coating operations for magnetic tape. As the final rule was published in 1994, 40 CFR 63.703(c) allowed you to leave HAP solvent storage tanks uncontrolled if you increase the overall control efficiency of your coating operations. Under today's final rule amendment, you may still leave uncontrolled 10, 15, or 20 tanks in exchange for controlling your coating operations to an overall efficiency of 97, 98, or 99 percent, respectively. Under today's amendment, however, you may leave uncontrolled one piece of mix preparation equipment in exchange for two solvent storage tanks left uncontrolled under the 1994 rule. For example, you could leave uncontrolled six solvent storage tanks and two pieces of mix preparation equipment if you achieve an overall efficiency of 97 percent—instead of 10 solvent storage tanks. See the amendment to 40 CFR 63.703(c)(4) for

combinations you may use to comply with the new alternative provisions.

We believe this amendment will limit HAP emissions from facilities that manufacture magnetic tape at least as much as provisions in the 1994 rule. Furthermore, the amendment will give you more flexibility to meet the regulation. We don't expect our amendment to pose any problems for enforcement or permitting because it's essentially similar to the 1994 rule, which affected facilities are following now. We expect you'll like this amendment because you may be able to save money and other resources, compared to the compliance approaches under the 1994 rule. Also, if you decide not to follow the amended provisions, they won't burden you—they merely give you another option, and the regulation is otherwise virtually unchanged.

IV. Administrative Requirements

A. Executive Order 12866: "Significant Regulatory Action Determination"

Under Executive Order 12866 (58 FR 51735, October 4, 1993) the Agency must determine whether the regulatory action is "significant" and therefore subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety in 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 entitlement, grants, user fees, or loan programs of the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Because the annualized cost of this final rule amendment would be significantly less than \$100 million and would not meet any of the other criteria specified in the Executive Order, it has been determined that this action is not a "significant regulatory action" under the terms of Executive Order 12866, and is therefore not subject to OMB review.

Executive Order 12866 also encourages agencies to provide a meaningful public comment period, and

suggests that in most cases the comment period should be 60 days. However, in consideration of the very limited scope of this amendment, the EPA considers 30 days to be sufficient in providing a meaningful public comment period for this rulemaking.

B. Regulatory Flexibility

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions. The EPA determined that this amendment to the Magnetic Tape Manufacturing Operations does not have a significant impact on a substantial number of small entities. The EPA has also determined that is not necessary to prepare a regulatory flexibility analysis in connection with this action.

C. Paperwork Reduction Act

This amendment does not include or create any information collection activities subject to the Paperwork Reduction Act, and therefore no information collection request (ICR) will be submitted to OMB for review in compliance with the Paperwork Reduction Act, 44 U.S.C. 3501, *et seq.*

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the

Administrator publishes with the final rule an explanation of why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

As noted above, this amendment is of very narrow scope, and provides a compliance alternative very similar to one already available in the promulgated regulation. The EPA has determined that this action contains no regulatory requirements that might significantly or uniquely affect small governments. EPA has also determined that this action 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. Thus, today's action is not subject to the requirements of sections 202 and 205 of the UMRA.

E. Docket

The docket includes an organized and complete file of all the information upon which EPA relied in taking this direct final action. The docketing system is intended to allow members of the public and industries involved to readily identify and locate documents so that they can effectively participate in the rulemaking process. Along with the proposed and promulgated standards and their preambles, the contents of the docket, except for certain interagency documents, will serve as the record for judicial review. (See CAA section 307(d)(7)(A).)

F. Executive Order 12875: Enhancing the Intergovernmental Partnership

Under Executive Order 12875, the 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 the 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 the 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 action does not create a mandate on State, local or tribal governments. The amendments to the rule do not impose any new or additional enforceable duties on these entities. Accordingly, the requirements of section 1(a) of Executive Order 12875 do not apply to this action.

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

Executive Order 13045 applies to any rule that the EPA determines (1) economically significant as defined under E.O. 12866, and (2) the environmental health or safety risk addressed by the rule has a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This amendment to the National Emissions Standards for Magnetic Tape Manufacturing Operations is not subject to E.O. 13045, entitled Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997), because it is not an economically significant regulatory action as defined by E.O. 12866, and it does not address an environmental health or safety risk that would have a disproportionate effect on children.

H. Executive Order 13084: Consultation and Coordination With Indian Tribal Governments

Under Executive Order 13084, the 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 separate identified section of the preamble to the rule, a description of the extent of the 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 the 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."

This amendment to National Emissions Standards for Magnetic Tape Manufacturing Operations does not significantly or uniquely affect the communities of Indian tribal governments. The amendments to the rule do not impose any new or additional enforceable duties on these entities. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this action.

I. Submission to Congress and the General Accounting Office

Under 5 U.S.C. 801(a)(1)(A) as added by the Small Business Regulatory Enforcement Fairness Act of 1996, the EPA submitted a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives and the Comptroller general of the General Accounting Office prior to publication of the rule in today's **Federal Register**. This action to amend the currently effective rule is not a "major rule" as defined by 5 U.S.C. 804(2).

J. National Technology Transfer and Advancement Act

Under section 12(d) of the National Technology Transfer and Advancement Act (NTTA), Public Law 104-113 (March 7, 1996), the EPA is required to use voluntary consensus standards in its regulatory and procurement activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices, etc.) which are adopted by voluntary consensus standard bodies. Where available and potentially applicable voluntary consensus standards are not used by the EPA, the NTTA requires the Agency to provide

Congress, through OMB, an explanation of the reasons for not using such standards. This action does not put forth any technical standards; therefore, consideration of voluntary consensus standards was not required.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Coating operation, Hazardous air pollutant, Magnetic tape manufacturing, Mix preparation equipment, Solvent storage tank.

Dated: April 1, 1999.

Carol M. Browner,
Administrator.

Chapter I, Part 63 of the Code of Federal Regulations are amended as follows:

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

1. The authority citation for part 63 continues to read as follows:

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

Subpart EE—National Emission Standards for Magnetic Tape Manufacturing Operations

2. Section 63.703 is amended by revising paragraph (c)(4) (i), (ii) and (iii) to read as follows:

§ 63.703 Standards.

* * * * *

(c) * * *

(4) In lieu of controlling HAP emissions from each solvent storage tank and piece of mix preparation equipment to the level required by paragraph (c)(1) of this section, an owner or operator of an affected source may elect to comply with one of the options set forth in paragraph (c)(4)(i), (ii) or (iii) of this section.

(i) Control HAP emissions from all coating operations by an overall HAP control efficiency of at least 97 percent in lieu of either:

(A) Controlling up to 10 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(B) Controlling 1 piece of mix preparation equipment that does not exceed 1,200 gallons in capacity and up to 8 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(C) Controlling up to 2 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 6 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(D) Controlling up to 3 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 4 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(E) Controlling up to 4 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 2 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(F) Controlling up to 5 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity.

(ii) Control HAP emissions from all coating operations by an overall HAP control efficiency of at least 98 percent in lieu of either:

(A) Controlling up to 15 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(B) Controlling 1 piece of mix preparation equipment that does not exceed 1,200 gallons in capacity and up to 13 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(C) Controlling up to 2 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 11 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(D) Controlling up to 3 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 9 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(E) Controlling up to 4 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 7 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(F) Controlling up to 5 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 5 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(G) Controlling up to 6 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 3 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(H) Controlling up to 7 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 1 HAP solvent storage tank that does not exceed 20,000 gallons in capacity.

(iii) Control HAP emissions from all coating operations by an overall HAP control efficiency of at least 99 percent in lieu of either:

(A) Controlling up to 20 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(B) Controlling 1 piece of mix preparation equipment that does not exceed 1,200 gallons in capacity and up to 18 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(C) Controlling up to 2 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 16 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(D) Controlling up to 3 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 14 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(E) Controlling up to 4 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 12 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(F) Controlling up to 5 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 10 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(G) Controlling up to 6 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 8 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(H) Controlling up to 7 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 6 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(I) Controlling up to 8 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 4 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(J) Controlling up to 9 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity and up to 2 HAP solvent storage tanks that do not exceed 20,000 gallons each in capacity; or

(K) Controlling up to 10 pieces of mix preparation equipment that do not exceed 1,200 gallons each in capacity.

* * * * *

[FR Doc. 99-8779 Filed 4-8-99; 8:45 am]

BILLING CODE 6560-50-P

and least burdensome alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

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

G. Submission to Congress and the Comptroller General

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

“major” rule as defined by 5 U.S.C. 804(2).

H. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by June 11, 1999. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects

40 CFR Part 52

Environmental protection, Air pollution control, Lead, Incorporation by reference, Intergovernmental relation, Reporting and recordkeeping requirements.

40 CFR Part 81

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

Dated: March 18, 1999.
Michael V. Peyton,
Acting Regional Administrator, Region 4.

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 *et seq.*

Subpart L—Georgia

2. Section 52.570 is amended by adding paragraph (c)(45) to read as follows:

§ 52.570 Identification of plan.

* * * * *

(c) * * *

(45) The State of Georgia submitted a lead SIP for the Muscogee County lead nonattainment area dated September 28, 1998.

(i) Incorporation by reference.

State Implementation Plan for Lead Columbus, Georgia Muscogee County, Requirements for the GNB facility that were adopted on September 28, 1998.

(ii) Other material. None.

* * * * *

PART 81—[AMENDED]

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

Authority: 42 U.S.C. 7401-7671q.

Subpart C—Section 107 Attainment Status Designations

2. In § 81.311, the attainment status table for lead is amended by revising the designation type and date entry for Muscogee County (part).

§ 81.311 [Amended]

GEORGIA—LEAD

Designated Area	Designation		Classification	
	Date	Type	Date	Type
Muscogee County (part)—That portion of the county which includes a circle with a radius of 2.3 kilometers with the GNB, Inc., lead smelting and battery production facility in the center.	June 11, 1999	Attainment		

[FR Doc. 99-8944 Filed 4-9-99; 8:45 am]
 BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AD-FRL-6322-8]

National Emission Standards for Hazardous Air Pollutants for Source Category: Pulp and Paper Production

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; interpretation and technical amendments.

SUMMARY: Under the Clean Air Act (Act), EPA issued a final rule (63 FR 18504, April 15, 1998) to reduce hazardous air pollutant (HAP) emissions from the pulp and paper production source category. That rule (known as the Pulp and Paper national emission standard for hazardous air pollutants or pulp and paper NESHAP) is the air component of the integrated air and water rules for the pulp and paper industry (known as the Pulp and Paper Cluster Rules). The rule applies to pulp and paper production processes

included under Standard Industrial Classification (SIC) code 26.

This action makes interpretive amendments to certain regulatory text in the 1998 pulp and paper NESHAP. We are making these amendments to make certain that the rule's language reflects our stated intent and also to correct certain inadvertent omissions and minor drafting errors.

DATES: These amendments are effective April 12, 1999. The incorporation by reference of the publication listed in the amendments is approved by the Director of the Federal Register as of April 12, 1999.

ADDRESSES: Docket No. A-92-40, containing the supporting information for the original and amendments to 1998 NESHAP and this action, is available for your inspection and copying between 8:00 a.m. and 5:30 p.m., Monday through Friday except for Federal holidays, at the following address: U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center (MC-6102), 401 M Street SW, Washington, DC 20460, or by calling (202) 260-7548. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Mr. Stephen Shedd, Emission Standards

Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711; telephone (919) 541-5397 or e-mail at shedd.steve@epa.gov. For questions on compliance and applicability determinations, contact Mr. Seth Heminway, Office of Enforcement and Compliance Assessment (2223A), U.S. Environmental Protection Agency, 401 M Street SW, Washington, DC 20460; telephone (202) 564-7017 or e-mail at heminway.seth@epa.gov.

SUPPLEMENTARY INFORMATION: *Regulated Entities.* Entities potentially regulated by this action include:

Category	SIC code	Examples of regulated entities
Industry	26	Pulp mills and integrated mills (mills that manufacture pulp and paper/paperboard) that chemically pulp wood fiber.

This table is not exhaustive. It lists the types of entities that we are now aware might be regulated by this action. To determine whether your facility is regulated by this action, you should carefully examine the applicability criteria in part 63, subparts A and S of title 40 of the Code of Federal Regulations.

Information Contacts. If you have questions about how this action applies to a particular situation or questions about compliance approaches, permitting, enforcement, and rule determinations, please contact the appropriate regional representative below.

Region I: Greg Roscoe, Chief, Air Pesticides and Toxics Enforcement Office, Office of Environmental Stewardship, U.S. EPA, Region I, JFK Federal Building (SEA), Boston, MA 02203; (617) 565-3221. Technical Contact for Applicability Determination, Susan Lancey, (617) 565-3587, (617) 565-4940 (Fax).

Region II: Mosey Ghaffari, Air Compliance Branch, U.S. EPA, Region II, 290 Broadway, New York, NY 10007-1866; (212) 637-3925, (212) 637-3998 (Fax).

Region III: Makeba Morris, U.S. EPA, Region III, 3AT10, 1650 Arch Street, Philadelphia, PA 19103; (215) 814-2187.

Region IV: Lee Page, U.S. EPA, Region IV, Atlanta Federal Center, 100 Alabama Street, Atlanta, GA 30303; (404) 562-9131.

Region V: Christina Prasinis (AE-17J), U.S. EPA, Region V, 77 West Jackson Street, Chicago, IL 60604-3590; (312) 886-6819, (312) 353-8289 (Fax).

Region VI: Michelle Kelly, Air Enforcement Branch (6EN-AA), U.S.

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Technology Transfer Network. The Technology Transfer Network (TTN) is a network of EPA's electronic bulletin boards. The TTN provides information and technology exchange in various areas of air pollution control. Information regarding the basis and purpose of this action, the rule and other relevant documents can be found on the pulp and paper page of EPA's Unified Air Toxics World Wide Web site (UATW) at "<http://www.epa.gov/ttn/uatw/pulp/pulppg.html>". For more information on the TTN, call the HELP line at (919) 541-5384.

Outline. The technical amendments discussed in this preamble are grouped according to rule sections: emission standards and testing, and monitoring and recordkeeping.

The preamble is organized as follows:

- I. Description of the Amendments and Interpretations
 - A. Emission Standards and Testing
 - 1. May process modifications be used instead of add-on control devices to meet the bleaching system standards (§ 63.445)?
 - 2. Must evaporator feed stage vapor and vacuum system condensates be controlled (§ 63.446)?
 - 3. May a direct injection gas chromatography/flame ionization detection test method be used to measure methanol in liquid streams (§ 63.14 and § 63.457(c)(3))?
 - 4. What are the minimum length and number of test runs required to demonstrate initial compliance (§ 63.457)?
 - B. Monitoring and Recordkeeping
 - 1. Must continuous monitors for residence time and concentration be used for some control device alternatives (§ 63.453)?
 - 2. What is the condensate tank "no detectable" emissions test frequency (§ 63.453)?
 - 3. What must be done if the tests for condensate tanks indicate emissions (§ 63.453)?
 - 4. May the repair period for closed-vent systems extend beyond 15 days as implied in the recordkeeping requirements (§ 63.453)?
 - 5. Do the recordkeeping requirements in subpart RR apply to closed collection systems (§ 63.453)?
 - C. Typographical Corrections
 - II. Administrative Requirements
 - III. Legal Authority
- I. Description of the Amendments and Interpretations**

In today's action, we are amending several sections of the national emission standard for hazardous air pollutants from the pulp and paper industry issued

on April 15, 1998 (the "1998 NESHAP") in title 40, part 63, subpart S. These amendments clarify the intent and correct inadvertent omissions and minor drafting errors in the 1998 NESHAP. This section presents a description of each of the amendments.

A. Emission Standards and Testing

1. May process modifications be used instead of add-on control devices to meet the bleaching system standards (§ 63.445)?

Today's action revises the bleaching system standards (§ 63.445) to make clear that process modifications (e.g., 100 percent substitution of chlorine dioxide for chlorine and elimination of hypochlorite) may be used to achieve compliance with the chlorinated HAP emission limits for the bleaching system standards. The 1998 NESHAP requires equipment at subject bleaching stages to be enclosed and vented into a closed-vent system and routed to a control device that meets the specified emission limits (see § 63.445(c)).

Following promulgation of the 1998 NESHAP, commenters indicated that some mills may be able to achieve the concentration or mass emission limits specified in § 63.445(c) by process modifications without the use of an add-on control device. The commenters stated that as written, the 1998 NESHAP would preclude mills from using process modifications (e.g., 100 percent chlorine dioxide substitution for chlorine and elimination of hypochlorite) because the 1998 NESHAP specifies that the emissions must be captured and routed to a control device.

We did not intend to prevent you (owner or operator of the mill or reader, as appropriate) from using process modifications to achieve compliance with the standards for chlorinated HAP emissions. The outlet concentration control option was provided in the 1998 NESHAP in response to comments on the December 17, 1996 proposal (Pulp, Paper, and Paperboard Industry—Background Information for Promulgated Air Emission Standards, EPA-453/R-93-050b, pages 6-1 and 6-2) indicating that bleaching systems using high levels of chlorine dioxide substitution could have difficulty meeting a percent reduction limit due to low chlorine concentrations at the process equipment outlet. Also, the mass emission limit for bleaching system vents in the 1998 NESHAP was developed in response to comments on the March 8, 1996 supplemental **Federal Register** document (61 FR 9394, second column) indicating that new low-flow rate bleaching system technologies

would not be able to meet either the percent reduction or outlet concentration limits (Air Docket A-92-40, item IV-B-29). Therefore, we provided for two standards to allow process modifications without the need for add-on controls. Thus, we do not intend to require enclosures and closed-vent systems for process equipment that achieve compliance using process modifications. A temporary enclosure may be necessary to measure the outlet concentration or mass emission limit during the initial performance test and other compliance demonstrations. It should be noted that the percent reduction alternative emission limit was not included in the amended language since this reduction alternative is inherently based on the use of an add-on control device.

2. Must evaporator feed stage vapor and vacuum system condensates be controlled (§ 63.446)?

Evaporator feed stage vapor and vacuum system condensates must be controlled. Today's action revises the standards for kraft pulping process condensates in the 1998 NESHAP (§ 63.446) to clarify which condensate streams from evaporator system weak liquor feed stages are subject to the standards. Our intention in the 1998 NESHAP was to collect all condensate streams from evaporator system stages where the majority of HAPs are discharged. The discussion in the next four paragraphs is intended to present the reader with a brief description of the evaporation process and provide background for identifying the regulated condensate streams.

The 1998 NESHAP (§ 63.446(b)(3)) specifies that the standards apply to certain kraft pulping process condensate streams. For the evaporator system, the 1998 NESHAP specifies that regulated streams are condensates from "each evaporator stage where weak liquor is introduced (feed stages)." The 1998 NESHAP defines the evaporator system as

* * * all equipment associated with increasing the solids content and/or concentrating spent cooking liquor from the pulp washing system including pre-evaporators, multi-effect evaporators, concentrators, and vacuum systems, as well as associated condensers, hotwells, and condensate streams, and any other equipment serving the same function as those previously listed.

Evaporators are used to remove water and volatile contaminants (including HAPs) from weak liquor so that the spent cooking chemicals can be economically recovered and reused. After passing through the evaporator system, concentrated weak liquor (i.e.,

heavy or strong liquor) is burned in the recovery furnace to recover spent cooking chemicals and heat value contained in organic compounds remaining in the concentrated liquor.

An evaporator system is a series of interconnected evaporator stages called "effects" (thus the industry term "multi-effect evaporator"). Each stage is operated at different pressures to evaporate water and contaminants (HAPs) from weak liquor. The evaporated vapors from one stage heat the next stage. Thus, the condenser of each stage condenses vapors from this and previous stages. These vapors typically do not exit the evaporator system until after entering the next stage or stages. Additionally, the vapors from the weak liquor feed stages have the highest HAP content since this is the initial contact of the weak liquor with heat. Later stages contain less HAPs (unless more weak liquor is fed into the effect) since the majority of HAPs are evaporated from the liquor in the previous stage(s).

The liquor feed stages in the evaporator system are operated under very high vacuum, usually maintained by steam ejectors or vacuum pumps. The condensates generated by these vacuum devices and their associated condensers also have high HAP content due to volatilization of compounds from the individual liquor feed stages.

Following issuance of the 1998 NESHAP, we received requests to clarify the 1998 NESHAP language regarding the subject condensates from evaporator system weak liquor feed stages. We intended to include the condensates from weak liquor feed stage vapors and condensates from weak liquor feed stage vacuum systems in the list of subject kraft pulping process condensates specified in the 1998 NESHAP (§ 63.446(b)). However, the 1998 NESHAP language used to describe the weak liquor feed stage vapor condensates was not accurate and the 1998 NESHAP language omitted weak liquor feed stage vacuum system condensates. Our intent is evident in EPA's analysis of the condensate characterization data (Air Docket A-92-40, item IV-B-9) submitted following proposal, the supplemental **Federal Register** document (March 8, 1996; 61 FR 9383; page 9390, second column), and communications between EPA and industry stakeholders (Air Docket A-92-40, items IV-E-65 and IV-E-71) following publication of the proposed rule.

Accordingly, we are amending § 63.446(b) to clarify that condensates from the vapors and vacuum systems for weak liquor feed stages are subject to the kraft pulping process condensate

standards. As noted above, the vapors from weak liquor feed stages may not be condensed in some evaporative systems until the following stage or stages. In this case, you must collect and control the condensates from these evaporator stages.

3. *May a direct injection gas chromatography/flame ionization detection test method be used to measure methanol in liquid streams (§ 63.14 and § 63.457(c)(3))?*

A specific direct injection gas chromatography/flame ionization detection (GC/FID) test method is being included in today's action as an additional and alternative test method for determining the methanol content of liquid streams. We are amending the test methods and procedures section of the 1998 NESHAP (§ 63.457(c)(3)) and the incorporation-by-reference section of the NESHAP general provisions (§ 63.14) to incorporate this test method.

As presented in the April 15, 1998 NESHAP preamble (63 FR 18529), the 1998 NESHAP specifies EPA Reference Method 305 for determining methanol content of liquid streams. As the 1998 NESHAP preamble notes, however, the GC/FID test method developed by the National Council of the Paper Industry for Air and Stream Improvement, Inc. (NCASI) had not been validated using EPA procedures (Method 301). However, we stated in the 1998 NESHAP preamble that if we approve this method using the Method 301 validation procedures, then the NCASI method would be approved as either an alternative or a replacement for Method 305 with a supplemental **Federal Register** document.

On February 18, 1998, the director of EPA's Emissions, Monitoring and Analysis Division (EMAD) approved NCASI's test method as an alternative test method to EPA Method 305 for measuring methanol in condensates. Since clarifying amendments to the 1998 NESHAP are being published in today's action, we decided to incorporate this NCASI test method into the 1998 NESHAP language to ease implementation and referencing.

Either EPA Method 305 or the NCASI method may be used for measuring the methanol content of liquid streams. However, the NCASI test method has been validated for only one HAP compound: methanol. So while this NCASI method can be used in other parts of the 1998 NESHAP where methanol is specified as a surrogate for HAP, this method may not be used for certain test requirements for biological treatment where we require a total measurement of all HAP compounds (not just methanol).

4. *What are the minimum length and number of test runs required to demonstrate initial compliance (§ 63.457)?*

For the initial performance tests, a minimum of three 1-hour test runs must be conducted during which either an integrated sample or four grab samples must be taken. Today's action clarifies the terminology used for test runs and samples in the vent sampling requirements in § 63.457(b)(5) and (b)(6) and adds the 1-hour test length specification to the liquid sampling requirements in § 63.457(c)(3).

Commenters to the 1998 NESHAP indicated that the language regarding the minimum length of the test run and number of test runs required by the NESHAP was unclear. In reviewing the 1998 NESHAP, we found two sections where clarification of the terminology used to describe test runs and samples is needed. Additionally, we inadvertently omitted specifying the minimum test run length for liquid sampling. The following discussion identifies the 1998 NESHAP language in question and the amendments in today's action to correct the rule language.

Performance tests are used to demonstrate compliance with a relevant standard based on conditions that reflect normal operations. As specified in the performance testing requirements section of the NESHAP general provisions (§ 63.7(e)(1)):

Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (i.e., performance based on normal operating conditions) of the affected source.

The NESHAP general provisions (§ 63.7(e)(3)) also specify:

* * * For the purpose of determining compliance with a relevant standard, the arithmetic mean of the results of the three runs shall apply.

For pulping and bleaching system vent standards, the 1998 NESHAP specifies in the test methods and procedures section (§ 63.457(b)(5)) that owners or operators must collect a minimum of three samples that are representative of normal conditions and average the results to determine vent gas pollutant concentrations. However, the terminology used in the 1998 NESHAP for vent sampling was incorrect since the term "samples" was used instead of the phrase "test runs." Section 63.457(b)(5) should have used the phrase "test runs" since the subsequent language in § 63.457(b)(6) refers the minimum sampling time for the test runs and also specifies the number of samples to be taken during the run.

Therefore, we are changing the word "samples" to "test runs" in § 63.457(b)(5). Also, for additional clarity, we are adding the word "test" in front of the word "run" in § 63.457(b)(6).

For liquid stream sampling, the 1998 NESHAP specifies in the test methods and procedures section (§ 63.457(c)(3)) that owners or operators must collect a minimum of three samples that are representative of normal conditions and average the results to determine liquid stream total HAP or methanol concentrations. In drafting the 1998 NESHAP, we inadvertently omitted the minimum sampling time of each test run for liquid stream sampling. Although the liquid stream test methods referenced in the 1998 NESHAP (§ 63.457(c)(3)(i) and (c)(3)(ii)) are batch tests, we intended for the samples (either grab samples or composite samples) to be collected over a minimum period of 1 hour. Our intent for liquid stream sampling length is found in the test methods and procedures section (§ 63.451(i)(2)(iv)) of the December 17, 1993 proposal (63 FR 66181). Today's action corrects this omission and inserts the 1-hour sampling period language into § 63.457(c)(3).

Today's action amends the 1998 NESHAP to clarify that the initial performance tests for vent and liquid streams must consist of a minimum of three test runs and that the minimum sampling time for each test run is 1 hour. However, additional performance tests or longer sampling times may be needed to demonstrate compliance under normal operating conditions for equipment systems that have multiple operating scenarios or modes.

With regard to continuous compliance, the 1998 NESHAP did not specify frequencies and averaging periods for continuous monitoring since we intended to provide you flexibility in developing appropriate continuous monitoring strategies. As specified in the monitoring section of the 1998 NESHAP (§ 63.453(n)(4)), you must provide for the Administrator's approval the rationale for the selected operating parameter value, monitoring frequency, and averaging time. Since we have delegated this authority to State agencies, you have the flexibility to work out the specifics of continuous monitoring strategies with your permitting agencies. Additionally, we continue to hold workshops to discuss and identify continuous monitoring strategies with stakeholders.

*B. Monitoring and Recordkeeping**1. Must continuous monitors for residence time and concentration be used for some control device alternatives (§ 63.453)?*

Thermal oxidizers meeting the outlet concentration standard may continuously monitor either combustion temperature or outlet concentration. Today's action clarifies the monitoring requirements in the 1998 NESHAP (§ 63.453(b)) for thermal oxidizers used to control pulping system vent emissions. Additionally, today's action clarifies that residence time is an operating parameter to be demonstrated initially and when process changes occur that will impact residence time.

The 1998 NESHAP (§ 63.443(d)) contains the following alternative emission limits for thermal oxidizers:

- (1) Reduce total HAP emissions by 98 percent or more by weight;
- (2) Reduce the total HAP concentration at the outlet of the thermal oxidizer to 20 parts per million or less by volume (ppmv), corrected to 10 percent oxygen on a dry basis;
- (3) Reduce total HAP emissions using a thermal oxidizer designed and operated at a minimum temperature of 871 °C (1600 °F) and a minimum residence time of 0.75 seconds; or
- (4) Reduce total HAP emissions using a boiler, lime kiln, or recovery furnace by introducing the HAP emission stream with the primary fuel or into the flame zone.

The monitoring requirements for thermal oxidizers (§ 63.453(b)) specify that a continuous monitoring system (CMS) must be operated to measure the temperature in the firebox or in the ductwork immediately downstream of the firebox and before any substantial heat exchange occurs. This applies to each thermal oxidizer used to comply with the percent reduction, outlet concentration, and minimum design specification requirements. When complying with the outlet concentration or the minimum design requirements, you must monitor for the parameter specified and for the temperature and concentration limits specified.

In drafting the 1998 NESHAP, we intended that continuous compliance with each emission limit alternative (with the exception of using a boiler, lime kiln, or recovery furnace) be demonstrated by monitoring only the thermal oxidizer operating temperature as evidenced by the December 17, 1993 proposal (§ 63.453(b)) and the 1998 NESHAP preamble (63 FR 18511). As an option for monitoring temperature, we intended to allow you to continuously monitor only the thermal oxidizer outlet concentration if you are complying with the 20 ppmv outlet concentration emission limit (§ 63.443(d)(2)).

However, the language in § 63.453(b) of the 1998 NESHAP is unclear. It incorrectly indicates that owners or operators complying with the 20 ppmv outlet concentration must continuously monitor the outlet concentration and temperature, and that owners or operators complying with the temperature and residence time specifications must continuously monitor the thermal oxidizer operating temperature, residence time, and HAP concentration.

Today's action amends the 1998 NESHAP to achieve the original intent as stated in the preamble (63 FR 18511). The amendment clarifies that mills that comply with the 20 ppmv emission limit must monitor either HAP concentration or temperature, but not both. The amendment also clarifies that monitoring of operating temperature is the only monitoring parameter requirement for demonstrating continuous compliance with the minimum temperature and residence time specification (§ 63.443(d)(3)). For the residence time requirement, you must demonstrate that the minimum residence time is being achieved (along with the operating temperature) and provide documentation to demonstrate this in the notification of compliance status. The minimum residence time must also be performed if the vent gas flow rate sent to the thermal oxidizer is increased above the flow rate established in the notification of compliance status.

2. What is the condensate tank "no detectable" emissions test frequency (§ 63.453)?

Today's action amends the monitoring requirements for closed collection systems (§ 63.453(l)) to clarify tests to determine "no detectable" emissions are to be conducted initially and annually.

In the standards for kraft pulping process condensates (§ 63.446(d)(2)(i)), the 1998 NESHAP specifies that condensate tanks used in the closed collection system for regulated condensate streams must be operated and designed with no detectable emissions as indicated by an instrument reading of less than 500 parts per million above background using EPA Reference Method 21. However, we inadvertently neglected to specify the schedule for conducting this Method 21 test. We intended this compliance monitoring to be conducted at the same frequency as that required for the closed-vent system Method 21 tests since the same test equipment and personnel are being used. Closed-vent systems are required to be tested initially and annually (§ 63.453(k)(3)). Today's amendment specifies that the

"no detectable" emissions tests for closed collection systems must also be performed initially and annually.

For additional clarity and to better incorporate additional changes being made in today's action (see sections I.B.3 and I.B.5 of this preamble), we restructured the NESHAP paragraph where the monitoring requirements for closed collection systems are specified (§ 63.453(l)). We are changing the structure of § 63.453(l) to parallel that used for the enclosure and closed-vent system monitoring requirements (§ 63.453(k)). Consequently, several subsections are being added to § 63.453(l). These revisions are contained in amended § 63.453(l)(2). Additional changes to § 63.453(l) are discussed in sections I.B.3 and I.B.5 of this preamble.

3. What must be done if the tests for condensate tanks indicate emissions (§ 63.453)?

We are amending the closed collection system monitoring requirements (§ 63.453(l)) to clarify that pulp and paper mills must comply with the repair schedule requirements of subpart RR of this part (§ 63.964(b)) if condensate tank "no detectable" emissions tests indicate emissions. All detectable emissions measured on condensate tanks must be repaired according to the repair schedule in subpart RR of this part.

The kraft pulping process condensate standards of the 1998 NESHAP (§ 63.446(d)(2)(i)) state that condensate tanks used in the closed collection system must be designed and operated with no detectable emissions. The 1998 NESHAP (§ 63.453(l)) specifies that closed collection systems (which include condensate tanks) must meet the inspection and monitoring requirements of subpart RR of this part (§ 63.964) which provide a repair schedule. Section 63.964(b) of subpart RR of this part states:

(b) The owner or operator shall repair all detected defects as follows:

(1) The owner or operator shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 15 calendar days after detection except as provided in paragraph (b)(2) of this section.

(2) Repair of a defect may be delayed beyond 15 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the individual drain system and no alternative capacity is available at the facility site to accept the wastewater normally managed in the individual drain system. In this case, the owner or operator shall repair the defect at the next time the process or unit that is generating the wastewater managed in

the individual drain system stops operation. Repair of the defect shall be completed before the process or unit resumes operation.

We inadvertently omitted rule text in the 1998 NESHAP specifying that you must follow the repair schedule if the condensate tank tests indicate emissions. Our intent is evident since we included the repair schedule for defects in the continuous monitoring section (§ 63.453(f)(3)) of the December 17, 1993 proposal (58 FR 66182). In today's action, we are clarifying the 1998 NESHAP by explicitly specifying that the repair schedule requirements in subpart RR of this part (§ 63.964(b)(1) and (b)(2)) are triggered if the condensate tank "no detectable" emissions tests identify emissions.

As discussed previously in section I.B.2 of this preamble, the structure of the paragraph in the 1998 NESHAP specifying the monitoring requirements for closed collection systems (§ 63.453(l)) is being revised to parallel that used for the enclosure and closed-vent system monitoring requirements (§ 63.453(k)). As part of that restructuring, the revisions discussed in today's action regarding the repair schedule specified in subpart RR of this part for both condensate tanks and the rest of the closed collection system are contained in § 63.453(l)(3). One additional change to § 63.453(l) is discussed in section I.B.5 of this preamble.

4. *May the repair period for closed-vent systems extend beyond 15 days as implied in the recordkeeping requirements (§ 63.453)?*

Corrective actions or repairs of closed-vent system defects or leaks, under certain circumstances, may extend beyond the 15 calendar days specified in the 1998 NESHAP. Today's action corrects a drafting oversight in the requirements for inspection and repair of enclosures and closed-vent systems (§ 63.453(k)(6)(ii)).

In the monitoring requirements for enclosures and closed-vent systems (§ 63.453(k)(6)(ii)), the 1998 NESHAP specifies that corrective actions or repairs for enclosure and closed-vent system defects and leaks must be completed no later than 15 calendar days after the problem is identified. However, certain equipment may require more than the 15 calendar days to repair. It is not our intent to create a violation in cases where the failure to repair is beyond the control of the owner or operator, or where immediate repair would create greater emissions. The Agency's intent is evident since specific recordkeeping requirements (§ 63.454(b)(8) through (b)(10)) are triggered when repairs or corrective

actions require more than 15 calendar days to complete indicating that the rule contemplates situations where it will take longer than 15 days to complete repairs. For these cases, owners or operators must record the reason for the delay in repair, the expected date of successful repair, and the actual date of successful repair. If the reasons for delaying the repair meet the conditions specified in the rule and the recordkeeping requirements are met, then repairs or corrective actions that require longer than 15 calendar days are allowed.

Today's action adds clarifying sentences to the monitoring requirements for enclosures and closed-vent systems (§ 63.453(k)(6)(ii)). Delays in corrective actions or repairs beyond 15 calendar days are allowed in cases where the corrective actions or repairs are technically infeasible without a process unit shutdown or where the emissions resulting from immediate repair would be greater than the emissions likely to result from the delay of repair. This language addressing corrective actions and repairs is consistent with provisions in the national emission standards, specifically for oil-water separators and organic water separators (§ 63.1047(d)(2) of subpart VV of this part) and in the national emission standards for organic hazardous air pollutants for equipment leaks (§ 63.172(i) of subpart H of this part).

5. *Do the recordkeeping requirements in subpart RR apply to closed collection systems (§ 63.453)?*

The recordkeeping requirements of subpart RR of this part do not apply to closed collection systems. Today's action amends the monitoring requirements for closed collection systems (§ 63.453(l)) to clarify that the recordkeeping requirements of subpart RR of this part are not in effect. Certain provisions of the national emission standards for individual drain systems (subpart RR of this part) are referenced in the 1998 NESHAP for convenience. In developing the 1998 NESHAP, we identified areas of overlap between subpart RR of this part and the pulp and paper NESHAP. However, additional overlap was identified since promulgation.

The closed collection system monitoring requirements in the 1998 NESHAP (§ 63.453(l)) specify that each closed collection system must comply with the inspection and monitoring requirements of subpart RR of this part (§ 63.964). However, the monitoring requirement section of subpart RR of this part contains references (§ 63.964(a)(1)(vi) and (b)(3)) to the

recordkeeping requirements of subpart RR of this part (§ 63.965).

Today's action amends the pulp and paper 1998 NESHAP to specify that owners or operators are required to comply only with the closed collection system recordkeeping requirements specified in the pulp and paper 1998 NESHAP (§ 63.454) since the recordkeeping requirements specified in subpart RR of this part are redundant. As discussed previously in sections I.B.2 and I.B.3 of this preamble, the structure of the paragraph in the 1998 NESHAP specifying the monitoring requirements for closed collection systems (§ 63.453(l)) is being revised to parallel that used for the enclosure and closed-vent system monitoring requirements (§ 63.453(k)). The revisions to identify the overlap between the monitoring requirements of subpart RR of this part and the pulp and paper NESHAP discussed in this section are contained in § 63.453(l)(1)(i).

C. *Typographical Corrections*

Minor drafting errors and inadvertent omissions were identified in the 1998 NESHAP after promulgation. Today's action makes the following corrections:

- Changes "HAP's" to "HAPs" in the following sections: the definition of process wastewater treatment system (§ 63.441); the standards for kraft pulping process condensates section (§ 63.446(e)(3)); and the test methods and procedures section (§ 63.457(f)(1) and § 63.457(h)).

- Changes the word "sources" to "source" in the standards for the pulping system at kraft, soda, and semi-chemical processes (§ 63.443(b)(1)).

- Changes the word "uses" to "use" in the standards for the bleaching system (§ 63.445(a)(2)).

- Corrects text for the closed collection system design specifications in the standards for kraft pulping process condensates. In § 63.446(d)(1), delete the word "for", changes the words "closed" and "vent" to "closed-vent", and deletes the phrase "§ 63.693 as specified in."

- Corrects text for the clean condensate alternative standards (§ 63.447). In § 63.447(e)(2), delete the word "that", add the word "and" at the end of the paragraph in § 63.447(g)(1)(ii), and add the word "of" to § 63.447(g)(2) between the words "requirements" and "paragraphs."

- Corrects wording for the standards for enclosures and closed-vent systems (§ 63.450). In the § 63.450(b), add the word "in" before "§ 63.45(e)."

- Corrects wording for test methods and procedures section (§ 63.457). In § 63.457(b)(5)(ii)(C), change the word

"project" to "protect." In § 63.457(b)(5)(ii)(E)(7), change the word "an" to "a." In § 63.457(c)(2), change the semicolon at the end of the paragraph to a period. Add the word "an" to § 63.457(c)(4)(i) between the words "into" and "Erlenmeyer" in the first sentence of the paragraph.

- Changes the acronym "CEM's" to "CEMs" in the comment column for the reference § 63.8(f)(6) in table 1 of the 1998 NESHAP (general provisions applicability to subpart S).

II. Administrative Requirements

A. Docket

The docket is an organized and complete file of all the information considered by EPA in the development of this rulemaking. The docket is a dynamic file, because material is added throughout the rulemaking development. The docketing system is intended to allow members of the public and industries involved to readily identify and locate documents so that you can effectively participate in the rulemaking process. Along with the proposed and promulgated standards and their preambles, the contents of the docket except for certain interagency documents will serve as the record in case of judicial review. (See section 307(d)(7)(A) of the Act.)

B. Paperwork Reduction Act

The EPA already submitted the information requirements of the 1998 NESHAP to the Office of Management and Budget (OMB) on April 27, 1998 for approval under the *Paperwork Reduction Act*, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1657.03), and a copy may be obtained from Sandy Farmer, Office of Policy, Planning, and Evaluation Regulatory Information Division; U.S. Environmental Protection Agency (2137); 401 M Street SW, Washington, DC 20460 or by calling (202) 260-2740. The information requirements are not effective until OMB approves them.

Today's amendments to the NESHAP will have no impact on the information collection burden estimates made previously. The amendments clarify the intent of the 1998 NESHAP and correct inadvertent omissions and minor drafting errors in the 1998 NESHAP. Consequently, the ICR has not been revised.

C. Executive Order 12866: "Significant Regulatory Action" Determination

Under Executive Order 12866, EPA must determine whether the regulatory action is "significant" and, therefore,

subject to 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, public health or safety in State, local, or tribal governments or communities;
- (2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, 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.

The NESHAP published on April 15, 1998 was considered significant under Executive Order 12866, and EPA accordingly prepared a regulatory impact analysis (RIA). The amendments published today clarify the intent of the 1998 NESHAP and correct inadvertent omissions and minor drafting errors in the 1998 NESHAP. The OMB evaluated this action and determined it to be nonsignificant; thus, it did not require OMB review.

D. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions. The EPA determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this action. These amendments would not result in increased impacts to small entities and the changes to the 1998 NESHAP in today's action do not add new control requirements.

E. Unfunded Mandates Reform Act

Under section 202 of the Unfunded Mandates Reform Act of 1995 ("Unfunded Mandates Act"), EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in estimated costs to State, local, or tribal governments in the aggregate, or to the private sector, of \$100 million or more. Under section 205, EPA must select the most cost-effective and least burdensome

alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

The EPA has determined that the action promulgated today does not include a Federal mandate that may result in estimated costs of \$100 million or more to either State, local, or tribal governments in the aggregate or to the private sector. Therefore, the requirements of the Unfunded Mandates Act do not apply to today's action.

F. Executive Order 12875: Enhancing Intergovernmental Partnerships

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 OMB 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."

While the final rule published on April 15, 1998 (1998 NESHAP) does not create mandates upon State, local, or tribal governments, EPA involved State and local governments in its development. Because today's action clarifies the intent of the 1998 NESHAP and corrects inadvertent omissions and minor drafting errors, today's action does not create a mandate upon State, local, or tribal governments.

G. Applicability of Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

Executive Order 13045 applies to any rule that EPA determines (1) is economically significant as defined under Executive Order 12866, and (2) the environmental health or safety risk addressed by the rule has a disproportionate effect on children. If

the regulatory action meets both criteria, EPA must evaluate the environmental health or safety effects of the planned rule on children and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the order has the potential to influence the regulation. This rule falls into that category only in part: the minimum rule stringency is set according to a congressionally mandated, technology-based lower limit called the "floor," while a decision to increase the stringency beyond this floor can be partly based on risk considerations.

No children's risk analysis was performed for the 1998 NESHAP rulemaking because no alternative technologies exist that would provide greater stringency at a reasonable cost, and therefore the results of any such analysis would have no impact on the stringency decision. Today's action is not subject to Executive Order 13045 because it does not involve decisions on environmental health risks or safety risks that may disproportionately affect children.

H. Executive Order 13084: Consultations 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 if EPA consults with those governments. If EPA complies by consulting, Executive Order 13084 requires EPA to provide to the OMB, in a separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected and other representatives of Indian tribal governments "to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities."

Today's action does not significantly or uniquely affect the communities of Indian tribal governments. The final rule published on April 15, 1998 (1998 NESHAP) does not create mandates upon tribal governments. Because today's action clarifies the intent of the 1998 NESHAP and corrects inadvertent omissions and minor drafting errors, today's action does not create a mandate on tribal governments. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this action.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) directs all Federal agencies to use voluntary consensus standards instead of government-unique standards in their regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices) that are developed or adopted by one or more voluntary consensus standards bodies. Examples of organizations generally regarded as voluntary consensus standards bodies include the American Society for Testing and Materials (ASTM), the National Fire Protection Association (NFPA), and the Society of Automotive Engineers (SAE). The NTTAA requires Federal agencies like EPA to provide Congress, through the OMB, with explanations when an agency decides not to use available and applicable voluntary consensus standards.

Although this action does not involve any new technical standards, today's action does include the incorporation by reference of an alternative test method. The method was developed by NCASI, however, NCASI is not a voluntary consensus standards body. No voluntary consensus standards were identified for measuring methanol in pulping process condensates.

J. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this rule and other required information to the U.S.

Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2). These technical amendments will be effective April 12, 1999.

K. Immediate Effective Date

The EPA is making today's action effective immediately. The EPA has determined that the rule amendments being made in today's action are interpretive rules which are not subject to notice and comment requirements. The EPA has also determined that this rule may be made effective in less than 30 days because it is interpretive and relieves restrictions. See 5 U.S.C. 553(d) (1) and (2).

III. Legal Authority

These regulations are amended under the authority of sections 112, 114, and 301 of the Clean Air Act, as amended (42 U.S.C. sections 7412, 7414, and 7601).

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedure, Air pollution control, Incorporation by reference, Intergovernmental relations.

Dated: March 31, 1999.

Robert Brenner,

Acting Assistant Administrator, OAR.

For the reasons set out in the preamble, title 40, Chapter I of the Code of Federal Regulations is amended as follows:

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

1. The authority citation for part 63 continues to read as follows:

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

Subpart A—General Provisions

2. Amend § 63.14 by adding paragraph (f) to read as follows:

§ 63.14 Incorporations by reference.

* * * * *

(f) The following material is available from the National Council of the Paper Industry for Air and Stream Improvement, Inc. (NCASI), P. O. Box 133318, Research Triangle Park, NC 27709-3318 or at <http://www.ncasi.org>: NCASI Method DI/MEOH-94.02, Methanol in Process Liquids GC/FID (Gas Chromatography/Flame Ionization

Detection), August 1998, Methods Manual, NCASI, Research Triangle Park, NC, IBR approved for § 63.457(c)(3)(ii) of subpart S of this part.

Subpart S—National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry

3. Amend § 63.441 by revising the definition of "Process wastewater treatment system" to read as follows:

§ 63.441 Definitions.

Process wastewater treatment system means a collection of equipment, a process, or specific technique that removes or destroys the HAPs in a process wastewater stream. Examples include, but are not limited to, a steam stripping unit, wastewater thermal oxidizer, or biological treatment unit.

4. Amend § 63.443 by revising paragraph (b)(1) to read as follows:

§ 63.443 Standards for the pulping system at kraft, soda, and semi-chemical processes.

(b) ***
(1) At each existing affected source, the total HAP emissions from each LVHC system shall be controlled.

5. Amend § 63.445 by revising paragraphs (a)(2) and (b) to read as follows:

§ 63.445 Standards for the bleaching system.

(a) ***
(2) Bleaching systems bleaching pulp from kraft, sulfite, or soda pulping processes that use any chlorinated compounds; or

(b) The equipment at each bleaching stage, of the bleaching systems listed in paragraph (a) of this section, where chlorinated compounds are introduced shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in paragraph (c) of this section. The enclosures and closed-vent system shall meet the requirements specified in § 63.450. If process modifications are used to achieve compliance with the emission limits specified in paragraphs (c)(2) or (c)(3), enclosures and closed-vent systems are not required, unless appropriate.

6. Amend § 63.446 by revising paragraphs (b), (d)(1), and (e)(3) to read as follows:

§ 63.446 Standards for kraft pulping process condensates.

(b) The pulping process condensates from the following equipment systems shall be treated to meet the requirements specified in paragraphs (c), (d), and (e) of this section:

- (1) Each digester system;
- (2) Each turpentine recovery system;
- (3) Each evaporator system condensate from:
 - (i) The vapors from each stage where weak liquor is introduced (feed stages); and
 - (ii) Each evaporator vacuum system for each stage where weak liquor is introduced (feed stages).
- (4) Each HVLC collection system; and
- (5) Each LVHC collection system.

(d) ***
(1) Each closed collection system shall meet the individual drain system requirements specified in §§ 63.960, 63.961, and 63.962 of subpart RR of this part, except closed-vent systems and control devices shall be designed and operated in accordance with §§ 63.443(d) and 63.450, instead of in accordance with § 63.962(a)(3)(ii), (b)(3)(ii)(A), and (b)(3)(ii)(B)(5)(iii); and

(e) ***
(3) Treat the pulping process condensates to reduce or destroy the total HAPs by at least 92 percent or more by weight; or

7. Amend § 63.447 by revising paragraphs (e)(2), (g)(1)(ii), and (g)(2) to read as follows:

§ 63.447 Clean condensate alternative.

(e) ***
(2) The HAP emissions reduction occurring by complying with the clean condensate alternative technology.

(g) ***
(1) ***
(ii) The air pollution control technologies that would be used to meet the requirements of § 63.443(a)(1)(ii) through (a)(1)(v); and

(2) Estimates and basis for the estimates of total HAP emissions and emission reductions to fulfill the requirements of paragraphs (d), (e), and (f) of this section.

8. Amend § 63.450 by revising paragraph (b) to read as follows:

§ 63.450 Standards for enclosures and closed-vent systems.

(b) Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in § 63.457(e). Each enclosure or hood opening closed during the initial performance test specified in § 63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.

9. Amend § 63.453 by revising paragraphs (b), (k)(6)(ii), and (l) to read as follows:

§ 63.453 Monitoring requirements.

(b) A CMS shall be operated to measure the temperature in the firebox or in the ductwork immediately downstream of the firebox and before any substantial heat exchange occurs for each thermal oxidizer used to comply with the requirements of § 63.443(d)(1) through (d)(3). Owners and operators complying with the HAP concentration requirements in § 63.443(d)(2) may install a CMS to monitor the thermal oxidizer outlet total HAP or methanol concentration, as an alternative to monitoring thermal oxidizer operating temperature.

(k) ***
(6) ***

(ii) The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if the owner or operator determines that the emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

(l) Each pulping process condensate closed collection system used to comply with § 63.446(d) shall comply with the requirements specified in paragraphs (l)(1) through (l)(3) of this section.

(1) Each pulping process condensate closed collection system shall be visually inspected every 30 days and shall comply with the inspection and monitoring requirements specified in § 63.964 of subpart RR of this part, except:

(i) Owners or operators shall comply with the recordkeeping requirements of § 63.454 instead of the requirements specified in § 63.964(a)(1)(vi) and (b)(3) of subpart RR of this part.

(ii) Owners or operators shall comply with the inspection and monitoring requirements for closed-vent systems and control devices specified in paragraphs (a) and (k) of this section instead of the requirements specified in § 63.964(a)(2) of subpart RR of this part.

(2) Each condensate tank used in the closed collection system shall be operated with no detectable leaks as specified in § 63.446(d)(2)(i) measured initially and annually by the procedures specified in § 63.457(d).

(3) If an inspection required by this section identifies visible defects in the closed collection system, or if an instrument reading of 500 parts per million or greater above background is measured, then corrective actions specified in § 63.964(b) of subpart RR of this part shall be taken.

* * * * *

10. Amend § 63.457 by revising paragraphs (b)(5) introductory text, (b)(5)(ii)(C), (b)(5)(ii)(E)(7), (b)(6), (c)(2), (c)(3) introductory text, (c)(4)(i), (f)(1), (h), and (m)(1)(ii); by redesignating paragraph (c)(3)(ii) as paragraph (c)(3)(iii); and adding a new paragraph (c)(3)(ii) to read as follows:

§ 63.457 Test methods and procedures.

* * * * *

(b) * * *

(5) To determine vent gas concentrations, the owner or operator shall conduct a minimum of three test runs that are representative of normal conditions and average the resulting pollutant concentrations using the following procedures.

* * * * *

(ii) * * *

(C) Critical orifice. The critical orifice shall have a flow rate of 200 to 250 ml/min and shall be followed by a vacuum pump capable of providing a vacuum of

640 millimeters of mercury (mm Hg). A 45 millimeter diameter in-line Teflon 0.8 micrometer filter shall follow the impingers to protect the critical orifice and vacuum pump.

* * * * *

(E) * * *

(7) To prepare the 10 percent sulfuric acid solution, add 10 ml of concentrated sulfuric acid to 80 ml water in a 100 ml volumetric flask. Dilute to volume.

* * * * *

(6) The minimum sampling time for each of the three test runs shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the test run.

(c) * * *

(2) The volumetric flow rate of the entering and exiting liquid streams shall be determined using the inlet and outlet flow meters or other methods demonstrated to the Administrator's satisfaction. The volumetric flow rate measurements to determine actual mass removal shall be taken at the same time as the concentration measurements.

(3) The owner or operator shall conduct a minimum of three test runs that are representative of normal conditions and average the resulting pollutant concentrations. The minimum sampling time for each test run shall be 1 hour and the grab or composite samples shall be taken at approximately equally spaced intervals over the 1-hour test run period. The owner or operator shall use one of the following procedures to determine total HAP or methanol concentration:

* * * * *

(ii) For determining methanol concentrations, NCASI Method DI/MEOH-94.02, Methanol in Process

Liquids by GC/FID, August 1998, Methods Manual, NCASI, Research Triangle Park, NC. This test method is incorporated by reference in § 63.14(f) of subpart A of this part.

* * * * *

(4) * * *

(i) Filter the sample through the filter paper, into an Erlenmeyer flask by applying a vacuum to the flask sidearm. Minimize the time for which vacuum is applied to prevent stripping of volatile organics from the sample. Replace filter paper as often as needed in order to maintain filter times of less than approximately 30 seconds per filter paper. No rinsing of sample container or filter bowl into the Erlenmeyer flask is allowed.

* * * * *

(f) * * *

(1) As the sum of all individual HAPs: or

* * * * *

(h) *Bleaching HAP concentration measurement.* For purposes of complying with the bleaching system requirements in § 63.445, the owner or operator shall measure the total HAP concentration as the sum of all individual chlorinated HAPs or as chlorine.

* * * * *

(m) * * *

(1) * * *

(ii) Multiply the total HAP mass determined in paragraph (m)(1)(i) of this section by 0.65 to determine the target HAP mass for the high-HAP fraction condensate stream or streams.

* * * * *

11. Table 1 of subpart S is amended by revising the entry for § 63.8(f)(6) to read as follows:

TABLE 1 TO SUBPART S—GENERAL PROVISIONS APPLICABILITY TO SUBPART S^a

Reference	Applies to Subpart S	Comment
63.8(f)(6)	No	Subpart S does not specify relative accuracy test for CEMs.

^a Wherever subpart A specifies "postmark" dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified date, but a postmark is not required.

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AD-FRL-6330-3]

RIN 2060-AC19

National Emission Standards for Hazardous Air Pollutants for Source Categories: Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry and Other Processes Subject to the Negotiated Regulation for Equipment Leaks; Technical Amendments

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; technical amendments.

SUMMARY: This document amends certain portions of the final regulation "National Emission Standards for Hazardous Air Pollutants for Source Categories: Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry and Other Processes Subject to the Negotiated Regulation for Equipment Leaks," which was published on January 17, 1997. This rule is commonly known as the Hazardous Organic NESHAP or the HON.

These amendments to the rule will not change the basic control requirements of the rule or the level of health protection it provides. The rule requires new and existing major sources to control emissions of hazardous air pollutants to the level reflecting application of the maximum achievable control technology.

EFFECTIVE DATE: April 26, 1999.

ADDRESSES: Docket. Docket Numbers A-90-19, A-90-20, A-90-21, A-90-22, and A-90-23 contain the supporting information for the original NESHAP and this action. These dockets are available for public inspection and

copying between 8:00 a.m. and 5:30 p.m., Monday through Friday, at the EPA's Air and Radiation Docket and Information Center, Waterside Mall, Room M-1500, first floor, 401 M Street SW, Washington, DC 20460, or by calling (202) 260-7548 or 260-7549. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: For questions, contact Dr. Janet S. Meyer, Coatings and Consumer Products Group, at telephone (919) 541-5254 or e-mail meyer.jan@epa.gov, or contact Mary Tom Kissell, Waste and Chemical Processes Group, at telephone (919) 541-4516 or e-mail kissell.mary@epa.gov. The mailing address for both contacts is Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711.

SUPPLEMENTARY INFORMATION:

I. Regulated Entities and Background Information

A. Regulated Entities

The regulated category and entities affected by this action include:

Category	Examples of regulated entities
Industry	Synthetic organic chemical manufacturing industry (SOCMI) units, e.g., producers of benzene, toluene, or any other chemical listed in Table 1 of 40 CFR part 63, subpart F.

This table is not intended to be exhaustive but, rather, provides a guide for readers regarding entities likely to be interested in the revisions to the regulation affected by this action. Entities potentially regulated by the HON are those which produce as primary intended products any of the chemicals listed in table 1 of 40 CFR part 63, subpart F and are located at

facilities that are major sources as defined in section 112 of the Clean Air Act. Potentially regulated entities generally are companies that manufacture industrial organic chemicals and cyclic organic crude and intermediates. To determine whether your facility is regulated by this action, you should carefully examine all of the applicability criteria in 40 CFR 63.100. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

B. Background on the Rule

On April 22, 1994 (59 FR 19402), and June 6, 1994 (59 FR 29196), the EPA published in the **Federal Register** the NESHAP for the SOCMI, and for several other processes subject to the equipment leaks portion of the rule. These regulations were promulgated as subparts F, G, H, and I in 40 CFR part 63, and are commonly referred to as the hazardous organic NESHAP, or the HON. Since the April 22, 1994 notice, there have been several amendments to clarify various aspects of the rule. Readers should see the following **Federal Register** documents for more information: September 20, 1994 (59 FR 48175); October 24, 1994 (59 FR 53359); October 28, 1994 (59 FR 54131); January 27, 1995 (60 FR 5321); April 10, 1995 (60 FR 18020); April 10, 1995 (60 FR 18026); December 12, 1995 (60 FR 63624); February 29, 1996 (61 FR 7716); June 20, 1996 (61 FR 31435); August 26, 1996 (61 FR 43698); December 5, 1996 (61 FR 64571); January 17, 1997 (62 FR 2721); August 22, 1997 (62 FR 44608); and December 9, 1998 (63 FR 67787).

II. Summary of Corrections

Today's changes are described in Table 2 to this preamble for the convenience of the reader.

Section 40 CFR, part 63	Change
63.100(g)(4)	Changes "ceasing" to "ceases" for grammatical reasons and makes cross reference correction by revising "(g)(2)(i) and (g)(2)(iii) of this section" to "(g)(2)(i) and (g)(2)(ii) of this section."
63.100(h)(3)	Makes cross reference correction.
63.100(i)(5)	Makes cross reference correction.
63.116(c)(3)(iii)(B)	Text currently reads "[t]he concentration corrected to 3 percent oxygen (C _o) shall be computed using either of the following equations . . ." Only one equation follows this text and the sentence was changed to reflect this.
63.129(a)(4)(ii)	The first sentence was inadvertently omitted from the final rule. Today's amendments corrects this oversight.
63.133(h)	Delay of repair provisions are intended to apply to any inspection done for the section. Today's action removes cross references to specific paragraphs.
63.134(b)(2)(ii)(B)	Makes cross reference correction.
63.139(d)(4)	This paragraph exempted certain boilers, process heaters, and incinerators from performance test or design evaluation requirements. Today's revisions adds an exemption from the monitoring requirements of § 63.143 for these cases.
63.145(d)(6)	Removes an equation that is not used in the compliance demonstration.

Section 40 CFR, part 63	Change
63.145(i)	Adds paragraph (i) introductory text. This paragraph was inadvertently deleted in the December 9, 1998 FEDERAL REGISTER notice. This paragraph was previously incorrectly designated as § 63.145(h)(2)(iii).
63.145(c)(2)	Replaces "flow meter" with "flow measurement device." This makes it consistent with EPA's intent and terminology used elsewhere.
63.146(b)(8) introductory text	Makes cross reference corrections by revising "§ 63.138(b)(1)(iii)(C), (c)(1)(iii)(D), (d), or (e) of this subpart" to "§ 63.138(b)(1), (c)(1), (d), (e), (f), or (g) of this subpart."
63.146(b)(8)(i)	Adds a sentence clarifying that when using the design steam stripper option specified in § 63.138(d) to comply, some reports are not required.
63.147(b)(4)	Makes cross reference corrections by revising "Item 1 and Item 2 of table 12 of this subpart" to "Item 1 and Item 3 of table 12 of this subpart."
63.147(b)(5)	Makes cross reference corrections by revising "paragraphs (e) and (g) of this subpart" to "paragraph (e) of this subpart" and revising "Item 3 of table 12 of this subpart" to "Item 2 of table 12 of this subpart."
63.148(b)(3)	Removes the requirement for a Method 21 initial inspection. Initial visual inspection is still required. This makes it consistent with the requirements in §§ 63.133 through 63.137 and EPA's intent.
63.148(c), introductory text	Removes words "fixed roof," "cover," and "enclosure" from text to remove requirement for Method 21 initial inspection. Amendments make the rule text consistent with the requirements in table 11 of subpart G.
63.148(c)(4)(ii)	Makes cross reference corrections.
63.150(g)(5), (h)(5), and (j)(2)	Today's action: —Makes cross reference corrections throughout the wastewater portions of this section. —For consistency with the wastewater sections, replaces: "organic HAP" with "table 9 HAP"; "point of generation" with "point of determination"; and "VOHAP" with "table 9 HAP." —Replaces § 63.150(g)(5)(i)(A)(1) and (2) with a reference to the sampling plan requirements in § 63.144(b)(5)(ii). —Replaces equation in § 63.150(h)(5)(v)(A) with correct equation. The FEDERAL REGISTER printed the wrong equation; it printed the equation in § 63.150(h)(5)(v)(B) twice. —Adds reference to § 63.145(a)(3) and (a)(4) as to what is meant by "representative conditions."
§ 63.151(j)(3)	Changes the reference to "(e) of this section" to "(e)(1) through (e)(5) of this section" and specifies the information shall be submitted to the EPA regional office where the source is located.
§ 63.152(c)(2)(ii)(C)	Makes no conceptual changes: revisions are clarifying edits.
§ 63.152(d)(1)	Removes "semi-annual" from the second sentence and makes the corresponding cross reference change. This correction clarifies the reporting obligations for instances where a source does not follow its start-up, shut-down, and malfunction plan. The correction also makes this paragraph consistent with § 63.10(d)(5).
Table 4 to subpart G	Makes terms consistent with rule text by replacing "mass flow" with "mass or volumetric flow."
Table 7 to subpart G	Makes terms consistent with rule text by replacing "mass flow" with "mass or volumetric flow."
63.160(a)	Replaces the word "systems" with "closed vent systems." The change revises the paragraph to use a defined term and is the intended meaning of the text.
63.163(b)(1)	Makes cross reference correction.
63.164(h)	Makes cross reference correction.
63.173(j)	Makes cross reference correction.
63.181(b)(7)	Makes cross reference correction and corresponding grammatical change by replacing "through" with "and."
63.181(g)(3)	Makes cross reference correction and corresponding grammatical change by replacing "through" with "and."

III. Administrative Requirements

A. Good Cause Finding

By promulgating these technical corrections directly as a final rule, the EPA is foregoing an opportunity for public comment on a notice of proposed rulemaking. Section 553(b) of title 5 of the United States Code and section 307(b) of the CAA permit an agency to forego notice and comment when "the agency for good cause finds (and incorporates the finding and a brief statement of reasons therefore in the rules issued) that notice and public procedure thereon are impracticable, unnecessary, or contrary to the public interest." The EPA finds that notice and comment regarding these minor

technical corrections are unnecessary due to their noncontroversial nature and because they do not substantively change the requirements of the HON. The EPA finds that this constitutes good cause under 5 U.S.C. 553(b) for a determination that the issuance of a notice of proposed rulemaking is unnecessary.

B. Executive Orders 12866, 13045, 13083, 13084, Unfunded Mandates Reform Act, Regulatory Flexibility Act, and Administrative Procedure Act

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a "significant regulatory action" and is therefore not subject to review by the Office of Management and Budget. In

addition, this action does not impose any enforceable duty, contain any unfunded mandate, or impose any significant or unique impact on small governments as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4). This rule also does not require prior consultation with State, local, and tribal government officials as specified by Executive Order 12875 (58 FR 58093, October 28, 1993) or Executive Order 13084 (63 FR 27655 (May 10, 1998), or involve special consideration of environmental justice related issues as required by Executive Order 12898 (59 FR 7629, February 16, 1994). Because this action is not subject to notice-and-comment requirements under the Administrative Procedure Act

or any other statute, it is not subject to the regulatory flexibility provisions of the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). This rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because EPA interprets E.O. 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Order has the potential to influence the regulation. This rule is not subject to E.O. 13045 because it does not establish an environmental standard intended to mitigate health or safety risks. EPA's compliance with these statutes and Executive Orders for the underlying rule is discussed in the December 9, 1998 **Federal Register** document.

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. Section 808 allows the issuing agency to make a good cause finding that notice and public procedure is impracticable, unnecessary or contrary to the public interest. This determination must be supported by a brief statement. 5 U.S.C. 808(2). As stated previously, EPA has made such a good cause finding, including the reasons therefor, and established an effective date of April 26, 1999. 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).

C. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (the NTTAA), Public Law 104-113, section 12(d) (15 U.S.C. 272 note), directs the EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices, etc.) that are developed or adopted by voluntary consensus standard bodies. The NTTAA requires the EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and

applicable voluntary consensus standards.

This regulatory action makes technical amendments, such as cross reference corrections and does not involve any technical standards that would require the Agency to consider voluntary consensus standards pursuant to section 12(d) of the NTTAA.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: April 12, 1999.

Robert Perciasepe,
Assistant Administrator for Air and Radiation.

For the reasons set out in the preamble, title 40 chapter I, part 63 of the Code of Federal Regulations is amended as follows:

PART 63—[AMENDED]

1. The authority citation for part 63 continues to read as follows:

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

2. Section 63.100 is amended as follows:

- a. By revising paragraph (g)(4);
- b. In paragraph (h)(3), by revising the reference to "(h)(2)(iv) of this section" to read "(h)(2)(iii) of this section"; and
- c. In paragraph (i)(5), by revising the reference to "(i)(2)(iv) of this section" to read "(i)(2)(iii) of this section."

The revision to paragraph (g)(4) reads as follows:

§ 63.100 Applicability and designation of source.

* * * * *

(g) * * *

(4) If the storage vessel begins receiving material from (or sending material to) another chemical manufacturing process unit, or ceases to receive material from (or send material to) a chemical manufacturing process unit, or if the applicability of this subpart F and subpart G of this part to a storage vessel has been determined according to the provisions of paragraphs (g)(2)(i) and (g)(2)(ii) of this section and there is a change so that the predominant use may reasonably have changed, the owner or operator shall reevaluate the applicability of this subpart to the storage vessel.

* * * * *

3. Section 63.116 is amended by revising paragraph (c)(3)(iii)(B) to read as follows:

§ 63.116 Process vent provisions—performance test methods and procedures to determine compliance.

* * * * *

(c) * * *

(3) * * *

(iii) * * *

(B) The concentration corrected to 3 percent oxygen (C_c) shall be computed using the following equation:

$$C_c = C_m \left(\frac{17.9}{20.9 - \%O_{2d}} \right)$$

Where:

C_c =Concentration of TOC or organic HAP corrected to 3 percent oxygen, dry basis, parts per million by volume.

C_m =Concentration of TOC (minus methane and ethane) or organic HAP, dry basis, parts per million by volume.

$\%O_{2d}$ =Concentration of oxygen, dry basis, percent by volume.

* * * * *

4. Section 63.129 is amended by revising paragraph (a)(4)(ii) to read as follows:

§ 63.129 Transfer operations provisions—reporting and recordkeeping for performance tests and notification of compliance status.

(a) * * *

(4) * * *

(ii) The percent reduction of total organic HAP or TOC achieved by the control device determined as specified in § 63.128(a) of this subpart, or the concentration of total organic HAP or TOC (parts per million by volume, by compound) determined as specified in § 63.128(a) of this subpart at the outlet of the control device. For combustion devices, the concentration shall be reported on a dry basis corrected to 3 percent oxygen.

* * * * *

5. Section 63.133 is amended by revising the second sentence of paragraph (h) to read as follows:

§ 63.133 Process wastewater provisions—wastewater tanks.

* * * * *

(h) * * * If a failure that is detected during inspections required by this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the owner or operator may utilize up to 2 extensions of up to 30 additional calendar days each. * * *

6. In § 63.134, paragraph (b)(2)(ii)(B) is amended by revising the reference to "(b)(2)(i) of this section" to read "(b)(2)(ii)(A) of this section."

7. Section 63.139 is amended by revising paragraph (d)(4) introductory text to read as follows:

§ 63.139 Process wastewater provisions—control devices.

(d) ***
 (4) An owner or operator using any control device specified in paragraphs (d)(4)(i) through (d)(4)(iv) of this section is exempt from the requirements in paragraphs (d)(1) through (d)(3) of this section and from the requirements in § 63.6(f) of subpart A of this part, and from the requirements of paragraph (e) of this section.

8. Section 63.145 is amended as follows:

- a. In paragraph (d)(6), by removing and reserving equation WW5;
- b. By adding paragraph (i) introductory text; and
- c. By revising paragraph (c)(2).
 The addition of paragraph (i) introductory text and the revision of paragraph (c)(2) read as follows:

§ 63.145 Process wastewater provisions—test methods and procedures to determine compliance.

(c) ***
 (2) *Flow rate.* The flow rate of the entering and exiting wastewater streams shall be determined using inlet and outlet flow measurement devices, respectively. Where the outlet flow is not greater than the inlet flow, a flow measurement device shall be used, and may be used at either the inlet or outlet. Flow rate measurements shall be taken at the same time as the concentration measurements.

(i) *Performance tests for control devices other than flares.* This paragraph applies to performance tests that are conducted to demonstrate compliance of a control device with the efficiency limits specified in § 63.139(c). If complying with the 95-percent

reduction efficiency requirement, comply with the requirements specified in paragraphs (i)(1) through (i)(9) of this section. If complying with the 20 ppm by volume requirement, comply with the requirements specified in paragraphs (i)(1) through (i)(6) and (i)(9) of this section. The 20 ppm by volume limit or 95-percent reduction efficiency requirement shall be measured as either total organic hazardous air pollutants or as TOC minus methane and ethane.

9. Section 63.146 is amended by revising paragraph (b)(8) introductory text and by adding two sentences to the end of paragraph (b)(8)(i) introductory text to read as follows:

§ 63.146 Process wastewater provisions—reporting.

(8) For each treatment process used to comply with § 63.138(b)(1), (c)(1), (d), (e), (f), or (g) of this subpart, the owner or operator shall submit the information specified in paragraphs (b)(8)(i) and (b)(8)(ii) of this section.

(i) *** An owner or operator using the design steam stripper compliance option specified § 63.138(d) of this subpart does not have to submit the information specified in paragraph (b)(8)(i)(A) or (b)(8)(i)(B) of this section. However, the monitoring requirements specified in Item 2 of table 12 of this subpart still apply.

10. Section 63.147 is amended by revising paragraphs (b)(4) and (b)(5) to read as follows:

§ 63.147 Process wastewater provisions—recordkeeping.

(b) ***
 (4) For Item 1 and Item 3 of table 12 of this subpart, the owner or operator shall keep the records approved by the Administrator.

(5) Except as provided in paragraph (e) of this section, continuous records of the monitored parameters specified in

Item 2 of table 12 and table 13 of this subpart, and in § 63.143(e)(2) of this subpart.

11. Section 63.148 is amended by revising paragraph (b)(3); revising paragraph (c) introductory text and revising the second sentence in paragraph (c)(4)(ii) to read as follows:

§ 63.148 Leak inspection provisions.

(b) ***
 (3) For each fixed roof, cover, and enclosure, the owner or operator shall conduct initial visual inspections and semi-annual visual inspections for visible, audible, or olfactory indications of leaks as specified in §§ 63.133 through 63.137 of this subpart.

(c) Each vapor collection system and closed vent system shall be inspected according to the procedures specified in paragraphs (c)(1) through (c)(5) of this section.

(ii) *** A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in paragraph (c)(2)(i) of this section. ***

12. Section 63.150 is amended as follows:

- a. By revising paragraphs (g)(5) and (h)(5);
- b. By adding a sentence to the end of the introductory text to paragraph (j)(2); and
- c. By revising paragraphs (j)(2)(ii)(B) and (m)(5)(i) to read as follows:

§ 63.150 Emissions averaging provisions.

(g) ***
 (5) Emissions from wastewater shall be calculated as follows:

(i) The following equation shall be used for each wastewater stream i to calculate EWW_{ic}:

$$EWW_{ic} = (6.0 * 10^{-8}) Q_i H_i \sum_{m=1}^s (1 - Fr_m) Fe_m HAP_{im} + (0.05)(6.0 * 10^{-8}) Q_i H_i \sum_{m=1}^s (Fr_m HAP_{im})$$

where:

EWW_{ic} = Monthly wastewater stream emission rate if wastewater stream i is controlled by the reference control technology, megagrams per month.

Q_i = Average flow rate for wastewater stream i, as determined by the procedure in § 63.144(c)(3), liters per minute.

H_i = Number of hours during the month that wastewater stream i was generated, hours per month.

s = Total number of table 9 HAP in wastewater stream i.

Fr_m = Fraction removed of table 9 HAP m in wastewater, from table 9, dimensionless.

Fe_m = Fraction emitted of table 9 HAP m in wastewater, from table 34, dimensionless.

HAP_{im} = Average concentration of table 9 HAP m in wastewater stream i, parts per million by weight.

(A) HAP_{im} shall be determined for the point of determination or, at a location downstream of the point of determination and adjusted according as specified in § 63.144(b)(6) of this subpart, by developing and using the sampling plan specified in § 63.144(b)(5)(ii) of this subpart. The samples collected may be analyzed by any of the methods specified in § 63.144(b)(5)(i)(B) through (b)(5)(i)(F) of this subpart. Concentration

measurements based on Method 305 shall be adjusted by dividing each concentration by the compound-specific F_m factor listed on table 34 of this subpart. Concentration measurements other than Method 305 shall not be adjusted by the compound-specific F_m factor listed in table 34 of this subpart.

(B) Values for Q_i , HAP_{im} , and C_{im} shall be determined during a performance test conducted under representative conditions as specified in § 63.145(a)(3) and (a)(4) of this subpart. The average value obtained from three test runs shall be used. The values of Q_i , HAP_{im} , and C_{im} shall be established in the Notification of Compliance Status and must be updated as provided in paragraph (g)(5)(i)(C) of this section.

(C) If there is a change to the process or operation such that the previously

measured values of Q_i , HAP_{im} , and C_{im} are no longer representative, a new performance test shall be conducted to determine new representative values of Q_i , HAP_{im} , and C_{im} . These new values shall be used to calculate debits and credits from the time of the change forward, and the new values shall be reported in the next Periodic Report.

(ii) The following equation shall be used to calculate $EWW_{iACTUAL}$ for each wastewater stream i that is not managed according to the provisions for waste management units of §§ 63.133 through 63.137 of this subpart, as applicable, which specify equipment and work practices for suppressing and controlling vapors. Q_i , H_i , s , Fe_m , and HAP_{im} are as defined and determined according to paragraph (g)(5)(i) of this section.

$$EWW_{iACTUAL} = (6.0 \times 10^{-8}) Q_i H_i \sum_{m=1}^s Fe_m HAP_{im}$$

Where:

$EWW_{iACTUAL}$ = Monthly wastewater stream emission rate if wastewater stream i is uncontrolled or is controlled to a level less stringent than the reference control technology, megagrams per month.

(iii) The following equation shall be used to calculate $EWW_{iACTUAL}$ for each wastewater stream i that is managed according to the requirements of §§ 63.133 through 63.137 of this subpart, as applicable, and wastewater stream i is uncontrolled or is controlled to a level less stringent than the

reference control technology (for the purposes of the wastewater emissions averaging provisions, the term control is used to mean treatment). Q_i , H_i , s , Fe_m , and HAP_{im} are as defined and determined according to paragraph (g)(5)(i) of this section.

$$EWW_{iACTUAL} = (6.0 * 10^{-8}) Q_i H_i \sum_{m=1}^s [Fe_m HAP_{im} (1 - PR_{im})] + \left(1 - \frac{R_i}{100\%}\right) (6.0 * 10^{-8}) Q_i H_i \sum_{m=1}^s (HAP_{im} PR_{im})$$

Where:

$EWW_{iACTUAL}$ = Monthly wastewater stream emission rate if wastewater stream i is uncontrolled or is controlled to a level less stringent than the reference control technology, megagrams per month.

PR_{im} = The efficiency of the treatment process, or series of treatment processes, which treat wastewater stream i, in reducing the emission potential of table 9 HAP m in wastewater, dimensionless, as calculated by:

$$PR_{im} = \frac{HAP_{im-in} - HAP_{im-out}}{HAP_{im-in}}$$

Where:

HAP_{im-in} = Average concentration of table 9 HAP m, parts per million by weight, as defined and determined according to paragraph (g)(5)(i) of

this section, in the wastewater entering the first treatment process in the series.

HAP_{im-out} = Average concentration of table 9 HAP m, parts per million by weight, as defined and determined according to paragraph (g)(5)(i) of this section, in the wastewater exiting the last treatment process in the series.

R_i = Reduction efficiency of the device used to control any vapor streams emitted and collected from wastewater stream i during treatment, dimensionless, as determined according to the procedures in § 63.145(i) or (j) of this subpart.

* * * * *

(h) * * *

(5) Emissions from wastewater shall be determined as follows:

(i) EWW_{1ic} shall be calculated according to the equation for EWW_{ic} in paragraph (g)(5)(i) of this section.

(ii) EWW_{2iBASE} shall be calculated according to the equation for $EWW_{iACTUAL}$ in paragraph (g)(5)(ii) of this section for each Group 2 wastewater stream i, which on November 15, 1990, was not managed according to the requirements of §§ 63.133 through 63.137 of this subpart, as applicable.

(iii) EWW_{2iBASE} shall be calculated according to the equation for $EWW_{iACTUAL}$ in paragraph (g)(5)(iii) of this section for each Group 2 wastewater stream i, which on November 15, 1990, was managed according to the requirements of §§ 63.133 through 63.137 of this subpart, as applicable, and was uncontrolled or controlled to a level less stringent than the reference control technology.

(iv) For Group 2 wastewater streams that are managed according to the requirements of §§ 63.133 through 63.137 of this subpart, as applicable, EWW_{2ACTUAL} shall be calculated as follows:

(A) EWW_{2ACTUAL} shall be calculated according to the equation for EWW_{1ACTUAL} in paragraph (g)(5)(iii) of this section for each Group 2 wastewater stream i that is controlled to a level less stringent than, or equivalent to, the reference control technology.

(B) EWW_{2ACTUAL} shall be calculated according to the procedures for calculating EWW_{1ACTUAL} in paragraph

(h)(5)(v) of this section for each Group 2 wastewater stream that is controlled to a level more stringent than the reference control technology.

(v) The following equations for EWW_{1ACTUAL} shall be used to calculate emissions from each Group 1 wastewater stream i that is managed according to the requirements of §§ 63.133 through 63.137 of this subpart, as applicable, and is controlled to a level more stringent than the reference control technology.

(A) If the Group 1 wastewater stream i is controlled using a treatment process or series of treatment processes with an

approved nominal reduction efficiency in the concentration of table 9 HAP for stream i greater than that of the design steam stripper specified in § 63.138(d) of this subpart, and the control device used to reduce table 9 HAP emissions from the vapor stream(s) vented from the treatment process(es) achieves a percent reduction equal to 95 percent, the following equation shall be used. All terms in this equation are as defined and determined in paragraph (g)(5) of this section.

$$EWW_{1ACTUAL} = (6.0 * 10^{-8}) Q_i H_i \sum_{m=1}^s [Fe_m HAP_{im} (1 - PR_{im})] + 0.05 (6.0 * 10^{-8}) Q_i H_i \sum_{m=1}^s [HAP_{im} PR_{im}]$$

(B) If the Group 1 wastewater stream i is not controlled using a treatment process or series of treatment processes with a nominal reduction efficiency in the table 9 HAP concentration greater than that of the design steam stripper

specified in § 63.138(d) of this subpart, but the vapor stream(s) vented from the treatment process(es) are controlled using a device with an approved nominal efficiency greater than 95 percent, the following equation shall be

used. All terms other than nominal efficiency are as defined and determined in paragraph (g)(5) of this section.

$$EWW_{1ACTUAL} = (6.0 * 10^{-8}) Q_i H_i \sum_{m=1}^s [Fe_m HAP_{im} (1 - Fr_m)] + \left(1 - \frac{\text{Nominal efficiency \%}}{100}\right) (6.0 * 10^{-8}) Q_i H_i \sum_{m=1}^s [HAP_{im} Fr_m]$$

(C) If the Group 1 wastewater stream i is controlled using a treatment process or series of treatment processes with an approved nominal reduction efficiency in the table 9 HAP concentration greater

than that of the design steam stripper specified in § 63.138(d) of this subpart, and the vapor stream(s) vented from the treatment process are controlled using a device with an approved nominal

efficiency greater than 95 percent, the following equation shall be used. All terms other than nominal efficiency are as defined and determined in paragraph (g)(5) of this section.

$$EWW_{1ACTUAL} = (6.0 * 10^{-8}) Q_i H_i \sum_{m=1}^s [Fe_m HAP_{im} (1 - PR_{im})] + \left(1 - \frac{\text{Nominal efficiency \%}}{100}\right) (6.0 * 10^{-8}) Q_i H_i \sum_{m=1}^s [HAP_{im} PR_{im}]$$

* * * * *

(j) * * *

(2) * * * When the term "organic HAP" is used in § 63.150(j)(2) in

reference to wastewater emission points, the term "table 9 HAP" shall apply for the purposes of this paragraph.

* * * * *

(ii) * * *

(B) For wastewater, E_B shall be calculated as follows:

$$E_B = \sum_{i=1}^n \left[(6.0 * 10^{-8}) Q_{Bi} H_{Bi} \sum_{m=1}^s Fe_m HAP_{Bim} \right]$$

Where:

n = Number of wastewater streams.

Q_{Bi} = Average flow rate for wastewater stream i before the pollution

prevention measure, defined and determined according to paragraph

(g)(5)(i) of this section, liters per minute, before implementation of the pollution prevention measure.
 H_{Bi} = Number of hours per month that wastewater stream *i* was discharged before the pollution prevention measure, hours per month.
 s = Total number of table 9 HAP in wastewater stream *i*.
 Fe_m = Fraction emitted of table 9 HAP *m* in wastewater of this subpart, dimensionless.
 HAP_{Bim} = Average concentration of table 9 HAP *m* in wastewater stream *i*, defined and determined according to paragraph (g)(5)(i) of this section, before the pollution prevention measure, parts per million by weight, as measured before the implementation of the pollution measure.
 * * * * *
 (m) * * *
 (5) * * *
 (i) For wastewater treatment processes, conduct tests as specified in § 63.138(j) of this subpart.
 * * * * *
 13. Section 63.151 is amended by revising paragraph (j)(3) to read as follows:

§ 63.151 Initial notification.
 * * * * *
 (j) * * *
 (3) Whenever an emission point or a chemical manufacturing process unit is added to a source, written information specified under paragraphs (e)(1) through (e)(5) of this section, containing information on the new emission point(s) shall be submitted to the EPA regional office where the source is located.
 14. Section 63.152 is amended by revising paragraphs (c)(2)(ii)(C) and (d)(1) to read as follows:
§ 63.152 General reporting and continuous records.
 * * * * *
 (c) * * *
 (2) * * *
 (ii) * * *
 (C) A monitored parameter that is outside its established range or monitoring data that are not collected are excursions. However, if the conditions in paragraph (c)(2)(ii)(C)(1) or (c)(2)(ii)(C)(2) of this section are met, these excursions are not violations and do not count toward the number of excused excursions for determining compliance.

(1) *Periods of start-up, shutdown, or malfunction.* During periods of start-up, shutdown, or malfunction when the source is operated during such periods in accordance with the source's start-up, shutdown, and malfunction plan as required by § 63.6(e)(3) of subpart A.
 (2) *Periods of nonoperation.* During periods of nonoperation of the chemical manufacturing process unit, or portion thereof, that results in cessation of the emissions to which the monitoring applies.
 * * * * *
 (d) * * *
 (1) Reports of start-up, shutdown, and malfunction required by § 63.10(d)(5) of subpart A. The start-up, shutdown and malfunction reports may be submitted on the same schedule as the Periodic Reports required under paragraph (c) of this section instead of the schedule specified in § 63.10(d)(5) of subpart A.
 * * * * *
 15. The appendix to subpart G is amended by revising tables 4 and 7 to read as follows:
Appendix to Subpart G—Tables and Figures
 * * * * *

TABLE 4. PROCESS VENTS—MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS FOR MAINTAINING A TRE INDEX VALUE >1.0 AND ≤4.0

Final recovery device	Parameters to be monitored ^a	Recordkeeping and reporting requirements for monitored parameters
Absorber ^b	Exit temperature of the absorbing liquid [63.114(b)(1)], and.	1. Continuous records ^c . 2. Record and report the exit temperature of the absorbing liquid averaged over the full period of the TRE determination—NCS ^d . 3. Record the daily average exit temperature of the absorbing liquid for each operating day ^e . 4. Report all the daily average exit temperatures of the absorbing liquid that are outside the range established in the NCS or operating permit—PR ^f .
	Exit specific gravity [63.114(b)(1)]	1. Continuous records. 2. Record and report the exit specific gravity averaged over the full period of the TRE determination—NCS. 3. Record the daily average exit specific gravity for each operating day ^e . 4. Report all daily average exit specific gravity values that are outside the range established in the NCS or operating permit—PR.
Condenser ^d	Exit (product side) temperature [63.114(b)(2)].	1. Continuous records. 2. Record and report the exit temperature averaged over the full period of the TRE determination—NCS. 3. Record the daily average exit temperature for each operating day ^e . 4. Report all daily average exit temperatures that are outside the range established in the NCS or operating permit—PR.
Carbon adsorber ^d	Total regeneration stream mass or volumetric flow during carbon bed regeneration cycle(s) [63.114(b)(3)], and.	1. Record of total regeneration stream mass or volumetric flow for each carbon bed regeneration cycle. 2. Record and report the total regeneration stream mass or volumetric flow during each carbon bed regeneration cycle during the period of the TRE determination—NCS. 3. Report all carbon bed regeneration cycles when the total regeneration stream mass or volumetric flow is outside the range established in the NCS or operating permit—PR.
	Temperature of the carbon bed after regeneration [and within 15 minutes of completing any cooling cycle(s)] [63.114(b)(3)].	1. Records of the temperature of the carbon bed after each regeneration. 2. Record and report the temperature of the carbon bed after each regeneration during the period of the TRE determination—NCS.

TABLE 4. PROCESS VENTS—MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS FOR MAINTAINING A TRE INDEX VALUE >1.0 AND >4.0—Continued

Final recovery device	Parameters to be monitored ^a	Recordkeeping and reporting requirements for monitored parameters
All recovery devices (as an alternative to the above).	Concentration level or reading indicated by an organic monitoring device at the outlet of the recovery device [63.114 (b)].	3. Report all carbon bed regeneration cycles during which temperature of the carbon bed after regeneration is outside the range established in the NCS or operating permit—PR. 1. Continuous records. 2. Record and report the concentration level or reading averaged over the full period of the TRE determination—NCS. 3. Record the daily average concentration level or reading for each operating day. ^c 4. Report all daily average concentration levels or readings that are outside the range established in the NCS or operating permit—PR.

^aRegulatory citations are listed in brackets.
^bAlternatively, these devices may comply with the organic monitoring device provisions listed at the end of this table under "All Recovery Devices."
^c"Continuous records" is defined in § 63.111 of this subpart.
^dNCS = Notification of Compliance Status described in § 63.152 of this subpart.
^eThe daily average is the average of all values recorded during the operating day. If all recorded values during an operating day are within the range established in the NCS or operating permit, a statement to this effect can be recorded instead of the daily average.
^fPR= Periodic Reports described in § 63.152 of this subpart.

* * * * *

TABLE 7.—TRANSFER OPERATIONS—MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS FOR COMPLYING WITH 98 WEIGHT-PERCENT REDUCTION OF TOTAL ORGANIC HAZARDOUS AIR POLLUTANTS EMISSIONS OR A LIMIT OF 20 PARTS PER MILLION BY VOLUME

Control device	Parameters to be monitored ^a	Recordkeeping and reporting requirements for monitored parameters
Thermal incinerator	Firebox temperature ^b [63.127(a)(1)(i)].	1. Continuous records ^c during loading. 2. Record and report the firebox temperature averaged over the full period of the performance test—NCS. ^d 3. Record the daily average firebox temperature for each operating day. ^e 4. Report daily average temperatures that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected ^f —PR. ^e
Catalytic incinerator	Temperature upstream and downstream of the catalyst bed [63.127(a)(1)(ii)].	1. Continuous records during loading. 2. Record and report the upstream and downstream temperatures and the temperature difference across the catalyst bed averaged over the full period of the performance test—NCS. 3. Record the daily average upstream temperature and temperature difference across catalyst bed for each operating day. ^e 4. Report all daily average upstream temperatures that are outside the range established in the NCS or operating permit—PR. 5. Report all daily average temperature differences across the catalyst bed that are outside the range established in the NCS or operating permit—PR. 6. Report all operating days when insufficient monitoring data are collected. ^f
Boiler or process heater with a design heat input capacity less than 44 megawatts and vent stream is not introduced with or as the primary fuel.	Firebox temperature ^b [63.127(a)(3)].	1. Continuous records during loading. 2. Record and report the firebox temperature averaged over the full period of the performance test—NCS. 3. Record the daily average firebox temperature for each operating day. ^e 4. Report all daily average firebox temperatures that are outside the range established in the NCS or operating permit and all operating days when insufficient data are collected ^f —PR.
Flare	Presence of a flame at the pilot light [63.127(a)(2)].	1. Hourly records of whether the monitor was continuously operating and whether the pilot flame was continuously present during each hour. 2. Record and report the presence of a flame at the pilot light over the full period of the compliance determination—NCS. 3. Record the times and durations of all periods when all pilot flames are absent or the monitor is not operating. 4. Report the duration of all periods when all pilot flames of a flare are absent—PR.

TABLE 7.—TRANSFER OPERATIONS—MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS FOR COMPLYING WITH 98 WEIGHT-PERCENT REDUCTION OF TOTAL ORGANIC HAZARDOUS AIR POLLUTANTS EMISSIONS OR A LIMIT OF 20 PARTS PER MILLION BY VOLUME—Continued

Control device	Parameters to be monitored ^a	Recordkeeping and reporting requirements for monitored parameters
Scrubber for halogenated vent streams (Note: Controlled by a combustion device other than a flare).	pH of scrubber effluent [63.127(a)(4)(i)], and.	<ol style="list-style-type: none"> 1. Continuous records during loading. 2. Record and report the pH of the scrubber effluent averaged over the full period of the performance test—NCS. 3. Record the daily average pH of the scrubber effluent for each operating day.^c 4. Report all daily average pH values of the scrubber effluent that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected^f—PR.
	Scrubber liquid and gas flow rates [63.127(a)(4)(ii)].	<ol style="list-style-type: none"> 1. Continuous records during loading of scrubber liquid flow rate. 2. Record and report the scrubber liquid/gas ratio averaged over the full period of the performance test—NCS. 3. Record the daily average scrubber liquid/gas ratio for each operating day.^c 4. Report all daily average scrubber liquid/gas ratios that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected^f—PR.
Absorber ^h	Exit temperature of the absorbing liquid [63.127(b)(1)], and.	<ol style="list-style-type: none"> 1. Continuous records during loading. 2. Record and report the exit temperature of the absorbing liquid averaged over the full period of the performance test—NCS. 3. Record the daily average exit temperature of the absorbing liquid for each operating day.^c 4. Report all daily average exit temperatures of the absorbing liquid that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected^f—PR.
	Exit specific gravity [63.127(b)(1)]	<ol style="list-style-type: none"> 1. Continuous records during loading. 2. Record and report the exit specific gravity averaged over the full period of the performance test—NCS. 3. Record the daily average exit specific gravity for each operating day.^c 4. Report all daily average exit specific gravity values that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected^f—PR.
Condenser ^h	Exit (product side) temperature [63.127(b)(2)].	<ol style="list-style-type: none"> 1. Continuous records during loading. 2. Record and report the exit temperature averaged over the full period of the performance test—NCS. 3. Record the daily average exit temperature for each operating day.^c 4. Report all daily average exit temperatures that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected^f—PR.
Carbon adsorber ^h	Total regeneration stream mass or volumetric or volumetric flow during carbon bed regeneration cycle(s) [63.127(b)(3)], and.	<ol style="list-style-type: none"> 1. Record of total regeneration stream mass or volumetric flow for each carbon bed regeneration cycle. 2. Record and report the total regeneration stream mass or volumetric flow during each carbon bed regeneration cycle during the period of the performance test—NCS. 3. Report all carbon bed regeneration cycles when the total regeneration stream mass or volumetric flow is outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected^f—PR.
	Temperature of the carbon bed after regeneration [and within 15 minutes of completing any cooling cycle(s)] [63.127(b)(3)].	<ol style="list-style-type: none"> 1. Records of the temperature of the carbon bed after each regeneration. 2. Record and report the temperature of the carbon bed after each regeneration during the period of the performance test—NCS. 3. Report all the carbon bed regeneration cycles during which the temperature of the carbon bed after regeneration is outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected^f—PR.
All recovery devices (as an alternative to the above).	Concentration level or reading indicated by an organic monitoring device at the outlet of the recovery device [63.127(b)].	<ol style="list-style-type: none"> 1. Continuous records during loading. 2. Record and report the concentration level or reading averaged over the full period of the performance test—NCS. 3. Record the daily average concentration level or reading for each operating day.^d

TABLE 7.—TRANSFER OPERATIONS—MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS FOR COMPLYING WITH 98 WEIGHT-PERCENT REDUCTION OF TOTAL ORGANIC HAZARDOUS AIR POLLUTANTS EMISSIONS OR A LIMIT OF 20 PARTS PER MILLION BY VOLUME—Continued

Control device	Parameters to be monitored ^a	Recordkeeping and reporting requirements for monitored parameters
All control devices and vapor balancing systems.	Presence of flow diverted to the atmosphere from the control device [63.127(d)(1)] or. Monthly inspections of sealed valves [63.127(d)(2)].	4. Report all daily average concentration levels or readings that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected—PR. 1. Hourly records of whether the flow indicator was operating and whether a diversion was detected at any time during each hour. 2. Record and report the duration of all periods when the vent stream is diverted through a bypass line or the monitor is not operating—PR. 1. Records that monthly inspections were performed. 2. Record and report all monthly inspections that show the valves are moved to the diverting position or the seal has been changed.

^aRegulatory citations are listed in brackets.
^bMonitor may be installed in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange is encountered.
^c"Continuous records" is defined in § 63.111 of this subpart.
^dNCS = Notification of Compliance Status described in § 63.152 of this subpart.
^eThe daily average is the average of all recorded parameter values for the operating day. If all recorded values during an operating day are within the range established in the NCS or operating permit, a statement to this effect can be recorded instead of the daily average.
^fThe periodic reports shall include the duration of periods when monitoring data are not collected for each excursion as defined in § 63.152(c)(2)(ii)(A) of this subpart.
^gPR = Periodic Reports described in § 63.152 of this subpart.
^hAlternatively, these devices may comply with the organic monitoring device provisions listed at the end of this table under "All Recovery Devices."

16. Section 63.160 is amended by revising paragraph (a) to read as follows:

§ 63.160 Applicability and designation of source.

(a) The provisions of this subpart apply to pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, instrumentation systems, and control devices or closed vent systems required by this subpart that are intended to operate in organic hazardous air pollutant service 300 hours or more during the calendar year within a source subject to the provisions of a specific subpart in 40 CFR part 63 that references this subpart.

* * * * *

§ 63.163 [Amended]

17. Paragraph (b)(1) of § 63.163 is amended by revising the reference to "(e) through (i) of this section" to read "(e) through (j) of this section."

§ 63.164 [Amended]

18. Paragraph (h) of § 63.164 is amended by revising the reference to "(a) through (f) of this section" to read "(a) through (g) of this section."

§ 63.173 [Amended]

19. In § 63.173, paragraph (j) introductory text is amended by revising the reference to "(b) through (d) of this

section" to read "(a) through (d) of this section."

20. Section 63.181 is amended by revising paragraph (b)(7) introductory text and revising paragraph (g)(3) introductory text to read as follows:

§ 63.181 Recordkeeping requirements.

* * * * *

(b) * * *

(7) The following information pertaining to all pumps subject to the provisions of § 63.163(j), valves subject to the provisions of § 63.168(h) and (i) of this subpart, agitators subject to the provisions of § 63.173(h) through (j), and connectors subject to the provisions of § 63.174(f) and (g) of this subpart shall be recorded:

* * * * *

(g) * * *

(3) Records of inspections of closed-vent systems subject to the provisions of § 63.172 of this subpart, as specified in paragraphs (g)(3)(i) and (g)(3)(ii) of this section.

* * * * *

[FR Doc. 99-10099 Filed 4-23-99; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 372

[OPPTS-400141; FRL-6075-3]

Revised Policy for Amending Form R and Form A Submissions; Toxic Chemical Release Inventory Reporting; Community Right-to-Know

AGENCY: Environmental Protection Agency (EPA).

ACTION: Policy statement.

SUMMARY: EPA is making a minor administrative change to the Agency's management of data submitted each year to EPA under the Toxic Release Inventory (TRI) reporting program pursuant to section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and section 6607 of the Pollution Prevention Act (PPA) of 1990. Specifically, EPA is revising the period during which the Agency will accept voluntary revisions to Form R and Form A submissions each year for inclusion in the annual data release for that year. Facilities must now submit voluntary revisions to their Form R and Form A submissions to EPA within 30 days of the reporting deadline each year. The statutory annual reporting deadline is July 1. Therefore, revisions received after July 31 of each year, will not be included in the annual release of the TRI data for that year. EPA

withdrawing the direct final rule will be published in the **Federal Register**, and a notice of proposed rulemaking may be published with a new comment period.

Comments Invited

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

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

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 99-ACE-22." The postcard will be stamped and returned to the commenter.

Agency Findings

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

The FAA has determined that this regulation is noncontroversial and unlikely to result in adverse or negative comments. For the reasons discussed in the preamble, I certify that this regulation (1) is not a "significant

regulatory action" under Executive Order 12866; (2) is not a "significant rule" under Department of Transportation (DOT) Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

Adoption of the Amendment

Accordingly, the Federal Aviation Administration amends 14 CFR part 71 as follows:

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

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

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

§ 71.1 [Amended]

2. The incorporation by reference in 14 CFR 71.1 of Federal Aviation Administration Order 7400.9F, Airspace Designations and Reporting Points, dated September 10, 1998, and effective September 16, 1998, is amended as follows:

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

* * * * *

ACE IA E5 Harlan, IA [Revised]

Harlan Municipal Airport, IA
(Lat. 41°35'04" N., Long. 95°20'23" W.)
Harlan NDB
(Lat. 41°34'45" N., Long. 95°20'26" W.)

That airspace extending upward from 700 feet above the surface within a 6.4-mile radius of Harlan Municipal Airport and within 2.6 miles each side of the 135° bearing from the Harlan NDB extending from the 6.4-mile radius to 7.4 miles southeast of the airport.

* * * * *

Issued in Kansas City, MO, on April 26, 1999.

Donovan D. Schardt,

Acting Manager, Air Traffic Division, Central Region.

[FR Doc. 99-11542 Filed 5-6-99; 8:45 am]

BILLING CODE 4910-13-M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 60 and 63

[AD-FRL-6338-3]

RIN 2060-AH47

National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins and Group IV Polymers and Resins and Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Polymer Manufacturing Industry

AGENCY: Environmental Protection Agency (EPA).

ACTION: Withdrawal of amendment in direct final rule.

SUMMARY: Due to an adverse comment, the EPA is withdrawing an amendment from the March 9, 1999 direct final rule for the National Emission Standards for Hazardous Air Pollutants (NESHAP): Group I Polymers and Resins and Group IV Polymers and Resins and Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry (64 FR 11536). This amendment deals with the oxygen correction factor requirements when complying with the 20 parts per million by volume (ppmv) control device outlet concentration compliance option for continuous front-end process vents. The withdrawal of the amendment from the direct final rule will only affect sources subject to the Group I Polymers and Resins NESHAP. **DATES:** Amendment 6 in the direct final rule, which amends § 63.485, published on March 9, 1999 (64 FR 11542), is withdrawn as of May 7, 1999. The remaining amendments will be effective May 10, 1999 as stated in the March 9 rule.

ADDRESSES: Docket No. A-92-44 containing supporting information used in the development of this notice is available for public inspection and copying between 8 a.m. and 5:30 p.m., Monday through Friday, excluding holidays. The docket is located in the EPA's Air and Radiation Docket and Information Center, Waterside Mall, Room M-1500, 401 M Street, SW, Washington, DC 20460, or by calling (202) 260-7548. A reasonable fee may be charged for copying docket materials.

FOR FURTHER INFORMATION CONTACT: Mr. Robert E. Rosensteel at (919) 541-5608, Emission Standards Division (MD-13), Environmental Protection Agency, Research Triangle Park, North Carolina 27711, electronic mail address "rosensteel.bob@epa.gov".

SUPPLEMENTARY INFORMATION: On March 9, 1999, the EPA published a direct final rule (64 FR 11536) and a parallel proposal (64 FR 11555) to amend portions of the Group I and Group IV Polymers and Resins NESHAP. Also on March 9, 1999, the EPA published a notice (64 FR 11560) proposing amendments to the Group I and Group IV Polymers and Resins NESHAP (40 CFR part 63, subparts U and JJJ, respectively) to make changes to the 1996 promulgated rules, in response to technical issues raised through a 1996 petition for review.

The EPA stated in the direct final rule (64 FR 11536, March 9, 1999) that if relevant, adverse comments were received by April 8, 1999, the EPA would publish a notice to withdraw the affected portions of the direct final rule before its effective date of May 10, 1999. The EPA received an adverse comment on Amendment 6 in the direct final rule and, therefore, is withdrawing Amendment 6. This withdrawal of Amendment 6 only affects sources subject to the Group I Polymers and Resins NESHAP (40 CFR part 63, subpart U). Amendment 6 would have changed the requirements in § 63.485(a) to reference a new paragraph (§ 63.485(v)), which would have adjusted the control device outlet concentration of 20 ppmv using a 3 percent oxygen correction factor.

The adverse comment stated that § 63.485(a) in the direct final rule makes reference to paragraphs in separate proposed amendments (64 FR 11560, March 9, 1999), which respond to a 1996 petition for review, rather than to paragraphs in the 1996 promulgated NESHAP (40 CFR part 63, subpart U). The commenter said that Amendment 6 in the direct final rule caused confusion in interpreting the intent of the regulation. The EPA will address this comment on the withdrawn amendment in the subsequent final action on the proposed amendments. The 25 amendments for which we did not receive adverse comments will become effective on May 10, 1999, as provided in the March 9, 1999 direct final rule (64 FR 11536).

Dated: April 29, 1999.

Robert Perciasepe,

Assistant Administrator for Air and Radiation.

[FR Doc. 99-11561 Filed 5-6-99; 8:45 am]

BILLING CODE 6560-50-P

FEDERAL EMERGENCY MANAGEMENT AGENCY

44 CFR Part 64

[Docket No. FEMA-7713]

Suspension of Community Eligibility

AGENCY: Federal Emergency Management Agency, FEMA.

ACTION: Final rule.

SUMMARY: This rule identifies communities, where the sale of flood insurance has been authorized under the National Flood Insurance Program (NFIP), that are suspended on the effective dates listed within this rule because of noncompliance with the floodplain management requirements of the program. If the Federal Emergency Management Agency (FEMA) receives documentation that the community has adopted the required floodplain management measures prior to the effective suspension date given in this rule, the suspension will be withdrawn by publication in the **Federal Register**.

EFFECTIVE DATES: The effective date of each community's suspension is the third date ("Susp.") listed in the third column of the following tables.

ADDRESSES: If you wish to determine whether a particular community was suspended on the suspension date, contact the appropriate FEMA Regional Office or the NFIP servicing contractor.

FOR FURTHER INFORMATION CONTACT: Robert F. Shea Jr., Division Director, Program Support Division, Mitigation Directorate, 500 C Street, SW., Room 417, Washington, DC 20472, (202) 646-3619.

SUPPLEMENTARY INFORMATION: The NFIP enables property owners to purchase flood insurance which is generally not otherwise available. In return, communities agree to adopt and administer local floodplain management aimed at protecting lives and new construction from future flooding. Section 1315 of the National Flood Insurance Act of 1968, as amended, 42 U.S.C. 4022, prohibits flood insurance coverage as authorized under the National Flood Insurance Program, 42 U.S.C. 4001 et seq., unless an appropriate public body adopts adequate floodplain management measures with effective enforcement measures. The communities listed in this document no longer meet that statutory requirement for compliance with program regulations, 44 CFR part 59 et seq. Accordingly, the communities will be suspended on the effective date in the third column. As of that date, flood insurance will no longer be

available in the community. However, some of these communities may adopt and submit the required documentation of legally enforceable floodplain management measures after this rule is published but prior to the actual suspension date. These communities will not be suspended and will continue their eligibility for the sale of insurance. A notice withdrawing the suspension of the communities will be published in the **Federal Register**.

In addition, the Federal Emergency Management Agency has identified the special flood hazard areas in these communities by publishing a Flood Insurance Rate Map (FIRM). The date of the FIRM if one has been published, is indicated in the fourth column of the table. No direct Federal financial assistance (except assistance pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act not in connection with a flood) may legally be provided for construction or acquisition of buildings in the identified special flood hazard area of communities not participating in the NFIP and identified for more than a year, on the Federal Emergency Management Agency's initial flood insurance map of the community as having flood-prone areas (section 202(a) of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4106(a), as amended). This prohibition against certain types of Federal assistance becomes effective for the communities listed on the date shown in the last column.

The Associate Director finds that notice and public comment under 5 U.S.C. 553(b) are impracticable and unnecessary because communities listed in this final rule have been adequately notified.

Each community receives a 6-month, 90-day, and 30-day notification addressed to the Chief Executive Officer that the community will be suspended unless the required floodplain management measures are met prior to the effective suspension date. Since these notifications have been made, this final rule may take effect within less than 30 days.

National Environmental Policy Act

This rule is categorically excluded from the requirements of 44 CFR Part 10, Environmental Considerations. No environmental impact assessment has been prepared.

Regulatory Flexibility Act

The Associate Director has determined that this rule is exempt from the requirements of the Regulatory Flexibility Act because the National Flood Insurance Act of 1968, as

TABLE 52.1031.—EPA-APPROVED RULES AND REGULATIONS

State citation	Title/Subject	Date adopted by State	Date approved by EPA	Federal Register citation	52.1020
119	Motor Vehicle Fuel Volatility Limit.	March 9, 1999	May 14, 1999	[Insert FR citation from published date].	49 Maine Motor Vehicle Fuel Volatility Limit. Amends previously approved regulation to require that fuel with a further volatility controls be sold in York, Cumberland, Sagadahoc, Androscoggin, Kennebec, Knox and Lincoln Counties. The RVP limit during the summer will begin in 1999 with a 7.8 psi limit, and drop to 7.2 psi in each subsequent summer.

[FR Doc. 99-11827 Filed 5-13-99; 8:45 am]
BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AD-FRL-6343-1]

RIN 2060-A128

Hazardous Air Pollutants: Regulations Governing Equivalent Emission Limitations by Permit

AGENCY: Environmental Protection Agency (EPA).

ACTION: Withdrawal of direct final rule.

SUMMARY: Due to receipt of an adverse comment, EPA is withdrawing an April 16, 1999 direct final rule (64 FR 18824) which would have amended the rule implementing Clean Air Act section 112(j) to extend the section 112(j) permit application deadline for sources in 7-year source categories until December 15, 1999. Having withdrawn the direct final rule, EPA is today taking final action to extend the section 112(j) permit application deadline based on the proposed rule which was also published on April 16, 1999 (64 FR 18862).

DATES: The direct final rule to amend the section 112(j) permit application deadline, which was published on April

16, 1999 (64 FR 18827), is hereby withdrawn as of May 14, 1999.

ADDRESSES: Docket No. A-93-32 containing information pertaining to this rulemaking is available for public inspection and copying between 8 a.m. and 5:30 p.m., Monday through Friday, excluding holidays. The docket is located in the EPA's Air and Radiation Docket and Information Center, Waterside Mall, Room M-1500, 401 M Street, SW, Washington, DC 20460, or by calling (202) 260-7548. A reasonable fee may be charged for copying docket materials.

FOR FURTHER INFORMATION CONTACT: Mr. James Szykman at (919) 541-2452, Emission Standards Division (MD-13), Environmental Protection Agency, Research Triangle Park, North Carolina 27711, electronic mail address is szykman.jim@epa.gov.

SUPPLEMENTARY INFORMATION: On April 16, 1999, EPA published a direct final rule (64 FR 18824) and a parallel proposal (64 FR 18862) to amend the section 112(j) permit application deadline in the Regulations Governing Equivalent Emission Limitations by Permit. This amendment would extend to December 15, 1999 the permit application deadline for major sources subject to 7-year MACT standards which were not promulgated in a timely manner.

The EPA stated in the direct final rule that if relevant, adverse comments were

received by April 26, 1999, the EPA would publish a notice withdrawing the direct final rule before its effective date of May 17, 1999. The EPA received adverse comments on the direct final rule from one commenter on April 26, 1999 and is, therefore, withdrawing the direct final rule. The EPA will address these comments in a final rule extending the section 112(j) permit application deadline for major sources subject to 7-year MACT standards published elsewhere in today's **Federal Register**.

Dated: May 10, 1999.

Carol M. Browner,
Administrator.

[FR Doc. 99-12242 Filed 5-13-99; 8:45 am]
BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AD-FRL-6343-2]

RIN 2060-A128

Hazardous Air Pollutants: Amendment to Regulations Governing Equivalent Emission Limitations by Permit

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This final rule adopts an amendment to the Regulations Governing Equivalent Emission Limitation by Permit proposed in the *Federal Register* on April 16, 1999 (64 FR 18862). This action amends the rule implementing Clean Air Act section 112(j) to extend the section 112(j) permit application deadline for sources in 7-year source categories until December 15, 1999.

EFFECTIVE DATE: May 14, 1999.

ADDRESSES: *Docket.* The administrative record for this rulemaking may be found in Docket No. A-93-32. The docket is available for public inspection and

copying between 8:00 a.m. and 5:30 p.m., Monday through Friday, at the EPA's Air and Radiation Docket and Information Center (6102), 401 M Street, SW, Washington, DC 20460, or by calling (202) 260-7548. A reasonable fee may be charged for copying. An electronic version of this rule is available for download through the EPA web site at: <http://www.epa.gov/ttn/oarpg>. For further information and general questions regarding the Technology Transfer Network (TTNWEB), call Mr. Hersch Rorex, (919) 541-5637 or Mr. Phil Dickerson, (919) 541-4814.

FOR FURTHER INFORMATION CONTACT: For information concerning this rule, contact Mr. James Szykman or Mr. David Markwordt, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone (919) 541-2452 (Szykman), or (919) 541-0837 (Markwordt), e-mail szykman.jim@epa.gov and markwordt.david@epa.gov.

SUPPLEMENTARY INFORMATION: Entities potentially affected by this action are owners or operators of major sources that fall into one of the following source categories:

Category	Affected source categories
Industry	hydrogen fluoride production; primary lead smelting; ferroalloys production; steelpickling--HCl processes; oil and natural gas production; butadiene-furfural cotrimer (R-11) production; 4-chloro-2-methyl phenoxyacetic acid production; 2, 4-D salts and esters production; 4, 6-dinitro-o-cresol production; captafol production; captan production; chloroneb production; chlorothalonil production; dacthal (tm) production; sodium pentachlorophenate production; tordon (tm) acid production; acrylic fibers/modacrylic fibers production; acetal resins production; mineral wool production; portland cement manufacturing; wool fiberglass manufacturing; polycarbonates production; polyether polyols production; phosphate fertilizer production; phosphoric acid manufacturing; publicly owned treatment works; amino resins production; phenolic resins production; secondary aluminum production; and pulp and paper (combustion).

The information presented in this preamble is organized as follows:

- I. Background
- II. Public Comment on the April 16, 1998 Proposal
- III. Judicial Review
- IV. Administrative Requirements
 - A. Docket
 - B. Paperwork Reduction Act
 - C. Executive Order 12866
 - D. Executive Order 12875
 - E. Executive Order 13045
 - F. Executive Order 13084
 - G. Submission to Congress and the General Accounting Office
 - H. National Technology Transfer and Advancement Act

I. Background

On May 20, 1994, the Agency promulgated a rule (59 FR 26429) governing the establishment of equivalent emission limitations by permit, pursuant to section 112(j) of the Clean Air Act (Act). After the effective date of a title V permit program in a State, each owner or operator of a major source in a source category for which the EPA was scheduled, but failed, to promulgate a section 112(d) emission standard will be required to obtain an equivalent emission limitation by permit. The permit application must be submitted to the title V permitting authority 18 months after the EPA's missed promulgation date.

On April 16, 1999, the Agency issued a direct final rule (64 FR 18824) and a parallel proposed rule (64 FR 18862) to amend the original Regulations Governing Equivalent Emission

Limitations by Permit rule. This amendment would extend until December 15, 1999 the permit application deadline for major sources subject to 7-year maximum achievable control technology (MACT) standards which were not promulgated in a timely manner.

Due to receipt of an adverse comment, the EPA has withdrawn the direct final rule and is instead issuing this final rule extending the deadline pursuant to the proposal. This action is needed to alleviate unnecessary paperwork for both major source owners or operators and permitting agencies.

II. Public Comment on the April 16, 1999 Proposal

One timely adverse comment was submitted in response to the April 16, 1999 proposed rule. The commenter opposed the delay in the permit application deadline from May 15, 1999 to December 15, 1999, stating that EPA erroneously concluded that no environmental benefit would be lost by delaying the permit application deadline until December 15, 1999.

In his first argument, the commenter stated that the existence of a consent decree requiring promulgation of 25 source categories by May 15, 1999 is irrelevant. The commenter further stated that it is unreasonable to assume, based on EPA's current rate of promulgating the 7-year standards, that EPA will be able to promulgate the remaining 7-year standards in accordance with the

consent decree, which requires 25 source categories by May 15, 1999.

The EPA does not agree that the deadlines established by the consent decree are "irrelevant." Before agreeing to the schedule embodied in the proposed consent decree, the EPA assessed the current status of each 7-year source category standard in order to select realistic promulgation dates for each standard included in the consent decree. The EPA fully intends to meet the time frames established in the consent decree for promulgation of the standards.

Moreover, EPA believes that the commenter's stated concerns about the potential inability of EPA to meet every promulgation deadline in the consent decree actually are consistent with the Agency's stated rationale for extending the section 112(j) permit application deadline. One of the principal objectives of the extension is to minimize the necessity for preparation of precautionary applications by sources that cannot be completely certain whether EPA will promulgate a MACT standard by the dates specified in the consent decree. EPA believes that preparation of such contingent applications would be totally futile and represent an unnecessary waste of resources.

In his second argument, the commenter stated that even if EPA promulgates the standards for the 25 source categories by May 15, 1999, in accordance with the consent decree, that there is no assurance the standards

will be enforceable. The commenter also states that Federally Enforceable Equivalent Emissions by Permit will, in the absence of an enforceable MACT standard, provide environmental benefits in excess of the de minimis levels upon which the proposal was based.

The EPA does not agree that the commenter's second argument is relevant to the proposed action. The obligation to submit a section 112(j) permit application is based on the failure by EPA to promulgate a MACT standard governing the category or subcategory in question in a timely manner. Any alleged limitations on the enforceability of the promulgated standard are not germane. Moreover, EPA does not agree with the commenter's apparent premise that MACT emission limitations adopted on a case-by-case basis are more enforceable than a generally applicable MACT standard.

Nothing in the adverse comments which were submitted change in any way the prior determination by EPA that extension of the section 112(j) permit application deadline is warranted. Therefore, EPA affirms the rationale for extension of the deadline set forth in the April 16, 1999 *Federal Register* notices and is today promulgating the proposed extension in the form which was proposed on that date. In light of the notice of this change which EPA has provided previously, the final amendment will be effective immediately.

III. Judicial Review

Under section 307(b)(1) of the Act, judicial review of this final rule is available only by the filing of a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by July 13 1999. Any such judicial review is limited to only those objections which are raised with reasonable specificity in timely comments. Under section 307(b)(2) of the Act, the requirements that are the subject of this final rule may not be challenged later in civil or criminal proceedings brought by EPA to enforce these requirements.

IV. Administrative Requirements

A. Docket

The record supporting this final rule is included in Docket No. A-93-32, the same docket as the original final rule. This 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 notice.

B. Paperwork Reduction Act

The information collection requirements in this rule will be submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document will be prepared by EPA and a copy will be available from Sandy Farmer by mail at OP Regulatory Information Division; U.S. Environmental Protection Agency (2137); 401 M St., SW; Washington, DC 20460, by e-mail at farmer.sandy@epa.gov, or by calling (202) 260-2740. A copy may also be downloaded off the internet at <http://www.epa.gov/icr>. The information requirements are not effective until OMB approves them. Section 112(j) of the Act as amended in 1990 requires a source to submit a permit application if EPA fails to promulgate a MACT standard for a category or subcategory of major sources on schedule. The permit application is used by the permitting agency to issue permits containing MACT emission limitations on a case-by-case (source-by-source) basis, equivalent to what would have been promulgated by EPA. The requirement to submit the permit application is not voluntary. Section 112(j) of the Act contains the need and authority for this information collection (42 U.S.C. 7401 *et seq.* as amended by Pub. L. 101-549).

Any information submitted to a permitting authority with a claim of confidentiality is to be safeguarded according to policies in 40 CFR chapter 1, part 2, Subpart B—Confidentiality of Business Information.

The total estimated burden, which includes all activities associated with the respondents or government agencies, is \$1,323,000 and 46,339 hours. This collection of information has an estimated reporting burden of 171 hours per respondent and 140 hours per permitting agency. The permit application is a one time occurrence along with the issuance of the permit by the permitting agency. This estimated cost per respondent is \$4,600 and \$4,300 per permitting agency.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any

previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15.

C. 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 notice would delay an existing requirement, 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 change proposed here is expected to reduce regulatory burdens on small businesses, and will not have a significant impact on a substantial number of small entities.

D. National Technology Transfer and Advancement Act

Under Section 12 of the National Technology Transfer and Advancement Act (NTTAA) 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 NTTAA 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 NTTAA 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 OMB, 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 OMB 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 revisions do not create a mandate on State, local or tribal governments. The rule revisions do not impose any enforceable duties on these entities. Rather, the rule revisions reduce 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 effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA previously submitted a report containing the withdrawn direct final rule, and will also submit a report containing this rule and other required information, to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

List of Subjects for 40 CFR Part 63

Environmental protection, Administrative practices and procedures, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: May 10, 1999.

Carol M. Browner,
Administrator.

For the reasons set out in the preamble, 40 CFR part 63 is amended as follows:

PART 63—[AMENDED]

1. The authority citation for part 63 continues to read as follows:

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

2. In § 63.51, the definition of *Section 112(j) deadline* is revised to read as follows:

§ 63.51 Definitions.

* * * * *

Section 112(j) deadline means the date 18 months after the date by which a relevant standard is scheduled to be promulgated under this part, except that for all major sources listed in the source category schedule for which a relevant standard is scheduled to be promulgated by November 15, 1994, the section 112(j) deadline is November 15, 1996, and for all major sources listed in the source category schedule for which a relevant standard is scheduled to be promulgated by November 15, 1997, the section 112(j) deadline is December 15, 1999.

* * * * *

[FR Doc. 99-12243 Filed 5-13-99; 8:45 am]

BILLING CODE 6560-50-P

Issued in Fort Worth, Texas, on May 11, 1999.
 Eric Bries,
*Acting Manager, Rotorcraft Directorate,
 Aircraft Certification Service.*
 [FR Doc 99-12743 Filed 5-19-99; 8:45 am]
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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 9 and 63

[IL-64-2-5807; FRL-6345-7]

RIN 2060-AF29

National Emission Standards for Hazardous Air Pollutants for Ferroalloys Production: Ferromanganese and Silicomanganese

AGENCY: Environmental Protection
 Agency (EPA).

ACTION: Final rule.

SUMMARY: This action finalizes national emission standards for hazardous air pollutants (NESHAP) for ferroalloys production: ferromanganese and silicomanganese. This rule was proposed under the title of "national emission standards for hazardous air pollutants for ferroalloys production." The EPA changed the title of the final rule to reflect the specific ferroalloy produced (ferromanganese and silicomanganese) at the only existing source to be regulated. The EPA also has deleted the proposed applicability to ferrochromium production with this action and withdrawn the proposed rule for ferronickel production facilities.

The EPA has identified ferromanganese and silicomanganese facilities as major sources of hazardous air pollutants (HAP) emissions of manganese. Manganese can adversely affect human health. The effects of chronic human exposure to environmental levels of manganese through inhalation include subtle but not insignificant effects on the central nervous system. These effects, reported in workers exposed to manganese, include slow visual reaction time, loss of eye-hand coordination, and imprecise hand movements caused by small tremors. The NESHAP requires affected sources to meet emission standards that reflect the application of maximum achievable control technology (MACT).
DATES: *Effective Date.* The final rule is effective May 20, 1999.

Judicial Review. Under Clean Air Act section 307(b), 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 publication of this rule. Under section 307(b)(2), the regulations that are the subject of this action may not be challenged later in civil or criminal proceedings brought by EPA in reliance on them.

ADDRESSES: *Docket.* All information considered by the EPA in developing this rulemaking, including public comments on the proposed rule and other information developed by the EPA in addressing those comments since proposal, is located in Public Docket No. A-92-59 at the following address: Air and Radiation Docket and Information Center (6102), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. The docket is located at the above address in Room M-1500, Waterside Mail (ground floor), and may be inspected from 8:00 a.m. to 5:30 p.m., Monday through Friday. Materials related to this rulemaking are available upon request from the Air and Radiation Docket and Information Center by calling (202) 260-7548 or 7549. The FAX number for the Center is (202) 260-4400. A reasonable fee may be charged for copying docket materials.

FOR FURTHER INFORMATION CONTACT: Mr. Conrad Chin, Metals Group, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone (919) 541-1512; facsimile (919) 541-5600, electronic mail address "chin.conrad@epamail.epa.gov".

SUPPLEMENTARY INFORMATION:

Regulated Entities

This action regulates entities that are industrial facilities producing ferromanganese or silicomanganese. Regulated categories and entities include those sources listed in the following primary Standard Industrial Classification code: 3313, Electrometallurgical Products, Except Steel.

This description provides a guide for readers regarding entities regulated by this final action. It lists the types of entities that the EPA is aware of that would be regulated. To determine whether a facility is regulated, the owner or operator should examine the applicability criteria in § 63.1650 of the rule. At this time, the EPA knows of only one facility (the Elkem Metals Company plant in Marietta, Ohio) that is subject to the final rule. Direct questions regarding the applicability of this action to a particular entity should be directed to the person listed in the preceding **FOR FURTHER INFORMATION**

CONTACT section or the relevant permitting authority.

Electronic Access

This document, the regulatory text, and other background information are available in Docket No. A-92-59, by request from the EPA's Air and Radiation Docket and Information Center (see **ADDRESSES**), or through the EPA web site at: <http://www.epa.gov/ttn/oarpg>.

Preamble Outline

The information presented in this preamble is organized as follows:

- I. Background
 - A. What is the statutory and regulatory authority for the final rule?
 - B. What are the benefits and costs of the final rule?
 - C. How did the public participate in developing the rule?
- II. Summary of Final Rule
- III. Significant Comments and Changes to the Proposed Rule
 - A. Should the EPA finalize the proposed ferronickel rule?
 - B. Does the final rule regulate ferrochromium production?
 - C. Is the format for the proposed furnace standards appropriate?
 - D. Should the EPA set separate standards for each furnace?
 - E. Should the EPA change its technical approach for selecting the numerical emissions standards for submerged arc furnaces?
 - F. What are the final standards for existing furnaces?
 - G. What are the final standards for new or reconstructed furnaces?
 - H. What are the final standards for new or reconstructed metal oxygen reduction processes?
 - I. How is the scrubber pressure drop operating parameter value to be determined?
 - J. What are the final monitoring requirements for baghouses?
 - K. How were performance testing issues raised in the public comments resolved?
- IV. Administrative Requirements
 - A. Docket
 - B. Executive Order 12866
 - C. Executive Order 12875
 - D. Executive Order 13084
 - E. Unfunded Mandates Reform Act
 - F. Regulatory Flexibility Act
 - G. Paperwork Reduction Act
 - H. Protection of Children from Environmental Health Risks and Safety Risk Under Executive Order 13045
 - I. National Technology Transfer and Advancement Act
 - J. Congressional Review Act

I. Background

A. What Is the Statutory and Regulatory Authority for the Final Rule?

Section 112 of the Clean Air Act (Act) requires that the EPA promulgate regulations to control HAP emissions

from major and area sources. The control of HAP is achieved through promulgation of emission standards under section 112(d) and (f) and operational and work practice standards under section 112(h) for categories of sources that emit HAP.

The statutory authority for this action is provided by sections 101, 112, 114, 116, and 301 of the Act as amended (42 U.S.C. 7401, 7412, 7414, 7416, and 7601).

B. What Are the Benefits and Costs of the Final Rule?

The final rule is expected to apply to only one facility, the Elkem Metals Company plant in Marietta, Ohio (Elkem). The following discussion of environmental, energy, and economic impacts is limited to this facility. No new facilities are anticipated.

The EPA believes that the final standards will have the primary effect of codifying existing control equipment and practices. Therefore, no additional emission control equipment would be required to comply with the final standards, and no significant emission reduction or other environmental impacts are anticipated to result from this rulemaking.

Cost and economic impacts are expected to be minimal. The only costs associated with the final standards are those required to perform compliance assurance activities such as performance testing, monitoring, reporting, and recordkeeping. However, these costs are minor compared to costs already incurred by the facility in meeting its permit obligations for criteria pollutants. Section IV.F. of this preamble addresses the burden associated with recordkeeping and reporting.

C. How Did the Public Participate in Developing the Rule?

Prior to proposal, the EPA met with industry representatives and State regulatory authorities several times to discuss the data and information used to develop the proposed standards. In addition, these and other potential stakeholders, including equipment vendors and environmental groups, had opportunity to comment on the proposed standards.

The proposed standards were published in the Federal Register on August 4, 1998 (63 FR 41508). The preamble to the proposed standards discussed the availability of technical support documents, which described in detail the information gathered during the standards development process. Public comments were solicited at proposal.

The EPA provided interested persons the opportunity for oral presentation of data, views, or arguments concerning the proposed standards in a public hearing. However, no member of the public requested to speak at a hearing, so none was held.

The original public comment period ended on October 5, 1998. However, at the request of the only affected facility, the EPA extended the comment period to November 4, 1998 (63 FR 54646). During the comment period, the EPA received four comment letters on the proposed standards. In the post-proposal period, the EPA talked with commenters and other stakeholders to clarify comments and to assist in the EPA's analysis of the comments. Records of these contacts are found in the final rulemaking docket. All of the comments have been carefully considered, and, where appropriate,

changes have been made in the final standards.

In a separate action, the EPA proposed supplemental requirements (64 FR 7149) on February 12, 1999, to modify the use of bag leak detection systems in rules proposed for the source categories of ferroalloys production, mineral wool production, primary lead smelting, and wool fiberglass manufacturing. The public comment period on the supplemental requirements ended on March 15, 1999, and four letters were received. The EPA considered these comments in preparing the final ferroalloys regulation.

II. Summary of Final Rule

The NESHAP will apply to new and existing ferroalloy production facilities that manufacture ferromanganese and silicomanganese and are major sources of HAP emissions or are co-located at major sources of HAP emissions. The following HAP emission sources at a ferroalloy production facility will be affected by the rule:

- Submerged arc furnaces
- Metal oxygen refining (MOR) process
- Crushing and screening operations
- Fugitive dust sources.

The rule contains emission standards that limit particulate matter emissions from existing and new or reconstructed emission sources. The limits for the submerged arc furnaces depend on the product produced and furnace design. The rule also sets limits for the air pollution control devices associated with the MOR process and crushing and screening operations. The following table summarizes the emission standards, by process.

EMISSION STANDARDS

New or reconstructed or existing source	Affected source	Applicable particulate matter emission standards
New or reconstructed	Submerged arc furnace (primary and tapping)	1. 0.23 kg/hr/MW (0.51 lb/hr/MW), or 2. 35 mg/dscm (0.015 gr/dscf).
Existing	Open submerged arc furnace (primary and tapping).	1. 16.3 kg/hr (35.9 lb/hr) when producing silicomanganese. 2. 6.4 kg/hr (14.0 lb/hr) when producing ferromanganese.
Existing	Semi-sealed submerged arc furnace (primary, tapping, and vent stacks).	11.2 kg/hr (24.7 lb/hr).
New, reconstructed, or existing	MOR process	69 mg/dscm (0.03 gr/dscf).
New or reconstructed	Individual equipment associated with the crushing and screening operation.	50 mg/dscm (0.022 gr/dscf).
Existing	Individual equipment associated with the crushing and screening operation.	69 mg/dscm (0.03 gr/dscf).

The final standard establishes an opacity limit on the shop buildings housing one or more of the submerged

arc furnaces. The shop building opacity limit addresses furnace process fugitive emissions that escape capture by the

furnace hood and ventilation equipment.

The final standards impose a duty on the owner or operator to prepare and operate according to a fugitive dust control plan that describes the measures that will be put in place to control fugitive dust sources. This duty to operate will be incorporated into the facility's operating permit issued by the designated permitting authority under 40 CFR part 70.

Proper maintenance of emission sources and air pollution control devices to minimize HAP emissions is an essential component of the final standards. In addition to satisfying the maintenance requirements imposed by the part 63 General Provisions, owners and operators must develop and implement a written maintenance plan for each air pollution control device. The procedures specified in the maintenance plan shall include a preventive maintenance schedule that is consistent with good air pollution control practices for minimizing emissions.

Finally, the owner or operator must also perform monthly inspections of the equipment that is important to the performance of the furnace capture systems.

The rule also contains detailed compliance provisions that establish compliance dates, as well as provisions for performance testing, monitoring, recordkeeping, and reporting.

III. Significant Comments and Changes to the Proposed Rule

Following is a discussion of the significant comments received on the proposed rule and the resulting changes in the final rule. The document, "Technical Document for Promulgation of Standards: Ferromanganese and Silicomanganese NESHAP Comment and Response Summary" is available in the docket and contains a detailed summary of all of the comments and responses. This document is also available on the EPA's web site (<http://www.epa.gov/ttn/oarpg>) and from the person listed in the **FOR FURTHER INFORMATION CONTACT** section at the beginning of this notice.

In addition to changes resulting from the consideration of significant comments, the EPA made several clarifying and formatting changes to the final regulation. For example, the compliance demonstration section was restructured to clarify requirements and improve its readability. The requirements for fugitive dust control measures were condensed to essential requirements. None of these changes were substantive.

A. Should the EPA Finalize the Proposed Ferronickel Rule?

When the proposed rule was published in August 1998, the only existing facility in the United States producing ferronickel (Glenbrook Nickel Company) had suspended operations. Since then, the company has said they will permanently close the facility. The EPA has decided to exercise its authority to withdraw the proposed rule because there is no major source currently operating or expected to begin operating that would emit the HAP associated with ferronickel production. Should a new major source of ferronickel production commence operation after promulgation, the EPA will evaluate at that time how and whether to set a MACT standard.

B. Does the Final Rule Regulate Ferrochromium Production?

The EPA included ferrochromium production at proposal because of provisions contained in Elkem's State operating permit which provides for the possibility of converting one or more furnaces to ferrochromium production.

The commenters argued that using the same limits for ferrochromium production as those established for ferromanganese or silicomanganese is technically unjustified. Ferrochromium production operates at much higher furnace loads and temperatures and, consequently, has a higher emission potential than other alloys. Upon reexamination, the EPA agrees that it should not assume that limits developed for ferromanganese or silicomanganese production are appropriate for ferrochromium production.

In deciding whether to withdraw ferrochromium production from the rule, the EPA considered the likelihood that an affected source would convert an existing furnace to produce ferrochromium. A primary consideration was the recent closure of the only domestic producer of ferrochromium due to poor market conditions and price competition from imports. The EPA thinks it unlikely that an affected source would start producing ferrochromium under these conditions. Therefore, the EPA has withdrawn ferrochromium production from the final rule. Should an affected source convert to ferrochromium production or a new source commence operation after promulgation, the EPA will evaluate at that time how and whether to set MACT standards for ferrochromium production.

C. Is the Format for the Proposed Furnace Standards Appropriate?

One commenter disagreed with the proposed format of the furnace standards, which is in units of "kilograms per hour per megawatt (kg/hr/MW) (pounds per hour per megawatt [lb/hr/MW])." The commenter agreed that production is a function of power consumption, but stated that existing data show emissions from furnaces are not solely a function of furnace load. Instead, several other factors affect emissions. For example, when furnace operations are "rough," steps to decrease the load may result in increased emissions. Furthermore, the variability of furnace operations and emissions is demonstrated in the statistical variability of the stack test data.

In considering this comment, the EPA reviewed the data supplied by the commenter and conducted a linear regression analysis of the emission test data for furnaces #1 and #12 to evaluate the strength of the correlation between power input and scrubber emissions. The calculated correlation coefficients were 0.03 and 0.08, far from the perfect correlation indicated by a value of one. These results clearly show that there is no significant correlation between emissions and power input. Therefore, the EPA has changed the format of the standard for existing furnaces to a straight mass rate basis, kilograms per hour (kg/hr) (pounds per hour [lb/hr]).

D. Should the EPA Set Separate Standards for Each Furnace?

One commenter asked EPA to set separate standards for furnaces #1 and #12, because the products and operating conditions differ. High carbon ferromanganese is made from a blend of coke and ore, plus some recycled materials. Under ideal conditions, the operation is relatively quiet with only light flaming and fuming at the top of the furnace. In contrast, silicomanganese is produced from a variety of slags, scrap products, metallics, low grade ores, and cokes. Silicomanganese operates at a higher power load, has hotter and more open top conditions, and emits considerably more fume. Based on a statistical analysis, the commenter claimed that there is a statistically significant difference in mean emission levels between the two furnaces.

Based on a thorough review of the data submitted by the commenter, the EPA agrees the data demonstrate substantially lower emissions from furnace #12 than from furnace #1. Although both furnaces are of the same

open design, furnace #1 typically produces silicomanganese, while furnace #12 produces ferromanganese. This difference, combined with the change in format of the standard, leads the EPA to establish separate standards for each furnace.

E. Should the EPA Change Its Technical Approach for Selecting the Numerical Emission Standards for Submerged Arc Furnaces?

As described below, the EPA reevaluated the data base used to select the numerical emission standards for submerged arc furnaces. However, the EPA maintained its overall technical approach of setting the limits based on the performance achieved by the individual furnaces.

Use of upper prediction limits. Commenters disagreed with EPA's technical approach to evaluating test data for use in setting MACT. They proposed that EPA should set emission standards that account for the natural variability of the operations. In particular, the EPA should use prediction limits to calculate an upper limit on the observations to be expected during future performance tests. The commenters evaluated the false positive rates (FPR) expected from the proposed standards and compared the effect on the FPR to the EPA standard and the existing Ohio permit emission limits. The FPR, or significance level of a statistical test, is the probability of finding an exceedance when, in fact, there has been no systematic change in the process generating the observations. The commenter distinguished between the per-comparison FPR (the chance of one or more exceedances at any single monitoring location) and the facility-wide FPR (the chance of one or more exceedances at the whole facility.) The commenter calculated FPR well in excess of the desired rates (at least for furnaces #1 and #18), resulting in approximately a 41 percent or 51 percent probability of an exceedance at one or more monitoring locations during each event.

The EPA disagrees with the commenter's proposed approach to setting the MACT standards for furnace primary and tapping emissions. Instead, the appropriate way to set these standards is to rely on the results of performance testing, which in turn establish compliance criteria in the form of emission limits. These compliance criteria establish an expectation for the operation and maintenance parameters needed to ensure that the source continues to meet the required emission limits. Subsequent performance tests are a measure of the owner or operator's

ability to operate and maintain the affected air pollution control device and associated emission sources such that the emission limit is maintained. The required maintenance and monitoring of the control device and associated parameters contribute to assurances that standards are met between the required performance tests.

The sources cited by the commenter justifying statistical techniques to establish FPR (or upper prediction limits) are based on frequent monitoring of numerous events. However, the data base supporting selection of the MACT standards, while considered relatively extensive from a MACT standard-setting perspective, is limited to a handful of annual events. The commenter's proposed methodology would "penalize" the much smaller MACT data base, because it would take a much larger sample size to achieve the suggested proposed FPR. A mitigating factor to the relatively small sample size of the MACT approach is based on the fact that source testing is a relatively infrequent, but planned, occurrence. Prior to conducting the test, the source should take steps to ensure maximum performance of the control device, so long as "representative" operating conditions are maintained. By taking these steps, the owner or operator is expected to exert significant control over the outcome of the test.

The EPA also disagrees with the commenter's assertion that the standards should be set such that exceedances at any point in the facility are avoided. The intent of setting individual standards is to ensure that each emission source and its associated air pollution control device are operated and maintained so that the emission standard is met.

The above language does not prevent EPA from using statistical and other relevant information to verify the validity or reasonableness of standards it may set. As discussed in section III.F., the EPA considered the possibility of excessive exceedances in establishing the final emission limits.

Data excluded from the analysis. One commenter said EPA both incorrectly excluded certain test data from its analyses and included other data. As suggested by the commenter, the EPA reviewed the data that were included in the analysis and the basis for the exclusion of any data points. The EPA also performed a quality assurance check of the data set. In a few cases, the EPA identified discrepancies in the emissions data submitted by the commenter. Where indicated, these data were corrected. The final data set used by EPA is in the comment summary and

response document referenced at the beginning of section III.

As a first step in reanalyzing the data, the EPA considered whether there were any statistical outliers in the data set. The EPA identified the April 1997 test on the furnace #1 scrubber and run 1 of the November 1992 test on furnace #12 as statistical outliers using procedures in American Society for Testing and Materials Designation E 178-94, Standard Practice for Dealing with Outlying Observations. Consistent with the approach recommended by the commenter, these data were excluded from further consideration.

The EPA also excluded the November 1994 test on the furnace #18 vent stacks, because every run exceeded the State emission limit for the entire furnace. In addition, the statistical analysis identified these results as outliers.

F. What Are the Final Standards for Existing Furnaces?

One commenter suggested the following alternatives to EPA's proposed emission limits for existing furnaces:

- Revise emission limits based on a parametric data analysis.
- Replace limits with equipment standards or work practice requirements.
- Use existing State emission limits.

Parametric data analysis. The commenter recommended that EPA compute the required emission standards using the 99-percent upper prediction limits based on the available emissions test data and suggested numerical limits. With the change in format, the specific limits suggested by the commenter are no longer relevant. The EPA also has decided to issue separate regulations for furnaces #1 and #12. However, the EPA did consider comments regarding the overall approach used to establish emission limits.

As discussed in section III.E., the EPA does not believe that using statistical analyses to set MACT standards is appropriate. Instead, in cases where there are ample emissions tests data on specific air pollution control devices, as in this case, the EPA has historically set emission limits based on the highest valid data point recorded under representative and normal operating conditions. This approach is consistent with the approach taken at proposal.

The performance test data consist of compliance tests for particulate matter standards that were conducted for the State of Ohio over a 6-year period. The final data set, adjusted for outliers and out-of-compliance tests, includes six tests of the furnace #1 scrubber, seven

tests of the furnace #1 baghouse, seven tests of the furnace #12 scrubber, six tests of the furnace #18 scrubber, and four tests of the furnace #18 vent stacks.

The MACT for this industry (and source) is the level of performance achieved by the existing control equipment. In order to set the emission limit, the EPA considered the highest valid test results obtained for each furnace. Then, the EPA adjusted these results upward slightly (approximately 7.5 percent) to account for measurement error and other variabilities inherent in the test procedure. Next, the EPA compared these results to the existing State permit limits and the 90-percent upper prediction limit, as indicators of the source's ability to achieve the final adjusted results.

For furnaces #1 and #12, the analysis shows that the adjusted test results reflect these furnaces' ability to meet the limits on an on-going basis.

Coincidentally, these limits also are comparable to the existing State permit limits. Based on this analysis, the EPA decided to set the emission limits for furnace #1 at 16.3 kg/hr (35.9 lb/hr) and for furnace #18 at 11.2 kg/hr (24.7 lb/hr). This approach results in numerical standards that are consistent with the available data and minimizes the disruption of existing permit conditions.

The adjusted data for furnace #12 reflect this furnace's ability to meet the limit on an on-going basis. In this case, however, the existing permit limit does not coincide with the available test data. Based on this analysis, the EPA has decided to finalize the emission limit for furnace #12 at 6.4 kg/hr (14.0 lb/hr). The data support this limit, which is achievable with the existing control device.

Existing Ohio permit limits. As an alternative to establishing different emission limits, one commenter said EPA should consider Ohio's use of a process weight rate approach to establishing emission limits. Two commenters noted that Elkem has developed control equipment and technology over the years to comply with the Ohio EPA allowable emission limits. Considering the variability of furnace operations, EPA's proposal to reduce these allowable emissions would position Elkem to potentially fail compliance tests in the future.

The EPA considered these limits in evaluating the reasonableness of the final standards. Where the State limits coincided with the limits suggested by EPA's analysis of the test data, they were considered in setting the level of the final standards. However, where the limits did not coincide, EPA set the

final standards based on analysis of the test data alone.

Equipment or work practice standard. Two commenters argued that since EPA already accepts the Elkem existing control devices as representative of the MACT floor and because there are no other existing facilities, there is no reason to specify emission limits for existing Elkem operations. One commenter stated that EPA should establish equipment standards or work practice standards in place of further numerical emission limits.

Equipment or work practice standards are not appropriate in this case, because the Act precludes the establishment of non-numerical emission standards when the EPA has data and test methods on which to base and enforce a numerical limit. Specifically, section 112(h) says the Administrator can promulgate a design, equipment, work practice, operational standards, or combination thereof, only if it is not feasible to prescribe or enforce an emission standard. "Not feasible" means that the source cannot meet either of the following criteria:

- The HAP cannot be emitted through a conveyance designed and constructed to emit or capture the HAP or the requirement for such a conveyance would be inconsistent with existing law.
 - Emissions from the source cannot be measured practicably due to technological or economic limitations.
- Given that Elkem already complies with emission standards on the furnaces and that it is possible to test them, the EPA must issue emission standards.

G. What Are the Final Standards for New or Reconstructed Furnaces?

Based on the following discussion, the EPA added an alternative standard of 35 milligrams per dry standard cubic meter (mg/dscm), 0.15 grain per dry standard cubic foot (gr/dscf), to the final rule based on the expected use of baghouse technology on any new or reconstructed open furnaces. The EPA also retained the proposed standard of 0.23 kg/hr/MW (0.51 lb/hr/MW) based on the new source performance standards (NSPS) limit.

One commenter said the MACT requirements for new and reconstructed facilities should be more stringent than proposed due to the levels of particulate matter control technology available today. The commenter noted that baghouses have been applied in a wide range of industrial process applications, some of which are similar to ferromanganese and silicomanganese production, with the actual achievable particulate matter and opacity levels well below the proposed levels.

Other commenters said adopting the NSPS limit for new or reconstructed furnaces is not appropriate for the NESHAP. They said because no one has built an NSPS furnace producing ferromanganese, silicomanganese, or ferrochromium since the NSPS were promulgated, there is no technological basis to either demonstrate or dispute the level of the NSPS.

One commenter added that the NSPS emission limits may not be achievable for a new or reconstructed furnace, because the limits are over 25 years old and were based on the assumption that sealed furnaces would be the norm in the ferromanganese smelting industry. However, because of safety issues, the industry now believes that open furnaces represent the technology of choice. The commenter stated that a baghouse would be required to meet the new source standard for a new open furnace.

The commenter also noted that the format of the NSPS, which assumes a correlation between furnace load and emissions, is inconsistent with the data showing a lack of correlation between the two factors.

The NSPS format, kg/hr/MW (lb/hr/MW), offers a significant advantage for new sources, because it can be applied to a range of furnace sizes. In contrast, the NESHAP format, kg/hr (lb/hr), would result in a production cap on new furnaces, because this format makes no allowance for differences in production capacity. While this is acceptable in the case of known, existing furnaces, it is not acceptable for new furnaces. Because the NSPS will apply to new or reconstructed furnaces in any case, and to provide needed flexibility in the NESHAP, the final rule will retain as an option the NSPS format for emission standards.

In addition, recognizing that new or reconstructed open furnaces would likely be controlled with baghouse technology and to provide additional flexibility, the EPA added an alternate concentration standard based on expected levels of baghouse performance. The alternate limit, 35 mg/dscm (0.15 gr/dscf), is based on the maximum level of performance achieved by baghouses tested in 1993 and 1994 on open ferroalloy furnaces producing a variety of products. This level is also consistent with baghouse performance data on the #1 furnace tapping baghouse at Elkem. Because baghouses are characteristically constant outlet devices, this level of performance should be achievable with ferromanganese and silicomanganese production.

H. What Are the Final Standards for New or Reconstructed Metal Oxygen Reduction Processes?

The proposed limit was based on the premise that the NSPS limit for basic oxygen furnaces (BOF) was a reasonable surrogate for a new or reconstructed MOR process. Upon reexamination, the EPA decided that the technology transfer basis for the proposed limit was inappropriate given the differences in the MOR process and its emissions potential compared to the BOF process and its emission potential. Therefore, the final standard will be set at 69 mg/dscm (0.03 gr/dscf), which is consistent with the allowable concentration for existing sources.

The process differences were documented by a commenter who noted that while both processes remove carbon from a molten metal by oxidizing it with oxygen and forming carbon monoxide gas, there are distinct differences in the chemistry between manganese in the MOR process and iron in the BOF process. The commenter noted that the main differences are the higher operating temperature of the MOR, the higher volatility of manganese, and the higher carbon content of the manganese metal being treated. According to the commenter, these differences result in an estimated 10 times more fume generation during the MOR process compared to a BOF process. Therefore, baghouse emission reduction performance for an MOR process would likely be different than that for a BOF process.

I. How Is the Scrubber Pressure Drop Operating Parameter Value To Be Determined?

When a scrubber is used, the proposed rule required the owner or operator to establish an operating parameter value based on pressure drop to ensure ongoing compliance with the required emission limit. The commenter requested that EPA allow more flexibility in establishing the parameter value. In particular, the commenter requested that the source be allowed to establish the limit based on the average pressure drop obtained during any single complying run in any complying emission test. The EPA agrees there should be more flexibility in how the source sets the operating parameter value during a complying emission test. Therefore, the final rule contains a requirement that the operating parameter monitoring value will be set based on the lowest average pressure drop on any individual complying run in the three runs constituting any compliant test.

J. What Are the Final Monitoring Requirements for Baghouses?

One commenter requested changes in the frequency and intent of the requirements to ensure proper operation and maintenance of baghouses. The EPA clarified the requirements where needed.

One commenter also questioned the need to install bag leak detection systems on baghouses controlling new or reconstructed furnaces given the other monitoring requirements already in place. The EPA believes that baghouse leak detection represents state-of-the-art compliance assurance for baghouses, and plans to implement it in all new source MACT standards, where it is applicable, and, in most cases, to existing source standards as well.

In a separate action, (64 FR 7149, February 12, 1999) the EPA proposed supplemental requirements to modify the use of bag leak detection systems in rules proposed for the source categories of ferroalloys production, mineral wool production, primary lead smelting, and wool fiberglass manufacturing. The overall goal of the requirements was to add an enforceable operating limit if the alarm on the bag leak detection system sounds for more than 5 percent of the total operating time in each 6-month period. Adding this requirement would provide greater assurance that the baghouse would be properly operated and maintained, and that the emission limit would be met. The supplemental notice also proposed that owners and operators would be required to continuously record bag leak detection system output to ensure that data necessary to assess compliance with the newly proposed operating limit for bag leak detection system alarms would be available. In the absence of such information, enforcement personnel would be unable to determine whether the operating limit is being met. The output records would also provide data necessary to assess the magnitude of the output level above the alarm set point, and would assist owners and operators in properly operating and maintaining the baghouse and in diagnosing baghouse upsets.

The EPA requested public comment on these requirements as part of the supplemental notice. The comments and EPA's responses, are described in the Technical Document for Promulgation of Standards. There were no comments resulting in significant changes to the proposed requirements. Therefore, with this final rule, the EPA is finalizing the operational limits for bag leak detection systems. In addition, the EPA has also added definitions and

compliance, monitoring, reporting, and recordkeeping requirements to clarify and implement the operational standards. These are not substantive additions and are consistent with language in the other rules affected by the supplemental notice.

K. How Were Performance Testing Issues Raised in the Public Comments Resolved?

Commenters raised several issues regarding testing-related terms and requirements. The EPA has clarified these in the final rule. In particular, the EPA clarified the definition of tapping period and resolved an inconsistency in the sampling time requirements. The EPA also revised the rule to require sources to include a tapping period, or at least 20 minutes of a tapping period, in a minimum of two test runs. This change, reduced from a requirement to include a tapping period in each of three runs, is consistent with the source's existing permit conditions and with how previous performance data were obtained.

One commenter objected to the use of Method 5D for positive pressure baghouses that are not equipped with outlet stacks. They stated that this method requires cutting off the flow of air through the baghouse, thereby creating a fire hazard. They suggested that visual emission observations beyond the ridge vent/roof monitor will adequately demonstrate compliance with emissions limits for this type of baghouse.

As stated in the proposal preamble, the EPA proposed changes to Method 5D to address safety and other practicality issues (62 FR 45369, August 27, 1997). In particular, the amendments would revise the outlet volumetric flow rate calculation procedure to be used in those cases where the gas velocity at the baghouse outlet is too low to be measured accurately. The change will allow for the calculation of outlet gas flow rate based on the difference between the baghouse gas inlet and outlet temperatures and a direct measurement of the gas inlet flow rate. The EPA expects the final amendments to be published in the *Federal Register* by mid-summer of this year, well before performance testing under the rule would need to be conducted. A copy of the proposed amendments is available on the Emission Measurement Center (EMC) home page (<http://www.epa.gov/ttn/emc>) by choosing "methods," then "proposed," then "EPA Methods (New EMMC Format)."

assigned OMB control number 2060-0391.

The information collected will be used by Agency enforcement personnel to perform the following tasks:

- Identify sources subject to the standard
- Ensure that MACT is being properly applied
- Ensure that emission control devices are being properly operated and maintained on a continuous basis to reduce HAP emissions from furnaces and process fugitive sources
- Ensure that fugitive dust controls are being fully implemented.

Owners or operators must comply with the information collection requirements in the rule. The EPA developed this rule under the authority of section 112(d) of the Act, which requires EPA to regulate emissions of 188 HAP listed in section 112(b).

The total 3-year monitoring, recordkeeping, and reporting burden for this collection is estimated at 2,236 labor hours at a total cost of \$62,283 for the single existing affected facility. This estimate includes a one-time performance test and report; subsequent performance tests and reports for some sources; semiannual reports when the procedures in a startup, shutdown, and malfunction plan were not followed; quarterly and semiannual excess emissions reports; maintenance inspections; notifications; and recordkeeping. There are no separate capital/startup costs associated with the proposed rules.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to conduct the following activities:

- Review instructions.
- Develop, acquire, install, and utilize technology and systems for the purpose of responding to the information collection.
- Adjust existing ways to comply with any previously applicable instructions and requirements.
- Train personnel to respond to a collection of information.
- Search existing data sources.
- Complete and review the collection of information.
- Transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15.

The EPA is amending the table in 40 CFR part 9 of currently approved ICR control numbers issued by OMB for various regulations to list the information requirements contained in this final rule. This amendment updates the table to list the information requirements being promulgated today as the NESHAP for ferromanganese and silicomanganese production.

The EPA will continue to present OMB control numbers in a consolidated table format to be codified in 40 CFR part 9 of the Agency's regulations, and in each CFR volume containing EPA regulations. The table lists the section numbers with reporting and recordkeeping requirements, and the current OMB control numbers. This listing of the OMB control numbers and their subsequent codification in the CFR satisfy the requirements of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*) and OMB's implementing regulations at 5 CFR part 1320.

H. Protection of Children From Environmental Health Risks and Safety Risk Under Executive Order 13045

Executive Order 13045: "Protection of Children From Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns the environmental health or safety risk that the EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the EPA 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 EPA.

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis under section 5-501 of the Order has the potential to influence the regulation. This final rule is not subject to Executive Order 13045 because it is not an economically significant regulatory action as defined by Executive Order 12866, and it is based on technology performance and not on health or safety risks.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA) directs all Federal agencies to use voluntary consensus standards instead of government-unique standards in their regulatory activities

unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., material specifications, test methods, sampling and analytical procedures, business practices, etc.) that are developed or adopted by one or more voluntary consensus standards bodies. Examples of organizations generally regarded as voluntary consensus standards bodies include the American Society for Testing and Materials (ASTM), the National Fire Protection Association (NFPA), and the Society of Automotive Engineers (SAE). The NTTAA requires Federal agencies like EPA to provide Congress, through OMB, with explanations when an agency decides not to use available and applicable voluntary consensus standards.

This action does not involve the promulgation of any new technical standards. It does, however, incorporate by reference existing technical standards. Incorporated are longstanding EPA reference test methods and procedures for demonstrating compliance with particulate matter standards and opacity standards, specifically EPA test methods 1 through 5 and 9, as codified under 40 CFR 60, appendix A. Consequently, the Agency searched for voluntary consensus standards that might be applicable. The search was conducted through the National Standards System Network (NSSN), an automated service provided by the American National Standards Institute (ANSI) for identifying available national and international standards. The search identified no applicable standards. The EPA did not receive any public comments identifying other possible technical standards. Therefore, the EPA will use the government-unique technical standards cited above for determining compliance.

J. Congressional Review Act

The Congressional Review Act, 5 U.S.C. section 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provided that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule to each House of the Congress and to the Comptroller General of the United States. The 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 in the **Federal Register**. This rule is not a

"major rule" as defined by 5 U.S.C. section 804(2).

List of Subjects in 40 CFR Parts 9 and 63

Environmental protection, Air pollution control, Hazardous substances, Ferromanganese and silicomanganese production, Reporting and recordkeeping requirements.

Dated: May 13, 1999.

Carol M. Browner,
Administrator.

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

PART 9—[AMENDED]

1. The authority citation for part 9 continues to read as follows:

Authority: 7 U.S.C. 135 et seq., 136–136y; 15 U.S.C. 2001, 2003, 2005, 2006, 2601–2671; 21 U.S.C. 331j, 346a, 348; 31 U.S.C. 9701; 33 U.S.C. 1251 et seq., 1311, 1313d, 1314, 1318, 1321, 1326, 1330, 1342, 1344, 1345(d) and (e), 1361; E.O. 11735, 38 FR 21243, 3 CFR, 1971–1975 Comp. p. 973; 42 U.S.C. 241, 242b, 243, 246, 300f, 300g, 300g–1, 300g–2, 300g–3, 300g–4, 300g–5, 300g–6, 300j–1, 300j–2, 300j–3, 300j–4, 300j–9, 1857 et seq., 6901–6992k, 7401–7671q, 7542, 9601–9657, 11023, 11048.

2. In § 9.1 the table is amended by adding an entry in numerical order under the indicated heading to read as follows:

§ 9.1 OMB approvals under the Paperwork Reduction Act.

* * * * *

40 CFR citation	OMB control No.
* * *	* * *
National Emission Standards for Hazardous Air Pollutants for Source Categories ³	
* * *	* * *
63.1620–63.1679	2060–0391
* * *	* * *

³The ICRs referenced in this section of the table encompass the applicable general provisions contained in 40 CFR part 63, subpart A, which are not independent information collection requirements.

* * * * *

PART 63—[AMENDED]

1. The authority citation for part 63 continues to read as follows:

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

2. Part 63 is amended by adding subpart XXX to read as follows:

Subpart XXX—National Emission Standards for Hazardous Air Pollutants for Ferroalloys Production: Ferromanganese and Silicomanganese

- Sec.
- 63.1620–63.1649 [Reserved].
- 63.1650 Applicability and compliance dates.
- 63.1651 Definitions.
- 63.1652 Emission standards.
- 63.1653 Opacity standards.
- 63.1654 Operational and work practice standards.
- 63.1655 Maintenance requirements.

- 63.1656 Performance testing, test methods, and compliance demonstrations.
- 63.1657 Monitoring requirements.
- 63.1658 Notification requirements.
- 63.1659 Reporting requirements.
- 63.1660 Recordkeeping requirements.
- 63.1661 Delegation of authorities.
- 63.1662–63.1679 [Reserved].

Subpart XXX—National Emission Standards for Hazardous Air Pollutants for Ferroalloys Production: Ferromanganese and Silicomanganese

§§ 63.1620–63.1649 [Reserved]

§ 63.1650 Applicability and compliance dates.

(a) This subpart applies to all new and existing ferromanganese and silicomanganese production facilities that manufacture ferromanganese or silicomanganese and are major sources or are co-located at major sources of hazardous air pollutant emissions.

(b) The following sources at a ferromanganese and silicomanganese production facility are subject to this subpart:

- (1) Submerged arc furnaces.
- (2) Metal oxygen refining (MOR) process.
- (3) Crushing and screening operations.
- (4) Fugitive dust sources.

(c) A new affected source is one for which construction or reconstruction commenced after August 4, 1998.

(d) The following table specifies which provisions of subpart A of this part apply to owners and operators of ferromanganese and silicomanganese production facilities subject to this subpart:

GENERAL PROVISIONS APPLICABILITY TO SUBPART XXX

Reference, Subpart A General Provisions	Applies to Subpart XXX, §§ 63.1620–63.1679	Comment
63.1–63.5	Yes.	
63.6(a)–(g), (i)–(j)	Yes.	
63.6(h)(1)–(h)(6), (h)(8)–(h)(9)	Yes.	
63.7(h)(7)	No	§ 63.6(h)(7), use of continuous opacity monitoring system, not applicable.
63.7	Yes.	
63.8	Yes.	
63.9	Yes	Notification of performance test results changed to a 30-day notification period.
63.10	Yes	Allow changes in dates by which periodic reports are submitted by mutual agreement between the owner or operator and the State to occur any time after the source's compliance date.
63.11	No	Flares will not be used to comply with the emission limits.
63.12–63.15	Yes.	

(e) *Compliance dates.* (1) Each owner or operator of an existing affected source must comply with the requirements of this subpart no later than May 21, 2001.

(2) Each owner or operator of a new or reconstructed affected source that

commences construction or reconstruction after August 4, 1998, must comply with the requirements of this subpart by May 20, 1999 or upon startup of operations, whichever is later.

§ 63.1651 Definitions.

Terms in this subpart are defined in the Clean Air Act (Act), in subpart A of this part, or in this section as follows:

Bag leak detection system means a system that is capable of continuously

monitoring particulate matter (dust) loadings in the exhaust of a baghouse in order to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

Capture system means the equipment (including hoods, ducts, fans, dampers, etc.) used to capture or transport particulate matter generated by an affected submerged arc furnace.

Casting means the period of time from when molten ferroalloy falls from the furnace tapping runner into the ladle until pouring into molds is completed. This includes the following operations: ladle filling, pouring alloy from one ladle to another, slag separation, slag removal, and ladle transfer by crane, truck, or other conveyance.

Crushing and screening equipment means the crushers, grinders, mills, screens and conveying systems used to crush, size, and prepare for packing manganese-containing materials, including raw materials, intermediate products, and final products.

Fugitive dust source means a stationary source from which manganese-bearing particles are discharged to the atmosphere due to wind or mechanical inducement such as vehicle traffic. Fugitive dust sources include plant roadways, yard areas, and outdoor material storage and transfer operations.

Furnace power input means the resistive electrical power consumption of a submerged arc furnace, expressed as megawatts (MW).

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures caused in part by poor maintenance or careless operation are not malfunctions.

Metal oxygen refining (MOR) process means the reduction of the carbon content of ferromanganese through the use of oxygen.

Open submerged arc furnace means an electric submerged arc furnace that is equipped with a canopy hood above the furnace to collect primary emissions.

Operating time means the period of time in hours that the affected source is in operation beginning at a startup and ending at the next shutdown.

Plant roadway means any area at a ferromanganese and silicomanganese production facility that is subject to plant mobile equipment, such as fork lifts, front end loaders, or trucks,

carrying manganese-bearing materials. Excluded from this definition are employee and visitor parking areas, provided they are not subject to traffic by plant mobile equipment.

Primary emissions means gases and emissions collected by hoods and ductwork located above an open furnace or under the cover of a semi-closed or sealed furnace.

Sealed submerged arc furnace means an electric submerged arc furnace equipped with a total enclosure or cover from which primary emissions are evacuated directly.

Semi-closed submerged arc furnace means an electric submerged arc furnace equipped with a partially sealed cover over the furnace. This cover is equipped with openings to allow penetration of the electrodes into the furnace. Mix is introduced into the furnace around the electrode holes forming a partial seal between the electrodes and the cover. Furnace emissions generated under the cover are ducted to an emission control device. Emissions that escape the cover are collected and vented through stacks directly to the atmosphere.

Shop means the building which houses one or more submerged arc furnaces.

Shutdown means the cessation of operation of an affected source for any purpose.

Start-up means the setting in operation of an affected source for any purpose.

Submerged arc furnace means any furnace wherein electrical energy is converted to heat energy by transmission of current between electrodes partially submerged in the furnace charge. The furnace may be of an open, semi-sealed, or sealed design.

Tapping emissions means a source of air pollutant emissions that occur during the process of removing the molten product from the furnace.

Tapping period means the time from when a tap hole is opened until the time a tap hole is closed.

§ 63.1652 Emission standards.

(a) *New and reconstructed submerged arc furnaces.* No owner or operator shall cause to be discharged into the atmosphere from any new or reconstructed submerged arc furnace exhaust gases (including primary and tapping) containing particulate matter in excess of one of the following:

- (1) 0.23 kilograms per hour per megawatt (kg/hr/MW) (0.51 pounds per hour per megawatt [lb/hr/MW]), or
- (2) 35 milligrams per dry standard cubic meter (mg/dscm) (0.015 grains per dry standard cubic foot [gr/dscf]).

(b) *Existing open submerged arc furnaces.* No owner or operator shall

cause to be discharged into the atmosphere from any existing open submerged arc furnace exhaust gases (including primary and tapping) containing particulate matter in excess of one of the following:

- (1) 16.3 kilograms per hour (kg/hr) (35.9 pounds per hour [lb/hr]) when producing silicomanganese, or
- (2) 6.4 kg/hr (14.0 lb/hr) when producing ferromanganese.

(c) *Existing semi-sealed submerged arc furnaces.* No owner or operator shall cause to be discharged into the atmosphere from any existing semi-sealed submerged arc furnace exhaust gases (including primary, tapping, and vent stacks) containing particulate matter in excess of 11.2 kg/hr (24.7 lb/hr) when producing ferromanganese.

(d) *MOR process.* No owner or operator shall cause to be discharged into the atmosphere from any new, reconstructed, or existing MOR process exhaust gases containing particulate matter in excess of 69 mg/dscm (0.03 gr/dscf).

(e) *Crushing and screening equipment.* (1) *New and reconstructed equipment.* No owner or operator shall cause to be discharged into the atmosphere from any new or reconstructed piece of equipment associated with crushing and screening exhaust gases containing particulate matter in excess of 50 mg/dscm (0.022 gr/dscf).

(2) *Existing equipment.* No owner or operator shall cause to be discharged into the atmosphere from any existing piece of equipment associated with crushing and screening exhaust gases containing particulate matter in excess of 69 (mg/dscm) (0.03 gr/dscf).

§ 63.1653 Opacity standards.

No owner or operator shall cause emissions exiting from a shop due solely to operations of any affected submerged arc furnace, to exceed 20 percent opacity for more than one 6-minute period during any performance test, with the following exceptions:

(a) Visible particulate emissions from a shop due solely to operation of a semi-closed submerged arc furnace, may exceed 20 percent opacity, measured as a 6-minute average, one time during any performance test, so long as the emissions never exceed 60 percent opacity, measured as a 6-minute average.

(b) Blowing taps, poling and oxygen lancing of the tap hole; burndowns associated with electrode measurements; and maintenance activities associated with submerged arc furnaces and casting operations are

exempt from the opacity standards specified in this section.

§ 63.1654 Operational and work practice standards.

(a) *Fugitive dust sources.* (1) Each owner or operator of an affected ferromanganese and silicomanganese production facility must prepare, and at all times operate according to, a fugitive dust control plan that describes in detail the measures that will be put in place to control fugitive dust emissions from the individual fugitive dust sources at the facility.

(2) The owner or operator must submit a copy of the fugitive dust control plan to the designated permitting authority on or before the applicable compliance date for the affected source as specified in § 63.1650(e). The requirement for the owner or operator to operate the facility according to a written fugitive dust control plan must be incorporated in the operating permit for the facility that is issued by the designated permitting authority under part 70 of this chapter.

(3) The owner or operator may use existing manuals that describe the measures in place to control fugitive dust sources required as part of a State implementation plan or other federally enforceable requirement for particulate matter to satisfy the requirements of paragraph (a)(1) of this section.

(b) *Baghouses equipped with bag leak detection systems.* The owner or operator of a new or reconstructed submerged arc furnace must install and continuously operate a bag leak detection system if the furnace's primary and/or tapping emissions are ducted to a negative pressure baghouse or to a positive pressure baghouse equipped with a stack. The owner or operator must maintain and operate each baghouse such that the following conditions are met:

(1) The alarm on the system does not sound for more than 5 percent of the total operating time in a 6-month reporting period.

(2) A record is made of the date and time of each alarm and procedures to determine the cause of the alarm are initiated within 1 hour of the alarm according to the plan for corrective action required under § 63.1657(a)(7).

§ 63.1655 Maintenance requirements.

(a) The owner or operator of an affected source must comply with the requirements of § 63.6(e) of subpart A.

(b)(1) The owner or operator must develop and implement a written maintenance plan for each air pollution control device associated with submerged arc furnaces, metal oxygen

refining processes, and crushing and screening operations subject to the provisions of this part. The owner or operator must keep the maintenance plan on record and available for the Administrator's inspection for the life of the air pollution control device or until the affected source is no longer subject to the provisions of this part.

(2) To satisfy the requirement to develop maintenance plans, the owner or operator may use the affected source's standard operating procedures (SOP) manual or other plan, provided the alternative plan meets the requirements of this paragraph and is made available for inspection when requested by the Administrator.

(c) The procedures specified in the maintenance plan must include a preventive maintenance schedule that is consistent with good air pollution control practices for minimizing emissions and, for baghouses, ensure that the requirements specified in § 63.1657(a) are met.

(d) The owner or operator must perform monthly inspections of the equipment that is important to the performance of the furnace capture system. This inspection must include an examination of the physical condition of the equipment, suitable for detecting holes in ductwork or hoods, flow constrictions in ductwork due to dents or accumulated dust, and operational status of flow rate controllers (pressure sensors, dampers, damper switches, etc.). Any deficiencies must be recorded and proper maintenance and repairs performed.

§ 63.1656 Performance testing, test methods, and compliance demonstrations.

(a) *Performance testing.* (1) All performance tests must be conducted according to the requirements in § 63.7 of subpart A.

(2) Each performance test must consist of three separate and complete runs using the applicable test methods.

(3) Each run must be conducted under conditions that are representative of normal process operations.

(4) Performance tests conducted on air pollution control devices serving submerged arc furnaces must be conducted such that at least one tapping period, or at least 20 minutes of a tapping period, whichever is less, is included in at least two of the three runs. The sampling time for each run must be at least as long as three times the average tapping period of the tested furnace, but no less than 60 minutes.

(5) The sample volume for each run must be at least 0.9 dscm (30 dscf).

(b) *Test methods.* The following test methods in Appendix A of part 60 of

this chapter must be used to determine compliance with the emission standards.

(1) Method 1 to select the sampling port location and the number of traverse points.

(2) Method 2 to determine the volumetric flow rate of the stack gas.

(3) Method 3 to determine the dry molecular weight of the stack gas.

(4) Method 4 to determine the moisture content of the stack gas.

(5) Method 5 to determine the particulate matter concentration of the stack gas for negative pressure baghouses and positive pressure baghouses with stacks.

(6) Method 5D to determine particulate matter concentration and volumetric flow rate of the stack gas for positive pressure baghouses without stacks.

(7) Method 9 to determine opacity.

(8) The owner or operator may use equivalent alternative measurement methods approved by the Administrator following the procedures described in § 63.7(f) of subpart A.

(c) *Compliance demonstration with the emission standards.* (1) The owner or operator must conduct an initial performance test for air pollution control devices or vent stacks subject to § 63.1652(a) through (e) to demonstrate compliance with the applicable emission standards.

(2) The owner or operator must conduct annual performance tests for the air pollution control devices and vent stacks associated with the submerged arc furnaces, with the exception of any air pollution control devices that serve tapping emissions combined with non-furnace emissions, such as the MOR process or equipment associated with crushing and screening. Also excluded are air pollution control devices that serve dedicated non-furnace emissions, such as the MOR process or equipment associated with crushing and screening. The results of these annual tests will be used to demonstrate compliance with the emission standards in § 63.1652(a) through (e), as applicable.

(3) Following development, and approval, if required, of the site-specific test plan, the owner or operator must conduct a performance test for each air pollution control device or vent stack to measure particulate matter and determine compliance with the applicable standard.

(i) An owner or operator of sources subject to the particulate matter concentration standards in § 63.1652(a)(2), (d), or (e), must determine compliance as follows:

(A) Determine the particulate matter concentration using Method 5 or 5D, as applicable.

(B) Compliance is demonstrated if the average concentration for the three runs comprising the performance test does not exceed the standard.

(ii) An owner or operator of sources subject to the particulate mass rate standards in § 63.1652(b) or (c) must determine compliance as follows:

(A) Determine the particulate matter concentration and volumetric flow rate using Method 5 or 5D, as applicable.

(B) Compute the mass rate (E_M) of particulate matter for each run using the following equation:

$$E_M = \left[\sum_{i=1}^N C_{si} Q_{sdi} \right] / K$$

Where:

E_M = mass rate of particulate matter, kg/hr (lb/hr).

N = total number of exhaust streams at which emissions are quantified.

C_{si} = concentration of particulate matter from exhaust stream "i", mg/dscm (gr/dscf).

Q_{sdi} = volumetric flow rate of effluent gas from exhaust stream "i", dscm/hr (dscf/hr)

K = conversion factor, 1×10^6 mg/kg (7,000 gr/lb).

(C) Compliance is demonstrated if the average of the mass rates for the three runs comprising the performance test does not exceed the standard.

(iii) An owner or operator of sources subject to the particulate matter process-weighted rate standard in § 63.1652(a)(1) must determine compliance as follows:

(A) Determine particulate matter concentration and volumetric flow rate using Method 5 or 5D, as applicable.

(B) Compute the process-weighted mass rate (E_P) of particulate matter for each run using the following equation:

$$E_P = \left[\sum_{i=1}^N C_{si} Q_{sdi} \right] / PK$$

Where:

E_P = process-weighted mass rate of particulate matter, kg/hr/MW (lb/hr/MW).

N = total number of exhaust streams at which emissions are quantified.

C_{si} = concentration of particulate matter from exhaust stream "i", mg/dscm (gr/dscf)

Q_{sdi} = volumetric flow rate of effluent gas from exhaust stream "i", dscm/hr (dscf/hr)

P = Average furnace power input, MW
 K = conversion factor, 1×10^6 mg/kg (7,000 gr/lb).

(C) Compliance is demonstrated if the average process-weighted mass rate for the three runs comprising the performance test does not exceed the standard.

(4) If a venturi scrubber is used to comply with the emission standards, the owner or operator must establish as a site-specific operating parameter the lowest average pressure drop on any individual complying run in the three runs constituting any compliant test.

The pressure drop must be monitored at least every 5 minutes during the test and hourly averages recorded.

(i) [Reserved]

(ii) The owner or operator may augment the data obtained under paragraph (a)(4) of this section by conducting multiple performance tests to establish a range of compliant operating parameter values. The lowest value of this range would be selected as the operating parameter monitoring value. The use of historic compliance data may be used to establish the compliant operating parameter value if the previous values were recorded during performance tests using the same test methods specified in this subpart and established as required in paragraph (a)(4) of this section.

(d) *Compliance demonstration with opacity standards.*

(1)(i) The owner or operator subject to § 63.1653 must conduct initial opacity observations of the shop building to demonstrate compliance with the applicable opacity standards according to § 63.6(h)(5), which addresses the conduct of opacity or visible emission observations.

(ii) In conducting the opacity observations of the shop building, the observer must limit his or her field of view to the area of the shop building roof monitor that corresponds to the placement of the affected submerged arc furnaces.

(iii) The owner or operator must conduct the opacity observations according to EPA Method 9 of 40 CFR part 60, appendix A, for a minimum of 60 minutes.

(2)(i) When demonstrating initial compliance with the shop building opacity standard, as required by paragraph (d)(1) of this section, the owner or operator must simultaneously establish parameter values for one of the following: the control system fan motor amperes and all capture system damper positions, the total volumetric flow rate to the air pollution control device and all capture system damper positions, or volumetric flow rate through each separately ducted hood that comprises the capture system.

(ii) The owner or operator may petition the Administrator to reestablish these parameters whenever he or she can demonstrate to the Administrator's satisfaction that the submerged arc furnace operating conditions upon which the parameters were previously established are no longer applicable. The values of these parameters determined during the most recent demonstration of compliance must be maintained at the appropriate level for each applicable period.

(3) The owner or operator must demonstrate continuing compliance with the opacity standards by following the monitoring requirements specified in § 63.1657(c) and the reporting and recordkeeping requirements specified in §§ 63.1659(b)(4) and 63.1660(b).

(e) *Compliance demonstration with the operational and work practice standards.*

(1) *Fugitive dust sources.* Failure to have a fugitive dust control plan or failure to report deviations from the plan and take necessary corrective action would be a violation of the general duty to ensure that fugitive dust sources are operated and maintained in a manner consistent with good air pollution control practices for minimizing emissions per § 63.6(e)(1)(i) of subpart A.

(2) *Baghouses equipped with bag leak detection systems.* The owner or operator demonstrates compliance with the bag leak detection system requirements by submitting reports as required by § 63.1659(b)(5) showing that the alarm on the system does not sound for more than 5 percent of the total operating time in a 6-month period. Calculate the percentage of total operating time the alarm on the bag leak detection system sounds as follows:

(i) Do not include alarms that occur due solely to a malfunction of the bag leak detection system in the calculation.

(ii) Do not include alarms that occur during startup, shutdown, and malfunction in the calculation if the condition is described in the startup, shutdown, and malfunction plan and the owner or operator follows all the procedures in the plan defined for this condition.

(iii) Count 1 hour of alarm time for each alarm where the owner or operator initiates procedures to determine the cause within 1 hour of the alarm.

(iv) Count the actual time it takes the owner or operator to initiate procedures to determine the cause of the alarm for each alarm where the owner or operator does not initiate procedures to determine the cause within 1 hour of the alarm.

(v) Calculate the percentage of time the alarm on the bag leak detection system sounds as the ratio of the sum of alarm times to the total operating time multiplied by 100.

§ 63.1657 Monitoring requirements.

(a) *Baghouses.* (1) For the baghouses serving the submerged arc furnaces, the metal oxygen refining process, and crushing and screening operations, the owner or operator must observe on a daily basis for the presence of any visible emissions.

(2) In addition to the daily visible emissions observation, the owner or operator must conduct the following activities:

(i) Daily monitoring of pressure drop across each baghouse cell, or across the baghouse if it is not possible to monitor each cell individually, to ensure the pressure drop is within the normal operating range identified in the baghouse maintenance plan.

(ii) Weekly confirmation that dust is being removed from hoppers through visual inspection, or equivalent means of ensuring the proper functioning of removal mechanisms.

(iii) Daily check of compressed air supply for pulse-jet baghouses.

(iv) An appropriate methodology for monitoring cleaning cycles to ensure proper operation.

(v) Monthly check of bag cleaning mechanisms for proper functioning through visual inspection or equivalent means.

(vi) Quarterly visual check of bag tension on reverse air and shaker-type baghouses to ensure that the bags are not kinked (knead or bent) or laying on their sides. Such checks are not required for shaker-type baghouses using self-tensioning (spring loaded) devices.

(vii) Quarterly confirmation of the physical integrity of the baghouse structure through visual inspection of the baghouse interior for air leaks.

(viii) Semiannual inspection of fans for wear, material buildup, and corrosion through visual inspection, vibration detectors, or equivalent means.

(3) In addition to meeting the requirements of paragraphs (a)(1) and (a)(2) of this section, the owner or operator of a new or reconstructed submerged arc furnace must install and continuously operate a bag leak detection system if the furnace primary and/or tapping emissions are ducted to a negative pressure baghouse or to a positive pressure baghouse equipped with a stack. The bag leak detection system must meet the following requirements:

(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(ii) The bag leak detection system sensor must provide output of relative particulate matter loadings, and the owner or operator must continuously record the output from the bag leak detection system.

(iii) The bag leak detection system must be equipped with an alarm system that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located where it can be heard by the appropriate plant personnel.

(iv) Each bag leak detection system that works based on the triboelectric effect must be installed, calibrated, operated, and maintained consistent with the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). Other bag leak detection systems must be installed, calibrated, and maintained consistent with the manufacturer's written specifications and recommendations.

(v) The initial adjustment of the system must, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time.

(vi) Following initial adjustment, the owner or operator must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in the maintenance plan required under § 63.1655(b). In no event must the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless a responsible official certifies the baghouse has been inspected and found to be in good operating condition.

(vii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(4) As part of the maintenance plan required by § 63.1655(b), the owner or operator must develop and implement corrective action procedures to be followed in the case of a bag leak detection system alarm (for baghouses equipped with such a system), the observation of visible emissions from the baghouse, or the indication through the periodic baghouse system inspections that the system is not operating properly. The owner or operator must initiate corrective action

as soon as practicable after the occurrence of the observation or event indicating a problem.

(5) The corrective action plan must include procedures used to determine the cause of an alarm or other indications of problems as well as actions to minimize emissions. These actions may include the following:

(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media, or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.

(vi) Shutting down the process producing the particulate matter emissions.

(6) Failure to monitor or failure to take corrective action under the requirements of paragraph (a) of this section would be a violation of the general duty to operate in a manner consistent with good air pollution control practices that minimizes emissions per § 63.6(e)(1)(i) of subpart A.

(b) *Venturi scrubbers.* (1) The owner or operator must monitor the pressure drop across the venturi at least every 5 minutes and record the average hourly pressure drop. Measurement of an average hourly pressure drop less than the pressure drop operating parameter limit established during a successful compliance demonstration would be a violation of the applicable emission standard, unless the excursion in the pressure drop is due to a malfunction.

(2) As part of the maintenance plan required by § 63.1655(b), the owner or operator must develop and implement corrective action procedures to be followed in the case of a violation of the pressure drop requirement. The owner or operator must initiate corrective action as soon as practicable after the excursion.

(3) Failure to monitor or failure to take corrective action under the requirements of paragraph (b) of this section is a violation of the general duty to operate in a manner consistent with good air pollution control practices that minimizes emissions per § 63.6(e)(1)(i).

(c) *Shop opacity.* The owner or operator subject to the opacity standards in § 63.1653 must comply with one of the monitoring options in paragraphs (c)(1), (c)(2) or (c)(3) of this section. The selected option must be consistent with

that selected during the initial performance test described in § 63.1656(d)(2). Alternatively, the owner or operator may use the provisions of § 63.8(f) to request approval to use an alternative monitoring method.

(1) The owner or operator must check and record the control system fan motor amperes and capture system damper positions once per shift.

(2) The owner or operator must install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood.

(3) The owner or operator must install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate at the inlet of the air pollution control device and must check and record the capture system damper positions once per shift.

(4) The flow rate monitoring devices must meet the following requirements:

(i) Be installed in an appropriate location in the exhaust duct such that reproducible flow rate monitoring will result.

(ii) Have an accuracy ± 10 percent over its normal operating range and be calibrated according to the manufacturer's instructions.

(5) The Administrator may require the owner or operator to demonstrate the accuracy of the monitoring device(s) relative to Methods 1 and 2 of appendix A of part 60 of this chapter.

(6) Failure to maintain the appropriate capture system parameters (fan motor amperes, flow rate, and/or damper positions) establishes the need to initiate corrective action as soon as practicable after the monitoring excursion in order to minimize excess emissions.

(7) Failure to monitor or failure to take corrective action under the requirements of paragraph (c) of this section is a violation of the general duty to operate in a manner consistent with good air pollution control practices that minimizes emissions per § 63.6(e)(1)(i).

§ 63.1658 Notification requirements.

(a) As required by § 63.9(b) of subpart A, unless otherwise specified in this subpart, the owner or operator must submit the following written notifications to the Administrator:

(1) The owner or operator of an area source that subsequently becomes subject to the requirements of the standard must provide notification to the applicable permitting authority as required by § 63.9(b)(1).

(2) As required by § 63.9(b)(2), the owner or operator of an affected source that has an initial startup before the effective date of the standard must

notify the Administrator that the source is subject to the requirements of the standard. The notification must be submitted no later than 120 calendar days after May 20, 1999 (or within 120 calendar days after the source becomes subject to this standard) and must contain the information specified in § 63.9(b)(2)(i) through (b)(2)(v).

(3) As required by § 63.9(b)(3), the owner or operator of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup after the effective date and for which an application for approval of construction or reconstruction is not required under § 63.5(d), must notify the Administrator in writing that the source is subject to the standards no later than 120 days after initial startup. The notification must contain the information specified in § 63.9(b)(2)(i) through (b)(2)(v), delivered or postmarked with the notification required in § 63.9(b)(5).

(4) As required by § 63.9(b)(4), the owner or operator of a new or reconstructed major affected source that has an initial startup after the effective date of this standard and for which an application for approval of construction or reconstruction is required under § 63.5(d) must provide the information specified in § 63.9(b)(4)(i) through (b)(4)(v).

(5) As required by § 63.9(b)(5), the owner or operator who, after the effective date of this standard, intends to construct a new affected source or reconstruct an affected source subject to this standard, or reconstruct a source such that it becomes an affected source subject to this standard, must notify the Administrator, in writing, of the intended construction or reconstruction.

(b) *Request for extension of compliance.* As required by § 63.9(c), if the owner or operator of an affected source cannot comply with this standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with § 63.6(i)(5), he or she may submit to the Administrator (or the State with an approved permit program) a request for an extension of compliance as specified in § 63.6(i)(4) through (i)(6).

(c) *Notification that source is subject to special compliance requirements.* As required by § 63.9(d), an owner or operator of a new source that is subject to special compliance requirements as specified in § 63.6(b)(3) and (b)(4) must notify the Administrator of his or her compliance obligations no later than the notification dates established in

§ 63.9(b) for new sources that are not subject to the special provisions.

(d) *Notification of performance test.* As required by § 63.9(e), the owner or operator of an affected source must notify the Administrator in writing of his or her intention to conduct a performance test at least 30 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under § 63.7(c) and to have an observer present during the test.

(e) *Notification of opacity and visible emission observations.* As required by § 63.9(f), the owner or operator of an affected source must notify the Administrator in writing of the anticipated date for conducting the opacity or visible emission observations specified in § 63.6(h)(5). The notification must be submitted with the notification of the performance test date, as specified in paragraph (d) of this section, or if visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under § 63.7, the owner or operator must deliver or postmark the notification not less than 30 days before the opacity or visible emission observations are scheduled to take place.

(f) *Notification of compliance status.* The owner or operator of an affected source must submit a notification of compliance status as required by § 63.9(h). The notification must be sent before the close of business on the 60th day following completion of the relevant compliance demonstration.

§ 63.1659 Reporting requirements.

(a) *General reporting requirements.* The owner or operator of a ferromanganese and silicomanganese production facility must comply with all of the reporting requirements under § 63.10 of subpart A, unless otherwise specified in this subpart.

(1) *Frequency of reports.* As provided by § 63.10(a)(5), if the owner or operator is required to submit periodic reports to a State on an established time line, he or she may change the dates by which periodic reports submitted under this part may be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. This provision may be applied at any point after the source's compliance date.

(2) *Reporting results of performance tests.* As required by § 63.10(d)(2), the owner or operator of an affected source must report the results of the initial

performance test as part of the notification of compliance status required in § 63.1658(f).

(3) [Reserved]

(4) *Periodic startup, shutdown, and malfunction reports.* (i) As required by § 63.10(d)(5)(i), if actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the owner or operator must state such information in a semiannual report. The report, to be certified by the owner or operator or other responsible official, must be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half; and

(ii) Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator must comply with all requirements of § 63.10(d)(5)(ii).

(b) *Specific reporting requirements.* In addition to the information required under § 63.10, reports required under paragraph (a) of this section must include the information specified in paragraphs (b)(1) through (b)(5) of this section. As allowed by § 63.10(a)(3), if any State requires a report that contains all of the information required in a report listed in this section, an owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.

(1) *Air pollution control devices.* The owner or operator must submit reports that summarize the records maintained as part of the practices described in the maintenance plan for air pollution control devices required under § 63.1655(b), including an explanation of the periods when the procedures were not followed and the corrective actions taken.

(2) *Venturi scrubbers.* In addition to the information required to be submitted in paragraph (b)(1) of this section, the owner or operator must submit reports that identify the periods when the average hourly pressure drop of venturi scrubbers used to control particulate emissions dropped below the levels established in § 63.1656(c)(4), and an explanation of the corrective actions taken.

(3) *Fugitive dust.* The owner or operator must submit reports that explain the periods when the procedures outlined in the fugitive dust

control plan pursuant to § 63.1654(a) were not followed and the corrective actions taken.

(4) *Capture system.* The owner or operator must submit reports that summarize the monitoring parameter excursions measured pursuant to § 63.1657(c) and the corrective actions taken.

(5) *Bag leak detection system.* The owner or operator must submit reports including the following information:

(i) Records of all alarms.
(ii) Description of the actions taken following each bag leak detection system alarm.
(iii) Calculation of the percent of time the alarm on the bag leak detection system sounded during the reporting period.

(6) *Frequency of reports.* (i) The owner or operator must submit reports pursuant to § 63.10(e)(3) that are associated with excess emissions events such as the excursion of the scrubber pressure drop limit per paragraph (b)(2) of this section. These reports are to be submitted on a quarterly basis, unless the owner or operator can satisfy the requirements in § 63.10(e)(3) to reduce the frequency to a semiannual basis.

(ii) All other reports specified in paragraphs (b)(1) through (b)(5) of this section must be submitted semiannually.

§ 63.1660 Recordkeeping requirements.

(a) *General recordkeeping requirements.* (1) The owner or operator of a ferromanganese and silicomanganese production facility must comply with all of the recordkeeping requirements under § 63.10.

(2) As required by § 63.10(b)(2), the owner or operator must maintain records for 5 years from the date of each record of:

(i) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment and control devices);

(ii) The occurrence and duration of each malfunction of the source or air pollution control equipment;

(iii) All maintenance performed on the air pollution control equipment;

(iv) Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the startup, shutdown, and malfunction plan;

(v) All information necessary to demonstrate conformance with the startup, shutdown, and malfunction

plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions) are consistent with the procedures specified in such plan. This information can be recorded in a checklist or similar form (see § 63.10(b)(2)(v));

(vi) All required measurements needed to demonstrate compliance with the standard and to support data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;

(vii) All results of initial or subsequent performance tests;

(viii) If the owner or operator has been granted a waiver from recordkeeping or reporting requirements under § 63.10(f), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements;

(ix) If the owner or operator has been granted a waiver from the initial performance test under § 63.7(h), a copy of the full request and the Administrator's approval or disapproval;

(x) All documentation supporting initial notifications and notifications of compliance status required by § 63.9; and

(xi) As required by § 63.10(b)(3), records of any applicability determination, including supporting analyses.

(b) *Specific recordkeeping requirements.* (1) In addition to the general records required by paragraph (a) of this section, the owner or operator must maintain records for 5 years from the date of each record of:

(i) Records of pressure drop across the venturi if a venturi scrubber is used.

(ii) Records of manufacturer certification that monitoring devices are accurate to within 5 percent (unless otherwise specified in this subpart) and of calibrations performed at the manufacturer's recommended frequency, or at a frequency consistent with good engineering practice, or as experience dictates.

(iii) Records of bag leak detection system output.

(iv) An identification of the date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, and the date and time the alarm was corrected.

(v) Copy of the written maintenance plan for each air pollution control device.

(vi) Copy of the fugitive dust control plan.

(vii) Records of each maintenance inspection and repair, replacement, or other corrective action.

(2) All records for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.

§ 63.1661 Delegation of authorities.

In delegating implementation and enforcement authority to a State under subpart E of this part, the Administrator retains no authorities.

§§ 63.1662—63.1679 [Reserved].

[FR Doc. 99-12584 Filed 5-19-99; 8:45 am]
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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[NC-9915; FRL-6335-8]

Approval and Promulgation of Air Quality Implementation Plans; North Carolina; Revised Format for Materials Being Incorporated by Reference

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; notice of administrative change.

SUMMARY: EPA is revising the format of 40 CFR part 52 for materials submitted by the State of North Carolina that are incorporated by reference (IBR) into the State Implementation Plan (SIP). The regulations affected by this format change have all been previously submitted by the State agency and approved by EPA.

This format revision will affect the "Identification of plan" sections of 40 CFR part 52, as well as the format of the SIP materials that will be available for public inspection at the Office of the Federal Register (OFR), the Air and Radiation Docket and Information Center located in Waterside Mall, Washington, D.C., and the Regional Office. The sections of 40 CFR part 52 pertaining to provisions promulgated by EPA or state-submitted materials not subject to IBR review remain unchanged.

EFFECTIVE DATE: This action is effective May 20, 1999.

ADDRESSES: SIP materials which are incorporated by reference into 40 CFR part 52 are available for inspection at the following locations:

Environmental Protection Agency,
Region 4, 61 Forsyth Street, SW,
Atlanta, GA 30303;

Office of Air and Radiation, Docket and Information Center (Air Docket), EPA,
401 M Street, SW, Room M1500,
Washington, DC 20460; and
Office of the Federal Register, 800 North
Capitol Street, NW, Suite 700,
Washington, D.C.

FOR FURTHER INFORMATION CONTACT:
Randy Terry at the above Region 4
address or at 404-562-9032.

SUPPLEMENTARY INFORMATION:

The supplementary information is organized in the following order:

What is a SIP?

How EPA enforces SIPs.

How the State and EPA update the SIP.

How EPA compiles the SIPs.

How EPA organizes the SIP Compilation.

Where you can find a copy of the SIP

Compilation.

The format of the new Identification of Plan Section.

When a SIP revision become federally enforceable.

The historical record of SIP revision approvals.

What EPA is doing in this action.

How this document complies with the Federal Administrative Requirements for rulemaking.

What Is a SIP?

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

How EPA Enforces SIPs

Each state must formally adopt the control measures and strategies in the SIP after the public has had an opportunity to comment on them and then submit the SIP to EPA.

Once these control measures and strategies are approved by EPA, after notice and comment, they are incorporated into the federally approved SIP and are identified in part 52 (Approval and Promulgation of Implementation Plans), Title 40 of the Code of Federal Regulations (40 CFR part 52). The full text of the state regulation approved by EPA is not reproduced in its entirety in 40 CFR part 52, but is "incorporated by reference." This means that EPA has approved a given state regulation with a specific effective date. The public is referred to the location of the full text version should they want to know which measures are contained in a given SIP.

The information provided allows EPA and the public to monitor the extent to which a state implements the SIP to attain and maintain the NAAQS and to take enforcement action if necessary.

How the State and EPA Update the SIP

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

EPA began the process of developing:

1. A revised SIP document for each state that would be incorporated by reference under the provisions of 1 CFR part 51;

2. A revised mechanism for announcing EPA approval of revisions to an applicable SIP and updating both the IBR document and the CFR; and

3. A revised format of the "Identification of plan" sections for each applicable subpart to reflect these revised IBR procedures.

The description of the revised SIP document, IBR procedures and "Identification of plan" format are discussed in further detail in the May 22, 1997, Federal Register document.

How EPA Compiles the SIPs

The federally-approved regulations and source specific permits (entirely or portions of), submitted by each state agency have been compiled by EPA into a "SIP Compilation." The SIP Compilation contains the updated regulations and source specific permits approved by EPA through previous rule making actions in the Federal Register. The compilations are contained in 3-ring binders and will be updated, primarily on an annual basis.

How EPA Organizes the SIP Compilation

Each SIP Compilation contains two parts. Part 1 contains the regulations and Part 2 contains the source specific requirements that have been approved as part of the SIP. Each part has a table of contents identifying each regulation or each source specific permit. The table of contents in the compilation corresponds to the table of contents published in 40 CFR part 52 for each state. The Regional EPA Offices have the primary responsibility for ensuring accuracy and updating the compilations.

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 9 and 63

[FRL-6345-4]

RIN 2060-AE08

National Emission Standards for Hazardous Air Pollutants for Source Categories; National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action promulgates national emission standards for hazardous air pollutants (NESHAP) for new and existing sources in mineral wool production facilities. Hazardous air pollutants (HAPs) emitted by the facilities covered by this rule include carbonyl sulfide (COS), nine hazardous metals, formaldehyde, and phenol. Exposure to these HAPs may be associated with adverse carcinogenic, respiratory, nervous system, dermal, developmental, and/or reproductive health effects. The EPA estimates that the final rule will reduce nationwide emissions of HAPs from these facilities by 46 megagrams per year (Mg/yr) (51 tons per year (tpy)). In addition, emissions of particulate matter (PM) will be reduced by approximately 186 Mg/yr (205 tpy). This action also amends 40 CFR part 9 by updating the table of currently approved information collection control numbers to include the information requirements contained in this final rule.

These standards implement section 112(d) of the Clean Air Act (Act) by requiring all mineral wool production facilities that are major sources to meet hazardous air pollutant (HAP) emission standards reflecting the application of the maximum achievable control technology (MACT). The emissions reductions achieved by these standards, when combined with the emissions reductions achieved by other similar standards, will provide protection to the public and achieve a primary goal of the Act.

A supplement to the proposed rule was proposed in the *Federal Register* on February 12, 1999 (64 FR 7149). The EPA will give careful consideration to all comments on the supplemental proposal and will amend this final rule in a future action as appropriate.

EFFECTIVE DATE: June 1, 1999. See the **SUPPLEMENTARY INFORMATION** section concerning judicial review.

ADDRESSES: *Docket.* The docket for this rulemaking containing the information considered by the EPA in development of the final rule is Docket A-95-33. This docket is available for public inspection between 8 a.m. and 5:30 p.m., Monday through Friday, excluding Federal holidays, at the following address: U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center (6102), 401 M Street, SW, Washington, DC 20460; telephone number (202) 260-7548. The docket is located at the above address in Room M-1500, Waterside Mall (ground floor). A reasonable fee may be charged for copying docket materials.

FOR FURTHER INFORMATION CONTACT: Ms. Mary Johnson, Minerals and Inorganic Chemicals Group, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number (919) 541-5025; facsimile number (919) 541-5600; electronic mail address "johnson.mary@epamail.epa.gov".

SUPPLEMENTARY INFORMATION:

Regulated Entities

Categories and entities potentially regulated by this action include:

Category	Examples of regulated entities
Industry	Mineral wool production facilities (SIC 3296).
Federal government ..	None.
State/local/tribal government.	None.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. To determine whether your facility is regulated by this action, you should examine the applicability criteria in § 63.1177 of the final rule. If you have any questions regarding the applicability of this action to a particular entity, consult the appropriate regional representative:

- Region I:
Janet Bowen, Office of Ecosystem Protection, U.S. EPA, Region I, CAP, JFK Federal Building, Boston, MA 02203, (617) 565-3595
- Region II:
Kenneth Eng, Air Compliance Branch Chief, U.S. EPA, Region II, 290 Broadway, New York, NY 10007-1866, (212) 637-4000
- Region III:
Bernard Turlinski, Air Enforcement Branch Chief, U.S. EPA, Region III, 3AT10, 841 Chestnut Building, Philadelphia, PA 19107, (215) 566-

- 2110
- Region IV:
Lee Page, Air Enforcement Branch, U.S. EPA, Region IV, Atlanta Federal Center, 61 Forsyth Street, Atlanta, GA 30303-3104, (404) 562-9131
- Region V:
George T. Czerniak, Jr., Air Enforcement Branch Chief, U.S. EPA, Region V, 5AE-26, 77 West Jackson Street, Chicago, IL 60604, (312) 353-2088
- Region VI:
John R. Hepola, Air Enforcement Branch Chief, U.S. EPA, Region VI, 1445 Ross Avenue, Suite 1200, Dallas, TX 75202-2733, (214) 665-7220
- Region VII:
Donald Toensing, Air Permitting and Compliance, Branch Chief, U.S. EPA, Region VII, 726 Minnesota Avenue, Kansas City, KS 66101, (913) 551-7446
- Region VIII:
Douglas M. Skie, Air and Technical Operations, Branch Chief, U.S. EPA, Region VIII, 999 18th Street, Suite 500, Denver, CO 80202-2466, (303) 312-6432
- Region IX:
Barbara Gross, Air Compliance Branch Chief, U.S. EPA, Region IX, 75 Hawthorne Street, San Francisco, CA 94105, (415) 744-1138
- Region X:
Anita Frankel, Air and Radiation Branch Chief, U.S. EPA, Region X, AT-092, 1200 Sixth Avenue, Seattle, WA 98101, (206) 553-1757

Plain Language

The final rule is written in plain language. Plain language regulatory writing involves structuring the rule around questions the user may have. It takes the form of questions and answers and uses the words "I" and "you" to represent the owner or operator.

Judicial Review

The NESHAP for mineral wool production plants was proposed on May 8, 1997 (62 FR 25370). This action announces the EPA's final decisions on the rule. Under section 307(b)(1) of the Act, judicial review of the NESHAP 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 rule may not be challenged later in civil or criminal proceedings brought by the EPA to enforce these requirements.

Technology Transfer Network

In addition to being available in the docket, an electronic copy of today's notice is also available through the Technology Transfer Network (TTN). Following promulgation, a copy of the rule will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules (<http://www.epa.gov/ttn/oarpg/t3pfpr.html>). The TTN provides information and technology exchange in various areas of air pollution control. If more information regarding the TTN is needed, call the TTN HELP line at (919) 541-5384.

Outline

The information presented in this preamble is organized as follows:

- I. Statutory Authority
- II. Background and Public Participation
- III. Summary of Final Rule
 - A. Applicability
 - B. Standards
 - C. Compliance and Performance Test Provisions
 - D. Monitoring Requirements
 - E. Notification, Recordkeeping, and Reporting Requirements
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 - A. General
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- C. Executive Order 12875—Enhancing the Intergovernmental Partnership
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- E. Unfunded Mandates Reform Act
- F. Regulatory Flexibility
- G. Submission to Congress and the Comptroller General
- H. Paperwork Reduction Act
- I. Pollution Prevention Act
- J. National Technology Transfer and Advancement Act
- K. Executive Order 13045—Protection of Children From Environmental Health Risks and Safety Risks

I. Statutory Authority

The statutory authority for this rule is provided by sections 101, 112, 113, 114, 116, and 301 of the Act, as amended (42 U.S.C. 7401, 7412, 7413, 7414, 7416, and 7601). This rule is also subject to section 307(d) of the Act (42 U.S.C. 7407(d)).

II. Background and Public Participation

Section 112(d) of the Act directs the EPA to establish standards to control all major sources emitting HAPs. On July 16, 1992, the EPA published a list of major source categories, including "Mineral Wool Production," for which NESHAP are to be promulgated (57 FR 3156). The NESHAP for mineral wool production (40 CFR part 63, subpart DDD) was proposed in the **Federal Register** on May 8, 1997 (62 FR 25370). The public comment period ended on July 7, 1997. Industry representatives, regulatory authorities, environmental groups, and the general public had the opportunity to comment on the proposed standards and to provide additional information during the public comment period. Three comment letters were received. Comments were received from the association representing industry and from two

representatives of air pollution control equipment manufacturers. Today's final rule reflects the EPA's full consideration of the comments. A summary of the major public comments along with the EPA's responses are summarized in this preamble. A more detailed discussion of public comments and the EPA's responses are contained in the docket (Docket No. A-95-33; Item V-C-2).

III. Summary of Final Rule

A. Applicability

The final NESHAP applies to each existing, new, and reconstructed cupola and curing oven at a mineral wool production facility that is located at a plant site that is a major source of HAP emissions. Facilities that manufacture wool fiberglass are not subject to this rule but are subject to a separate NESHAP rulemaking for wool fiberglass manufacturing.

B. Standards

Emissions of PM are regulated for existing cupolas. For new and reconstructed cupolas, emissions of carbon monoxide (CO) are also regulated. Emissions of formaldehyde are regulated for existing, new, and reconstructed curing ovens. Particulate matter serves as a surrogate for metal HAPs and CO is a surrogate for COS. In addition to being a HAP itself, formaldehyde serves as a surrogate for phenol. A numerical emission limit for PM expressed in kilograms per megagram (kg/Mg) or pound per ton (lb/ton) of melt is promulgated in the final rule. For CO or formaldehyde, the owner or operator may comply with percent removal or numerical emission limits. The emission limits for existing sources and new sources are presented below.

SUMMARY OF EMISSION LIMITS FOR EXISTING SOURCES

Source	Pollutant	Emission limit
Cupola	PM	0.05 kg/Mg (0.10 lb/ton) of melt.
Curing oven	Formaldehyde	0.03 kg/Mg (0.06 lb/ton) of melt or 80 percent formaldehyde removal.

SUMMARY OF EMISSION LIMITS FOR NEW AND RECONSTRUCTED SOURCES

Source	Pollutant	Emission limit
Cupola	PM	0.05 kg/Mg (0.10 lb/ton) of melt.
	CO	0.05 kg/Mg (0.10 lb/ton) of melt or 99 percent CO removal.
Curing oven	Formaldehyde	0.03 kg/Mg (0.06 lb/ton) of melt or 80 percent formaldehyde removal.

The owner or operator must also comply with operating limits. Operating limits for cupolas are as follows:

- (1) Within one hour after the alarm on a bag leak detection system sounds, the owner or operator must begin, and complete in a timely manner, corrective

actions as specified in their operations, maintenance, and monitoring plan.

- (2) When the alarm on a bag leak detection system sounds for more than

five percent of the total operating time in a six-month reporting period, the owner or operator must develop and implement a written quality improvement plan (QIP) consistent with the compliance assurance monitoring requirements in § 64.8(b)-(d) of 40 CFR part 64 (62 FR 54900, October 22, 1997).

(3) For each new or reconstructed cupola, the owner or operator must maintain the operating temperature of the thermal incinerator such that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.

The owner or operator must meet the following operating limits for curing ovens:

(1) The owner or operator must maintain the free-formaldehyde content of each resin lot and formaldehyde content of each binder formulation at or below the specification ranges of the resin and binder used during the performance test.

(2) The owner or operator must maintain the operating temperature of each thermal incinerator such that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.

C. Compliance and Performance Test Provisions

For existing sources, compliance with the standards must be demonstrated no later than three years from the effective date of the final rule. An extension for a fourth year may be granted by the Administrator under section 112(i)(3)(B) of the Act if necessary for the installation of controls. For new and reconstructed sources, any control devices or monitoring equipment necessary to meet the standards must be installed. Performance testing must be completed and compliance with all requirements of the final rule must be demonstrated by the dates in § 63.7 of the general provisions in subpart A of 40 CFR part 63. On and after these dates, the owner or operator must comply with the standards. The standards will apply at all times except during periods of startup, shutdown, or malfunction.

A performance test is required to demonstrate initial compliance with the percent removal or numerical emissions limits for cupolas and curing ovens. The performance test must be conducted while operating at the maximum production rate and must consist of three test runs. All monitoring systems and equipment must be installed, operational, and properly calibrated prior to the performance tests. To

comply with the CO or formaldehyde emission limit for a cupola or curing oven controlled by a thermal incinerator, or the PM limit for a fabric filter-controlled cupola, measurements are made at the outlet of the control device. If the owner or operator elects to comply with the percent removal emission limit for CO or formaldehyde, measurements are required at the inlet and outlet of the control device.

The owner or operator is required to measure and record the amount of raw materials, excluding coke, charged into and melted in each cupola during each performance test run, determine the average hourly melt rate for each performance test run, and determine the arithmetic average of the average hourly melt rates associated with the three performance test runs. The average hourly melt rate of the three performance test runs is used to determine compliance.

The owner or operator must conduct the performance test for each curing oven while manufacturing the product that requires a binder formulation made with the resin containing the highest free-formaldehyde content specification range. During the performance test, the owner or operator must record the free-formaldehyde content specification range of the resin used and the formulation of the binder used, including formaldehyde content and binder specification.

During the performance test for each cupola that uses a thermal incinerator to comply with the emission limit for CO and each curing oven that uses a thermal incinerator to comply with the formaldehyde emission limit, the owner or operator is required to establish the average operating temperature of the incinerator. The owner or operator must continuously measure the operating temperature, determine the average temperatures in consecutive 15-minute blocks, determine the arithmetic average of the 15-minute block temperatures for each performance test run, and determine the arithmetic average of the average operating temperatures associated with the three performance test runs.

With prior approval from the Administrator, operating limits established for control devices or processes during the initial performance tests and used to monitor compliance may be expanded by conducting additional performance tests to demonstrate compliance at the new levels. Also, owners or operators of curing ovens may conduct short-term experimental production runs without conducting additional performance tests

with prior approval from the Administrator.

D. Monitoring Requirements

Each fabric filter used on a cupola must be equipped with a bag leak detection system having an audible alarm that automatically sounds when an increase in particulate emissions above a predetermined level is detected. The alarm must be located in an area where appropriate plant personnel will be able to hear it. Such a device serves as an indicator of the performance of the fabric filter and provides an indication of when maintenance of the fabric filter is needed. The rule requires that in response to an alarm, corrective actions be initiated within one hour, and completed in a timely manner, according to the operations, maintenance, and monitoring plan. The owner or operator is in violation of this operating limit upon a failure to begin corrective actions within one hour of the alarm.

When the alarm is activated for more than five percent of the total operating time during a six-month reporting period, the owner or operator must develop and implement a written QIP consistent with the compliance assurance monitoring requirements in § 64.8(b)-(d) of 40 CFR part 64 (62 FR 54900, October 22, 1997). Failure to develop and implement a written QIP that is consistent with the compliance assurance monitoring requirements is a violation of this operating limit.

Each owner or operator of an affected curing oven must monitor and record the free-formaldehyde content of each resin lot and the formulation of each batch of binder used, including formaldehyde content. Following the performance test, the owner or operator must maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges of the resin and binder used during the performance test. If the free-formaldehyde content of a resin lot or the formaldehyde content of a binder formulation exceeds the performance test specification ranges, the owner or operator is in violation of this operating limit.

For each thermal incinerator used to control emissions from affected cupolas or curing ovens, the owner or operator must continuously measure the operating temperature of the incinerator. The owner or operator must determine the average temperatures in consecutive 15-minute blocks and then determine the arithmetic average of the 15-minute averages for each one-hour period. The average operating temperature of the

incinerator is based on the arithmetic average of the one-hour average temperatures for each consecutive three-hour period. Following the performance test, the owner or operator is required to maintain the operating temperature so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test. If the average temperature in any three-hour block period falls below the average established during the performance test, the owner or operator is in violation of this operating limit. The owner or operator must operate and maintain each incinerator as specified in their operations, maintenance, and monitoring plan. Procedures for properly operating and maintaining an incinerator must include an annual inspection.

Under today's rule, the owner or operator may change control device and process operating parameter levels established during performance tests and used to monitor compliance. The owner or operator must notify the Administrator and upon approval, conduct additional performance tests at the proposed new control device or process operating parameter levels to verify compliance with the applicable emission limits.

E. Notification, Recordkeeping, and Reporting Requirements

Notification, recordkeeping, and reporting requirements for NESHAP are included in the general provisions (40 CFR part 63, subpart A). The general provisions include requirements for: (1) Initial notification(s) of applicability, notification of performance test, and notification of compliance status; (2) a report of performance test results; (3) a startup, shutdown, and malfunction plan, including a semiannual report when a reportable event occurs and the steps in the plan were not followed; and (4) semiannual reports of deviations from established parameters. If deviations from established parameters are reported, the owner or operator must report quarterly until a request to return the reporting frequency to semiannual is approved.

Owners or operators of affected cupolas and curing ovens must submit an operations, maintenance, and monitoring plan as part of their application for a title V permit. The plan must include procedures for the proper operation and maintenance of processes and control devices used to comply with the emission limits, including an annual inspection of each thermal incinerator. The plan also must identify the process or control device parameters

to be monitored for compliance; the established operating levels or ranges for each process or control device; a monitoring schedule; the corrective actions to be taken when process or control device parameters deviate from the levels established during performance testing; and procedures for keeping records to document compliance.

In addition to requirements of the general provisions, the final rule specifies additional records to be kept by the owner or operator. The owner or operator is required to maintain records of the following, as applicable:

- (1) Cupola production (melt) rate;
- (2) bag leak detection system alarms, the date and time of the alarm, when corrective actions were initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected;
- (3) free-formaldehyde content of each resin lot and the binder formulation, including formaldehyde content, of each binder batch used in the manufacture of bonded products; and
- (4) incinerator operating temperature and results of incinerator inspections, including periods when the average temperature in any three-hour block period fell below the average temperature established during the performance test and periods when the inspection identified incinerator components in need of repair or maintenance, the date and time of the problem, when corrective actions were initiated, the cause of the problem, an explanation of the corrective actions taken, and when the cause of the problem was corrected.

The NESHAP general provisions require that records be maintained for at least five years from the date of each record. The owner or operator must retain the records on site for at least two years but may retain the records off site the remaining three years. The records may be retained on microfilm, on microfiche, on a computer, on computer disks, or on magnetic tape disks. Reports may be made on paper or on labeled computer disks using commonly available and compatible computer software.

IV. Summary of Changes Since Proposal

Changes have been incorporated into the final NESHAP for mineral wool production facilities in response to comments on the proposed rule, with the exception of the format change to plain language. A number of clarifications to the proposal language are reflected in the final rule as a result of this question and answer format. The

principal changes made since proposal are summarized below. Additional discussion of the changes and the rationale for these changes is presented in section VI of this preamble.

A. Definitions

In response to public comments, minor clarifying changes were made to the definition of *mineral wool*. Also, a definition for *new source*, that incorporates the May 8, 1997 date that the NESHAP was proposed, was added to the list of terms used in the final rule.

B. Standards

The final rule incorporates some changes to the proposed rule regarding emission standards. Depending on available control and monitoring technologies for particular source categories, emission limits, as well as operating limits, are set forth as enforceable regulatory requirements. In addition to emission limits, operating limits are also included as part of the final rule regulating mineral wool production facilities. These operating limits were included in the proposed rule as monitoring requirements and have been moved into the sections containing the emission limits in the final rule. These operating limits specify the established requirements which are enforceable and will be used to determine compliance.

As a result of additional PM emissions data from fabric filter-controlled cupolas, the proposed PM emission limit of 0.03 kg/Mg (0.06 lb/ton) has been revised to 0.05 kg/Mg (0.10 lb/ton) in the final rule. The additional data considered in making this determination are for three cupolas controlled by fabric filters with identical parameters as those previously determined to be representative of the MACT floor for existing and new cupolas. An emissions limit of 0.05 kg/Mg (0.10 lb/ton) represents a level that can be achieved by the fabric filter-controlled cupola upon which the proposed PM emission limit was based, as well as by these three fabric filter-controlled cupolas which are also representative of the MACT floor.

C. Performance Test Provisions

A few changes were made to the performance test requirements in the proposed rule. Revisions were made to clarify the proposed requirements for performance testing by specifying in the final rule how to establish the average operating temperature of an incinerator. The proposed provision that would allow the owner or operator of curing ovens subject to the NESHAP to conduct short-term experimental production

runs without conducting additional performance tests was revised. The final rule clarifies that the process modifications referred to in the proposed rule mean pollution prevention process modifications.

The proposed rule required the use of method 5 for determining the concentration of PM with a minimum performance test run time of two hours and a minimum sample volume of 2.5 dry standard cubic meters (dscm) (90 dry standard cubic feet (dscf)). The final rule specifies a minimum performance test run time of three hours and a minimum sample volume of 3.75 dscm (135 dscf). These revisions are the result of re-evaluation of the test method procedures in response to public comments regarding the level of the proposed emission limit for PM, and are to ensure that an adequate amount of PM is captured on the filter for analysis and subsequent compliance determination.

D. Monitoring Requirements

Several changes were made to the monitoring requirements in the proposed rule. The final rule does not include the proposed requirements to maintain the average hourly melt rate so that it does not exceed the average melt rate established during the performance test by more than 20 percent for more than five percent of the total operating time in each six-month reporting period, and to do a repeat performance test at the higher melt rate if the average hourly melt rate exceeds the average melt rate established during the performance test by more than 20 percent for more than five percent of the total operating time in a six-month reporting period. The EPA determined that these monitoring requirements are not necessary because compliance with the PM standards will be assessed through use of a bag leak detection system; compliance with the CO standards will be assessed through monitoring incinerator operating temperature; and compliance with the formaldehyde standards will be assessed through monitoring incinerator operating temperature, monitoring free-formaldehyde content of resin, and monitoring binder formulation. The average melt rate must still be determined during each performance test in order to assess compliance with the emissions standards. As a recordkeeping requirement, the final rule continues to require that records of cupola melt rate be maintained.

As proposed, each fabric filter used on a cupola must be equipped with a bag leak detection system having an audible alarm that automatically sounds

when an increase in particulate emissions above a predetermined level is detected. The final rule clarifies that each triboelectric bag leak detection system must be installed, operated, adjusted, and maintained according to the EPA's "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997) which is available on the TTN under Emission Measurement Center (EMC), Continuous Emission Monitoring. Other bag leak detection systems must be installed, operated, adjusted, and maintained according to the manufacturer's written specifications and recommendations. In response to public comments and to maintain consistency with sensitivity (range) specifications in other regulations, the final rule requires that the bag leak detection system be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot). To maintain consistency with bag leak detection system requirements in other regulations and to allow owners and operators flexibility to make necessary bag leak detection system adjustments, the final rule specifies that following initial adjustment, the owner or operator may adjust the range, averaging period, alarm set points, or alarm delay time as specified in the approved operations, maintenance, and monitoring plan. The final rule further specifies that in no event may the range be increased by more than 100 percent or decreased by more than 50 percent over a 365 day period unless a responsible official, as defined in § 63.2 of the general provisions in subpart A of 40 CFR part 63, certifies in writing to the Administrator that the fabric filter has been inspected and found to be in good operating condition. The final rule clarifies that the alarm must be located in an area where appropriate plant personnel will be able to hear it and that in response to the sounding of an alarm, the owner or operator must complete corrective actions in a timely manner.

Under the proposed rule, the owner or operator would monitor and record the free-formaldehyde content of each resin lot and the binder formulation, including the formaldehyde content of each binder batch, and would maintain the formaldehyde content of each binder formulation at or below the level established during the performance test. The final rule clarifies that the owner or operator must maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges of the resin and

binder used during the performance test. The use of ranges in the final rule accommodates the fact that resins and binders are produced in accordance with specification ranges rather than levels as proposed.

As proposed, the owner or operator would obtain, at a minimum, valid three-hour block average incinerator operating temperatures for 75 percent of the operating hours per day for 90 percent of the operating days per six-month reporting period. This requirement is not included in the final rule in order to maintain consistency with the compliance assurance monitoring final rule (62 FR 54899, October 22, 1997), which was revised based on comments received on its proposal and now requires monitoring devices to be operational at all times that the process is operational. Revisions were also made to clarify the proposed requirements for monitoring incinerator operating temperature by specifying in the final rule how to determine the average operating temperature.

Under the proposed rule, the owner or operator could change a control device or process operating parameter level established during the performance test by conducting additional performance tests at the new parameter level. The final rule clarifies that the owner or operator must notify the Administrator of the desire to expand the range of a control device or process operating parameter level, and upon approval, conduct additional performance tests at the proposed new parameter levels before operating at these levels to verify compliance with the emission limits.

E. Notification, Recordkeeping, and Reporting Requirements

A few changes were made since proposal to the notification, recordkeeping, and reporting requirements. The final rule clarifies that notifications of performance tests must be submitted to the Administrator at least 60 days prior to the performance test. The final rule also clarifies what elements are required to be included in performance test reports. The proposed rule required an operations, maintenance, and monitoring plan for each affected source that would contain information on the proper operation and maintenance of control devices, the parameters to be monitored for compliance and their established operating levels, a monitoring schedule, corrective actions to be taken when parameters deviate from the levels established during performance testing, and procedures for keeping records to document compliance. The final rule

specifies some example corrective actions for bag leak detection system alarms that may be included in the operations, maintenance, and monitoring plan. Consistent with the general provisions requirements to operate and maintain air pollution control equipment in a manner consistent with good air pollution control practices, the final rule clarifies that the operations, maintenance, and monitoring plan procedures for properly operating and maintaining control devices must include, where applicable, an inspection of each incinerator at least once per year. The final rule also clarifies that records of when corrective actions were initiated and when the cause of the problem was corrected must be maintained.

V. Summary of Impacts

The impacts estimated to be attributable to the final rule are the same as those estimated to be attributable to the proposed rule. Nationwide emissions of metal HAPs from mineral wool production cupolas are estimated to be 1.0 Mg/yr (1.1 tpy) at the current level of control. Existing PM emissions are estimated to be 239 Mg/yr (263 tpy). Implementation of the final rule will reduce nationwide metal HAP and PM emissions from existing cupolas by 0.91 Mg/yr (1.0 tpy) and 186 Mg/yr (205 tpy), respectively. Formaldehyde and phenol emissions from existing curing ovens are estimated to be 54 Mg/yr (59 tpy) and 14 Mg/yr (16 tpy), respectively. Nationwide emissions of formaldehyde and phenol will be reduced by about 30 Mg/yr (34 tpy) and 14 Mg/yr (16 tpy), respectively, as a result of this final rule. Although the EPA does not anticipate any new cupolas or curing ovens within the next five years, installation of a new cupola with a 7.3 megagram per hour (8 ton per hour) capacity would result in estimated reductions of COS and CO emissions by 104 Mg/yr (114 tpy) and 1,256 Mg/yr (1,384 tpy), respectively, in addition to metal HAP and PM reductions.

Because this rule is based on the use of fabric filters and thermal incinerators, there are no water pollution impacts. Solid waste generated by fabric filters in the form of ash is disposed of by landfilling. With the addition of fabric filters to five cupolas, the amount of solid waste is expected to increase by about 350 Mg/yr (390 tpy) from the current level of 24,800 Mg/yr (27,300 tpy) nationwide. The rule is estimated to have no significant effect on energy consumption.

The total nationwide capital and annualized costs for existing cupolas under the final rule are estimated to be

\$1.5 million and \$608,900/yr, respectively. These costs represent the addition of fabric filters to five cupolas but do not include the monitoring costs of bag leak detection systems required on all affected cupolas. Capital and annualized costs for a bag leak detection system are estimated at \$9,100 and \$1,800/yr for each affected cupola, respectively.

The total nationwide capital cost of complying with the requirements for existing curing ovens is estimated to be \$795,800 with a nationwide annual cost of \$641,600. These costs result from the addition of thermal incinerators to two curing ovens.

Total nationwide capital costs for the standard are estimated at \$2.6 million and nationwide annual costs are estimated at \$1.4 million, including installation, operation, and maintenance of emission control and monitoring systems.

Under the final rule, market-level price increases are estimated to range from 0.5 percent to 2.1 percent, resulting in quantity adjustments of -0.59 percent and -1.71 percent, respectively. The decreases in quantity demanded may lead to the loss of approximately nine jobs. There is no indication that the costs associated with achieving the reductions required by the final rule will cause facility closure.

VI. Summary of Responses to Major Comments

The EPA proposed the NESHAP for the mineral wool production source category on May 8, 1997 (62 FR 25370). A 60-day comment period from May 8, 1997 to July 7, 1997, was provided to accept written comments from the public on the proposed rule.

The EPA received a total of three comment letters regarding the proposed NESHAP for mineral wool production. A copy of each comment letter is available for public inspection in the docket for the rulemaking (Docket No. A-95-33; see the ADDRESSES section of this document for information on inspecting the docket). The EPA has had follow-up discussions with commenters regarding specific issues initially raised in their written comments that were submitted to the EPA during the comment period. Copies of correspondence and other information exchanged between the EPA and the commenters during the post-comment period are available for public inspection in the docket for the rulemaking.

All of the comments received by the EPA were reviewed and carefully considered by the EPA. Changes to the rule were made where the EPA

determined it to be appropriate. A summary of responses to major comments received on the proposed rule is presented below. Additional discussion of the EPA's responses to public comments is presented in the document "Summary of Public Comments and Responses on Mineral Wool Production NESHAP" (docket item V-C-2).

A. General

Comment: One commenter stated that there have been some shutdowns in the industry that affect the information presented in the preamble to the proposed rule. Currently, there are 15 mineral wool production facilities located in eight states. Five of the 15 plants manufacture bonded products and contain a total of ten cupolas and five curing ovens. Ten active plants manufacture only nonbonded products, with a total of 21 cupolas. Thus, the total industry currently operates 31 cupolas and five curing ovens, rather than the 36 cupolas and six curing ovens reported by the EPA in the *Federal Register* document. The commenter further stated that six of the ten companies in the mineral wool production industry are small businesses, rather than seven of the ten companies being small businesses as stated in the EPA's *Federal Register* document.

Response: The EPA acknowledges the information regarding shutdowns and changes in the industry profile as noted by the commenter. The EPA believes, however, that temporary shutdown of production lines is not unusual in this industry because the manufacture of mineral wool products is order-driven, and that these lines could be restarted in the future. The EPA, therefore, has not made any changes to the estimated impacts resulting from the rule. When considering these changes in the industry profile, the technology representative of the best controlled cupolas and curing ovens remains fabric filters and thermal incinerators, respectively. Therefore, these changes do not affect the proposed MACT floors for cupolas and curing ovens. Regarding the number of small businesses within the source category, two separate sources of information obtained by the EPA indicate that the company in question has less than 750 employees. Thus, the EPA continues to believe that seven of the ten mineral wool manufacturing companies are small businesses. No revisions to the final rule are necessary as a result of these comments.

B. Definitions

Comment: One commenter suggested that the definition of "bonded product" be amended to read "Bonded product means mineral wool to which a hazardous air pollutant-based binder (e.g., phenol, formaldehyde) has been applied and cured."

Response: After consideration of this comment, the EPA has decided to leave the definition of "bonded product" as it is in the proposed rule to allow the broadest coverage of this term. Once binder has been applied to mineral wool, whether cured or not, hazardous air pollutants, which are the focus of the definition, have been introduced into the production process.

Comment: One commenter suggested that the definition of "mineral wool" be amended to read "Mineral wool means a fibrous glassy substance made from natural rock (such as basalt), recycled blast furnace slag, or a mixture of rock and slag; it may be used as a thermal or acoustical insulation material or in the manufacturing of other products to provide structural strength, sound absorbency, fire resistance, or other uses."

Response: After consideration of this comment, the EPA has decided to modify the definition of "mineral wool" by adding "or other required properties" rather than "or other uses" as suggested by the commenter. The EPA believes that this modification adequately expands the definition of "mineral wool" as the commenter requested, as well as provides more clarification than the commenter's suggested revision. The EPA does not believe it is necessary or technically correct to add "recycled" to the definition.

Comment: One commenter suggested that the definition of "cupola" be amended to read "Cupola means a melting system consisting of raw material bins, weighing and charging equipment, electrical power system, controls, a large water cooled metal vessel with water cooling system, combustion air fans, duct work, tuyeres and oxygen enrichment system with combustion air preheater, molten slag handling and spinning equipment, off gas duct work, fan and a structure to support and house the melting system. The cupola is charged with a mixture of fuel, rock and/or blast furnace slag and additives; as the fuel is burned, the charged mixture is heated to a molten state, flows from the metal vessel and is spun into mineral wool."

Response: After consideration of this comment, the EPA has decided to leave the definition of "cupola" as it is in the proposed rule to allow the broadest

coverage of this term. The EPA does not agree that all of the items in the commenter's suggested definition are part of a cupola. It is the EPA's intention to define "cupola" in general terms in order to cover all possible configurations. Some configurations may not include all of the items included in the commenter's suggested definition.

C. Selection of Emission Standards

Comment: One commenter strongly supported the subcategorization in the proposed rule of plants with and without bonded lines. The commenter further stated that it is within the EPA's authority under the Act to define appropriate subcategories and that the differences between plants with and without bonded lines are substantial and consistent with the types of differences that the EPA has used to subcategorize other source categories.

Response: No changes in the final rule are necessary as a result of this comment.

Comment: One commenter supported the EPA's proposed MACT floor for new and existing sources.

Response: No changes in the final rule are necessary as a result of this comment.

Comment: One commenter strongly supported the EPA's proposed decision not to require an incinerator as above the MACT floor control for existing cupolas. Reasons cited by the commenter are that a cupola incinerator requirement would be unduly costly and economically devastating to an industry that produces an environmentally beneficial product using a waste product that would otherwise be landfilled, that a cupola incinerator requirement would not provide any significant health benefits, and that a cupola incinerator may even have negative net health impacts due to secondary emissions of nitrogen oxides (NO_x) and sulfur dioxide (SO₂).

Response: No changes in the final rule are necessary as a result of this comment.

Comment: One commenter stated that the EPA should require control of CO and COS emissions from existing cupolas. The commenter further stated that thermal oxidizers provide excellent control of cupola CO/COS emissions and that the EPA incorrectly concluded that the costs and ancillary emissions from thermal oxidizers are too high for the EPA to require their use on existing cupolas. The commenter stated that in fact, thermal oxidizer costs have been declining in real terms, and NO_x emissions from thermal oxidizers currently are guaranteed at very low

levels. Further, the commenter believes that the EPA's subcategorization of mineral wool production facilities based on the production of bonded products, and leading to MACT floors for cupola CO/COS emissions of no control, is inappropriate. Where subcategorization does not result in distinct emission limits or floors, the commenter believes that regulatory simplicity dictates that it should be avoided. The commenter also believes that the MACT floor for existing cupolas does call for thermal oxidizer-based limits given that the MACT floor level of control would be the use of thermal incineration or its equivalent in the absence of subcategorization.

Response: The EPA disagrees that subcategorization is either prohibited by the statute or unwise as a policy matter. While regulatory simplicity may be a consideration in how the EPA exercises its discretion, the statute does not dictate that this consideration supersede other legitimate considerations in establishing subcategories. As the EPA has noted in several rulemakings, the Act provides the EPA with substantial discretion to consider various factors when determining whether subcategorization is appropriate (see, e.g., 59 FR 29196-29200, June 6, 1994, **Federal Register** notice on determination of MACT floor for medium storage vessels at facilities subject to the hazardous organic NESHAP which indicates that the EPA may consider whether production processes used at different sources are sufficiently distinct to justify the creation of a subcategory).

In considering whether it is appropriate to subcategorize in this rule, the EPA continues to believe the basis for subcategorizing stated in the preamble to the proposed rule is valid (see 62 FR 25376-25377, May 8, 1997). Another commenter supported the EPA's view that it has substantial discretion to subcategorize and agreed with the EPA's decision to subcategorize in the proposed rule. Further, the EPA has taken several steps to accomplish the goal of regulatory simplicity in this rulemaking. For example, the EPA has emphasized readability in the plain language format of the final rule. In addition, the EPA has promulgated the cupola standards in one section, rather than in separate sections for each subcategory. Therefore, the EPA believes it has accomplished the goal of making the regulations as simple as possible while at the same time recognizing appropriate distinctions between the different types of facilities in the industry through subcategorization.

Regarding the commenter's statement about thermal oxidizer costs and ancillary emissions, the commenter did not provide any cost or NO_x emissions data to substantiate the assertion that a requirement to install thermal oxidizers on existing cupolas would be cost effective. The EPA continues to believe that the data in the record does not indicate that CO/COS controls are cost effective or otherwise appropriate for either subcategory. The EPA has not made any changes to the rule as a result of these comments.

Comment: One commenter supported the EPA's proposing thermal incineration as the MACT floor for both new and existing curing ovens and new cupolas. The commenter further stated that significantly higher control efficiencies can be achieved beyond the 80 percent discussed in the proposed rule with the use of catalytic incineration or oxidation and, in fact, volatile organic compound (VOC) reductions in excess of 98 percent can be achieved. According to the commenter, catalytic oxidation is a cost-effective control option which has been used for many years in diverse applications and the commenter believes that significant further VOC reductions can be cost-effectively achieved by using the technology to also control the emissions from existing cupolas. The commenter stated that catalytic incineration minimizes the temperature required for the destruction of VOCs and consequently, minimizes the production of NO_x and sulfur oxide (SO_x) emissions from the combustion of sulfur bearing fuels. Another commenter stated that thermal oxidizers or equivalent controls can easily provide the proposed 80 percent reduction in curing oven formaldehyde emissions and suggested that the EPA mention the capabilities of regenerative thermal oxidizers to reduce fuel costs in the preamble to the final rule.

Response: Neither commenter provided costs or data indicating destruction efficiency of catalytic oxidizers or regenerative thermal oxidizers on a mineral wool cupola or curing oven. In addition, catalytic oxidizers and regenerative thermal oxidizers are not demonstrated in the mineral wool production industry. The proposed 80 percent reduction in curing oven formaldehyde emissions is based upon test data from a recuperative thermal incinerator representative of MACT for curing ovens in the mineral wool production industry. The EPA has not made any changes to the rule as a result of these comments.

Comment: One commenter recommended that the proposed PM

emission standard for existing cupolas be increased significantly from the proposed limit of 0.06 lb/ton of melt to 0.9 lb/ton to ensure that cupolas equipped with a fabric filter (also known as a baghouse) can comply with the standard. The commenter believes that emissions tests upon which the EPA based the proposed PM standard involved invalid tests that resulted in unrepresentative PM emission levels. According to the commenter, the baghouse had defects that resulted in the improper influx of air into the outlet stream, thereby diluting the observed PM emission level. The commenter stated that approximately 70-90 percent more air was emitted at the outlet than entered the intake and that this defect prevents the test results from being used to establish emission levels representative of a properly functioning baghouse. The commenter also noted that the baghouse differential pressures varied widely during the emissions tests, which could indicate a number of problems with the baghouse including air leaks or problems with bag cleaning.

Response: The commenter's request to increase the proposed PM emission standard to ensure that cupolas equipped with fabric filters can comply with the standard indicates a misunderstanding of the nature of section 112 of the Act, as well as the MACT determination process, which requires that emission standards for existing sources be set not less stringent than the level achieved by the average of the best performing five sources for categories or subcategories with fewer than 30 sources. This determination is made assuming that some sources will need to install new emission controls or improve performance of their existing controls to meet a standard that is not less stringent than the MACT floor.

Regarding the commenter's statement that baghouse defects resulted in improper influx of air into the outlet stream and dilution of the PM emission level, dilution air is of no significance given that the proposed PM emission standard is in pounds of PM per ton of melt. Emissions data from the baghouse-controlled cupola indicates a PM removal efficiency of about 99.8 percent, and therefore, casts doubt upon the commenter's assertion that the data are not representative of a properly functioning baghouse. In addition, EPA believes that if the commenter's statement about baghouse operational problems during the emissions testing upon which the proposed PM standard is based accurately assessed the situation, then the emission test results would be biased high and the emission standard would, therefore, be biased

high. This certainly does not support raising the limit to an even higher level. When provided the opportunity to review the emissions test report, the facility did not have any comments regarding baghouse defects resulting in the improper influx of air into the outlet stream and diluted PM emission levels. Furthermore, when the EPA discussed the proposed PM emission standard of 0.06 lb/ton with industry representatives and State and local environmental agency representatives prior to proposal, no concerns were expressed. In addition, the commenter provided no basis for a PM emission standard of 0.9 lb/ton of melt. Based on the above discussion, the EPA has not made any changes to the proposed PM emission standard as a result of these comments.

During a follow-up meeting with the commenter (see Docket Item IV-E-1), held at the commenter's request to provide an opportunity to present to the EPA clarification of the comments and issues of concern regarding the proposed emission standards, the commenter provided the EPA with additional PM emissions data from fabric filter-controlled cupolas. These data are from the Emission Factor Documentation for AP-42 Section 8.16, Mineral Wool Manufacturing. These PM data are from three fabric filter-controlled cupolas at the same facility as the fabric filter-controlled cupola upon which the EPA based its proposed PM emission standard. Because the parameters for these three fabric filters are the same as those parameters previously determined to be representative of the MACT floor for existing and new sources and because these cupolas are at the same facility as the cupola tested by the EPA and would therefore experience similar operating and maintenance practices, the EPA has decided that the PM data from these three fabric filter-controlled cupolas should be considered in development of the final rule. When data from these three additional fabric filter-controlled cupolas are included in the data base, PM data representative of the MACT floor for cupolas now consists of the following: 0.04 lb/ton, 0.05 lb/ton, 0.065 lb/ton, and 0.099 lb/ton. Based on these data, the EPA has determined that a PM emission limit of 0.10 lb/ton represents a level that can be achieved by all four cupolas controlled with well designed, operated, and maintained fabric filters, and is representative of the MACT floor in the final rule.

Comment: One commenter stated that emissions data from the second facility in the EPA test program indicate that PM emissions from a cupola also

controlled with a baghouse averaged 0.6 lb/ton of melt, an order of magnitude higher than the proposed PM standard of 0.06 lb/ton. Thus, emissions from this facility would not meet the EPA's proposed PM emission standard, even though the facility is equipped with the control technology that represents the MACT floor. The commenter acknowledged that the PM emissions data from this facility includes emissions from both the cupola and fiber collection process but stated that the facility is nevertheless required to meet the emission limit set by the EPA. The commenter further stated that at least one other mineral wool company vents the fiber collection process as well as the cupola through a baghouse and it would be infeasible for this facility to meet the proposed PM standard. Further, it would be very expensive and counter-productive with respect to emission levels to force the facility to rearrange its baghouse operation to exclude the fiber collection process air. Because it is possible that the collection chamber may require additional PM controls in the future as a result, for example, of the EPA's recently proposed PM_{2.5} ambient standard, an additional reason to set the cupola PM emission standard at a higher level is therefore to permit the facility to meet the proposed PM emission standard with its current configuration, and to provide other companies additional flexibility to reduce PM emissions in the future.

Response: The EPA cannot foresee or accommodate all configurations of processes ducted to a common control device. Section 63.7 of the general provisions in subpart A of 40 CFR part 63 allows the use of alternative test methods and procedures based on review and approval by the EPA of relevant supporting information. The supporting data and information are submitted as part of the site specific test plan and are evaluated for approval by the EPA on a case-by-case basis. Because all facilities have the opportunity to request alternative methods and procedures for testing and demonstrating compliance with the cupola emission standards, the EPA again believes the proposed PM emission standard should not be raised to consider emissions not regulated by the MACT standards, and has therefore, not made any changes to the rule as a result of these comments.

Comment: One commenter stated that other mineral wool manufacturing companies indicated that a 0.06 lb/ton PM standard would not be feasible with their existing installed baghouse controls. Earlier data collected by the EPA as part of a screening study not

associated with the MACT standards development process found controlled particulate emissions from industry tests of six mineral wool cupolas equipped with baghouses ranged from 0.0044 to 0.70 lb/ton, while the average controlled emission level was 0.42 lb/ton. The commenter further stated that because most if not all mineral wool facilities will be unable to meet the proposed 0.06 lb/ton of melt PM standard on a consistent basis, the proposed standard is inconsistent with the intended objective of basing the standard on the existing baghouse technology installed by many facilities that represent the MACT floor.

Response: The EPA reviewed the 1980 document "Source Category Survey: Mineral Wool Manufacturing Industry" which contains the earlier data referred to by the commenter. Upon review, it was noted that only one facility with a cupola controlled by a baghouse as referenced in the 1980 report is still operational and it is not apparent from the study what the PM emissions associated with the cupola at this facility were. It is apparent, however, from an information collection request response submitted by this facility to the EPA in 1993, that new baghouses were installed in 1986 and 1987 for each of their two operating cupolas. Thus, the test data supplied by this facility for the 1980 study is not relevant. The commenter did not provide any data on baghouse design, maintenance, or operation characteristics to show that the facilities tabulated in the 1980 study were representative of MACT.

The commenter's statement that the proposed standard is inconsistent with the intended objective of basing the standard on the existing baghouse technology installed by many facilities that represent the MACT floor mischaracterizes the intent of the EPA and of section 112 of the Act. As previously stated, the statute requires the level of control to be not less stringent than the average level achieved by the best performing five sources, rather than be based on what all facilities can achieve with their current control and maintenance practices. The Act, through requiring all sources to meet a standard that is not less stringent than the MACT floor, assumes that existing controls may need to be replaced or upgraded at some sources. In many cases, bags within the fabric filter may need to be replaced and a more rigorous operation and maintenance plan may be necessary to meet the MACT. Accordingly, the EPA has decided that no changes in the final rule are necessary as a result of these comments.

Comment: One commenter recommended that the proposed formaldehyde emission standard for existing curing ovens be increased significantly from 0.06 pounds of formaldehyde per ton of melt (lb/ton) to 0.4 lb/ton because the commenter has concerns that the proposed standard may not be consistently achieved by an incinerator on the curing oven. The commenter stated that for example, the EPA's data from one tested facility (Facility B) showed that formaldehyde emissions from a curing oven equipped with an incinerator were 0.4 lb/ton, which is almost an order of magnitude above the proposed formaldehyde standard. The commenter acknowledged that the EPA's background documentation explains that only a portion of Facility B's curing oven exhaust passes through the high temperature incinerator but nevertheless, the input formaldehyde concentration into Facility B's curing oven incinerator was still over six times higher (1.3 lb/ton) than the low measured formaldehyde input at the facility upon which the proposed emission standard is based (0.2 lb/ton) (Facility A). The commenter stated that because the Facility A input level was abnormally low, the low output after incineration may also not be representative of other curing ovens. The commenter further stated that assuming Facility B's curing oven incinerator is the least efficient of the three curing oven incinerators existing in the industry, Facility B would be the median of the 5 curing ovens remaining in the industry. Thus, the commenter concluded that the MACT floor should be set at the emission limit corresponding to Facility B's curing oven incinerator.

Response: While the commenter characterizes the input formaldehyde concentration into Facility A's curing oven incinerator as strikingly low relative to the input formaldehyde concentration into Facility B's curing oven incinerator, the commenter did not submit data to indicate that the emissions measured for Facility A's curing oven incinerator are in error. The EPA recognized the potential variability in input formaldehyde, and for this reason proposed an alternative emission standard, also based on Facility A, requiring reduction of uncontrolled formaldehyde emissions by at least 80 percent. Regarding the commenter's concern that the proposed standards may not be consistently achieved by an incinerator, another commenter indicated that thermal oxidizers or equivalent controls can easily provide

the proposed 80 percent reduction in curing oven formaldehyde emissions. Furthermore, in the preamble to the proposed national emission standards for hazardous air pollutants for wool fiberglass manufacturing (62 FR 15228), the EPA stated that emission test measurements demonstrate that a thermal incinerator installed at these facilities is at least 99 percent effective in the removal of formaldehyde and phenol from curing ovens. Additionally, under the relevant emission standard for Facility B, 80 percent removal would translate into a limit of 0.26 lb/ton of melt, not 0.4 lb/ton of melt as proposed by the commenter.

Originally, Facility A's curing oven incinerator was selected as being representative of the MACT floor for existing sources and Facility B's curing oven incinerator was selected as being representative of MACT for new sources. These determinations were based on incinerator operating temperatures and gas residence times. After emissions testing was completed, the EPA decided to discount the data from Facility B because the curing oven incinerator was not operating properly as evidenced by a low formaldehyde removal efficiency of about 69 percent. Also, discussions with Facility B personnel revealed that gas flows within the curing oven were not within design parameters during the emissions test. Based on the above information, the EPA determined that Facility A's curing oven incinerator represented MACT for existing and new sources. Accordingly, other facilities with curing ovens, including Facility B, will be required to install new incinerators, or replace or modify their existing incinerators, as necessary, to meet the curing oven formaldehyde emission standards. After consideration of these comments, the EPA has decided to leave the formaldehyde emissions standards at 0.06 lb/ton of melt and 80 percent reduction of uncontrolled formaldehyde as in the proposed rule.

Comment: One commenter recommended that the EPA include an emission limit for COS of 0.05 pounds of COS per ton of melt (lb/ton) as an alternative to proposed emission standards for new cupolas of 0.10 pounds of CO per ton of melt (lb/ton) or 99 percent CO removal. The commenter stated that this alternative emission limit would give new sources in the future the flexibility to explore alternative methods to reduce COS through process modifications or other approaches. The commenter further stated that while they are not aware of any feasible process modifications that can significantly reduce COS at this

time, it is possible that alternative designs or processes that reduce COS emissions may be developed in the future that could be feasible for a new plant. The commenter believes that because the relationship between CO and COS involves some fluctuation and uncertainty, a direct COS alternative would be helpful to encourage exploration of such alternative means of compliance in any future new mineral wool plants.

Response: During development of the cupola emission standards, the EPA considered including an emission standard for COS for plants that choose to use process modifications, rather than thermal incineration, as a means of reducing COS emissions from new cupolas. When the EPA discussed this option with industry representatives, they considered this approach and strongly indicated, as the commenter does, that there are no feasible process modifications capable of reducing COS emissions to the level contemplated for a standard. In addition, the commenter provided no basis for a COS emission standard of 0.05 lb/ton of melt. Accordingly, the EPA has not made any changes to the rule as a result of this comment.

D. Monitoring

Comment: One commenter expressed concern that the monitoring equipment for baghouses required to meet the proposed PM standard is overly sensitive, would be unduly costly, and would trigger false alarms. The commenter recommended revising the bag leak detection system specifications from 1 milligram per cubic meter (mg/m³) to 10 mg/m³ in order to be consistent with other MACT standards, such as the secondary lead standard where the minimum detection capability of the bag leak detection system was revised from 1 to 10 mg/m³.

Response: After consideration of this comment, the EPA has decided to modify the required minimum detection capability for bag leak detection systems to 10 mg/m³ (0.0044 gr/ft³). This change does not alter the intended function of the bag leak detector, which is to detect broken bags or other defects in baghouses, and is consistent with the specification for sensitivity in other EPA standards.

Comment: One commenter suggested that the EPA allow the use of opacity monitors for bag leak detection because these monitors comply with Performance Specification 1 of Appendix B of 40 CFR part 60, and have been used for many years on electric arc furnace baghouses where the opacity limit is set at 3 percent.

Response: The commenter did not submit data to prove that opacity monitors are as sensitive as bag leak detection systems or can meet their minimum detection capability specification. The facts that opacity monitors comply with Performance Specification 1 of Appendix B of 40 CFR part 60 and that opacity monitors have been used on electric arc furnace baghouses are no indication that opacity monitors are suitable for use on cupola baghouses. The EPA continues to believe that a bag leak detection system will provide the best indication of cupola baghouse performance at the low PM levels characteristic of these sources. The EPA has not made any changes to the rule as a result of this comment.

E. Recordkeeping and Reporting

Comment: One commenter stated that although they agree with the need for startup, shutdown, and malfunction plans, the proposed rule does not clearly provide that emissions may temporarily exceed the emission limits during startup, shutdown, or malfunctions. The commenter recommended that the proposed rule should therefore specify that emission limits may be temporarily exceeded during startup, shutdown, or malfunctions without violating the standard provided the company is taking appropriate actions consistent with its startup, shutdown, and malfunction plan. The commenter further recommended that the EPA should provide some flexibility in the rule for unexpected developments and upsets that are difficult to predict and control in the mineral wool industry. The commenter stated that there is no practical or legal reason why a single perceived deviation from a defined operating range should be deemed to be out of compliance, but rather, some margin of error should be permitted in the form of one or two allowable excursions per month.

Response: Section 63.6(f) of the general provisions in subpart A of 40 CFR part 63 provides that nonopacity emission standards shall apply at all times except during periods of startup, shutdown, and malfunction. The situation the commenter describes regarding unexpected developments and upsets are covered under the definition of a malfunction in the general provisions provided the failures are not caused in part by poor maintenance or careless operation. The EPA, therefore, does not believe that an additional provision in the form of one or two allowable excursions per month is warranted. The EPA has specified in the

final rule, however, that the owner or operator must comply with the standards at all times except during periods of startup, shutdown, or malfunction.

VII. Administrative Requirements

A. Docket

The docket is intended to be an organized file of the administrative records compiled by the EPA. The docket is a dynamic file because information is added throughout the rulemaking development. The docketing system is intended to allow members of the public and industries involved to readily identify and locate documents so that they can effectively participate in the rulemaking process. Along with the proposed and promulgated standards and their preambles, the docket will contain the record in case of judicial review. (See section 307(d)(7)(A) of the Act.) The location of the docket, which includes all public comments received on the proposed rule, is in the **ADDRESSES** section at the beginning of this preamble.

B. Executive Order 12866—Regulatory Planning and 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 review by the Office of Management and Budget (OMB) and the requirements of the Executive Order. The Executive Order defines "significant regulatory action" as one that is likely to result in a rule that may:

- (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;
- (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, 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.

It has been determined that this action is not a "significant regulatory action" under the terms of the Executive Order and is therefore not subject to OMB review.

C. Executive Order 12875—Enhancing the Intergovernmental Partnership

Under Executive Order 12875, the 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 the EPA consults with those governments. If the EPA complies by consulting, Executive Order 12875 requires the EPA to provide to the OMB a description of the extent of the 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 the 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 does not create a mandate on State, local or tribal governments. The rule does not impose any enforceable duties on State, local or tribal governments, because they do not own or operate any sources that would be subject to this rule. Accordingly, the requirements of section 1(a) of Executive Order 12875 do not apply to this rule.

D. Executive Order 13084—Consultation and Coordination With Indian Tribal Governments

Under Executive Order 13084, the 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 the EPA consults with those governments. If the EPA complies by consulting, Executive Order 13084 requires the EPA to provide to the OMB, in a separately identified section of the preamble to the rule, a description of the extent of the 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 the 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. No affected facilities are owned or operated by Indian tribal governments. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

E. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Pub. L. 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, the EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires the EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows the EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before the EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The 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. The EPA projects that annual economic impacts would be far less than \$100 million. Thus, today's rule is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, the EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments because it does not impose any enforceable duties on small governments; such governments own or operate no sources subject to the rule and therefore would not be required to purchase control systems to meet the requirements of the rule.

F. Regulatory Flexibility

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions. The EPA has determined that seven of the ten firms that potentially would be subject to the final rule are small firms. The EPA has met with all of these small firms and their trade association. They have been fully involved in this rulemaking and their concerns and comments have been considered in the development of this rule. Also, a representative of the EPA's Office of the Small Business Ombudsman participated in the development of these standards as a work group member to ensure that the requirements of the standards were examined for potential adverse economic impacts and those impacts were mitigated to the extent feasible while still achieving the rule's environmental objectives.

Five of the seven small firms would incur emission control costs that are less than 0.1 percent of sales; one firm would incur control costs estimated to be 2.4 percent of the firm's sales; and another firm would incur control costs believed to be in excess of 3 percent. (See Docket Item II-A-16 for a discussion of this analysis.) Thus, this rule affects only a small number of small businesses. Further, most of the small businesses impacted by this rule will experience minimal increases in costs. Only two small businesses are projected to incur costs exceeding 0.1 percent of sales.

G. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The 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 June 1, 1999.

H. Paperwork Reduction Act

The OMB has approved the information collection requirements contained in this rule under the provisions of PRA, 44 U.S.C. 3501 *et seq.* and has assigned OMB control number 2060-0362.

The information collection requirements include the notification, recordkeeping, and reporting requirements of the NESHAP general provisions, authorized under section 114 of the Act, which are mandatory for all owners and operators subject to national emission standards. All information submitted to the EPA for which a claim of confidentiality is made is safeguarded according to EPA policies in 40 CFR part 2, subpart B. This rule does not require any notifications or reports beyond those required by the general provisions. Subpart DDD does require additional records of specific information needed to determine compliance with the rule. These include records of: (1) Cupola production (melt) rate; (2) all bag leak detection system alarms, the date and time of the alarm, when corrective actions were initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected; (3) the free-formaldehyde content of each resin lot and the binder formulation, including formaldehyde content, of each binder batch used in the manufacture of bonded products; and (4) incinerator operating temperature, including all periods when the average temperature in any three-hour block period fell below the average temperature established during the performance test, and the results of the annual inspection, including any problems discovered during the inspection, the date and time of the

problem, when corrective actions were initiated, the cause of the problem, an explanation of the corrective actions taken, and when the cause of the problem was corrected. Each of these information requirements is needed to determine compliance with the standards.

The annual public reporting and recordkeeping burden to industry for this collection is estimated to be 6,107 labor hours per year at an annual cost of \$196,206. This estimate includes a one-time performance test and report (with repeat tests where needed); one-time preparation of a startup, shutdown, and malfunction plan with semiannual reports of any event in which the procedures were not followed; preparation of an operations, maintenance, and monitoring plan; semiannual excess emissions reports; notifications; and recordkeeping. The total capital cost associated with the monitoring requirements is estimated to be \$309,400. This estimate includes the capital and startup costs associated with installation of a bag leak detection system for each affected cupola. The annualized cost of that capital is \$44,059 per year, and the operation and maintenance of the monitoring equipment is estimated to be \$17,000 per year.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15. In compliance with the Paperwork Reduction Act (PRA), the EPA is amending the table in 40 CFR part 9 of currently approved information collection request (ICR) control numbers issued by the OMB for various regulations.

This amendment updates the table to accurately display those information requirements contained in this final rule. The EPA will continue to present OMB control numbers in a consolidated table format to be codified in 40 CFR part 9 of the EPA's regulations, and in each Code of Federal Regulations volume containing EPA regulations. The table lists the section numbers with reporting and recordkeeping requirements, and the current OMB control numbers. This display of the OMB control number and its subsequent codification in the CFR satisfy the requirements of the PRA (44 U.S.C. 3501 *et seq.*) and OMB's implementing regulations at 5 CFR part 1320.

The ICR was previously subject to public notice and comment prior to OMB approval. As a result, the EPA finds there is "good cause" under section 553(b)(3)(B) of the Administrative Procedures Act (5 U.S.C. 553(b)(3)(B)) to amend this table without prior notice and comment. Due to the technical nature of the table, further notice and comment would be unnecessary. For the same reasons, the EPA also finds that there is good cause under 5 U.S.C. 553(d)(3).

I. Pollution Prevention Act

The Pollution Prevention Act of 1990 states that pollution should be prevented or reduced at the source whenever feasible. During the development of these standards, the EPA explored opportunities to eliminate or reduce emissions through the application of new processes or work practices. By reducing or eliminating the formaldehyde and phenol in binder formulations, HAPs from the curing process would be reduced or eliminated without the use of air pollution control equipment. Alternative binders have been investigated by various mineral wool producers. Acceptable alternatives have been difficult to identify due to the higher costs of the potential alternative binders; the problems associated with requalification of altered products to meet required product specifications; the production process changes necessitated by the use of modified binders; and the concerns regarding potential toxicity of new binder ingredients. Thus, at this time an acceptable alternative binder has not been commercially demonstrated.

J. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA), Pub. L. 104-113 (March 7, 1996), directs the EPA to use voluntary consensus standards in

regulatory and procurement activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (such as materials specifications, test methods, sampling procedures, and business practices) which are developed or adopted by voluntary consensus standard bodies. Where available and potentially applicable voluntary consensus standards are not used by EPA, the Act requires the Agency to provide Congress, through the OMB, an explanation for not using such standards. This section summarizes the EPA's response to the requirements of the NTTAA for the analytical test methods promulgated as part of this final rule.

Consistent with the NTTAA, the EPA conducted searches to identify voluntary consensus standards for the EPA's emissions sampling and analysis reference methods and industry recommended materials analysis procedures cited in this rule. Candidate voluntary consensus standards for materials analysis were identified for free-formaldehyde content. Consensus comments provided by industry experts were that the candidate standards did not meet industry materials analysis requirements. Therefore, EPA has determined these voluntary consensus standard are impractical for the mineral wool production NESHAP. The EPA, in consultation with the North American Insulation Manufacturers Association (NAIMA), has formulated an industry-specific materials analysis, consensus standard for free-formaldehyde content which is promulgated in this rule.

The EPA search to identify voluntary consensus standards for the EPA's emissions sampling and analysis reference methods cited in this rule identified 17 voluntary consensus standards that appeared to have possible use in lieu of EPA standard reference methods. However, after reviewing available standards, EPA determined that 12 of the candidate consensus standards identified for measuring emissions of the HAPs or surrogates subject to emission standards in the rule would not be practical due to lack of equivalency, documentation, validation data and other important technical and policy considerations. Five of the remaining candidate consensus standards are new standards under development that EPA plans to follow, review and consider adopting at a later date. This rule requires standard EPA emission test methods known to the industry and States. Approved alternative methods also may be used with prior EPA approval.

K. Executive Order 13045—Protection of Children From Environmental Health Risks and Safety Risks

Executive Order 13045 (62 FR 19885, April 23, 1997) applies to any rule that (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns the environmental health or safety risk that the EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the EPA must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the EPA.

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Order has the potential to influence the regulation. This final rule is not subject to Executive Order 13045 because it is not an economically significant regulatory action as defined by Executive Order 12866, and it is based on technology performance and not on health or safety risks.

List of Subjects

40 CFR Part 9

Environmental protection, Recordkeeping and reporting requirements.

40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Mineral wool production, Recordkeeping and reporting requirements.

Dated: May 13, 1999.

Carol M. Browner,
Administrator.

For the reasons set out in the preamble, parts 9 and 63 of title 40, chapter I of the Code of Federal Regulations are amended as follows:

PART 9—OMB APPROVALS UNDER THE PAPERWORK REDUCTION ACT

1. The authority citation for part 9 continues to read as follows:

Authority: 7 U.S.C. 135 *et seq.*, 136-136y; 15 U.S.C. 2001, 2003, 2005, 2006, 2601-2671; 21 U.S.C. 331j, 346a, 348; 31 U.S.C. 9701; 33 U.S.C. 1251 *et seq.*, 1311, 1313d, 1314, 1318, 1321, 1326, 1330, 1342, 1344, 1345(d) and (e), 1361; E.O. 11735, 38 FR 21243, 3 CFR, 1971-1975 Comp. p. 973; 42 U.S.C. 241, 242b, 243, 246, 300f, 300g, 300g-1, 300g-2, 300g-3, 300g-4, 300g-5, 300g-6, 300j-1, 300j-2, 300j-3, 300j-4, 300j-9, 1857 *et seq.*,

6901-6992k, 7401-7671q, 7542, 9601-9657, 11023, 11048.

2. Section 9.1 is amended by adding a new entry in numerical order to the table under the indicated heading to read as follows:

§ 9.1 OMB approvals under the Paperwork Reduction Act.

* * * * *

40 CFR citation	OMB control No.
* * * * *	* * * * *
National Emission Standards for Hazardous Air Pollutants for Source Categories³	
* * * * *	* * * * *
63.1178-63.1194	2060-0362
* * * * *	* * * * *

³The ICRs referenced in this section of the table encompass the applicable general provisions contained in 40 CFR part 63, subpart A, which are not independent information collection requirements.

* * * * *

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

3. The authority citation for part 63 continues to read as follows:

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

4. Part 63 is amended by adding subpart DDD to read as follows:

Subpart DDD—National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production

Sec.

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63.1197-63.1199 [Reserved]

Table 1 to Subpart DDD of Part 63—Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart DDD of Part 63.

Appendix A to Subpart DDD of Part 63—Free Formaldehyde Analysis of Insulation Resins by the Hydroxylamine Hydrochloride Method.

Subpart DDD—National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production

§ 63.1175 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants emitted from existing, new, and reconstructed cupolas and curing ovens at facilities that produce mineral wool.

§ 63.1176 Where can I find definitions of key words used in this subpart?

The definitions of key words used in this subpart are in the Clean Air Act (Act), in § 63.2 of the general provisions in subpart A of this part, and in § 63.1196 of this subpart.

§ 63.1177 Am I subject to this subpart?

You are subject to this subpart if you own or operate an existing, new, or reconstructed mineral wool production facility that is located at a plant site that is a major source of hazardous air pollutant (HAP) emissions, meaning the plant emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAPs at a rate of 22.68 megagrams (25 tons) or more per year.

Standards

§ 63.1178 For cupolas, what standards must I meet?

(a) You must control emissions from each cupola as follows:

(1) Limit emissions of particulate matter (PM) from each existing, new, or reconstructed cupola to 0.05 kilograms (kg) of PM per megagram (MG) (0.10 pound [lb] of PM per ton) of melt or less.

(2) Limit emissions of carbon monoxide (CO) from each new or reconstructed cupola to either of the following:

(i) 0.05 kg of CO per MG (0.10 lb of CO per ton) of melt or less.

(ii) A reduction of uncontrolled CO emissions by at least 99 percent.

(b) You must meet the following operating limits for each cupola:

(1) Begin within one hour after the alarm on a bag leak detection system sounds, and complete in a timely manner, corrective actions as specified in your operations, maintenance, and monitoring plan required by § 63.1187 of this subpart.

(2) When the alarm on a bag leak detection system sounds for more than five percent of the total operating time in a six-month reporting period, develop and implement a written quality improvement plan (QIP) consistent with the compliance assurance monitoring requirements of § 64.8(b)-(d) of 40 CFR part 64.

(3) Additionally, for each new or reconstructed cupola, maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.

§ 63.1179 For curing ovens, what standards must I meet?

(a) You must control emissions from each existing, new, or reconstructed curing oven by limiting emissions of formaldehyde to either of the following:

(1) 0.03 kg of formaldehyde per MG (0.06 lb of formaldehyde per ton) of melt or less.

(2) A reduction of uncontrolled formaldehyde emissions by at least 80 percent.

(b) You must meet the following operating limits for each curing oven:

(1) Maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges of the resin and binder used during the performance test.

(2) Maintain the operating temperature of each incinerator so that

the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.

§ 63.1180 When must I meet these standards?

(a) *Existing cupolas and curing ovens.* You must install any control devices and monitoring equipment necessary to meet the standards in this subpart, complete performance testing, and demonstrate compliance with all requirements of this subpart no later than the following:

- (1) June 2, 2002; or
- (2) June 3, 2003 if you apply for and receive a one-year extension under section 112(i)(3)(B) of the Act.

(b) *New and reconstructed cupolas and curing ovens.* You must install any control devices or monitoring equipment necessary to meet the standards in this subpart, complete performance testing, and demonstrate compliance with all requirements of this subpart by the dates in § 63.7 of the general provisions in subpart A of this part.

(c) You must comply with the standards in §§ 63.1178 and 63.1179 of this subpart on and after the dates in paragraphs (a) and (b) of this section.

(d) You must comply with these standards at all times except during periods of startup, shutdown, or malfunction.

Compliance With Standards

§ 63.1181 How do I comply with the particulate matter standards for existing, new, and reconstructed cupolas?

To comply with the PM standards, you must meet all of the following:

- (a) Install, adjust, maintain, and continuously operate a bag leak detection system for each fabric filter.
- (b) Do a performance test as specified in § 63.1188 of this subpart and show compliance with the PM emission limits while the bag leak detection system is installed, operational, and properly adjusted.
- (c) Begin corrective actions specified in your operations, maintenance, and monitoring plan required by § 63.1187 of this subpart within one hour after the alarm on a bag leak detection system sounds. Complete the corrective actions in a timely manner.
- (d) Develop and implement a written QIP consistent with compliance assurance monitoring requirements of 40 CFR 64.8(b) through (d) when the alarm on a bag leak detection system sounds for more than five percent of the total operating time in a six-month reporting period.

§ 63.1182 How do I comply with the carbon monoxide standards for new and reconstructed cupolas?

To comply with the CO standards, you must meet all of the following:

- (a) Install, calibrate, maintain, and operate a device that continuously measures the operating temperature in the firebox of each thermal incinerator.
- (b) Do a performance test as specified in § 63.1188 of this subpart and show compliance with the CO emission limits while the device for measuring incinerator operating temperature is installed, operational, and properly calibrated. Establish the average operating temperature as specified in § 63.1185(a) of this subpart.
- (c) Following the performance test, measure and record the average operating temperature of the incinerator as specified in § 63.1185(b) of this subpart.
- (d) Maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.
- (e) Operate and maintain the incinerator as specified in your operations, maintenance, and monitoring plan required by § 63.1187 of this subpart.

§ 63.1183 How do I comply with the formaldehyde standards for existing, new, and reconstructed curing ovens?

To comply with the formaldehyde standards, you must meet all of the following:

- (a) Install, calibrate, maintain, and operate a device that continuously measures the operating temperature in the firebox of each thermal incinerator.
- (b) Do a performance test as specified in § 63.1188 of this subpart while manufacturing the product that requires a binder formulation made with the resin containing the highest free-formaldehyde content specification range. Show compliance with the formaldehyde emission limits while the device for measuring incinerator operating temperature is installed, operational, and properly calibrated. Establish the average operating temperature as specified in § 63.1185(a) of this subpart.
- (c) During the performance test that uses the binder formulation made with the resin containing the highest free-formaldehyde content specification range, record the free-formaldehyde content specification range of the resin used, and the formulation of the binder used, including the formaldehyde content and binder specification.
- (d) Following the performance test, monitor and record the free-

formaldehyde content of each resin lot and the formulation of each batch of binder used, including the formaldehyde content.

(e) Maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges established during the performance test.

(f) Following the performance test, measure and record the average operating temperature of the incinerator as specified in § 63.1185(b) of this subpart.

(g) Maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.

(h) Operate and maintain the incinerator as specified in your operations, maintenance, and monitoring plan required by § 63.1187 of this subpart.

(i) With prior approval from the Administrator, you may do short-term experimental production runs using resin where the free-formaldehyde content, or binder formulations where the formaldehyde content, is higher than the specification ranges of the resin and binder used during previous performance tests, or using experimental pollution prevention process modifications without first doing additional performance tests. Notification of intent to perform a short-term experimental production run must include the following information:

- (1) The purpose of the experimental run.
- (2) The affected production process.
- (3) How the resin free-formaldehyde content or binder formulation will deviate from previously approved levels or what the experimental pollution prevention process modifications are.
- (4) The duration of the experimental run.
- (5) The date and time of the experimental run.
- (6) A description of any emissions testing to be done during the experimental run.

Additional Monitoring Information

§ 63.1184 What do I need to know about the design specifications, installation, and operation of a bag leak detection system?

A bag leak detection system must meet the following requirements:

- (a) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(b) The sensor on the bag leak detection system must provide output of relative PM emissions.

(c) The bag leak detection system must have an alarm that will sound automatically when it detects an increase in relative PM emissions greater than a preset level.

(d) The alarm must be located in an area where appropriate plant personnel will be able to hear it.

(e) For a positive-pressure fabric filter, each compartment or cell must have a bag leak detector. For a negative-pressure or induced-air fabric filter, the bag leak detector must be installed downstream of the fabric filter. If multiple bag leak detectors are required (for either type of fabric filter), detectors may share the system instrumentation and alarm.

(f) Each triboelectric bag leak detection system must be installed, operated, adjusted, and maintained so that it follows EPA's "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). Other bag leak detection systems must be installed, operated, adjusted, and maintained so that they follow the manufacturer's written specifications and recommendations.

(g) At a minimum, initial adjustment of the system must consist of establishing the baseline output in both of the following ways:

(1) Adjust the range and the averaging period of the device.

(2) Establish the alarm set points and the alarm delay time.

(h) After initial adjustment, the range, averaging period, alarm set points, or alarm delay time may not be adjusted except as specified in the operations, maintenance, and monitoring plan required by § 63.1187 of this subpart. In no event may the range be increased by more than 100 percent or decreased by more than 50 percent over a 365 day period unless a responsible official as defined in § 63.2 of the general provisions in subpart A of this part certifies in writing to the Administrator that the fabric filter has been inspected and found to be in good operating condition.

§ 63.1185 How do I establish the average operating temperature of an incinerator?

(a) During the performance test, you must establish the average operating temperature of an incinerator as follows:

(1) Continuously measure the operating temperature of the incinerator.

(2) Determine and record the average temperatures in consecutive 15-minute blocks.

(3) Determine and record the arithmetic average of the recorded

average temperatures measured in consecutive 15-minute blocks for each of the one-hour performance test runs.

(4) Determine and record the arithmetic average of the three one-hour average temperatures during the performance test runs. The average of the three one-hour performance test runs establishes the temperature level to use to monitor compliance.

(b) To comply with the requirements for maintaining the operating temperature of an incinerator after the performance test, you must measure and record the average operating temperature of the incinerator as required by §§ 63.1182 and 63.1183 of this subpart. This average operating temperature of the incinerator is based on the arithmetic average of the one-hour average temperatures for each consecutive three-hour period and is determined in the same manner described in paragraphs (a)(1) through (a)(4) of this section.

§ 63.1186 How may I change the compliance levels of monitored parameters?

You may change control device and process operating parameter levels established during performance tests and used to monitor compliance if you do the following:

(a) You must notify the Administrator of your desire to expand the range of a control device or process operating parameter level.

(b) Upon approval from the Administrator, you must conduct additional performance tests at the proposed new control device or process operating parameter levels. Before operating at these levels, the performance test results must verify that, at the new levels, you comply with the emission limits in §§ 63.1178 and 63.1179 of this subpart.

§ 63.1187 What do I need to know about operations, maintenance, and monitoring plans?

(a) An operations, maintenance, and monitoring plan must be submitted to the Administrator for review and approval as part of your application for the title V permit.

(b) The operations, maintenance, and monitoring plan must include the following:

(1) Process and control device parameters you will monitor to determine compliance, along with established operating levels or ranges for each process or control device.

(2) A monitoring schedule.

(3) Procedures for properly operating and maintaining control devices used to meet the standards in §§ 63.1178 and

63.1179 of this subpart. These procedures must include an inspection of each incinerator at least once per year. At a minimum, you must do the following as part of an incinerator inspection:

(i) Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation. Clean pilot sensor if necessary.

(ii) Ensure proper adjustment of combustion air, and adjust if necessary.

(iii) Inspect, when possible, all internal structures (such as baffles) to ensure structural integrity per the design specifications.

(iv) Inspect dampers, fans, and blowers for proper operation.

(v) Inspect motors for proper operation.

(vi) Inspect, when possible, combustion chamber refractory lining. Clean, and repair or replace lining if necessary.

(vii) Inspect incinerator shell for proper sealing, corrosion, and/or hot spots.

(viii) For the burn cycle that follows the inspection, document that the incinerator is operating properly and make any necessary adjustments.

(ix) Generally observe whether the equipment is maintained in good operating condition.

(x) Complete all necessary repairs as soon as practicable.

(4) Procedures for keeping records to document compliance.

(5) Corrective actions you will take if process or control device parameters vary from the levels established during performance testing. For bag leak detection system alarms, example corrective actions that may be included in the operations, maintenance, and monitoring plan include:

(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media, or otherwise repairing the control device.

(iv) Sealing off a defective fabric filter compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions.

Performance Tests and Methods

§ 63.1188 What performance test requirements must I meet?

You must meet the following performance test requirements:

(a) All monitoring systems and equipment must be installed, operational, and properly calibrated before the performance tests.

(b) Do a performance test, consisting of three test runs, for each cupola and curing oven subject to this subpart at the maximum production rate to demonstrate compliance with each of the applicable emission limits in §§ 63.1178 and 63.1179 of this subpart.

(c) Measure emissions of PM from each existing cupola.

(d) Measure emissions of PM and CO from each new or reconstructed cupola.

(e) Measure emissions of formaldehyde from each existing, new or reconstructed curing oven.

(f) Measure emissions at the outlet of the control device if complying with a numerical emission limit for PM, CO, or formaldehyde, or at the inlet and outlet of the control device if complying with a percent reduction emission limit for CO or formaldehyde.

(g) To determine the average melt rate, measure and record the amount of raw materials, excluding coke, charged into and melted in each cupola during each performance test run. Determine and record the average hourly melt rate for each performance test run. Determine and record the arithmetic average of the average hourly melt rates associated with the three performance test runs. The average hourly melt rate of the three performance test runs is used to determine compliance with the applicable emission limits.

(h) Compute and record the average emissions of the three performance test runs and use the equations in § 63.1190 of this subpart to determine compliance with the applicable emission limits.

(i) Comply with control device and process operating parameter monitoring requirements for performance testing as specified in this subpart.

§ 63.1189 What test methods do I use?

You must use the following test methods to determine compliance with the applicable emission limits:

(a) Method 1 in appendix A to part 60 of this chapter for the selection of the sampling port locations and number of sampling ports.

(b) Method 2 in appendix A to part 60 of this chapter for stack gas velocity and volumetric flow rate.

(c) Method 3 or 3A in appendix A to part 60 of this chapter for oxygen and carbon dioxide for diluent measurements needed to correct the concentration measurements to a standard basis.

(d) Method 4 in appendix A to part 60 of this chapter for moisture content of the stack gas.

(e) Method 5 in appendix A to part 60 of this chapter for the concentration of PM. Each PM test run must consist of a minimum run time of three hours and a minimum sample volume of 3.75 dscm (135 dscf).

(f) Method 10 in appendix A to part 60 of this chapter for the concentration of CO, using the continuous sampling option described in section 7.1.1 of the method. Each CO test run must consist of a minimum run time of one hour.

(g) Method 318 in appendix A to this part for the concentration of formaldehyde or CO.

(h) Method to determine the free-formaldehyde content of each resin lot in appendix A of this subpart.

§ 63.1190 How do I determine compliance?

(a) Using the results of the performance tests, you must use the following equation to determine compliance with the PM emission limit:

$$E = \frac{C \times O \times K_1}{P}$$

where:

E = Emission rate of PM, kg/Mg (lb/ton) of melt.

C = Concentration of PM, g/dscm (gr/dscf).

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr).

K₁ = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr).

P = Average melt rate, Mg/hr (ton/hr).

(b) Using the results of the performance tests, you must use the following equation to determine compliance with the CO and formaldehyde numerical emission limits:

$$E = \frac{C \times MW \times O \times K_1 \times K_2}{K_3 \times P \times 10^6}$$

where:

E = Emission rate of measured pollutant, kg/Mg (lb/ton) of melt.

C = Measured volume fraction of pollutant, ppm.

MW = Molecular weight of measured pollutant, g/g-mole:

CO = 28.01, Formaldehyde = 30.03.

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr).

K₁ = Conversion factor, 1 kg/1,000 g (1 lb/453.6 g).

K₂ = Conversion factor, 1,000 L/m³ (28.3 L/ft³).

K₃ = Conversion factor, 24.45 L/g-mole.

P = Average melt rate, Mg/hr (ton/hr).

(c) Using the results of the performance tests, you must use the following equation to determine compliance with the CO and formaldehyde percent reduction performance standards:

$$\%R = \frac{L_i - L_o}{L_i} \times 100$$

where:

%R = Percent reduction, or collection efficiency of the control device.

L_i = Inlet loading of pollutant, kg/Mg (lb/ton).

L_o = Outlet loading of pollutant, kg/Mg (lb/ton).

Notification, Recordkeeping, and Reporting

§ 63.1191 What notifications must I submit?

You must submit written notifications to the Administrator as required by § 63.9(b)-(h) of the general provisions in subpart A of this part. These notifications include, but are not limited to, the following:

(a) Notification that the following types of sources are subject to the standard:

(1) An area source that increases its emissions so that it becomes a major source.

(2) A source that has an initial startup before the effective date of the standard.

(3) A new or reconstructed source that has an initial startup after the effective date of the standard and doesn't require an application for approval of construction or reconstruction under § 63.5(d) of the general provisions in subpart A of this part.

(b) Notification of intention to construct a new major source or reconstruct a major source where the initial startup of the new or reconstructed source occurs after the effective date of the standard and an application for approval of construction or reconstruction under § 63.5(d) of the general provisions in subpart A of this part is required.

(c) Notification of special compliance obligations for a new source that is subject to special compliance requirements in § 63.6(b)(3) and (4) of the general provisions in subpart A of this part.

(d) Notification of a performance test at least 60 calendar days before the performance test is scheduled to begin.

(e) Notification of compliance status.

§ 63.1192 What recordkeeping requirements must I meet?

You must meet the following recordkeeping requirements:

(a) Maintain files of all information required by § 63.10(b) of the general provisions in subpart A of this part, including all notifications and reports.

(b) Maintain records of the following information also:

(1) Cupola production (melt) rate (Mg/hr (tons/hr) of melt).

(2) All bag leak detection system alarms. Include the date and time of the alarm, when corrective actions were initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.

(3) The free-formaldehyde content of each resin lot and the binder formulation, including formaldehyde content, of each binder batch used in the manufacture of bonded products.

(4) Incinerator operating temperature and results of incinerator inspections. For all periods when the average temperature in any three-hour block period fell below the average temperature established during the performance test, and all periods when the inspection identified incinerator components in need of repair or maintenance, include the date and time of the problem, when corrective actions were initiated, the cause of the problem, an explanation of the corrective actions taken, and when the cause of the problem was corrected.

(c) Retain each record for at least five years following the date of each occurrence, measurement, corrective action, maintenance, record, or report. The most recent two years of records must be retained at the facility. The remaining three years of records may be retained off site.

(d) Retain records on microfilm, on a computer, on computer disks, on magnetic tape disks, or on microfiche.

(e) Report the required information on paper or on a labeled computer disk using commonly available and compatible computer software.

§ 63.1193 What reports must I submit?

You must prepare and submit reports to the Administrator as required by this subpart and § 63.10 of the general provisions in subpart A of this part. These reports include, but are not limited to, the following:

(a) A performance test report, as required by § 63.10(d)(2) of the general provisions in subpart A of this part, that documents the process and control equipment operating parameters during the test period, the test methods and procedures, the analytical procedures, all calculations, and the results of the performance tests.

(b) A startup, shutdown, and malfunction plan, as described in § 63.6(e)(3) of the general provisions in subpart A of this part, that contains specific procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the

emission standards. In addition to the information required by § 63.6(e)(3), your plan must include the following:

(1) Procedures to determine and record what caused the malfunction and when it began and ended.

(2) Corrective actions you will take if a process or control device malfunctions, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

(3) An inspection and maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

(c) A report of each event as required by § 63.10(b) of the general provisions in subpart A of this part, including a report if an action taken during a startup, shutdown, or malfunction is inconsistent with the procedures in the plan as described in § 63.6(e)(3) of the general provisions in subpart A of this part.

(d) An operations, maintenance, and monitoring plan as specified in § 63.1187 of this subpart.

(e) A semiannual report as required by § 63.10(e)(3) of the general provisions in subpart A of this part if measured emissions exceed the applicable standard or a monitored parameter varies from the level established during performance testing. The report must contain the information specified in § 63.10(c) of the general provisions, as well as the relevant records required by § 63.1192(b) of this subpart.

(f) A semiannual report stating that no excess emissions or deviations of monitored parameters occurred during the reporting period as required by § 63.10(e)(3)(v) of the general provisions in subpart A of this part if no deviations have occurred.

Other Requirements and Information

§ 63.1194 Which general provisions apply?

The general provisions in subpart A of this part define requirements applicable to all owners and operators affected by NESHAP in part 63. See Table 1 of this subpart for general provisions that apply (or don't apply) to you as an owner or operator subject to the requirements of this subpart.

§ 63.1195 Who enforces this subpart?

If the Administrator has delegated authority to your State, then the State, along with the EPA, enforces this regulation. If the Administrator has not delegated authority to your State, then the EPA enforces this regulation.

§ 63.1196 What definitions should I be aware of?

Terms used in this subpart are defined in the Act, in § 63.2 of the general provisions in subpart A of this part, and in this section as follows:

Bag leak detection system means a monitoring device for a fabric filter that identifies an increase in particulate matter emissions resulting from a broken filter bag or other malfunction and sounds an alarm.

Bonded product means mineral wool to which a hazardous air pollutant-based binder (containing such hazardous air pollutants as phenol or formaldehyde) has been applied.

CO means, for the purposes of this subpart, emissions of carbon monoxide that serve as a surrogate for emissions of carbonyl sulfide, a compound included on the list of hazardous air pollutants in section 112 of the Act.

Cupola means a large, water-cooled metal vessel to which is charged a mixture of fuel, rock and/or slag, and additives. As the fuel is burned, the charged mixture is heated to a molten state for later processing to form mineral wool.

Curing oven means a chamber in which heat is used to thermoset a binder on the mineral wool fiber used to make bonded products.

Fabric filter means an air pollution control device used to capture particulate matter by filtering gas streams through fabric bags. It also is known as a baghouse.

Formaldehyde means, for the purposes of this subpart, emissions of formaldehyde that, in addition to being a HAP itself, serve as a surrogate for organic compounds included on the list of hazardous air pollutants in section 112 of the Act, including but not limited to phenol.

Hazardous air pollutant means any air pollutant listed in or pursuant to section 112(b) of the Act.

I means the owner or operator of a mineral wool production facility.

Incinerator means an enclosed air pollution control device that uses controlled flame combustion to convert combustible materials to noncombustible gases.

Melt means raw materials, excluding coke, that are charged into the cupola, heated to a molten state, and discharged to the fiber forming and collection process.

Melt rate means the mass of molten material discharged from a single cupola over a specified time period.

Mineral wool means a fibrous glassy substance made from natural rock (such as basalt), blast furnace slag or other slag, or a mixture of rock and slag. It

may be used as a thermal or acoustical insulation material or in the making of other products to provide structural strength, sound absorbency, fire resistance, or other required properties.

New source means any affected source the construction or reconstruction of which is commenced after May 8, 1997.
PM means, for the purposes of this subpart, emissions of particulate matter that serve as a surrogate for metals (in particulate or volatile form) on the list

of hazardous air pollutants in section 112 of the Act, including but not limited to: antimony, arsenic, beryllium, cadmium, chromium, lead, manganese, nickel, and selenium.

You means the owner or operator of a mineral wool production facility.

TABLE 1 TO SUBPART DDD OF PART 63—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART DDD OF PART 63

General provisions citation	Requirement	Applies to subpart DDD?	Explanation
63.1(a)(1)–(a)(4)	General Applicability	Yes.	
63.1(a)(5)		No	[Reserved].
63.1(a)(6)–(a)(8)	Initial Applicability Determination	Yes.	
63.1(a)(9)		No	[Reserved].
63.1(a)(10)–(a)(14)	Applicability After Standard Established	Yes.	
63.1(b)		Yes.	
63.1(c)(1)	Applicability of Permit Program	Yes	Some plants may be area sources.
63.1(c)(2)		No	[Reserved].
63.1(c)(3)	Definitions	Yes.	Additional definitions in § 63.1196.
63.1(c)(4)–(c)(5)		Yes.	
63.1(d)	Units and Abbreviations	No	[Reserved].
63.1(e)		Yes.	
63.2	Prohibited Activities	Yes.	
63.3		Yes.	
63.4(a)(1)–(a)(3)	Circumvention/Severability	No	[Reserved].
63.4(a)(4)		Yes.	
63.4(a)(5)	Construction/Reconstruction Applicability	Yes.	
63.4(b)–(c)		Yes.	
63.5(a)	Existing, New, Reconstructed Sources Requirements.	Yes.	
63.5(b)(1)		No	[Reserved].
63.5(b)(2)	Application for Approval of Construction/Reconstruction.	Yes.	
63.5(b)(3)–(b)(6)		No	[Reserved].
63.5(c)	Approval of Construction/Reconstruction Based on State Review.	Yes.	
63.5(d)		Yes.	
63.5(e)	Compliance with Standards and Maintenance Applicability.	Yes.	
63.5(f)		Yes.	
63.6(a)	New and Reconstructed Sources Dates	Yes.	
63.6(b)(1)–(b)(5)		No	[Reserved].
63.6(b)(6)	Existing Sources Dates	Yes.	§ 63.1180 specifies compliance dates.
63.6(b)(7)		Yes.	
63.6(c)(1)	Operation & Maintenance Requirements	No	[Reserved].
63.6(c)(2)		Yes.	
63.6(c)(3)–(c)(4)	Startup, Shutdown, and Malfunction Plan	Yes.	
63.6(c)(5)		No	[Reserved].
63.6(d)	Compliance with Emission Standards	Yes	
63.6(e)(1)–(e)(2)		Yes	§ 63.1187 specifies additional requirements.
63.6(e)(3)	Alternative Standard	Yes.	
63.6(f)		No	Subpart DDD does not include VE/opacity standards.
63.6(g)	Compliance with Opacity/VE Standards	Yes.	
63.6(h)		No	
63.6(i)(1)–(i)(14)	Extension of Compliance	Yes	§ 63.1180 specifies date.
63.6(i)(15)		No	[Reserved].
63.6(i)(16)	Exemption from Compliance	Yes.	
63.6(j)		Yes.	
63.7(a)	Performance Test Requirements Applicability.	Yes.	
63.7(b)		Yes.	
63.7(c)	Notification	Yes.	
63.7(d)		Yes.	
63.7(e)	Quality Assurance/Test Plan	Yes	§ 63.1188 specifies additional requirements.
63.7(f)		Yes.	
63.7(g)	Testing Facilities	Yes.	
63.7(h)		Yes.	
63.7(h)	Conduct of Tests	Yes	
63.7(i)		Yes.	
63.7(j)	Alternative Test Method	Yes.	
63.7(k)		Yes.	
63.7(l)	Data Analysis	Yes.	
63.7(m)		Yes.	
63.7(n)	Waiver of Tests	Yes.	
63.7(o)		Yes.	

TABLE 1 TO SUBPART DDD OF PART 63—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART DDD OF PART 63—Continued

General provisions citation	Requirement	Applies to subpart DDD?	Explanation
63.8(a)(1)	Monitoring Requirements Applicability	Yes.	Subpart DDD does not require CMS performance specifications.
63.8(a)(2)		No	
63.8(a)(3) .....	.....	No	[Reserved].
63.8(a)(4) .....	.....	Yes.	
63.8(b)	Conduct of Monitoring	Yes.	
63.8(c)(1)–(c)(3)	CMS Operation/Maintenance	Yes.	
63.8(c)(4)–(c)(8) .....	.....	No	Subpart DDD does not require COMS or CMS performance specifications.
63.8(d)	Quality Control	No	Subpart DDD does not require a CMS quality control program.
63.8(e)	CMS Performance Evaluation	No	Subpart DDD does not require CMS performance evaluations.
63.8(f)(1)–(f)(5)	Alternative Monitoring Method	Yes.	
63.8(f)(6)	Alternative to RATA Test	No	Subpart DDD does not require CEMS.
63.8(g)(1)	Data Reduction	Yes.	
63.8(g)(2) .....	.....	No	Subpart DDD does not require COMS or CEMS.
63.8(g)(3)–(g)(5) .....	.....	Yes.	
63.9(a)	Notification Requirements Applicability	Yes.	
63.9(b)	Initial Notifications	Yes.	
63.9(c)	Request for Compliance Extension	Yes.	
63.9(d)	New Source Notification for Special Compliance Requirements.	Yes.	
63.9(e)	Notification of Performance Test	Yes.	
63.9(f)	Notification of VE/Opacity Test	No	Subpart DDD does not include VE/opacity standards.
63.9(g)	Additional CMS Notifications	No	Subpart DDD does not require CMS performance evaluation, COMS, or CEMS.
63.9(h)(1)–(h)(3)	Notification of Compliance Status	Yes.	
63.9(h)(4) .....	.....	No	[Reserved].
63.9(h)(5)–(h)(6) .....	.....	Yes.	
63.9(i)	Adjustment of Deadlines	Yes.	
63.9(j)	Change in Previous Information	Yes.	
63.10(a)	Recordkeeping/Reporting-Applicability	Yes.	
63.10(b)	General Recordkeeping Requirements	Yes	§ 63.1192 includes additional requirements.
63.10(c)(1)	Additional CMS Recordkeeping	Yes.	
63.10(c)(2)–(c)(4) .....	.....	No	[Reserved].
63.10(c)(5) .....	.....	Yes.	
63.10(c)(6) .....	.....	No	Subpart DDD does not require CMS performance specifications.
63.10(c)(7)–(c)(8) .....	.....	Yes.	
63.10(c)(9) .....	.....	No	[Reserved].
63.10(c)(10)–(c)(13) .....	.....	Yes.	
63.10(c)(14) .....	.....	No	Subpart DDD does not require a CMS quality control program.
63.10(c)(15) .....	.....	Yes.	
63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements in § 63.1193.
63.10(d)(2)	Performance Test Results	Yes.	
63.10(d)(3)	Opacity or VE Observations	No	Subpart DDD does not include VE/opacity standards.
63.10(d)(4)–(d)(5)	Progress Reports/ Startup, Shutdown, and Malfunction Reports.	Yes.	
63.10(e)(1)–(e)(2)	Additional CMS Reports	No	Subpart DDD does not require CEMS or CMS performance evaluations.
63.10(e)(3)	Excess Emissions/CMS Performance Reports.	Yes.	
63.10(e)(4)	COMS Data Reports	No	Subpart DDD does not require COMS.
63.10(f)	Recordkeeping/Reporting Waiver	Yes.	
63.11(a)	Control Device Requirements Applicability.	Yes.	
63.11(b)	Flares	No	Flares not applicable.
63.12	State Authority and Delegations	Yes.	
63.13	Addresses	Yes.	
63.14	Incorporation by Reference	Yes.	
63.15	Information Availability/Confidentiality	Yes.	

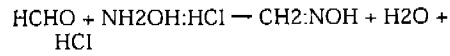
**Appendix A to Subpart DDD of Part 63—
Free Formaldehyde Analysis of Insulation
Resins by the Hydroxylamine Hydrochloride
Method**

1. Scope

The method in this appendix was specifically developed for water-soluble phenolic resins that have a relatively high free-formaldehyde (FF) content such as insulation resins. It may also be suitable for other phenolic resins, especially those with a high FF content.

2. Principle

2.1 a. The basis for this method is the titration of the hydrochloric acid that is liberated when hydroxylamine hydrochloride reacts with formaldehyde to form formaldoxime:



b. Free formaldehyde in phenolic resins is present as monomeric formaldehyde, hemiformals, polyoxymethylene hemiformals, and polyoxymethylene glycols. Monomeric formaldehyde and hemiformals react rapidly with hydroxylamine hydrochloride, but the polymeric forms of formaldehyde must hydrolyze to the monomeric state before they can react. The greater the concentration of free formaldehyde in a resin, the more of that formaldehyde will be in the polymeric form. The hydrolysis of these polymers is catalyzed by hydrogen ions.

2.2 The resin sample being analyzed must contain enough free formaldehyde so that the initial reaction with hydroxylamine hydrochloride will produce sufficient hydrogen ions to catalyze the depolymerization of the polymeric formaldehyde within the time limits of the test method. The sample should contain approximately 0.3 grams (g) free

formaldehyde to ensure complete reaction within 5 minutes.

3. Apparatus

- 3.1 Balance, readable to 0.01 g or better.
- 3.2 pH meter, standardized to pH 4.0 with pH 4.0 buffer and pH 7 with pH 7.0 buffer.
- 3.3 50-mL burette for 1.0 N sodium hydroxide.
- 3.4 Magnetic stirrer and stir bars.
- 3.5 250-mL beaker.
- 3.6 50-mL graduated cylinder.
- 3.7 100-mL graduated cylinder.
- 3.8 Timer.

4. Reagents

- 4.1 Standardized 1.0 N sodium hydroxide solution.
- 4.2 Hydroxylamine hydrochloride solution, 100 grams per liter, pH adjusted to 4.00.
- 4.3 Hydrochloric acid solution, 1.0 N and 0.1 N.
- 4.4 Sodium hydroxide solution, 0.1 N.
- 4.5 50/50 v/v mixture of distilled water and methyl alcohol.

5. Procedure

5.1 Determine the sample size as follows:
a. If the expected FF is greater than 2 percent, go to Part A in 5.1.c to determine sample size.

b. If the expected FF is less than 2 percent, go to Part B in 5.1.d to determine sample size.

c. Part A: Expected FF \geq 2 percent.

Grams resin = 60/expected percent FF

I. The following table shows example levels:

Expected percent free formaldehyde	Sample size, grams
2	30.0
5	12.0
8	7.5

Expected percent free formaldehyde	Sample size, grams
10	6.0
12	5.0
15	4.0

ii. It is very important to the accuracy of the results that the sample size be chosen correctly. If the milliliters of titrant are less than 15 mL or greater than 30 mL, reestimate the needed sample size and repeat the tests.

d. Part B: Expected FF < 2 percent

Grams resin = 30/expected percent FF

I. The following table shows example levels:

Expected percent free formaldehyde	Sample size, grams
2	15
1	30
0.5	60

ii. If the milliliters of titrant are less than 5 mL or greater than 30 mL, reestimate the needed sample size and repeat the tests.

5.2 Weigh the resin sample to the nearest 0.01 grams into a 250-mL beaker. Record sample weight.

5.3 Add 100 mL of the methanol/water mixture and stir on a magnetic stirrer. Confirm that the resin has dissolved.

5.4 Adjust the resin/solvent solution to pH 4.0, using the prestandardized pH meter, 1.0 N hydrochloric acid, 0.1 N hydrochloric acid, and 0.1 N sodium hydroxide.

5.5 Add 50 mL of the hydroxylamine hydrochloride solution, measured with a graduated cylinder. Start the timer.

5.6 Stir for 5 minutes. Titrate to pH 4.0 with standardized 1.0 N sodium hydroxide. Record the milliliters of titrant and the normality.

6. Calculations

$$\% \text{ FF} = \frac{\text{mL sodium hydroxide} \times \text{normality} \times 3.003}{\text{grams of sample}}$$

7. Method Precision and Accuracy

Test values should conform to the following statistical precision:

Variance = 0.005

Standard deviation = 0.07

95% Confidence Interval, for a single determination = 0.2

8. Author

This method was prepared by K.K. Tutin and M.L. Foster, Tacoma R&D Laboratory, Georgia-Pacific Resins, Inc. (Principle written by R. R. Conner.)

9. References

9.1 GPAM 2221.2.

9.2 PR&C TM 2.035.

9.3 Project Report, Comparison of Free Formaldehyde Procedures, January 1990, K. Tutin.

[FR Doc. 99-12585 Filed 5-28-99; 8:45 am]

BILLING CODE 6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[FRL-6344-7]

RIN 2060-AE-86

National Emission Standards for Hazardous Air Pollutants for Polyether Polyols Production

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This rule promulgates national emission standards for hazardous air pollutants (NESHAP) for new and existing plant sites that manufacture polyether polyols. The hazardous air pollutants (HAP) emitted by the facilities covered by this rule include ethylene oxide (EO), propylene oxide (PO), hexane, toluene, and incidental emissions of several other HAP. Some of these pollutants are considered to be probable human carcinogens when inhaled, and all can cause toxic effects following exposure. The rule is estimated to reduce emissions of these pollutants by 1,810 Megagrams per year (Mg/yr) (2,000 tons per year (tons/yr)). Because all of the pollutants are also volatile organic compounds (VOC), which are precursors to ambient ozone, the promulgated rule will also aid in the reduction of tropospheric ozone.

DATES: This regulation is effective on June 1, 1999.

ADDRESSES: *Docket.* Docket No. A-96-38, containing information considered by the EPA in development of the promulgated standards, is available for public inspection from 8:00 a.m. to 5:30 p.m., Monday through Friday, at the following address in room M-1500,

Waterside Mall (ground floor): U.S. Environmental Protection Agency, 401 M Street SW, Washington, DC 20460, telephone number (202) 260-7548. A reasonable fee may be charged for copying docket materials.

FOR FURTHER INFORMATION CONTACT: For information concerning this final rule or the analyses performed in developing this rule, contact Mr. David Svendsgaard, Organic Chemicals Group, Emission Standards Division (MD-13), Office of Air Quality Planning and Standards, U.S. EPA, Research Triangle Park, North Carolina 27711, telephone number (919) 541-2380, facsimile number (919) 541-3470, electronic mail address svendsgaard.dave@epa.gov. For information concerning applicability and rule determinations, contact your State or local representative or the appropriate EPA Regional Office representatives. For a listing of EPA Regional contacts, see the following.

SUPPLEMENTARY INFORMATION:

Electronic Access

These final standards and all other information considered by the EPA in the development of these final standards are available in Docket Number A-96-38 by request from the EPA's Air and Radiation Docket and Information Center (see **ADDRESSES**). Electronic versions of documents from the Office of Air and Radiation (OAR) are available through the EPA's OAR Technology Transfer Network Web site (TTNWeb). The TTNWeb is a collection of related Web sites containing information about many areas of air pollution science, technology, regulation, measurement, and prevention. The TTNWeb is directly accessible from the Internet via the World Wide Web location at the following address: <http://www.epa.gov/ttn>. Electronic versions of this preamble

and rule are located under the OAR Policy and Guidance Information Web site, at <http://www.epa.gov/ttn/oarpg/>, under the **Federal Register** notices section. If more information on the TTNWeb is needed, contact the Systems Operator at (919) 541-5384.

EPA Regional Office Contacts

- Director, Office of Environmental Stewardship, Attn: Air Compliance Clerk, U.S. EPA Region I, 1 Congress Street, Suite 1100 (SEA), Boston, MA 02114-2023 (617) 918-1740
- Umesh Dholakia, U.S. EPA Region II, 290 Broadway Street, New York, NY 10007-1866, (212) 637-4023
- Dianne Walker, U.S. EPA Region III, 1650 Arch Street, Philadelphia, PA 19103, (215) 814-3297
- Lee Page, U.S. EPA, Region IV, 61 Forsyth Street, SW, Atlanta, GA 30303-3104, (404) 562-9131
- Bruce Varner, U.S. EPA, Region V, 77 West Jackson Boulevard, Chicago, IL 60604-3507, (312) 886-6793
- Jim Yang, U.S. EPA, Region VI, 1445 Ross Avenue, Suite 1200 (6EN-AT), Dallas, TX 75202, (214) 665-7578
- Gary Schlicht, U.S. EPA, Region VII, 726 Minnesota Avenue, Kansas City, KS 66101, (913) 551-7097
- Tami Thomas-Burton, U.S. EPA, Region VIII, 999 18th Street, Suite 500, Denver, CO 80202, (303) 312-6581
- Ken Bigos, U.S. EPA, Region IX, 75 Hawthorne Street, San Francisco, CA 94105, (415) 744-1200
- Dan Meyer, U.S. EPA, Region X, 1200 Sixth Street, Seattle, WA 98101, (206) 553-4150

Regulated Entities

Entities regulated by this action are polyether polyols production facilities. Regulated categories and entities include:

Category	Standard industrial classification (SIC) codes	North American industrial classification system (NAICS) codes	Examples of potentially regulated entities
Industry	Typically, 2843 and 2869	Typically, 325199 and 325613	Producers of polyether polyols and polyether mono-ols.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that the EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your facility, company, business organization, etc., is subject to this rule, you should carefully examine the applicability criteria in 40 CFR 63.1420.

If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

Judicial Review

National emission standards for polyether polyols production were proposed in the **Federal Register** on September 4, 1997 (62 FR 46804). Today's **Federal Register** action announces the EPA's final decision on

the rule. Under section 307(b)(1) of the Clean Air Act (CAA), judicial review of the final rule is available 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 CAA, the requirements that are the subject of today's final rule may not be challenged later in civil or criminal proceedings brought by the EPA to enforce these requirements.

The following outline is provided to aid in reading the preamble to the final rule.

- I. List of Source Categories
- II. Summary of Considerations Made in Developing This Standard
 - A. Background and Purpose of the Regulation
 - B. Source of Authority
 - C. Stakeholder and Public Participation
- III. Summary of Promulgated Standards
 - A. Affected Sources
 - B. Storage Vessels
 - C. Process Vents
 - D. Wastewater Operations
 - E. Equipment Leaks
 - F. Heat Exchangers
 - G. General Testing Requirements
 - H. Monitoring Levels and Excursions
 - I. General Provisions
 - J. General Recordkeeping and Reporting Requirements
- IV. Control Technology Basis of the Standard
- V. Summary of Impacts
 - A. Air Impacts
 - B. Other Environmental Impacts
 - C. Energy Impacts
 - D. Cost Impacts
 - E. Economic Impacts
- VI. Significant Comments and Changes to the Proposed Standards
 - A. Primary Product Determination
 - B. Definition of "Polyether Polyol"
 - C. Definition of "Process Vent"
 - D. Outlet Concentration Limit as an Alternative Epoxide Process Vent Emission Limit for New Sources
 - E. Flares as a Reference Control Technology
 - F. Group Determination on an Individual Process Vent Basis for Nonepoxide Organic HAP Emissions from Making or Modifying the Product
 - G. Possibility of Dual Controls for Nonepoxide Organic HAP Emissions from Making or Modifying the Product
 - H. Worst-Case Testing Requirements
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 - A. Docket
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I. List of Source Categories

The EPA identified a total of approximately 84 plant sites producing polyether polyols. Of the 84 facilities,

78 were considered in the analysis supporting the proposed rule and are believed to be major sources according to the 1990 CAA Amendments' criteria of having the potential to emit 10 tons/yr (9.1 Mg/yr) of any one HAP or 25 tons/yr (22.7 Mg/yr) of combined HAP. Today's final rule applies to all major sources that produce polyether polyols. Area sources are not subject to today's final rule.

In developing the background information to support the proposed rule, the EPA decided it was appropriate to subcategorize the source category for purposes of analyzing the maximum achievable control technology (MACT) floors and regulatory alternatives. The subcategories were: polyether polyols made from the polymerization of epoxides, and polyether polyols made from the polymerization of tetrahydrofuran (THF). An "epoxide" is a chemical compound consisting of a three-membered cyclic ether. Ethylene oxide and propylene oxide are the only epoxides that are listed as HAP under section 112(b) of the CAA. Subcategorization was necessary due to the distinctively different nature of the epoxide and THF processes and their effect on the applicability of controls. One noteworthy distinction between the two subcategories is that the first group, polyols made with epoxides, uses a HAP as the monomer, whereas the second group, polyols made with THF, does not use a HAP monomer. Additionally, the first group (epoxide reactants) performs the reaction primarily on a batch basis, while the second group (THF) performs the reaction on a continuous basis.

The Agency obtained data from facilities that make polyether products by polymerizing a compound having multiple reactive hydrogen atoms, resulting in the formation of a "polyol," and from facilities that make polyethers by polymerizing a compound with a single reactive hydrogen, which forms a "mono-ol." The Agency then investigated the distinctions between the production units and the emissions controls for products from these two groups. The Agency found no fundamental difference between the processes, the chemistry, the emissions, or the types of control equipment. Further, many producers use the same process equipment to produce polyols and mono-ols, yet they generically refer to both types of products as "polyols." Therefore, for the purposes of this regulation, the Agency uses the term "polyether polyols" to represent both polyether polyols and polyether mono-ols.

II. Summary of Considerations Made in Developing This Standard

A. Background and Purpose of the Regulation

The CAA was created in part "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." (section 101(b)(1)). Section 112(b) of the CAA, as revised in 61 FR 30816 (June 18, 1996), lists 188 HAP believed to cause adverse health or environmental effects. Section 112(d) requires that emission standards be promulgated for all categories and subcategories of "major" sources of these HAP, and for many smaller "area" sources listed for regulation, pursuant to section 112(c). Major sources are defined as those that emit or have the potential to emit at least 10 tons/yr (9.1 Mg/yr) of any one HAP or 25 tons/yr (22.7 Mg/yr) of any combination of HAP.

On July 16, 1992 (57 FR 31576), the EPA published a list of categories of sources slated for regulation. This list included the polyether polyol production source category regulated by the standards being promulgated today. The statute requires emissions standards for the listed source categories to be promulgated between November 1992 and November 2000. On December 3, 1993, the EPA published a schedule for promulgating these standards (58 FR 63941). Standards for the polyether polyols production source category covered by this rule were proposed on September 4, 1997 (62 FR 46804).

The final standards give existing affected sources 3 years from the date of promulgation to comply with the emission limitations for storage vessels, process vents, wastewater, and heat exchangers. Subject to certain limited exceptions, this is the maximum amount of time allowed under the CAA. The final standards give existing affected sources 6 months to comply with the equipment leak provisions. New affected sources are required to comply with the standards upon initial startup. The EPA believes these standards to be achievable for all affected sources within the time provided.

Monitoring, recordkeeping, and reporting requirements are also included in this final rule. All of these components are necessary to ensure that sources will comply with the standards both initially and over time. However, the EPA has made every effort to simplify the requirements in the rule.

B. Source of Authority

The amended CAA requires the EPA to promulgate national emission standards for sources of HAP. Section 112(d) provides that these standards must reflect:

* * * the maximum degree of reduction in emissions of the HAP * * * that the Administrator, taking into consideration the cost of achieving such emission reduction, and any nonair quality health and environmental impacts and energy requirements, determines is achievable for new or existing sources in the category or subcategory to which such emission standard applies. * * * (42 U.S.C. § 7412(d)(2)).

This level of control is referred to as the MACT. The CAA goes on to establish the least stringent level of control for MACT; this level is termed the "MACT floor."

According to the CAA, new source standards for a source category or subcategory "shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator" (section 112(d)(3)). Existing source standards shall be no less stringent than the average emission limitation achieved by the best performing 12 percent of the existing sources for source categories and subcategories with 30 or more sources, or the average emission limitation achieved by the best performing 5 sources for sources or subcategories with fewer than 30 sources (section 112(d)(3)). These two minimum levels of control define the MACT floor for new and existing sources. When the EPA considers control levels more stringent than the MACT floor described above, the selection of MACT must take into consideration the cost of achieving the emission reduction, any non-air quality, health, and environmental impacts, and energy requirements.

C. Stakeholder and Public Participation

Numerous representatives of the polyether polyol production industry were consulted during the development of this standard. Industry representatives have included both trade associations and polyether polyol producers. The EPA also received input from representatives from State environmental agencies. Representatives from other EPA offices and programs participated in the regulatory development process as members of the work group. The work group was involved in the regulatory development process and was given opportunities to review and comment on the standards before proposal and promulgation. Therefore, the EPA believes that the

impact on other EPA offices and programs has been adequately considered during the development of these standards. Finally, industry representatives, regulatory authorities, environmental groups, and the public, as a whole, had the opportunity to comment on the proposed standards and to provide additional information during the public comment period that followed proposal.

The Polyether Polyols NESHAP was proposed in the **Federal Register** on September 4, 1997 (62 FR 46804). The preamble and Basis and Purpose Document for the proposed standards for polyether polyols sources (published on September 4, 1997) described the rationale for the proposed standards. Public comments on the Polyether Polyols NESHAP were solicited at the time of its proposal.

In addition, amendments to the Polymers and Resins I NESHAP (which some of the requirements in this final rule cross-reference that existing rule) were proposed on March 9, 1999 (63 FR 11560). Public comments were solicited by the EPA regarding how those proposed amendments, and the incorporation of concepts in the Polymers and Resins proposed rule into subpart PPP, would affect sources subject to the Polyether Polyols final rule.

To provide interested individuals the opportunity for oral presentation of data, views, or arguments concerning the proposed standards, a public hearing was offered at proposal of these requirements. However, the public did not request a hearing and, therefore, one was not held. The public comment period for the proposed rule was from September 4, 1997 to December 3, 1997. A total of 11 comment letters were received during the public comment period, and 4 comment letters were received after the end of the public comment period. Commenters included industry representatives and trade organizations. The comments were carefully considered, and changes were made in the promulgated standards when determined by the EPA to be appropriate. A detailed discussion of these comments and responses can be found in the Basis and Purpose Document for Final Standards, which is referenced in Section V of this preamble and serves as the basis for the revisions that have been made to these standards between proposal and promulgation. Section V of this preamble discusses some of the major changes made to the proposed standards.

III. Summary of Promulgated Standards

This section provides a summary of the final standards contained in subpart PPP. The full regulatory text is printed in today's final rule and is also available in Docket No. A-96-38, directly from the EPA, or from the Technology Transfer Network (TTN) on the EPA's electronic bulletin boards. More information on how to obtain a copy of the proposed regulation is provided at the beginning of the **SUPPLEMENTARY INFORMATION** section of this document.

A. Affected Sources

For this final rule, an affected source is defined as each group of one or more polyether polyols manufacturing process units (PMPUs) that is located at a plant site that is a major source. Polyether polyols are defined as the products formed by the reaction of EO, PO, or other cyclic ethers with compounds having one or more reactive hydrogens (i.e., a hydrogen atom bonded to nitrogen, sulfur, oxygen, phosphorous, etc.) to form polyethers (i.e., compounds with two or more ether bonds). The definition of "polyether polyol" excludes hydroxy ethyl cellulose and materials regulated under the Hazardous Organics NESHAP (HON), such as glycols and glycol ethers.

An existing affected source is any affected source that is not a new affected source. A new affected source can be created by one of four ways. If a plant site with an existing polyols-affected source adds one or more new PMPUs, the added group of one or more new PMPUs is a new affected source if the added group of one or more new PMPUs has the potential to emit more than 10 tons/yr (9.1 Mg/yr) of any one HAP or 25 tons/yr (22.7 Mg/yr) of all HAP. In this situation, the plant site would have an existing affected source and a new affected source. Each subsequent set of one or more added PMPUs with potential HAP emissions above the 10/25 levels cited above would be a separate new affected source.

New affected sources are also created when one or more PMPUs are constructed at a major source plant site where polyether polyols were not previously produced (with no consideration of the potential HAP emissions from the PMPU). Another instance where a new affected source is created is if one or more PMPUs are constructed at a new plant site (i.e., green field site) that will be a major source. The final manner in which a new affected source is created is when

an existing affected source undergoes reconstruction.
 Affected sources covered by the promulgated rule emit a variety of HAP from several different types of emission points. The most significant emissions are of the following HAP: EO, PO, hexane, and toluene. These final standards regulate emissions of these compounds, as well as all other organic HAP that are emitted during the production of polyether polyols.

Emissions from the following types of emission points (i.e., emission source types) are being covered by the promulgated rule: storage vessels, process vents, heat exchange systems, equipment leaks, and wastewater operations. Tables 1 and 2 summarize the level of control for existing and new affected sources, respectively, for each of these types of emission points. Where the applicability criteria and required level of control are the same as the HON

(40 CFR Part 63, subparts F, G, and H), this is indicated in Tables 1 and 2 as "HON." "Epoxides," in Tables 1 and 2, refer to EO and PO. "Nonepoxide organic HAP" refers to organic HAP other than EO and PO that are used in the polyether polyols production process. The following sections describe these standards in more detail, by emission source type.

TABLE 1.—SUMMARY OF LEVEL OF THE STANDARDS FOR EXISTING AFFECTED SOURCES

	Emission sources	Storage			Heat exch. syst.	Equip. leaks
		Process vents		Waste-water		
Polyether Polyols made with tetrahydro-furan.	HON	HON			HON	HON.
		Epoxide emissions	Nonepoxide organic HAP emissions from making or modifying product	Nonepoxide organic HAP in catalyst extraction		
Polyether Polyols made with epoxides.	HON	98 percent aggregate emission reduction; or flare emissions from all vents; or maintain outlet conc. ≤ 20 ppmv; or maintain emiss. factor < 1.69 × 10 ⁻² kg epox./Mg product.	Group 1 combination of process vents from batch unit operations: 90 percent aggregate emission reduction; or flare emissions from all vents.. Group 1 process vents from continuous unit operations: 98 percent emission reduction; or flare emissions.	90 percent aggregate emission reduction; or flare emissions from all vents.	HON	HON

TABLE 2.—SUMMARY OF LEVEL OF THE STANDARDS FOR NEW AFFECTED SOURCES

	Emission sources			Heat exch. syst.	Equip. leaks	
	Storage	Process vents				Waste-water
Polyether Polyols made with tetrahydro-furan.	Existing source HON.	HON			Exist. source HON.	HON.
		Epoxide emissions	Nonepoxide organic HAP emissions from making or modifying product	Nonepoxide organic HAP in catalyst extraction		
Polyether Polyols made with epoxides.	Existing source HON.	99.9 percent aggregate emission reduction; or maintain outlet conc. ≤ 20 ppmv; or maintain emiss. factor < 4.43 × 10 ⁻³ kg epox./Mg product.	Group 1 combination of process vents from batch unit operations: 90 percent aggregate emission reduction; or flare emissions from all vents.. Group 1 process vents from continuous unit operations: 98 percent emission reduction; or flare emissions..	90 percent aggregate emission reduction; or flare emissions from all vents.	Exist. source HON.	HON.

B. Storage Vessels

For polyether polyols made with either epoxides or THF, the storage vessel requirements at new and existing

affected sources are nearly identical to the HON storage vessel requirements in subpart G for existing sources. The final rule specifies procedures for determining whether a storage vessel is

assigned to a PMPU. Group 1 storage vessels require control, while Group 2 storage vessels do not. If a storage vessel has a capacity below 75 cubic meters, it is Group 2. For vessels with capacities

between 75 and 151 cubic meters, they are Group 1 if the vapor pressure of the liquid being stored is 13.1 kilopascals or greater. Storage vessels with capacities greater than 151 cubic meters are Group 1 if the vapor pressure of the liquid being stored is 5.2 kilopascals or greater.

The storage vessel provisions require that one of the following control systems be applied to Group 1 storage vessels: (1) An internal floating roof with proper seals and fittings; (2) an external floating roof with proper seals and fittings; (3) an external floating roof converted to an internal floating roof with proper seals and fittings; or (4) a closed vent system with a 95 percent efficient combustion, recovery, or recapture device. The storage vessel provisions give details on the types of seals and fittings required. Monitoring and compliance provisions include periodic visual inspections of vessels, roof seals, and fittings, as well as internal inspections. If a closed vent system and combustion, recovery, or recapture device is used, the owner or operator must establish appropriate monitoring procedures. Reports and records of inspections, repairs, and other information necessary to determine compliance are also required by the storage vessel provisions.

C. Process Vents

There are separate process vent provisions for affected sources that produce polyether polyols using epoxide reactants and affected sources that produce polyether polyols using THF. The control requirements for each type of affected source are discussed below, followed by a discussion of the monitoring, reporting, and recordkeeping provisions.

1. Polyether Polyols That Use Epoxides as a Reactant

For the polyether polyols that use epoxides as a reactant, the process vent provisions are separated into three groups that are based on the function of the organic HAP in the production process. These groups are: (1) Epoxide (i.e., EO and PO) emissions resulting from the use of these chemicals as reactants; (2) emissions of organic HAP other than EO or PO (i.e., "nonepoxide organic HAP") resulting from their use in making or modifying the polyether polyol product; and (3) emissions of nonepoxide organic HAP resulting from their use in catalyst extraction.

a. *Requirements for epoxide emissions.* The existing source requirement for epoxide emissions from process vents is to reduce epoxide emissions by 98 weight-percent. For new sources, this requirement is 99.9

weight-percent. This is an aggregated percent reduction applied to all process vents that emit epoxides in the PMPU. Therefore, the owner or operator has the flexibility to select which vents to control, provided that the overall epoxide emission reduction from the PMPU is equal to, or greater than, the required efficiency.

In addition to using a combustion, recovery, or recapture device to achieve the 98 percent reduction (or 99.9 percent for new sources), the final rule allows the use of "extended cookout" (ECO) as a means of reducing emissions by the required percentage. This pollution prevention technique reduces emissions by extending the time of reaction, thus leaving less unreacted epoxides to be emitted downstream.

Instead of complying with the 98 (or 99.9) weight-percent reduction limitation, an owner or operator may comply by demonstrating that each outlet stream has a concentration of 20 parts per million by volume (ppmv) epoxide or total organic compound (TOC). This option is available for existing and new affected sources, but only if a combustion, recovery, or recapture device is used.

As another alternative to the 98 percent emission reduction, owners or operators of existing affected sources may maintain an epoxide emission factor from the PMPU of no more than 1.69×10^{-2} kilograms of epoxide emissions per megagram of product made (kg/Mg), or 1.69×10^{-2} pounds of epoxide emissions per 1,000 pounds of product made (lb/1000 lb). The corresponding emission factor for new affected sources is 4.43×10^{-3} kg/Mg (4.43×10^{-3} lb/1000 lb). Compliance with this alternative limitation is achieved by developing and following an epoxide annual emissions plan, which must include provisions for the monitoring of the process and any combustion, recovery, or recapture device parameters to demonstrate continuous compliance with the emission limitation.

Finally, for affected existing sources, if a flare is used to reduce epoxide HAP emissions from all process vents in the PMPU, then a demonstration of 98 percent epoxide emission reduction is not required. If an owner or operator of a new affected source wants to use only a flare, a demonstration that the flare will achieve 99.9 percent epoxide emission reduction is required.

An owner or operator can also choose to use a combination of the percent reduction, 20 ppmv, and flare compliance options discussed above in a single PMPU.

b. *Requirements for emissions resulting from the use of nonepoxide organic HAP to make or modify the product.* For nonepoxide organic HAP emissions that result from the use of nonepoxide organic HAP to make or modify the product, the final rule uses a "group" approach, where those vents that are classified as Group 1 are required to be controlled. This provision only applies if a nonepoxide organic HAP is used to make or modify the product.

In many instances, the process vent stream containing these nonepoxide organic HAP will also contain epoxides. The combustion, recovery, or recapture device used to comply with the epoxide emission provisions discussed above may also reduce nonepoxide emissions. It is for this reason that the final rule requires that the group determination for nonepoxide organic HAP emissions from making or modifying the product be conducted after the emissions exit the epoxide combustion, recovery, or recapture device (or after the ECO). Therefore, any nonepoxide emission reduction that is coincidentally achieved in the epoxide combustion, recovery, or recapture device will impact whether the process vent is classified as Group 1.

The group determination approach for process vents from batch unit operations differs from that for process vents from continuous unit operations. Each approach is discussed below.

For process vents from batch unit operations, the approach is to determine if the collection of process vents in each PMPU that is associated with the use of nonepoxide organic HAP to make or modify the product is Group 1 or Group 2. If the combination of batch process vents is determined to be Group 1, the aggregate nonepoxide organic HAP emissions are required to be reduced by 90 weight-percent. As with the epoxide percent emission reduction requirement, this requirement is on an aggregated basis. Therefore, the owner or operator has the flexibility to select which vents to control, provided that the overall nonepoxide emission reduction from the PMPU is equal to, or greater than, 90 weight-percent. If a flare is used to reduce these nonepoxide organic HAP emissions from all process vents associated with the use of a nonepoxide organic HAP to make or modify the product, then a demonstration of 90 weight-percent emission reduction is not required. These requirements are the same for new and existing affected sources.

The group status for the combination of batch vents in a PMPU is determined by calculating the annual emissions

from all of the applicable vents. If the total nonepoxide organic HAP emissions are less than 11,800 kilograms per year (26,000 pounds per year), then the collection of vents is classified as Group 2, and no control is required. If the emissions are greater than 11,800 kilograms per year (26,000 pounds per year), they are used to calculate a "cut-off" flow rate. This cutoff flow rate is then compared to the actual combined annual average flow rate for all the vents. If the actual combined annual average flow rate is less than the cutoff flow rate, the group of vents is Group 1.

For process vents from continuous unit operations, the approach is to determine if each process vent in the PMPU that is associated with the use of nonepoxide organic HAP to make or modify the product is Group 1. If a continuous process vent is determined to be Group 1, the nonepoxide organic HAP emissions are required to be reduced by using a flare or by 98 weight-percent. As with batch vents, these requirements are the same for new and existing affected sources.

A continuous process vent is Group 1 if it has a flow rate greater than or equal to 0.005 standard cubic meters per minute, a HAP concentration greater than or equal to 50 ppmv, and a total resource effectiveness (TRE) index value less than or equal to 1.0. The final rule directly refers to the HON TRE equation in subpart G.

c. *Requirements for nonepoxide organic HAP emissions from catalyst extraction.* This provision only applies if a nonepoxide organic HAP is used in the catalyst extraction process. The promulgated process vent provisions require the owner or operator of existing affected sources using epoxides to reduce the aggregate total nonepoxide organic HAP emissions by 90 weight-percent from process vents associated with catalyst extraction at new or existing affected sources. This is also an aggregate emission reduction requirement for the PMPU. If a flare is used to reduce these nonepoxide organic HAP emissions from all process vents associated with catalyst extraction, then a demonstration of 90 weight-percent emission reduction is not required.

Uncontrolled nonepoxide organic HAP emissions from continuous or batch catalyst extraction unit operations are measured after the exit from the continuous or batch unit operation, but before any recovery devices; and controlled emissions are measured at the outlet of the combustion, recovery, or recapture device. Primary condensers operating as reflux condensers are considered to be part of the unit

operation and are not considered to be recovery devices.

2. Polyether Polyols That Use THF as a Reactant

The promulgated rule directly references the HON process vent provisions in subpart G for polyether polyols processes that use THF as a reactant. These provisions require a Group 1/Group 2 determination. A group 1 process vent is one with a flow rate greater than or equal to 0.005 standard cubic meters per minute, a HAP concentration greater than or equal to 50 ppmv, and a TRE less than or equal to 1.0. Owners or operators of Group 1 process vents at THF facilities are required to either reduce organic HAP emissions by 98 weight-percent, maintain an outlet concentration of 20 ppmv, or route emissions to a flare.

3. Monitoring, Reporting, and Recordkeeping Provisions for Process Vents

Monitoring, reporting, and recordkeeping provisions necessary to demonstrate compliance are also included in the process vent provisions. Compliance with the monitoring provisions is based on parametric monitoring of the combustion, recovery, or recapture device, or monitoring of the process parameters if ECO is used to control epoxide emissions.

D. Wastewater Operations

The final wastewater provisions in subpart PPP refer directly to the HON wastewater provisions. Water that is discarded from a PMPU is considered to be wastewater if the water has an annual average concentration of organic HAP of 5 parts per million by weight (ppmw) or greater and an annual average flow rate of 0.02 liters per minute (0.0053 gallons per minute) or greater, or an annual average concentration of organic HAP of at least 10,000 ppmw at any flow rate. There are two types of wastewater: maintenance wastewater and process wastewater. The requirements for each type of wastewater are discussed below.

1. Maintenance Wastewater

The final rule directly incorporates the HON requirements in § 63.105 of subpart F for maintenance wastewater. The provisions of § 63.105 require owners or operators to prepare a description of procedures that will be used to manage HAP-containing wastewater created during maintenance activities and to implement these procedures.

2. Process Wastewater

The final rule also directly incorporates HON provisions for process wastewater, which are contained in § 63.132 through § 63.149 of subpart G. These provisions employ a Group 1/Group 2 approach with Group 1 process wastewater streams requiring control. However, subpart PPP does not incorporate the HON new source Group 1 process wastewater stream criteria. That is, the Group 1 process wastewater stream criteria for new and existing affected sources are equivalent to the HON existing source Group 1 criteria. These criteria are as follows. A Group 1 wastewater stream is a wastewater stream with a total annual average concentration of organic HAP greater than or equal to 10,000 ppmw at any flow rate, or a total annual average concentration greater than or equal to 1,000 ppmw and an annual average flow rate greater than or equal to 10 liters per minute (2.6 gallons per minute).

An owner or operator may determine the organic HAP concentration and flow rate of wastewater streams either (1) at the point of determination (where the wastewater exits the PMPU); or (2) downstream of the point of determination, provided that adjustments are made for changes that occur to the stream from the point of determination to the downstream location. Both the applicability determination and the Group 1/Group 2 determination must reflect the wastewater characteristics before losses due to volatilization, a concentration differential due to dilution, or a change in organic HAP concentration or flow rate due to treatment.

There are requirements for wastewater tanks, surface impoundments, containers, individual drain systems, and oil/water separators that handle Group 1 wastewater streams. These provisions require either that specified measures be undertaken to suppress organic emissions from the wastewater stream, or that emissions be vented to a control device.

There are also treatment requirements for Group 1 wastewater streams to reduce the organic HAP content in the wastewater prior to placement in units without air emissions controls. There are a number of treatment options for Group 1 wastewater streams. These include reducing the total concentration of organic HAP to a level less than 50 ppmw, treating the stream in a steam stripper meeting specified design criteria, reducing the organic HAP mass flow rate by 99 percent (or by the fraction removed, or F_r , value for the HAP), achieving the required mass

removal (RMR) for the HAP, achieve a RMR of 95 percent in a biological treatment process, or treating the stream in a unit complying with specified Resource Conservation and Recovery Act (RCRA) requirements. Also, there is an exemption if the total source organic HAP mass flow rate is less than 1 Mg/yr (1.1 tons/yr).

The rule requires that inspections be conducted on waste management units. It also requires that design steam strippers and biological treatment units be monitored, along with control devices on waste management units. The rule also contains extensive provisions outlining how to demonstrate compliance, including reporting and recordkeeping provisions. For more information regarding the wastewater provisions in this final rule, consult the January 17, 1997 amendments to the HON (62 FR 2722).

E. Equipment Leaks

The equipment leak provisions in the promulgated rule refer directly to the HON requirements contained in 40 CFR part 63, subpart H. These final standards apply to equipment in organic HAP service for 300 or more hours per year that is associated with a PMPU, including valves, pumps, connectors, compressors, pressure relief devices, open-ended valves or lines, sampling connection systems, instrumentation systems, surge control vessels, bottoms receivers, and agitators. The provisions also apply to closed-vent systems and combustion, recovery, or recapture devices used to control emissions from any of the listed equipment.

The promulgated standard requires leak detection and repair (LDAR) for pumps in light liquid service and for valves in gas or light liquid service. The LDAR program involves a periodic check for organic vapor leaks with a portable instrument using Method 21 of appendix A of part 60. If leaks are found, they must be repaired within a certain period of time. These provisions contain programs where owners or operators that have demonstrated success in eliminating leaking equipment can increase the interval between leak inspections.

The final rule also requires LDAR of connectors in gas or light liquid service. The monitoring frequency for connectors is determined by the percent leaking connectors in the process unit and the consistency of performance.

Subpart H also contains standards for compressors, open-ended lines, pressure relief devices, and sampling connection systems. Compressors are required to be

controlled using a barrier-fluid seal system, by a closed vent system to a combustion, recovery, or recapture device, or must be demonstrated to have no leaks greater than 500 parts per million (ppm) HAP. Sampling connections must be a closed-purge or closed-loop system, or must be controlled using a closed vent system to a combustion, recovery, or recapture device. Agitators must either be monitored for leaks or use systems that are better designed such as dual mechanical seals. Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service are subject to instrumental monitoring only if evidence of a potential leak is found through sight, sound, or smell. Instrumentation systems consist of smaller pipes and tubing that carry samples of process fluids to be analyzed to determine process operating conditions or systems for measurement of process conditions.

Surge control vessels and bottoms receivers are required to be controlled using a closed vent system vented to a combustion, recovery, or recapture device. However, the applicability of controls to surge control vessels and bottoms receivers is based on the size of the vessel and the vapor pressure of the contents. The criteria for determining whether controls are required for surge control vessels and bottoms receivers are the same as the criteria for determining whether controls are required for storage vessels.

The standards require certain records to demonstrate compliance with the standard, and the records must be retained in a readily accessible recordkeeping system. Subpart H requires that the following records be maintained for equipment that would be subject to the standards: records of testing associated with batch processes; design specifications of closed vent systems and combustion, recovery, or recapture devices; and test results from performance tests.

F. Heat Exchangers

The final standards for heat exchange systems directly refer to the heat exchange provisions listed in subpart F of the HON at § 63.104. These provisions require that the owner or operator monitor heat exchange systems for leaks and repair any leaks that are detected.

G. General Testing Requirements

Specific testing requirements related to each emission source type are

included in the applicable sections of the final rule. Section 63.1437 of the final rule addresses conditions for performance tests and compliance determination procedures for flares.

Section 63.1437 requires that performance testing be conducted during maximum operating conditions for all emissions sources except for process vents from batch unit operations. Tests for process vents from batch unit operations are to be performed at worst-case conditions.

This section limits the time frame for the maximum operating and worst-case conditions to either the 6-month period that ends 2 months before the Notification of Compliance Status is due, or the 6-month period that begins 3 months before the performance test and ends 3 months after the performance test. This section also indicates that tests should not be performed under conditions that: (1) Cause damage to equipment, (2) necessitate that product made does not meet an existing specification for sale to a customer, (3) necessitate that product made is in excess of demand, or (4) cause plant or testing personnel to be subject to unsafe conditions.

This section clarifies that a performance test is not required for flares, and requires that a compliance determination be conducted for flares in accordance with § 63.11(b) of the General Provisions.

H. Monitoring Levels and Excursions

Specific monitoring requirements related to each emission source type are included in the applicable sections of the final rule. Section 63.1438 of the final rule addresses the establishment of parameter monitoring levels and excursions.

This section specifies how parameter monitoring levels are to be established. The three methods are: (1) To establish parameter levels based exclusively on performance testing; (2) to establish parameter monitoring levels based on performance tests, supplemented by engineering assessments and/or manufacturer's recommendations; and (3) to establish parameter monitoring levels based on engineering assessments and/or manufacturer's recommendations.

This section also provides definitions of excursions and how excursions are related to compliance. Table 3 in this preamble illustrates instances that are defined as excursions.

TABLE 3.—SUMMARY OF EXCURSIONS

Emission source type	Type of excursion	Description of excursion
Storage vessels, where continuous monitoring is required.	Daily average exceedance	When the daily average of a monitored parameter is above the maximum, or below the minimum, established level.
Storage vessels, where continuous monitoring is not required.	Insufficient monitoring data	Depends on the monitoring plan.
	If monitoring plan specifies monitoring a parameter, a filling period exceedance. If monitoring plan specifies that a value must be recorded at specific intervals, insufficient monitoring data.	When the average value of one or more parameters, averaged over the duration of the filling period for the storage vessel, is above the maximum level or below the minimum level. When measured values are not available for at least 75 percent of the specific intervals at which parameters are to be monitored and recorded, according to the monitoring plan, during the filling period for the storage vessel.
Process wastewater streams, heat exchange systems, or equipment leaks.	[See the HON]	[See the HON Requirements.]
Continuous process vents using combustion, recovery, or recapture devices.	Daily average exceedance	When the daily average of a monitored parameter is above the maximum, or below the minimum, established level.
	Insufficient monitoring data	Insufficient monitoring data is when an owner or operator fails to obtain a valid hour of data for at least 75 percent of the operating hours during an operating day. Four 15-minute parameter measurements must be obtained to constitute a valid hour of data.
Batch process vents using combustion, recovery, or recapture devices.	Daily average exceedance	When the daily average of a monitored parameter is above the maximum, or below the minimum, established level.
	Insufficient monitoring data	Insufficient monitoring data is when an owner or operator fails to obtain valid parameter measurements for at least 75 percent of the 15-minute periods during an operating day.
Process vents using ECO	Batch cycle parameter exceedance.	If time is monitored, when the time from the end of the epoxide feed to the end of an ECO is shorter than the minimum duration established for the product class. If reactor partial pressure is monitored, when the reactor epoxide partial pressure at the end of an ECO is above the maximum pressure established for the product class. If epoxide concentration is monitored, when the epoxide concentration in the reactor at the end of an ECO is above the maximum epoxide concentration established for the product class.

The owner or operator is allowed a certain number of "excused" excursions. In the first semiannual period, the owner or operator is allowed to excuse six excursions. This diminishes to one excused excursion for each semiannual period after the sixth semiannual period.

For each excursion that is not excused, the owner or operator is deemed to be out of compliance with the provisions of the final rule. If a condenser is used and temperature is the parameter monitored, or if another recovery or recapture device is used and organic HAP concentration is the parameter monitored, then the excursion is a violation of the emission limitation. For all other parameter monitoring situations, an excursion is a violation of the operating limit.

I. General Provisions

The final rule incorporates by reference the General Provisions in subpart A as promulgated on March 13, 1994. However, the EPA is in the process of drafting amendments to the General Provisions. After the promulgation of the amendments to the General Provisions, the amended

General Provisions will be automatically considered to be incorporated into this subpart. For that reason, as amendments are proposed for the General Provisions, owners and operators are encouraged to comment on how those amendments could potentially affect owners and operators subject to subpart PPP of part 63.

The final rule references the start-up, shutdown, and malfunction plan requirements in § 63.6(e)(3) of the General Provisions. The start-up, shutdown, and malfunction plan developed for each affected source must describe procedures for operating and maintaining the affected source during periods of start-up, shutdown, and malfunction, and must describe procedures and a program for corrective action for malfunctioning process and air pollution equipment used to comply with this subpart.

J. General Recordkeeping and Reporting Requirements

Specific recordkeeping and reporting requirements related to each emission source type are included in the applicable sections of the final rule. Section 63.1439 of the final rule

provides more general reporting, recordkeeping, and testing requirements. The following are the types of reports that must be submitted to the Administrator, as appropriate: Initial Notification, Precompliance Report, Notification of Compliance Status, Periodic Reports, and Other Reports. The requirements for each of the types of reports are summarized below.

Section 63.1434 of the final rule incorporates the reporting requirements of subpart H. The subpart H reporting requirements include an Initial Notification, a Notification of Compliance Status, and Periodic Reports. The information required by subpart H should be submitted along with the information specified in subpart PPP for the applicable report.

1. Initial Notification

For existing sources, the Initial Notification is required to be submitted June 1, 2000. For new sources, the due date is dependent on the date of initial start-up date. The Initial Notification must include the following information:

- The name and address of the owner or operator.

b. The address (i.e., physical location) of the affected source.

c. An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date.

d. An identification of the kinds of emission points within the affected source.

e. A statement of whether or not the affected source is a major source.

2. Precompliance Report

Affected sources making one or more of the following requests must submit a Precompliance Report 1 year before their compliance date: (1) Requesting an extension for compliance; (2) requesting approval to use alternative monitoring parameters, alternative continuous monitoring and recordkeeping, or alternative controls; (3) requesting approval to incorporate a provision for ceasing to collect monitoring data, during a start-up, shutdown, or malfunction, into the start-up, shutdown, and malfunction plan, when that monitoring equipment would be damaged if it did not cease to collect monitoring data; or (4) requesting to establish parameter monitoring levels based on engineering assessments and manufacturing recommendations. Supplements to the Precompliance Report may also be submitted after the due date of the Precompliance Report, if the owner or operator finds it necessary to clarify or modify information previously submitted under the original Precompliance Report. In addition, the final rule provides that, unless the Administrator has objected to a request made in the Precompliance Report or a supplement to the Precompliance Report within 45 days of its receipt, the request shall be automatically deemed "approved."

An owner or operator who submits an operating permit application may submit the information specified in the Precompliance Report, as applicable, with the operating permit application, in addition to any other information required to be included in the operating permit application.

3. Notification of Compliance Status

The Notification of Compliance Status is required to be submitted within 150 days after the source's compliance date. The information required to show compliance for each emission point must be included in the Notification of Compliance Status. Such information includes, but is not limited to, results of any performance tests, design analyses, and parameter monitoring levels for each emission point and supporting data for the designated level.

4. Periodic Reports

Generally, Periodic Reports are required to be submitted semiannually. However, if a combustion, recovery, or recapture device for a particular emission point or process section has more than the excused number of excursions, or if the regulatory authority requests it of the owner or operator, quarterly reports may be required for 1 year for that emission point. After 1 year, semiannual reporting may be resumed, if no additional excursions occur.

The Periodic Report must report when excursions occur, as well as results of any performance tests conducted during the reporting period. For equipment leaks, Periodic Reports must contain summary information on the LDAR program, changes in monitoring frequency or monitoring alternatives, and/or initiation of a quality improvement program (QIP).

5. Other Reports

Other reports required under the final rule include: (1) Reports of process changes that change the compliance status of process vents; (2) reports of changes to the primary product of a PMPU or process unit that becomes a PMPU as a result of the change; (3) reports of the addition of a new PMPU or emission point (other than an equipment leak); (4) reports of reconstruction or new source construction; (5) requests for approval to use alternative monitoring parameters, alternative continuous monitoring or recordkeeping, or alternative controls; and (5) requests for extensions of the allowable repair period and notifications of inspections for storage vessels and wastewater.

IV. Control Technology Basis of the Standard

The rule requirements are based on the MACT floor level of control for the following emission types for polyether polyols made with epoxides: storage vessels, process vent epoxide emissions, process vent nonepoxide emissions from catalyst extraction, and equipment leaks. The Agency selected requirements more stringent than the floor for wastewater emissions and for nonepoxide organic HAP process vent emissions from making or modifying the product. For polyether polyols made with THF, the Agency selected requirements more stringent than the MACT floor level of control for all of the emission types (i.e., storage, process vent emissions, equipment leaks and wastewater). These MACT control levels

have not changed since the September 4, 1997 proposal (62 FR 46804).

The HON control basis establishes MACT for both polyether polyols made with epoxides and polyether polyols made with THF, although for polyether polyols made with THF, the HON control level is above the floor. The only exception to this HON control basis is where control levels established in the "Control of Volatile Organic Compound Emissions From Batch Processes—Alternative Control Techniques Information Document," Document No. EPA-453/R-94-020 (i.e., the Batch ACT), are the above the floor control basis for process vents from batch unit operations.

The HON level of control establishes the basis for MACT for this standard because the continuous unit operations in polyether polyols manufacturing plants are fairly similar to the process units at sources that are subject to the HON. Given the similarity of PMPUs to process units subject to the HON and the fact that the HON level of control had received extensive evaluation during the development of the HON, the EPA concluded that the cost and other impacts of the HON levels were representative of those that could be expected for the polyether polyols production industry. The estimated cost effectiveness for the Batch ACT was determined to be comparable to the cost effectiveness of the HON continuous vent provisions and is expected to be comparable to the cost effectiveness of the process vent requirements in this final rule.

V. Summary of Impacts

The impacts discussed in this section are presented relative to a baseline reflecting the level of control in the absence of the rule. See the baseline emissions memorandum in the Supplementary Information Document for Proposed Standards (EPA-453/R-97-010c, May 1997) for a detailed discussion of this approach. The impacts for existing sources were estimated by bringing each facility's control level up to the levels of the standards. According to industry representatives, no new sources were projected to be constructed in the next 5 years. Therefore, no new source impacts were estimated.

A. Air Impacts

These promulgated standards are estimated to reduce HAP emissions from all existing sources of polyether polyols by 1,810 Mg/yr (2,000 tons/yr). This represents a 47 percent reduction from the baseline level of emissions. This reduction is relatively low, since

several affected facilities have already installed stringent pollution controls in response to State air toxics rules.

B. Other Environmental Impacts

All the HAP being reduced by this regulation are also volatile organic compounds (VOC); thus, a reduction of 1,810 Mg/yr (2,000 tons/yr) of VOC is anticipated as a result of implementing these standards. However, emissions of other criteria pollutants are estimated to increase by 80 Mg/yr (88 tons/yr) as a result of operating process vent and wastewater emission control systems to comply with the standards. Therefore, the net reduction in criteria pollutants resulting from this regulation is anticipated to be 1,730 Mg/yr (1,900 tons/yr).

C. Energy Impacts

The total nationwide energy demands that will result from implementing the process vent and wastewater requirements are around 4.7×10^{10} British thermal units annually (Btu/yr).

D. Cost Impacts

Cost impacts include the capital costs of new control equipment, the cost of energy (supplemental fuel, steam, and electricity) required to operate control equipment, operation and maintenance costs, and the cost savings generated by reducing the loss of valuable raw materials in the form of emissions. Also, cost impacts include the costs of monitoring, recordkeeping, and reporting associated with these promulgated standards.

Under the final rule, it is estimated that total capital costs for existing sources will be \$10.2 million (August 1996 dollars) and that total annual costs will be \$7.7 million per year. The actual compliance cost impacts of the final rule could be less than estimated, due to the potential to use common combustion, recovery, or recapture devices, upgrade existing combustion, recovery, or recapture devices, use other less expensive control technologies, or implement pollution prevention. Because the effect of such practices is highly site-specific and data were unavailable to estimate how often the lower cost compliance practices could be utilized, it is not possible to quantify the amount by which actual compliance costs will be reduced.

E. Economic Impacts

The goal of the economic impact analysis (EPA Document No. EPA-453/R-97-013, May 1997) is to estimate the market response of the polyether polyols industry to the emission standards and determine any adverse

effects that may result from the regulation. Approximately 78 facilities owned by 36 different companies producing polyether polyols domestically may potentially be affected by the regulation.

Since the nationwide annualized cost of this regulation of \$7.7 million represents approximately 0.06 percent of the estimated 1996 sales revenues for domestically produced polyether polyols, the EPA determined that the regulation is not likely to have a significant economic impact on this industry as a whole. For this reason, a streamlined economic analysis was performed to determine facility-specific impacts. Facility-specific impacts were examined by calculating the ratio of the estimated annualized costs of controls for each facility to the estimated revenues per facility (i.e., cost-to-sales ratio) to assess the likelihood of facility closures and employment impacts. A cost-to-sales ratio exceeding 1 percent was determined to be an initial indicator of the potential for a significant facility impact.

Costs exceeded 1 percent of sales for only one facility out of the 78 facilities affected by the regulation. This firm is estimated to potentially experience a cost-to-sales ratio of 1.5 percent. Based on an analysis of the costs of compliance compared to facility and company financial data for this firm, the EPA concluded that it was unlikely that the company owning this facility would choose to close it. The company is financially robust and the costs are a small share of the total company sales and net income. Therefore, the facility-specific impacts are not considered to be significant for any facility affected by this promulgated regulation. The generally small scale of the impacts suggests that there will also be no significant impacts on markets for the products made using polyether polyols, such as polyurethanes. For more information, consult the economic impact report entitled "Economic Analysis Of Air Pollution Regulations: Polyether Polyols Production, May 1997" in the docket for today's rule.

VI. Significant Comments and Changes to the Proposed Standards

Comments on the proposed rule were received from industry and trade organizations. A detailed discussion of these comments and responses can be found in the Basis and Purpose Document for the Final Standards (EPA-453/R-99-002b).

There were a number of comments submitted that were considered to be significant by the EPA. These significant comments covered many aspects of the

rule. The Agency's review of the significant issues raised by the commenters resulted in changes to the proposed rule in many instances. This section summarizes the significant comments raised and provides the EPA's response.

A. Primary Product Determination

One commenter expressed confusion over aspects of the primary product determination in the proposed rule, particularly the provision that specified how a non-PMPU could become a PMPU after the initial determination based on actual production. The EPA agrees that this portion of the proposed primary product provisions needed clarification. In fact, the EPA conducted an overall review of the proposed primary product provisions, and concluded that several structural and clarifying changes were needed. In addition, the EPA noted some potential situations that could occur that were not addressed in the proposed provisions.

The specific concern raised by the commenter was addressed by clearly stipulating how owners or operators of non-PMPUs are to determine whether they have become subject to the rule after the initial primary product determination. The final rule specifies that non-PMPUs that have produced polyether polyols in the past 5 years are to annually re-determine the primary product using actual production values. The rule also specifies how a non-PMPU process unit is to determine the primary product if it has not produced polyether polyols in the past 5 years, but plans to produce polyether polyols in the future.

The proposed provisions required that initial primary product determination be based on a 5-year prediction of anticipated production by the owner or operator. The EPA is aware that, in some instances, the owner or operator may not be able to make such a prediction. Clarifications and/or revisions were made to the primary product provisions to address this situation. First, in the initial determination, the time frame for which production must be anticipated for new process units was changed to 1 year. Also, provisions were added for owners or operators that cannot determine their primary product based on anticipated 5-year (or 1-year) production. To summarize, if polyether polyols have been produced in an existing process unit for 5 percent or greater of the time since September 4, 1997, then the process unit is designated as a PMPU and is subject to the existing source provisions of subpart PPP. For new process units, if polyether polyols will be produced at any time during the first

year of production, then the unit is a PMPU and is subject to the new source provisions of subpart PPP.

In addition to the provisions discussed above that specify how non-PMPUs are to determine if they become PMPUs (i.e., subject to subpart PPP), the EPA has also clarified and expanded the provisions that specify how the PMPU designation can be removed from a process unit. The first case, which is retained from the proposed rule, is where production of polyether polyols ceases and the owner or operator does not anticipate the production of polyether polyols in the future. Also, the EPA has added provisions that specify procedures for a primary product reevaluation based on actual production. If an owner or operator of a PMPU finds that another product has been produced for a greater amount of time than polyether polyols over a specified time period (previous 5 years or since beginning the production of polyether polyols), then the PMPU designation could possibly be removed. The stipulation is that production of the "new" primary product must make the process unit subject to another part 63 NESHAP. If the new primary product is not subject to another part 63 NESHAP and polyether polyols continue to be produced, the process unit continues to be classified as a PMPU and continues to be subject to subpart PPP.

The EPA has also added provisions addressing the determination of the primary product in situations where two or more products are produced simultaneously. Also, clarifications were made in the reporting and recordkeeping requirements associated with the primary product determination. A more in-depth explanation of the primary product determination procedures in § 63.1420(e) can be found in the preamble to the proposed amendments to the Polymers and Resins I and IV NESHAP (64 FR 11563). The primary product provisions in § 63.1420(e) mirror those proposed in §§ 63.480(f) and 63.1310(f).

B. Definition of "Polyether Polyol"

In the proposed rule a "Polyether Polyol" was defined as:

* * * a compound formed through the polymerization of ethylene oxide (EO) or propylene oxide (PO) or other cyclic ethers with compounds having one or more reactive hydrogens (i.e., a hydrogen atom bonded to nitrogen, oxygen, phosphorus, sulfur, etc.) to form polyethers. This definition excludes materials regulated under the HON, such as glycols and glycol ethers.

One commenter requested that the EPA revise the definition of "polyether

polyol" to clarify that the production of typical alkanolamines, which lack repeating ether units, is not regulated under subpart PPP. Another commenter explained that hydroxy ethyl cellulose is formed through the reaction of EO on cellulose polymer molecules. This commenter requested that the EPA clarify whether hydroxy ethyl cellulose manufacturing is included or excluded from the definition of "polyether polyol."

The EPA has revised the definition of "polyether polyol" in the final rule addressing both of these issues by excluding the production of hydroxy ethyl cellulose and by specifying that a polyether must have two or more ether bonds.

C. Definition of "Process Vent"

The definition of "process vent" in the proposed rule did not include any cutoffs based on the flow or HAP concentration of the process vent. One commenter was concerned that the definition of "process vent" did not have a de minimis cutoff, as does the definition of "process vent" in the HON. The cutoff suggested by the commenter (0.005 weight-percent total organic HAP) has been incorporated into the final definition of a process vent, for process vents from continuous unit operations. This decision was based on the fact that the EPA considers it to be impractical to impose requirements for process vent streams with such low HAP concentrations (less than 0.005 weight percent organic HAP). For similar reasons, a de minimis cutoff for process vents from batch unit operations was also added in the final rule. In the Polymers and Resins I and IV NESHAP, the batch process vent definition contains a de minimis cutoff of 225 kg/yr uncontrolled HAP emissions. The EPA believes that this level is also an appropriate de minimis level for process vents from batch unit operations in the polyether polyols industry.

D. Outlet Concentration Limit as an Alternative Epoxide Process Vent Emission Limit for New Sources

The proposed rule did not include a concentration limit as an alternative epoxide process vent emission limit for new sources. The preamble to the proposed rule solicited comments on this subject, to which four commenters responded. All four recommended a 20 ppmv alternative concentration limit. The commenters indicated that the preambles for the New Source Performance Standards for VOC Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations (40

CFR part 60, subpart NNN), and the HON (40 CFR part 63, subpart G) provided rationales for a 20 ppmv limitation that also are applicable to the polyether polyols rule.

In subpart NNN's preamble (48 FR 48932, October 21, 1983), the EPA stated that the outlet concentration of 20 ppmv was established based on kinetic calculations of incinerators. It was demonstrated that, at a given temperature and residence time, a stream with a low inlet concentration could not demonstrate an outlet concentration below 20 ppmv. In the preamble to the proposed amendments to the HON (61 FR 43698, August 26, 1996), the EPA expanded the application of this lower bound concentration performance standard to control/recovery devices other than incinerators. In the HON preamble, the EPA explained that recovery devices are designed to typically reduce emissions to the same outlet concentration level given a relatively wide range of inlet concentrations. When the inlet concentration is substantially below the design maximum leading conditions (and begins to approach the residual level in the outlet stream), the recovery device efficiency will decrease.

The EPA agrees that the rationales for the 20 ppmv concentration limit provided in the preambles discussed above are also applicable to subpart PPP. Further, the technological limitations that form the basis for this alternative 20 ppmv limit are applicable to combustion, recovery, and recapture devices that may be used at existing affected sources or new affected sources. Therefore, the EPA believes it is appropriate to also allow this alternative for new sources.

Therefore, the final rule contains an alternative concentration limit of 20 ppmv for both new and existing sources. This concentration is measured at the outlet of the combustion, recovery, or recapture device.

Another commenter advocated that the alternative 20 ppmv concentration limit should apply more broadly to process vents that do not utilize a combustion, recovery, or recapture device to reduce epoxide emissions. The examples provided by the commenter included vents from equipment practicing a very long ECO or vents from equipment where the epoxide content is very low and emissions are very small.

As discussed above, the lower outlet concentration limit recognizes that there is a lower outlet concentration boundary, below which combustion, recapture and control devices cannot achieve. The EPA understands that the outlet concentration after ECO may be

as low as that after a combustion, recovery, or recapture device. However, this is not based on technological limitations of ECO, as is the basis for the 20 ppmv concentration limit for combustion, recovery, and recapture devices. Therefore, the EPA believes that allowing the 20 ppmv concentration limit for ECO is not appropriate.

Further, the EPA does not believe that it is appropriate to use this alternative concentration requirement as a de minimis cutoff for vents where the epoxide content is very low and emissions are very small. The EPA believes that the HAP concentration and emission de minimis cutoffs in definition of the process vent (discussed above in Section V.C) adequately address these vents.

Finally, the proposed existing source concentration limit was 20 ppmv of total epoxides. Other rules, such as the HON, allow the option of determining outlet concentration limits on a TOC basis. In many instances in the polyether polyols industry, the EPA believes that all the TOC in the emission stream will be epoxides, making the TOC and epoxide concentration equivalent. In fact, if there were other TOC in the stream, compliance with a 20 ppmv TOC limit would mean that the epoxide concentration would necessarily be less than 20 ppmv. For these reasons, the EPA believes that having the alternative concentration limits based on total epoxides or TOC is appropriate for this rule. As discussed later in Section V.J, the EPA decided to allow Method 25A (which is designed to measure TOC) to determine compliance with the alternative concentration limits.

E. Flares as a Reference Control Technology

Two commenters requested that the EPA allow flares as a reference control technology for process vents at existing and new sources. The EPA agreed with the commenters that flares are an acceptable reference control technology for situations where the required organic HAP emission reduction is 98 percent or less. The final rule allows flares as a reference control technology for epoxide process vent emissions at existing sources, for Group 1 nonepoxide organic HAP process vent emissions at new and existing sources, and for nonepoxide organic HAP process vent emissions from catalyst extraction at new and existing sources. However, the data presented by the commenters do not support a destruction efficiency of 99.9 percent for flares combusting EO and PO, which is

the equivalent percent reduction efficiency for the epoxide process vent limitation for new sources. Therefore, the EPA cannot allow flares as a reference control technology for epoxide process vent emissions at new sources.

F. Group Determination on an Individual Process Vent Basis for Nonepoxide Organic HAP Emissions From Making or Modifying the Product

In addition to the use of epoxides reactants, some polyether polyol producers use organic HAP as initiators, solvents, viscosity adjusters, or in other ways to provide special properties to the final products. To address emissions of these nonepoxide organic HAP, the proposed rule contained requirements for "nonepoxide organic HAP used in making or modifying the product." To determine whether control of these nonepoxide organic HAP emissions was required, the proposed rule used a "group" applicability approach, where vents that were classified as Group 1 were required to be controlled by 90 percent. The proposed rule required that the group determination be performed on an aggregate basis. That is, the stream characteristics for all process vents from continuous unit operations within the PMPU that were associated with the use of the nonepoxide organic HAP to make or modify the product were combined and the group criteria applied to the theoretical combined stream. Similarly, the batch vent group determined was on an aggregate basis.

Two commenters raised the point that the equations and other criteria for deciding whether a vent is Group 1 or Group 2 were based on cost-effectiveness decisions related to controlling individual process vents, and that those equations were borrowed from other rules, where they were applied on an individual vent basis. The commenters requested that owners or operators have the option of making the group determinations for nonepoxide process vents on a vent-by-vent basis, rather than being required to do the group determination for the combination of all process vents.

The EPA agrees with the statement that the Group 1 criteria are essentially cost-effectiveness decisions. The group determination criteria in other MACT standards, specifically the HON (for process vents from continuous unit operations) and Polymers and Resins I and IV (for process vents from batch unit operations), are based on cost effectiveness. Prior to proposal, the EPA concluded that the cost-effectiveness based group criteria from the HON and the Polymers and Resins rules were also appropriate measures of the cost

effectiveness of controlling process vent streams at polyether polyols facilities, given the similarities in the process vent stream parameters between the affected industries. Therefore, these group determination criteria were borrowed for the proposed subpart PPP. However, the EPA does recognize that in all three of the rules cited above, the group determination is applied to individual process vents.

The EPA agrees that the TRE index approach was developed for, and has been applied to, individual vents. The EPA further agrees that applying the TRE approach to the combination of process vents from continuous unit operations in a PMPU is not appropriate without conducting an analysis to validate the equations for the combination of vents, or developing new equations. Rather than take this approach, the EPA has decided, in the final rule, to apply the Group 1 criteria for process vents from continuous unit operations that use nonepoxide organic HAP to make or modify the product to individual process vents.

For process vents from batch unit operations that use nonepoxide organic HAP to make or modify the product, the Group 1 equations are the same equations employed in the Polymers and Resins I and IV MACT standards (40 CFR part 63, subparts U and JJJ, respectively). The EPA agrees with the commenters that in these polymers and resins standards, the Group criteria are applied to individual vents. However, unlike the TRE for process vents from continuous unit operations, the group determination approach that is used in subparts U, JJJ, and PPP, was originally developed to be used for either individual vents or the combination of vents.

The original source of the batch vent group determination approach is the Batch ACT document. On page 7-5 of that document, the EPA states "The control option requirements presented in Chapter 6 apply to (1) individual batch VOC process vents to which the annual mass emissions and average flowrate cutoffs are applied directly, and (2) aggregated VOC process vents for which a singular annual mass emission total and average flowrate cutoff value is calculated and for which the option is applied across an aggregate of sources." Therefore, for process vents from batch unit operations, the EPA disagrees with the statements that the group determination equations are being used "in a totally different context" and that there is no supporting rationale for using them. The final rule retains the requirement that the Group criteria be applied to the nonepoxide organic HAP

emissions from the combination of process vents from batch unit operations associated with the use of nonepoxide organic HAP to make or modify the product.

G. Possibility of Dual Controls for Nonepoxide Organic HAP Emissions From Making or Modifying the Product

As discussed above, the proposed rule required group determinations for the nonepoxide organic HAP process vent emissions from making or modifying the product. One commenter pointed out that the proposed rule was not clear about when and where to make this group determination. The commenter also noted that a process vent that uses a control technique for epoxides only (e.g., a scrubber or ECO) would require a second control technique for the nonepoxide organic HAP emissions.

The EPA considered the commenter's points and the options suggested by the commenter. The final rule requires that the group determination for nonepoxide organic HAP emissions be made after the stream has been controlled for the epoxide emissions. The EPA believes that this approach addresses the situation regarding the possibility of dual control. If the epoxide control device also reduces nonepoxide emissions, then that control would impact whether the vent (or group of batch vents) is Group 1. Therefore, control of nonepoxide emissions along with the epoxides will impact whether controls are required at all. If the vent (or group of vents) still has sufficient nonepoxide organic HAP emissions after the epoxide control device to satisfy the Group 1 criteria, the EPA does not believe it is unreasonable to require an additional control device to achieve the specified percent reduction of the nonepoxide emissions.

H. Worst-Case Testing Requirements

The proposed rule required that performance tests for process vents be conducted during worst-case operating conditions for the process. Four commenters requested that this requirement be deleted from the rule.

Worst-case testing requirements were not deleted from the final rule, but were revised. The EPA's reason for requiring compliance testing under worst-case conditions is so that the reduction efficiency of the control device is documented under the most challenging conditions for that control device, especially since commenters noted how difficult it is to represent a typical venting episode. The phrase "worst-case" in the proposed rule referred to the operating conditions of the process (or PMPU). The worst-case testing

requirement has been revised to require testing during the worst-case conditions with respect to the combustion, recovery, or recapture (i.e., control) device.

Presumably, the control device should function as well or better under conditions that are not as challenging. By revising the rule to require testing during the worst-case conditions with respect to the control device, continuous monitoring of operating parameters established during the test provides a reasonable measure of continuous compliance with the efficiency requirement under all conditions.

The commenters asserted that there is no obvious technological difference that would require a different approach to performance testing in this rule from other regulations that have allowed performance tests during representative operating conditions. The EPA disagrees with the commenters' rationale. The EPA believes that there are obvious technological differences from the polyether polyols industry to industries previously regulated (particularly SOCFI type industries) since polyether polyols are produced on a batch basis. There is much more variance in the process vent parameters (i.e., flow and concentration) for process vent streams from batch unit operations, compared to process vents from continuous unit operations. In fact, this point was stressed by commenters. The EPA believes that it is more appropriate to compare the requirements of this rule with other rules that also regulate industries that operate on a batch basis. For this rule, the EPA not only compared the worst-case testing conditions with other rules regulating batch processes, but adopted similar language to that which is contained in the Pharmaceutical Production NESHAP (40 CFR part 63, subpart GGG).

The EPA would like to clarify a misconception related to these worst-case testing provisions. It is not the intent that production schedules be significantly altered, or that impractical scenarios be created for testing that would never occur in actual production. In other words, the EPA intends that testing be conducted for the worst-case situation that can reasonably be expected to occur during normal production. In order to clarify this intent, the EPA has added language in § 63.1438, the general testing section of the rule. This new language specifies that absolute worst case testing conditions does not include situations that could cause damage to equipment, situations that necessitate that the owner or operator make products that

do not meet an existing specification for sale to a customer, or situations that necessitate that the owner or operator make products in excess of demand.

The added language in § 63.1438 also specifies the time period in which the worst-case conditions are to be determined. This time period is either the 6-month period that ends 2 months before the Notification of Compliance Status is due, or the 6-month period that begins 3 months before the performance test and ends 3 months after the performance test. By limiting the worst-case conditions to one of these 6-month periods, the rule eliminates the need for an owner or operator to consider endless possible production scenarios, and allows them to focus on those production scenarios in the 6-month period selected by the owner or operator.

In conclusion, the EPA believes that requiring that performance tests for process vents from batch unit operations during absolute worst-case conditions is necessary to ensure that the emission limitations in the rule are achieved. The EPA also believes that, with the modifications to the rule made after proposal, that the worst-case provisions are reasonable and workable for the polyether polyols industry.

I. Engineering Calculations as an Alternative to Performance Testing

Three commenters voiced concern over the feasibility, accuracy, expense, and safety of measuring emissions from process vents from batch unit operations. The commenters stated that a performance test on these short duration, variable vents is likely to be very inaccurate and potentially dangerous. Two of the commenters recommended that a material balance based on common engineering calculations should be allowed in the final rule as a compliance demonstration option. The commenters stated that engineering calculations would provide a more accurate, less costly, and significantly safer means to verify compliance.

The EPA recognizes that there are issues related to the feasibility, accuracy, and expense of testing process vents from batch unit operations. The EPA would refer readers to Section 7.3 of the Batch ACT for a detailed discussion of these issues. However, the EPA does believe that accurate emission tests can be conducted for these process vents.

One reason that the EPA has historically required performance testing for control devices that reduce emissions from process vents, when engineering analyses are allowed for

other emission sources (such as storage vessels), is that emissions from process vents are typically significantly larger than those from other emission sources. When emissions are larger, the EPA believes that it is important that the effectiveness of the control device be accurately determined by a performance test.

Given that the magnitude of the emissions was a part of the basis for requiring performance tests, the EPA believes that it is reasonable to allow an alternative to performance testing for a process vent control device if emissions being routed to the device are comparable to the emissions that would be vented to control devices for other emission sources for which performance tests are not required. Therefore, the EPA decided that engineering assessments could be allowed in lieu of performance testing for "small" control devices that reduce HAP emissions from process vents. For the Pharmaceutical Production NESHAP, the EPA also determined that it was appropriate to allow engineering calculations as an alternative to performance testing for small control devices, where a small control device is defined as one with uncontrolled annual HAP emissions of less than 10 tons/yr (9.1 Mg/yr). The EPA believes that this level of uncontrolled emissions is also appropriate to define a small control device for the polyether polyols industry. Therefore, the final rule allows the use of a design evaluation instead of a performance test if the control device receives less than 10 tons/yr (9.1 Mg/yr) uncontrolled emissions from one or more PMPUs.

The exemption from performance testing for small control devices discussed above should help to alleviate some of the concerns raised by the commenters. Many of the concerns related to the feasibility, accuracy, and expense of testing these batch vents are due to the short duration, variable nature of batch venting episodes. The EPA believes that if a control device receives more than 10 tons/yr (9.1 Mg/yr) of uncontrolled HAP emissions, it is likely that the vent streams being routed to the device are of longer duration and less variable, thus making it easier to conduct the performance test.

However, the EPA also recognizes that the small control device exemption will not totally eliminate the concerns raised by the commenters. Therefore, the EPA made other changes to the testing requirements to address potential problems related to the testing of batch process vents, which are briefly discussed below.

Since batch emission episodes can be less than 1 hour, the rule was changed to specify that test runs be conducted for the complete duration of the batch venting episode or 1 hour, whichever is less. Other references to 1-hour periods were also removed.

The proposed rule required the use of Method 1 or 1A to select sampling sites. Commenters claimed that, in many instances, neither method would be appropriate for the batch vent streams. The rule was restructured by separating the paragraph addressing the use of Method 1 or 1A for sample or velocity traverses from the paragraphs specifying the sampling site location. In other words, if the owner or operator conducts a sample or velocity traverse, the final rule requires that Method 1 or 1A be used. However, it does not require that these methods be used to select sampling sites.

With regard to the safety issue, the final rule states that, in cases where it is imperative to limit any leakage of emissions into the work atmosphere, a sampling port with a double seal should be installed so that the probe can be inserted and removed without any leakage of exhaust gas into the work atmosphere. Further, the final rule requires that permanent sampling ports be installed at the inlet to the control device during a period when it is most convenient (or least disruptive) to shut the process down (e.g., during a scheduled maintenance outage). In addition to these specific requirements, a general requirement was added that allows owners or operators to eliminate potential testing scenarios if the test could create a situation which could cause plant or testing personnel to be subject to unsafe conditions.

In conclusion, the EPA acknowledges that issues exist with regard to the testing of emissions from batch process units. Changes have been made to the final rule to address these issues. However, the Agency maintains that numerous other industries that utilize batch processes are regulated by MACT standards, and are able to conduct performance tests. The EPA believes that the commenters did not provide sufficient rationale why the polyether polyols industry presents unique testing problems that are not present in these other industries that utilize batch processes. Therefore, the final rule requires that control devices that receive more than 10 tons/yr (9.1 Mg/yr) of uncontrolled organic HAP emissions conduct tests to demonstrate control device performance.

J. Allowable Test Methods for Control Efficiency Determinations

The proposed rule required test Method 18 (40 CFR part 60, appendix A), or any other method or data that have been validated according to Method 301 (40 CFR part 63, appendix A) for control device efficiency determinations. Three commenters noted that this requirement was inconsistent with the test methods used by the facility whose data established the new source MACT floor for epoxide process vent emissions (Method 25A of 40 CFR part 60, appendix A, was used). These commenters also discussed the expense of Method 301 validations, and noted that the proposed rule relied on Method 25A in other parts of the rule (for wastewater), and that other rules (such as the Polymers and Resins IV rule) allow Method 25A without Method 301 validation.

The EPA agrees that allowing of the use of Method 25A would provide more flexibility, and potentially provide the opportunity for less costly testing. However, the EPA believes that Method 25A should be used only after an accurate response factor has been determined. The importance of calibrating a flame ionization detector (FID) reading obtained using Method 25A with respect to a certain compound (adjustment by response factor) depends on how the Method will be used to demonstrate compliance with the standard. In general, the EPA believes that an accurate response factor is necessary in cases where Method 25A is used to demonstrate control efficiency across a device where the composition of the stream may change, or in situations where multiple components, including non-HAP VOC, are present. Because the relative proportion of organic compounds may change across the control device, appropriate response factors are needed to accurately quantify TOC at the inlet and outlet of a control device. In addition, the EPA believes that owners and operators should have the opportunity to demonstrate compliance at the outlet of a control device by measuring 20 ppmv TOC or less. Therefore, the final rule does allow the use of Method 25A under certain conditions. The following describes the choices of test methods allowed in the final rule: (1) Method 18 (40 CFR part 60, appendix A) to determine HAP concentration in any control device efficiency determination; (2) Method 25 (40 CFR part 60, appendix A) to determine total gaseous nonmethane organic concentration for control efficiency determinations in combustion devices; (3) Method 25A (40 CFR part

60, appendix A) to determine the HAP or TOC concentration for control device efficiency determinations under the conditions specified in Method 25 (40 CFR part 60, appendix A) for direct measurement of an effluent with a flame ionization detector, or in demonstrating compliance with the 20 ppmv TOC outlet standard. As an alternative, any other method or data that have been validated according to the applicable procedures in Method 301 (40 CFR part 63, appendix A) may be used.

K. Site-Specific Onset of Extended Cookout

In the proposed rule, the EPA recognized that extended cookout, or ECO, is a pollution prevention alternative used by some polyether polyols producers to reduce epoxide emissions. The proposed rule required that owners or operators of existing sources using ECO achieve the same 98 percent emission reduction (99.9 percent for new sources) that was required for owners or operators using combustion, recovery, or recapture devices. In order to demonstrate a percent efficiency, it was necessary to designate the basis, or the "uncontrolled" emissions, for assessing the percent reduction. The point where uncontrolled emissions were to be assessed, called the "onset" of the ECO, was defined in the proposed rule as the point when the epoxide concentration in the reactor liquid is equal to 25 percent of the concentration of epoxide in the liquid at the end of the epoxide feed. Commenters supported this default ECO onset, and it has been retained in the final rule.

In addition to using this "default" definition of the ECO onset, the proposed rule allowed owners and operators the option of defining the onset of the ECO for their specific process, at another point. The factors required to allow an owner or operator to set a site-specific ECO onset were the profit variable margin (the difference between variable costs (raw materials and energy) of the product and the cost of the raw material). One commenter objected to allowing the establishment of a site-specific ECO onset based on economics, stating that economics can be subjective, making it easy to demonstrate a 98-percent emission reduction.

A late submittal from one commenter challenged the first commenter's argument that the onset of ECO is subjective, noting that one of the pieces of economic information, the price of the raw material, comes from the *Chemical Market Reporter*. However, the other variable in defining the onset

of ECO, the product variable margin and the selling price, was the variable that provoked the original commenter's concern. In fact, the commenter providing the late comment stated that the product variable margin has "a much stronger correlation between product profitability and the economic onset of ECO."

Due to the subjectivity of the product variable margin, and the strong correlation between the product variable margin and the ECO onset, the EPA agreed with the first commenter. The EPA revised the final rule, removing the option of setting site-specific ECO onsets. Allowing the determination of a site-specific ECO onset is not consistent with the concept of MACT, since, given the subjectivity of this approach, it could effectively result in different levels of control for facilities in the same source category.

L. Parameter Monitoring Excursion Definitions

As a result of public comments, the EPA decided to restructure and expand the sections associated with parameter monitoring excursions in order to simplify and clarify these provisions in subpart PPP. The goal of these revisions was to include all of the necessary information about excursions and compliance in one location.

At proposal, the definitions of excursions and the statement that owners and operators were out of compliance for each parameter monitoring excursion were located in separate paragraphs. In the final rule, these concepts are combined into the same paragraph (§ 63.1438(f)).

Basically, there are two ways for excursions to occur. The first is if the average parameter value measured is above a maximum, or below a minimum, established value. The second is if insufficient monitoring data are collected. Revisions were made for both of these instances.

Provisions were added specifying that monitoring data recorded during start-ups, shutdowns, and malfunctions, and during periods of non-operation of the affected source (or portion thereof) are not to be included in any average computed. In addition, the EPA has added paragraphs that describe the periods that are not to be included when determining the period of control or recovery device operation, for purposes of determining whether sufficient monitoring data were collected. Under the new provisions, the following periods are not to be used when determining if sufficient monitoring data are available for the owner or operator to avoid having an excursion:

periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments; start-ups; shutdowns; malfunctions; and periods of non-operation of the affected source that result in the cessation of emissions to which the monitoring applies.

M. Monitoring During Start-ups, Shutdowns, and Malfunctions

The proposed rule required that monitoring data be collected during periods of start-up, shutdown, or malfunction (SSM). Commenters requested that the EPA allow a provision for ceasing to collect monitoring data at a particular control device if operating that monitoring device during periods of SSM would damage the monitoring device. The EPA revised the final rule to allow the owner or operator to cease collecting monitoring data if the owner or operator has illustrated that the monitoring device would be damaged or destroyed if it were not shut down during the SSM period. Such a provision must be included in the Start-up, Shutdown, and Malfunction Plan. Getting such a provision in the Start-up, Shutdown, and Malfunction Plan is accomplished by submitting a request, and rationale defending the request, in the Precompliance Report or in a supplement to the Precompliance Report.

N. Process Vent Control Requirement for Epoxide Emissions From New Sources

A major issue raised in the public comments that did not result in a rule change was related to the new source limitation for process vent epoxide emissions. The proposed rule included a requirement that epoxide emissions from process vents at new affected sources be reduced by 99.9 percent or greater. Several commenters objected to this requirement, and provided numerous reasons supporting their objections. Most of these reasons were related to the facility identified by the EPA as the "best performing facility," upon which this new source limitation was based. The commenters felt that this facility was not representative of the industry, and that a separate subcategory should be created for this facility. The commenters also pointed out that there were inconsistencies between the test methods used by this best performing facility to verify their epoxide emission reduction and the test methods that were contained in the proposed rule. Further, the commenters stated that the 99.9 percent limitation would force new sources to utilize combustion technology, which would

increase criteria pollutants and create potential safety hazards.

The EPA spent a great deal of time evaluating all aspects of this issue. The EPA concluded that the available data do not support the assertion that the polyether polyols source category should be subcategorized in the manner suggested by the commenters. Also, the fact that specific test data (which were analyzed in detail by the Agency) are available for this facility and that permit conditions are in place requiring compliance at the 99.9 percent level leaves the Agency little latitude in establishing new source MACT at a less stringent level. Discussion of each of the individual points raised by commenters is provided below.

1. Subcategorization

As noted above, several commenters stated their belief that the facility that formed the basis for the 99.9 percent new source epoxide emission requirement was not representative of the industry, and that a separate subcategory should be created for this facility. The commenters discussed three characteristics of this facility to support this assertion. The first was the method of operation. The other two were the facility's size and the fact that the facility utilized two incinerators.

By "method of operation," commenters were referring to the venting method employed during the reaction phase of the production process. The commenters stated that the best performing facility is not a similar source, due to the fact that the reactor vents during the epoxide feed step of the reaction. The commenters claimed that such an operation would send high concentrations of epoxides to the control device as a continuous or semi-continuous stream, resulting in an artificially high destruction efficiency (compared to a facility that does not vent unreacted epoxides continuously).

Prior to the development of the proposed rule, the EPA understood the technical merits of this argument, but did not have sufficient data to allow a comparison of the venting and emission characteristics of this facility with other polyether polyols production facilities. Therefore, the EPA requested additional data in order to conclude whether or not subcategorization was warranted on this basis. Therefore, the preamble to the proposed rule stated this data need and specifically requested facility-specific information, in order to allow for further evaluation of this issue (62 FR 46814).

In response to this request, one commenter presented a comparison of uncontrolled and controlled epoxide emissions for a facility owned by the

commenter that does not vent during the epoxide feed (i.e., a "nonvented" facility) with the best controlled facility, which does vent during the epoxide feed (i.e., "vented"). Another commenter provided a comparison of two facilities owned by the same company that were reported to be similar in most aspects, except with respect to when the facility vents the reactor (one was vented and one was nonvented). In addition, one commenter presented a hypothetical comparison between a venting facility and a nonventing facility. All of these comparisons led to conclusions by these commenters that uncontrolled emissions at vented facilities are much higher than uncontrolled emissions at nonvented facilities, which would give vented facilities an unfair advantage in achieving a higher epoxide emission reduction.

The EPA appreciated these comparisons. However, several inconsistencies and assumptions were identified that caused the Agency to conclude that these comparisons do not, independently, provide a sufficient basis for subcategorizing the polyether polyols source category into vented and nonvented subcategories. Some of EPA's concerns with these comparisons are discussed below.

With regard to the comparison of an actual facility with the best performing facility, the EPA found that the epoxide emission estimates used for the best performing facility in the commenter's comparison were drastically different from the emission data that were directly submitted to the EPA by the best performing facility. Also, the emission data from the commenter's facility had been updated from the data originally submitted during an EPA plant site visit to that facility. The estimates provided in the comments were lower than the original estimates due to process improvements at the facility (that were not related to the method of operation). The EPA conducted a similar comparison of the uncontrolled epoxide emissions at these same two facilities using the data originally submitted to the EPA by the two companies. The results were not in accordance with those presented by the commenter. In fact, the uncontrolled emission factor for the commenter's facility was higher than the best controlled facility's factor. Clearly, the analysis of the data available to the Agency does not support this commenter's analysis.

The actual facility analysis conducted by a second commenter stated that their analysis consisted of two facilities owned by the commenter that were

"similarly sized units." However, the EPA found that the production capacity for the nonvented reactor was larger than that for the vented reactor, and the emissions were not adjusted accordingly.

Finally, the hypothetical analysis assumed that a water-cooled condenser was used at the reactor vent. The EPA believes that the use of more efficient refrigerated condensers, which would result in considerably lower uncontrolled emissions, is more representative of practice in the industry.

Given these and other inconsistencies in the facility comparisons provided by commenters, the EPA could not conclude that subcategorization was necessary.

No commenters submitted the facility-specific data that were requested in the proposal preamble. Therefore, even if the examples provided by the commenters had led to the conclusion that subcategorization was warranted, the EPA did not have sufficient facility information to allow a complete subcategorization evaluation.

However, the Agency still wanted to attempt to address the commenters' concerns on this issue. Given the lack of facility-specific data provided by the industry prior to proposal and during the public comment period, the EPA conducted a brief telephone survey to inquire specifically about the method of operation at polyether polyol production facilities. Representatives from all the facilities in the process vent database were called and asked to describe their method of venting during epoxide feed. Of the facilities for which the EPA was able to collect method-of-venting data, 24 percent (including the best-controlled facility) reported venting during the epoxide feed step, and 76 percent reported that their facilities did not vent during the epoxide feed step. Therefore, the EPA concluded that the manner of operation of the best-controlled facility was not "unique," as was claimed by several of the commenters.

The EPA then sought to determine whether the different venting modes during epoxide feed resulted in differences in the amount and pattern of emissions and the achievable degree of emission reduction. The EPA determined that using a facility's uncontrolled emission factor (mass uncontrolled epoxide emissions per mass of polyol product produced) was the best method of comparison, and calculated such a factor for each facility for which sufficient information was available. For the vented facilities, the median uncontrolled emission factor

was 0.17 lb epoxide emissions per 1000 lb of product. The mean uncontrolled emission factor was considered to be an inadequate measure of central tendency, because the data points for vented facilities had a widely varied distribution, with two orders of magnitude difference between the ends of the range. For the nonvented facilities, the median uncontrolled emission factor was 1.09. The commenters asserted that uncontrolled epoxide emissions at vented facilities are considerably higher than those at nonvented facilities. However, the results of the EPA's analysis, based on the best information available, clearly do not support this assertion, since the median uncontrolled emission factor calculated for nonvented facilities is over six times higher than the median uncontrolled emission factor for vented facilities.

In conclusion, based on all of the information available to the Agency, the EPA was unable to determine a different emission trend between the vented and nonvented groups from the data made available to the Agency between proposal and promulgation. Therefore, the EPA did not subcategorize the industry based on the method of operation.

The commenters' second rationale for supporting their claim that the best-controlled facility is not a similar source was that the facility's production capacity is many times that of other sources in the source category. It is the EPA's policy (57 FR 31576; July 16, 1992) that subcategories, or subsets of similar emission sources within a source category, be defined if technical differences in emissions characteristics, processes, control device applicability, or opportunities for pollution prevention exist within the source category. The EPA does not believe that the fact that the best-controlled facility has a larger production capacity satisfies any of these criteria. Further, since one facility in the process vent database has a capacity that is 83 percent of the best-controlled facility's capacity, the EPA also disagrees that the production capacity at the best-controlled facility is unusually large in comparison to the rest of the source category.

The third argument given by the commenters to support their claim that the best-controlled facility is not similar to other affected sources was that this facility has two incinerators, and that no other source uses incineration. The EPA disagrees with the commenters' claim that the best-controlled facility is the only source using an incinerator to control epoxide emissions, since there is another facility in the database that also

uses incineration. Further, the fact that a source has a better control than all other facilities in the source category through the use of one or more incinerators is not a sufficient basis for asserting that the source should be subcategorized. The purpose of MACT is to ensure that regulated sources meet the control standards achieved by the best performing sources in the category. Subcategorization on the basis of the control technology utilized would undermine the very concept of MACT.

In addition to the evaluation of the individual points raised by commenters, the EPA also considered whether these characteristics of the best-controlled facility collectively form a basis for subcategorization. The EPA concluded that, based on the facility-specific process, emissions, and emissions control information provided to the Agency by the polyether polyol industry, a separate subcategory should not be created solely for the best-controlled facility.

2. Inconsistency in Test Methods

An additional concern raised by two commenters was that the data from the best-controlled facility do not support the new source standard because the Agency used information from the State permit and its corresponding performance test reports as data for the best-controlled facility. The commenters claimed that these data were submitted to the State agency to demonstrate compliance with permit emission limitations for VOC, not HAP, and to document that the incinerators were meeting the required VOC destruction efficiency. They noted that there are several significant inconsistencies between the test methods used and the methods required in the proposed standards.

The EPA disagrees with the commenters' statement that the data from the best-controlled facility do not support the new source standard because the performance test was conducted to determine VOC destruction efficiency instead of epoxide emission destruction efficiency, and that the permit conditions are specific to VOC. The primary pollutant in the stream was propylene oxide (PO), and this is the pollutant for which Method 18, at the inlet of the incinerator, and Method 25A, at the outlet of the incinerator, were calibrated during the test at the best-controlled facility. Therefore, even though the test and permit cite VOC destruction efficiency, it is clear that it is the destruction of PO that was tested and regulated at the best-controlled facility. The commenters' concerns about

inconsistencies between the test reports and the proposed standards was discussed in greater detail earlier in this document, in relation to the changes to the test method requirements.

3. Increase in Criteria Pollutant Emissions

Two commenters explained that the combustion technology utilized by the best-controlled facility (which would be necessary to meet the 99.9 percent requirement) results in an increase in criteria pollutants, which were not included in EPA's MACT floor analysis, while alternative control technologies, such as scrubbers or ECO, would be expected to cause significantly lower nitrogen oxides (NO_x) emissions. The EPA is aware that incineration has secondary criteria pollutant emissions. However, MACT floor decisions, under the Clean Air Act, are based on the reduction of HAP emissions, and not on their secondary impacts. The EPA also realizes that an increase in criteria pollutants could trigger Prevention of Significant Deterioration (PSD) and/or New Source Review (NSR). The EPA has addressed this issue in previous NESHAP, by referring to a July 1, 1994 guidance memorandum issued by the EPA (available on the Technology Transfer Network; see "Pollution Control Projects (PCP) and NSR Applicability" from John S. Seitz, Director, Office of Air Quality Planning and Standards to EPA Regional Air Division Directors). In that memorandum, the EPA provided guidance for permitting authorities regarding their ability to approve the PCP exemptions (from PSD review and major NSR) for source categories other than electric utilities that use add-on controls and switching to less-polluting fuels to reduce emissions of toxic pollutants. In the July 1, 1994 guidance memorandum, the EPA specifically identified the combustion of organic toxic pollutants as an example of an add-on control that could be considered a PCP and an appropriate candidate for a case-by-case exclusion from major NSR. The EPA is alert to potential NSR conflicts and feels that this memorandum will alleviate most NSR/PSD review concerns. In the event that it will not, the EPA will attempt to create implementation flexibility on a case-by-case basis.

4. Safety Concerns

The commenters claimed that the EPA has failed to account for potential process safety considerations associated with the combustion of ethylene oxide (EO). The safety issues of incineration of epoxides were adequately addressed at

the best-controlled facility and the other facility in the database that has incineration. Therefore, the EPA did not find these reasons to be sufficient to justify eliminating the data from the best-controlled facility when determining the MACT floor for new sources.

VII. 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 the final standards. The principal purposes of the docket are:

(1) To allow interested parties to readily identify and locate documents so that they can intelligently and 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. Executive Order 12866

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the EPA must determine whether the regulatory action is "significant" and therefore subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Executive Order defines "significant regulatory action" as one that is likely to result in standards 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 entitlement, grants, user 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.

The EPA has determined that this rule does not meet any of the criteria enumerated above and therefore, does not constitute a "significant regulatory action" under the terms of Executive Order 12866.

C. Executive Order 13045

Executive Order 13045, "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), applies to any rule that:

(1) Is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that the EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Order has the potential to influence the regulation. This final rule falls into that category only in part: The minimum rule stringency is set according to a congressionally-mandated, technology-based lower limit called the "floor," while a decision to increase the stringency beyond this floor can be based on risk considerations. Only to the extent that the Agency may consider the inherent toxicity of a regulated pollutant, and any differential impact such a pollutant may have on children's health, in deciding whether to adopt control requirements more stringent than the floor level.

This final rule is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866. No children's risk analysis was performed for this rulemaking because no alternative technologies exist that would provide greater stringency at a reasonable cost, and therefore the results of any such analysis would have no impact on the stringency decision.

D. Paperwork Reduction Act

The information collection requirements in this rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1811.02) and a copy may be obtained from Sandy Farmer by mail at OP Regulatory Information Division; U.S. Environmental Protection Agency (2137); 401 M St., SW.; Washington, DC 20460, by email at farmer.sandy@epa.gov, or by calling (202) 260-2740. A copy may also be downloaded off the internet at <http://www.epa.gov/icr>. The information requirements are not effective until OMB approves them.

The public recordkeeping and reporting burden for this collection of information is estimated to average 1,046 hours per respondent for the first year and 162 hours for each of the second and third years (following promulgation of the rule). Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An Agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR Chapter 15.

E. Regulatory Flexibility Act

The EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this final rule. The EPA has also determined that this rule will not have a significant adverse economic impact on a substantial number of small businesses. Consistent with Small Business Administrative (SBA) size standards, a polyether polyols producing firm is classified as a small entity if it has less than 750 employees and is unaffiliated with a larger domestic entity. Based upon this standard, 7 of the 36 polyether polyol producing firms are classified as small entities (i.e., having fewer than 750 employees). The EPA determined that none of these seven small entities will experience an increase in costs as a result of the promulgation of today's rule that is greater than one percent of revenues. This does not qualify as a significant economic impact on a substantial number of small businesses.

F. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides

that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. This rule is not a "major rule" as defined by 5 U.S.C. § 804(2).

G. Unfunded Mandates

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Pub. L. 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, the EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires the EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows the EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before the EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The 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 aggregate, or the private sector in any 1 year, nor does the rule significantly or uniquely impact small governments, because it contains no requirements that apply to such governments or impose obligations upon them. Thus, the requirements of the UMRA do not apply to this rule.

H. Executive Order 12875

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 implements requirements specifically set forth by the Congress in section 112 of the CAA without the exercise of any discretion by the EPA. Accordingly, the requirements of section 1(a) of Executive Order 12875 do not apply to this rule.

I. Executive Order 13084

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 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. The rule does not affect these entities because they do not own or operate sources subject to this rule and therefore are not required to purchase control systems to meet the requirements of this rule. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

J. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA), Pub. L. 104-113 (March 7, 1996), directs all Federal agencies to use voluntary consensus standards in regulatory and procurement activities unless to do so would be inconsistent with applicable law or otherwise impracticable. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) developed or adopted by one or more voluntary consensus bodies. The NTTAA requires Federal agencies to provide Congress, through annual reports to OMB, with explanations when an agency does not use available and applicable voluntary consensus standards. This section summarizes the EPA's response to the requirements of the NTTAA for the analytical and test methods to be required by this final rule.

Consistent with the NTTAA, the EPA conducted a search to identify voluntary consensus standards. The search identified 15 voluntary consensus standards that appeared to have possible use in lieu of EPA standard reference methods in this rule. However, after reviewing available standards, EPA determined that eight of the candidate consensus standards identified for measuring emissions of the HAP or surrogates subject to emission standards in the rule would not be practical due to lack of equivalency, documentation, validation data or other important technical and policy considerations. Seven of the remaining candidate consensus standards are new standards under development that EPA plans to follow, review and consider adopting at a later date.

One consensus standard, ASTM Z7420Z, is potentially practical for EPA use in lieu of EPA Method 18 (See 40 CFR part 60, appendix A). At the time of EPA's search, the ASTM standard was still under development and EPA had provided comments on the method. The EPA also compared a draft of this ASTM standard to methods previously approved as alternatives to EPA Method 18 with specific applicability limitations. These methods, designated as ALT-017 and CTM-028, are available through EPA's Emission Measurement Center Internet site at www.epa.gov/ttn/emc/tmethods.html. The proposed ASTM Z7420Z standard is very similar to these approved alternative methods. When finalized and adopted by ASTM, the standard may be equally suitable for specific applications. However, today's rule does not adopt the ASTM standard at this time as it is not practical to do so until the potential candidate is final and EPA has reviewed the final standard. The EPA plans to continue to follow the progress of the standard and will consider adopting the ASTM standard at a later date.

This rule requires standard EPA methods known to the industry and States. Approved alternative methods also may be used with prior EPA approval.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Reporting and recordkeeping requirements.

Dated: May 12, 1999.

Carol M. Browner,
Administrator.

For the reasons set out in the preamble, part 63 of title 40, chapter I of the Code of Federal Regulations is amended as follows:

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR AFFECTED SOURCE CATEGORIES

1. The authority citation for part 63 continues to read as follows:

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

2. Part 63 is amended by adding subpart PPP to read as follows:

Subpart PPP—National Emission Standards for Hazardous Air Pollutant Emissions for Polyether Polyols Production

Sec.

- 63.1420 Applicability and designation of affected sources.
- 63.1421 Delegation of authority.
- 63.1422 Compliance dates and relationship of this rule to existing applicable rules.
- 63.1423 Definitions.

- 63.1424 Emission standards.
- 63.1425 Process vent control requirements.
- 63.1426 Process vent requirements for determining organic HAP concentration, control efficiency, and aggregated organic HAP emission reduction for a PMPU.
- 63.1427 Process vent requirements for processes using extended cookout as an epoxide emission reduction technique.
- 63.1428 Process vent requirements for group determination of PMPUs using a nonepoxide organic HAP to make or modify the product.
- 63.1429 Process vent monitoring requirements.
- 63.1430 Process vent reporting and recordkeeping requirements.
- 63.1431 Process vent annual epoxides emission factor plan requirements.
- 63.1432 Storage vessel provisions.
- 63.1433 Wastewater provisions.
- 63.1434 Equipment leak provisions.
- 63.1435 Heat exchanger provisions.
- 63.1436 [Reserved]
- 63.1437 Additional requirements for performance testing.
- 63.1438 Parameter monitoring levels and excursions.
- 63.1439 General recordkeeping and reporting provisions.

Table 1 to Subpart PPP of Part 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART PPP AFFECTED SOURCES

Table 2 to Subpart PPP of Part 63—APPLICABILITY OF SUBPARTS F, G, H, AND U TO SUBPART PPP AFFECTED SOURCES

Table 3 to Subpart PPP of Part 63—GROUP 1 STORAGE VESSELS AT EXISTING AND NEW AFFECTED SOURCES

Table 4 to Subpart PPP of Part 63—KNOWN ORGANIC HAP FROM POLYETHER POLYOL PRODUCTS

Table 5 to Subpart PPP of Part 63—PROCESS VENTS FROM BATCH UNIT OPERATIONS—MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

Table 6 to Subpart PPP of Part 63—PROCESS VENTS FROM CONTINUOUS UNIT OPERATIONS—MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

Table 7 to Subpart PPP of Part 63—OPERATING PARAMETERS FOR WHICH MONITORING LEVELS ARE REQUIRED TO BE ESTABLISHED FOR PROCESS VENTS STREAMS

Table 8 to Subpart PPP of Part 63—ROUTINE REPORTS REQUIRED BY THIS SUBPART

Subpart PPP—National Emission Standards for Hazardous Air Pollutant Emissions for Polyether Polyols Production

§ 63.1420 Applicability and designation of affected sources.

(a) *Definition of affected source.* The provisions of this subpart apply to each affected source. Affected sources are

described in paragraphs (a)(1) through (4) of this section.

(1) An affected source is either an existing affected source or a new affected source. Existing affected source is defined in paragraph (a)(2) of this section, and new affected source is defined in paragraph (a)(3) of this section.

(2) An existing affected source is defined as the group of one or more polyether polyol manufacturing process units (PMPUs) and associated equipment, as listed in paragraph (a)(4) of this section, that is not part of a new affected source, as defined in paragraph (a)(3) of this section, and that is located at a plant site that is a major source.

(3) A new affected source is defined as a source that meets the criteria of paragraph (a)(3)(i), (ii), or (iii) of this section. The situation described in paragraph (a)(3)(i) of this section is distinct from those situations described in paragraphs (a)(3)(ii) and (iii) of this section.

(i) At a site without organic HAP emission points before September 4, 1997 (i.e., a "greenfield" site), the group of one or more PMPUs and associated equipment, as listed in paragraph (a)(4) of this section, that is part of a major source, and on which construction for the PMPU(s) commenced after September 4, 1997;

(ii) The group of one or more PMPUs meeting the criteria in paragraph (g)(1)(i) of this section; or

(iii) A reconstructed affected source meeting the criteria in paragraph (g)(2)(i) of this section.

(4) The affected source also includes the emission points and equipment specified in paragraphs (a)(4)(i) through (vi) of this section that are associated with a PMPU (or a group of PMPUs) making up an affected source, as defined in § 63.1423.

- (i) Each waste management unit.
- (ii) Maintenance wastewater.
- (iii) Each heat exchange system.
- (iv) Equipment required by or utilized as a method of compliance with this subpart which may include control techniques and recovery devices.
- (v) Product finishing operation.
- (vi) Each feed or catalyst operation.

(b) *PMPUs without organic HAP.* The owner or operator of a PMPU that is part of an affected source, as defined in paragraph (a) of this section, but that does not use or manufacture any organic HAP during the production of one or more products is only subject to the provisions of this subpart as specified in paragraph (b)(1) or (2) of this section, as applicable. Products or raw material(s) containing organic HAP as impurities

only are not considered organic HAP for the purposes of this paragraph.

(1) If an organic HAP is not used or manufactured in the production of polyether polyols, the PMPU is not subject to any provisions of this subpart, except that the owner or operator shall comply with either paragraph (b)(1)(i) or (ii) of this section. The owner or operator is not required to comply with the provisions of 40 CFR part 63, subpart A (the General Provisions) for that PMPU.

(i) Retain information, data, and analyses used to document the basis for the determination that the PMPU does not use or manufacture any organic HAP. Types of information that could document this determination include, but are not limited to, records of chemicals purchased for the process, analyses of process stream composition, engineering calculations, or process knowledge.

(ii) When requested by the Administrator, demonstrate that the PMPU does not use or manufacture any organic HAP.

(2) If an organic HAP is used or manufactured in the production of polyether polyols, but an organic HAP is not used in the production of one or more products that are not polyether polyols, the PMPU is not subject to any provision of this subpart other than paragraph (b)(1)(i) or (ii) of this section during the production of the non-polyether polyol products that do not use or manufacture any organic HAP.

(c) *Emission points included in the affected source but not subject to the provisions of this subpart.* The affected source includes the emission points listed in paragraphs (c)(1) through (12) of this section, but these emission points are not subject to the requirements of this subpart or the provisions of 40 CFR part 63, subpart A.

(1) Equipment that does not contain organic HAP or that contains organic HAP as impurities only and is located at a PMPU that is part of an affected source.

(2) Stormwater managed in segregated sewers.

(3) Water from fire-fighting and deluge systems in segregated sewers.

(4) Spills.

(5) Water from safety showers.

(6) Water from testing of deluge systems.

(7) Water from testing of firefighting systems.

(8) Vessels that store and/or handle material that contains no organic HAP or organic HAP as impurities only.

(9) Equipment that operates in organic HAP service for less than 300 hours during the calendar year.

(10) Loading racks, loading arms, or loading hoses that only transfer liquids containing HAP as impurities.

(11) Loading racks, loading arms, or loading hoses that vapor balance during all loading operations.

(12) Utility fluids, such as heat transfer fluids.

(d) *Processes exempted from the affected source.* The processes specified in paragraphs (d)(1) through (3) of this section are not part of the affected source and are exempted from the requirements of both this subpart and subpart A of this part.

(1) Research and development facilities.

(2) Solvent reclamation, recovery, or recycling operations at hazardous waste treatment, storage, and disposal facilities (TSDF) requiring a permit under 40 CFR part 270 that are not part of a PMPU to which this subpart applies.

(3) Reactions or processing that occur after the epoxide polymerization is complete and after all catalyst removal steps, if any, are complete.

(e) *Primary product determination and applicability.* An owner or operator of a process unit that produces or plans to produce a polyether polyol shall determine if the process unit is subject to this subpart in accordance with this paragraph.

(1) *Initial primary product determination.* The owner or operator shall initially determine the primary product of each process unit in accordance with paragraphs (e)(1)(i) through (iii) of this section.

(i) If a process unit manufactures only one product, then that product shall represent the primary product of the process unit.

(ii) If a process unit produces more than one intended product at the same time, the primary product shall be determined in accordance with paragraph (e)(1)(ii)(A) or (B) of this section.

(A) The product for which the process unit has the greatest annual design capacity on a mass basis shall represent the primary product of the process unit, or

(B) If a process unit has the same maximum annual design capacity on a mass basis for two or more products and if one of those products is a polyether polyol, then the polyether polyol shall represent the primary product of the process unit.

(iii) If a process unit is designed and operated as a flexible operation unit, the primary product shall be determined as specified in paragraph (e)(1)(iii)(A) or (B) of this section based on the anticipated operations for the 5 years

following September 4, 1997 for existing process units, or for the first year after the process unit begins production of any product for the new process units. If operations cannot be anticipated sufficiently to allow the determination of the primary product for the specified period, applicability shall be determined in accordance with paragraph (e)(2) of this section.

(A) If the flexible operation unit will manufacture one product for the greatest operating time over the specified 5-year period for existing process units, or the specified 1-year period for new process units, then that product shall represent the primary product of the flexible operation unit.

(B) If the flexible operation unit will manufacture multiple products equally based on operating time, then the product with the greatest expected production on a mass basis over the specified 5-year period for existing process units, or the specified 1-year period for new process units shall represent the primary product of the flexible operation unit.

(iv) If, according to paragraph (e)(1)(i), (ii), or (iii) of this section, the primary product of a process unit is a polyether polyol, then that process unit shall be designated as a PMPU. If the plant site is a major source, that PMPU and associated equipment, as listed in paragraph (a)(4) of this section, is either an affected source or part of an affected source comprised of one or more other PMPUs and associated equipment, as listed in paragraph (a)(4) of this section, and subject to this subpart. If the primary product of a process unit is not a polyether polyol, then that process unit is not a PMPU.

(2) *Provisions if primary product cannot be determined.* If the primary product cannot be determined for a flexible operation unit in accordance with paragraph (e)(1)(iii) of this section, applicability shall be determined in accordance with this paragraph.

(i) If the owner or operator can determine that a polyether polyol is not the primary product, then that flexible operation unit is not a PMPU.

(ii) If the owner or operator cannot determine that a polyether polyol is not the primary product as specified in paragraph (e)(2)(i) of this section, applicability shall be determined in accordance with paragraph (e)(2)(ii)(A) or (B) of this section.

(A) If the flexible operation unit is an existing process unit, the flexible operation unit shall be designated as a PMPU if a polyether polyol was produced for 5 percent or greater of the total operating time of the flexible operation unit since September 4, 1997.

(B) If the flexible operation unit is a new process unit, the flexible operation unit shall be designated as a PMPU if the owner or operator anticipates that a polyether polyol will be manufactured in the flexible operation unit at any time in the first year after the date the unit begins production of any product.

(3) *Annual applicability determination for non-PMPUs that have produced a polyether polyol.* Once per year beginning June 1, 2004 the owner or operator of each flexible operation unit that is not designated as a PMPU, but that has produced a polyether polyol at any time in the preceding 5-year period or since the date that the unit began production of any product, whichever is shorter, shall perform the evaluation described in paragraphs (e)(3)(i) through (iii) of this section.

(i) For each product produced in the flexible operation unit, the owner or operator shall calculate the percentage of total operating time over which the product was produced during the preceding 5-year period.

(ii) The owner or operator shall identify the primary product as the product with the highest percentage of total operating time for the preceding 5-year period.

(iii) If the primary product identified in paragraph (e)(3)(ii) is a polyether polyol, the flexible operation unit shall be designated as a PMPU. The owner or operator shall notify the Administrator no later than 45 days after determining that the flexible operation unit is a PMPU, and shall comply with the requirements of this subpart in accordance with paragraph (g)(1) of this section for the flexible operation unit.

(4) *Applicability determination for non-PMPUs that have not produced a polyether polyol.* The owner or operator that anticipates the production of a polyether polyol in a process unit that is not designated as a PMPU, and in which no polyether polyol products have been produced in the previous 5-year period or since the date that the process unit began production of any product, whichever is shorter, shall use the procedures in paragraph (e)(1) or (2) of this section to determine if the process unit is designated as a PMPU, with the exception that for existing process units, owners or operators shall project production for the 5 years following the date that the owner or operator anticipates initiating the production of a polyether polyol, instead of the 5 years following September 4, 1997. If the unit is designated as a PMPU, the owner or operator shall comply in accordance with paragraph (g)(1) of this section.

(5) *Applicability of requirements for PMPUs that are flexible operation units.* The owner or operator of PMPUs that are flexible operation units shall comply with the provisions of this subpart in accordance with paragraphs (e)(5)(i) through (iii) of this section.

(i) *Control requirements.* The owner or operator shall comply with the control requirements of this subpart in accordance with paragraphs (e)(5)(i)(A) and (B) of this section.

(A) During periods when the PMPU produces polyether polyols, the owner or operator shall comply with the provisions of this subpart.

(B) During periods when the PMPU produces products other than polyether polyols, the owner or operator is not required to install additional combustion, recovery, or recapture devices (to otherwise demonstrate compliance). However, the owner or operator shall continue to operate any existing combustion, recovery, or recapture devices that are required for compliance during the production of polyether polyols, with the exceptions provided in paragraph (e)(5)(iv) of this section. If extended cookout (ECO) is the control technique chosen for epoxide emission reduction, then ECO or a control technique providing an equivalent reduction in epoxide emissions should continue to be used for epoxide emission reduction, if the non-polyether polyol being produced uses epoxide monomers.

(ii) *Monitoring requirements.* The owner or operator shall comply with the monitoring requirements of this subpart in accordance with paragraphs (e)(5)(ii)(A) and (B) of this section, and paragraph (e)(5)(ii)(C) of this section if applicable.

(A) The owner or operator shall establish a single parameter monitoring level (for each parameter required to be monitored at each device subject to monitoring requirements) in accordance with § 63.1438(a) based on emission point and control technique characteristics when polyether polyol is being produced.

(B) The owner or operator shall monitor each parameter at each device subject to monitoring requirements at all times (during periods when the PMPU produces polyether polyols, and during periods when the PMPU produces products other than polyether polyols), with the exceptions provided in paragraph (e)(5)(iv) of this section.

(C) If ECO is used to reduce epoxide emissions, a parameter monitoring level shall be established for the production of non-polyether polyol products as the average of the established parameter levels for all product classes produced.

During periods when products other than polyether polyols are produced, the ECO shall be performed so that the parameter monitoring level established for the production of non-polyether polyol products is maintained when the ECO is used as a control technique.

(iii) *Group determinations.* For emission points where the owner or operator is required to determine if the emission point is Group 1 according the definitions in § 63.1423 (storage vessels, process vents for nonepoxide organic HAP emissions used to make or modify the product, and wastewater), the owner or operator shall determine the group status based on emission point characteristics when polyether polyol is being manufactured. Group 1 emission points shall be controlled in accordance with paragraph (e)(5)(i) of this section.

(iv) *Exceptions.* During periods when products described in paragraphs (e)(5)(iv)(A) and (B) of this section are produced, the owner or operator is not required to comply with the provisions of this subpart.

(A) Products in which no organic HAP is used or manufactured, provided that the owner or operator comply with paragraph (b)(2) of this section.

(B) Products that make the PMPU subject to 40 CFR part 63, subpart GGG (Pharmaceuticals Production NESHAP).

(6) [Reserved]

(7) [Reserved]

(8) *Requirements for process units that are not PMPUs.* If it is determined that a process unit is not subject to this subpart, the owner or operator shall either retain all information, data, and analysis used to document the basis for the determination that the process unit is not a PMPU, or, when requested by the Administrator, demonstrate that the process unit is not a PMPU.

(9) *PMPUs terminating production of polyether polyols products.* If a PMPU terminates the production of polyether polyol and does not anticipate the production of a polyether polyol in the future, the process unit is no longer a PMPU and is not subject to this subpart after notification is made to the Administrator. This notification shall be accompanied by a rationale for why it is anticipated that no polyether polyol will be produced in the process unit in the future.

(10) *Redetermination of applicability to PMPUs that are flexible operation units.* Whenever changes in production occur that could reasonably be expected to change the primary product of a PMPU that is operating as a flexible operation unit from a polyether polyol to a product that would make the process unit subject to another subpart of this part, the owner or operator shall

reevaluate the primary product, in accordance with paragraphs (e)(3)(i) and (ii) of this section. If the conditions in paragraphs (e)(10)(i) through (iii) of this section are met, the flexible operation unit shall no longer be designated as a PMPU after the compliance date of the other subpart, and shall no longer be subject to the provisions of this subpart after the date that the process unit is required to be in compliance with the provisions of the other subpart. If the conditions in paragraphs (e)(10)(i) through (iii) of this section are not met, the flexible operation unit shall continue to be considered a PMPU and subject to the requirements of this subpart.

(i) The product identified as the primary product is not polyether polyol;
 (ii) The production of the product identified as the primary product is subject to another subpart of this part; and

(iii) The owner or operator submits a notification to the Administrator of the pending change in applicability.

(f) *Storage vessel ownership determination.* The owner or operator shall follow the procedures specified in paragraphs (f)(1) through (7) of this section to determine to which process unit a storage vessel shall be assigned.

(1) If a storage vessel is already subject to another subpart of 40 CFR part 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories) on June 1, 1999, that storage vessel shall be assigned to the process unit subject to the other subpart, and none of the other provisions in this subpart shall apply to that storage vessel.

(2) If a storage vessel is dedicated to a single process unit, the storage vessel shall be assigned to that process unit.

(3) If a storage vessel is shared among process units, then the storage vessel shall be assigned to that process unit located on the same plant site as the storage vessel that has the greatest input into or output from the storage vessel (i.e., the process unit that has the predominant use of the storage vessel.)

(4) If predominant use cannot be determined for a storage vessel that is shared among process units and if only one of those process units is a PMPU subject to this subpart, the storage vessel shall be assigned to that PMPU.

(5) If predominant use cannot be determined for a storage vessel that is shared among process units and if more than one of the process units are PMPUs that have different primary products and that are subject to this subpart, then the owner or operator shall assign the storage vessel to any one of the PMPUs sharing the storage vessel.

(6) If the predominant use of a storage vessel varies from year to year, then predominant use shall be determined based on the utilization that occurred during the year preceding June 1, 1999 or based on the expected utilization for the 5 years following June 1, 1999 for existing affected sources, whichever is more representative of the expected operations for that storage vessel, and based on the expected utilization for the 5 years after initial start-up for new affected sources. The determination of predominant use shall be reported in the Notification of Compliance Status, as required by § 63.1439(e)(5)(v).

(7) Where a storage vessel is located at a major source that includes one or more process units which place material into or receive material from the storage vessel, but the storage vessel is located in a tank farm (including a marine tank farm), the applicability of this subpart shall be determined according to the provisions in paragraphs (f)(7)(i) through (iv) of this section.

(i) The storage vessel may only be assigned to a process unit that utilizes the storage vessel and does not have an intervening storage vessel for that product (or raw materials, as appropriate). With respect to any process unit, an intervening storage vessel means a storage vessel connected by hard-piping to both the process unit and the storage vessel in the tank farm so that product or raw material entering or leaving the process unit flows into (or from) the intervening storage vessel and does not flow directly into (or from) the storage vessel in the tank farm.

(ii) If there is no process unit at the major source that meets the criteria of paragraph (f)(7)(i) of this section with respect to a storage vessel, this subpart does not apply to the storage vessel.

(iii) If there is only one process unit at the major source that meets the criteria of paragraph (f)(7)(i) of this section with respect to a storage vessel, the storage vessel shall be assigned to that process unit.

(iv) If there are two or more process units at the major source that meet the criteria of paragraph (f)(7)(i) of this section with respect to a storage vessel, the storage vessel shall be assigned to one of those process units according to the provisions of paragraphs (f)(3) through (6) of this section. The predominant use shall be determined among only those process units that meet the criteria of paragraph (f)(7)(i) of this section.

(8) If the storage vessel begins receiving material from (or sending material to) a process unit that was not included in the initial determination, or ceases to receive material from (or send

material to) a process unit that was included in the initial determination, the owner or operator shall reevaluate the applicability of this subpart to that storage vessel.

(g) *Changes or additions to plant sites.* The provisions of this paragraph apply to the owner or operator that changes or adds to their plant site or affected source.

(1) *Adding a PMPU to a plant site.* The provisions of paragraphs (g)(1)(i) and (ii) of this section apply to the owner or operator that adds one or more PMPUs to a plant site. A PMPU may be added to a plant site by constructing or reconstructing a process unit to produce polyether polyols. A PMPU may also be added to a plant site due to changes in production (anticipated production or actual past production) such that a polyether polyol becomes the primary product of a process unit that was not previously a PMPU.

(i) If a group of one or more PMPUs is added to a plant site, the added group of one or more PMPUs and their associated equipment, as listed in paragraph (a)(4) of this section, shall be a new affected source and shall comply with the requirements for a new affected source in this subpart upon initial start-up or by June 1, 1999, whichever is later, if the criteria specified in paragraph (g)(1)(i)(A) is met and either the criteria in paragraph (g)(1)(i)(B) or (C) of this section are met.

(A) The process units are new process units, as defined in § 63.1423.

(B) The added group of one or more PMPUs and associated equipment, as listed in paragraph (a)(4) of this section, has the potential to emit 10 tons per year (9.1 megagrams per year) or more of any organic HAP or 25 tons per year (22.7 megagrams per year) or more of any combination of organic HAP, and polyether polyols are currently produced at the plant site as the primary product of an affected source.

(C) A polyether polyol is not currently produced at the plant site as the primary product of an affected source, and the plant site meets, or after the addition is constructed will meet, the General Provisions' definition of a major source in § 63.2.

(ii) If a group of one or more PMPUs is added to a plant site, and the added group of one or more PMPUs does not meet the criteria specified in paragraph (g)(1)(i)(A) of this section and one of the criteria specified in either paragraph (g)(1)(i)(B) or (C) of this section, and the plant site meets, or after the addition will meet, the definition of a major source, the owner or operator of the added group of one or more PMPUs and associated equipment, as listed in

paragraph (a)(4) of this section, shall comply with the requirements for an existing affected source in this subpart upon initial start-up; by June 1, 2002; or by 6 months after notifying the Administrator that a process unit has been designated as a PMPU (in accordance with paragraph (g)(3) of this section), whichever is later.

(2) *Adding emission points or making process changes to existing affected sources.* The provisions of paragraphs (g)(2)(i) and (ii) of this section apply to the owner or operator that adds emission points or makes process changes to an existing affected source.

(i) If any process change or addition is made to an existing affected source that meets the criteria specified in paragraphs (g)(2)(i)(A) and (B) of this section, the entire affected source shall be a new affected source and shall comply with the requirements for a new affected source in this subpart upon initial start-up or by June 1, 1999.

(A) It is a process change or addition that meets the definition of reconstruction in § 63.1423(b). For purposes of determining whether the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct an entire affected source, the equivalent capital cost shall be the entire potentially affected source; and

(B) Such reconstruction commenced after September 4, 1997.

(ii) If any process change is made or emission point is added to an existing affected source, and the process change or addition does not meet the criteria specified in paragraph (g)(2)(i)(A) of this section, the resulting emission point(s) shall be subject to the requirements for an existing affected source in this subpart. The resulting emission point(s) shall be in compliance upon initial start-up or by the appropriate compliance date specified in § 63.1422 (i.e., December 1, 1999 for most equipment leak components, and June 1, 2002 for emission points other than equipment leaks).

(3) *Determining what are and are not process changes.* For purposes of paragraph (g) of this section, examples of process changes include, but are not limited to, additions in process equipment resulting in changes in production capacity; production of a product outside the scope of the compliance demonstration; or whenever there is a replacement, removal, or addition of recovery equipment. For purposes of paragraph (g) of this section, process changes do not include: Process upsets, unintentional temporary process changes, and changes that are within the equipment configuration and operating

conditions documented in the Notification of Compliance Status report required by § 63.1439(e)(5).

(4) *Reporting requirements for owners or operators that change or add to their plant site or affected source.* An owner or operator that changes or adds to their plant site or affected source, as discussed in paragraphs (g)(1) and (2) of this section, shall submit a report as specified in § 63.1439(e)(7)(ii).

(h) *Applicability of this subpart during periods of start-up, shutdown, malfunction, or non-operation.* Paragraphs (h)(1) through (4) of this section shall be followed during periods of start-up, shutdown, malfunction, and non-operation of the affected source or any part thereof.

(1) The emission limitations set forth in this subpart and the emission limitations referred to in this subpart shall apply at all times except during periods of non-operation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which this subpart applies. These emission limitations shall not apply during periods of start-up, shutdown, or malfunction, during which the owner or operator shall follow the applicable provisions of the start-up, shutdown, and malfunction plan required by § 63.6(e)(3). However, if a start-up, shutdown, malfunction, or period of non-operation of one portion of an affected source does not affect the ability of a particular emission point to comply with the emission limitations to which it is subject, then that emission point shall still be required to comply with the applicable emission limitations of this subpart during the start-up, shutdown, malfunction, or period of non-operation. For example, if there is an overpressure in the reactor area, a storage vessel that is part of the affected source would still be required to be controlled in accordance with the storage tank provisions in § 63.1432. Similarly, the degassing of a storage vessel would not affect the ability of a process vent to meet the emission limitations for process vents in §§ 63.1425 through 63.1430.

(2) The emission limitations set forth in 40 CFR part 63, subpart H, as referred to in the equipment leak provisions in § 63.1434, shall apply at all times except during periods of non-operation of the affected source (or specific portion thereof) in which the lines are drained and depressurized resulting in cessation of the emissions to which § 63.1434 applies, or during periods of start-up, shutdown, malfunction, or process unit shutdown (as defined in § 63.161).

(3) The owner or operator shall not shut down items of equipment that are

required or utilized for compliance with this subpart during periods of start-up, shutdown, or malfunction during times when emissions (or, where applicable, wastewater streams or residuals) are being routed to such items of equipment if the shutdown would contravene requirements applicable to such items of equipment. This paragraph does not apply if the item of equipment is malfunctioning. This paragraph also does not apply if the owner or operator shuts down the compliance equipment (other than monitoring systems) to avoid damage due to a contemporaneous start-up, shutdown, or malfunction of the affected source or portion thereof. If the owner or operator has reason to believe that monitoring equipment would be damaged due to a contemporaneous start-up, shutdown, or malfunction of the affected source or portion thereof, the owner or operator shall provide documentation supporting such a claim in the Precompliance Report or in a supplement to the Precompliance Report, as provided for in § 63.1439(e)(4). Once approved by the Administrator in accordance with § 63.1439(e)(4)(vii), the provision for ceasing to collect, during a start-up, shutdown, or malfunction, monitoring data that would otherwise be required by the provisions of this subpart shall be incorporated into the start-up, shutdown, malfunction plan for that affected source, as stated in § 63.1439(b)(1).

(4) During start-ups, shutdowns, and malfunctions when the emission limitations of this subpart do not apply pursuant to paragraphs (h)(1) through (3) of this section, the owner or operator shall implement, to the extent reasonably available, measures to prevent or minimize excess emissions to the extent practical. For purposes of this paragraph, the term "excess emissions" means emissions in excess of those that would have occurred if there were no start-up, shutdown, or malfunction and the owner or operator complied with the relevant provisions of this subpart. The measures to be taken shall be identified in the applicable start-up, shutdown, and malfunction plan, and may include, but are not limited to, air pollution control technologies, recovery technologies, work practices, pollution prevention, monitoring, and/or changes in the manner of operation of the affected source. Use of back-up control techniques is not required, but is allowed, if available.

§ 63.1421 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 112(l) of the Act, the authorities

contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to the States: the permission to use an alternative means of emission limitation, from § 63.6(g), and the authority of § 63.177.

§ 63.1422 Compliance dates and relationship of this rule to existing applicable rules.

(a) [Reserved]

(b) New affected sources that commence construction or reconstruction after September 4, 1997 shall be in compliance with this subpart upon initial start-up or by June 1, 1999, whichever is later, as provided in § 63.6(b).

(c) Existing affected sources shall be in compliance with this subpart (except for § 63.1434 for which compliance is covered by paragraph (d) of this section) no later than June 1, 2002, as provided in § 63.6(c), unless an extension has been granted as specified in paragraph (e) of this section.

(d) Except as provided for in paragraphs (d)(1) through (5) of this section, existing affected sources shall be in compliance with § 63.1434 no later than December 1, 1999 unless an extension has been granted as specified in paragraph (e) of this section.

(1) Compliance with the compressor provisions of § 63.164 shall occur no later than June 1, 2000 for any compressor meeting one or more of the criteria in paragraphs (d)(1)(i) through (iv) of this section, if the work can be accomplished without a process unit shutdown, as defined in § 63.161.

(i) The seal system will be replaced.

(ii) A barrier fluid system will be installed.

(iii) A new barrier fluid will be utilized which requires changes to the existing barrier fluid system.

(iv) The compressor shall be modified to permit connecting the compressor to a closed vent system.

(2) Compliance with the compressor provisions of § 63.164 shall occur no later than December 1, 2000, for any compressor meeting all the criteria in paragraphs (d)(2)(i) through (iv) of this section.

(i) The compressor meets one or more of the criteria specified in paragraphs (d)(1)(i) through (iv) of this section.

(ii) The work can be accomplished without a process unit shutdown as defined in § 63.161.

(iii) The additional time is necessary, due to the unavailability of parts beyond the control of the owner or operator.

(iv) The owner or operator submits the request for a compliance extension

to the appropriate U.S. Environmental Protection Agency Regional Office at the addresses listed in § 63.13 no later than 45 days before December 1, 1999. The request for a compliance extension shall contain the information specified in § 63.6(i)(6)(i)(A), (B), and (D). Unless the EPA Regional Office objects to the request for a compliance extension within 30 days after receipt of the request, the request shall be deemed approved.

(3) If compliance with the compressor provisions of § 63.164 cannot reasonably be achieved without a process unit shutdown, as defined in § 63.161, the owner or operator shall achieve compliance no later than June 1, 2001. The owner or operator who elects to use this provision shall submit a request for an extension of compliance in accordance with the requirements of paragraph (d)(2)(iv) of this section.

(4) Compliance with the compressor provisions of § 63.164 shall occur no later than June 1, 2002 for any compressor meeting one or more of the criteria in paragraphs (d)(4)(i) through (iii) of this section. The owner or operator who elects to use these provisions shall submit a request for an extension of compliance in accordance with the requirements of paragraph (d)(2)(iv) of this section.

(i) Compliance cannot be achieved without replacing the compressor.

(ii) Compliance cannot be achieved without recasting the distance piece.

(iii) Design modifications are required to connect to a closed-vent system.

(5) Compliance with the surge control vessel and bottoms receiver provisions of § 63.170 shall occur no later than June 1, 2002.

(e) Pursuant to section 112(i)(3)(B) of the Act, an owner or operator may request an extension allowing the existing affected source up to 1 additional year to comply with section 112(d) standards. For purposes of this subpart, a request for an extension shall be submitted to the permitting authority as part of the operating permit application or to the Administrator as a separate submittal or as part of the Precompliance Report. Requests for extensions shall be submitted no later than 120 days prior to the compliance dates specified in paragraphs (b) through (d) of this section, except as discussed in paragraph (e)(3) of this section. The dates specified in § 63.6(i) for submittal of requests for extensions shall not apply to this subpart.

(1) A request for an extension of compliance shall include the data described in § 63.6(i)(6)(i)(A), (B), and (D).

(2) The requirements in § 63.6(i)(8) through (14) shall govern the review and approval of requests for extensions of compliance with this subpart.

(3) An owner or operator may submit a compliance extension request after the date specified in paragraph (e) of this section, provided that the need for the compliance extension arose after that date, and the need arose due to circumstances beyond reasonable control of the owner or operator. This request shall include, in addition to the information specified in paragraph (e)(1) of this section, a statement of the reasons additional time is needed and the date when the owner or operator first learned of the problem.

(f) Table 1 of this subpart specifies the requirements in 40 CFR part 63, subpart A (the General Provisions) that apply and those that do not apply to owners and operators of affected sources subject to this subpart. For the purposes of this subpart, Table 3 of 40 CFR part 63, subpart F is not applicable.

(g) Table 2 of this subpart summarizes the provisions of 40 CFR part 63, subparts F, G, and H (collectively known as the "HON") that apply and those that do not apply to owners and operators of affected sources subject to this subpart.

(h)(1) After the compliance dates specified in this section, an affected source subject to this subpart that is also subject to the provisions of 40 CFR part 63, subpart I, is required to comply only with the provisions of this subpart.

(2) Sources subject to the provisions in 40 CFR part 63, subpart I, that have elected to comply through a quality improvement program, as specified in § 63.175 or § 63.176 or both, may elect to continue these programs without interruption as a means of complying with this subpart. In other words, becoming subject to this subpart does not restart or reset the "compliance clock" as it relates to reduced burden earned through a quality improvement program.

(i) After the compliance dates specified in this section, a storage vessel that is assigned to an affected source subject to this subpart that is also subject to the 40 CFR part 60, subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984) is required to comply only with the provisions of this subpart. After the compliance dates specified in this section, that storage vessel shall no longer be subject to 40 CFR part 60, subpart Kb.

(j) After the compliance dates specified in this subpart, if any combustion device, recovery device or recapture device subject to this subpart is also subject to monitoring, recordkeeping, and reporting requirements for hazardous waste, disposal, and treatment facilities in 40 CFR part 264, subpart AA (Air Emission Standards for Process Vents) or subpart CC (Air Emission Standards for Tanks, Surface Impoundment, and Containers), the owner or operator may comply with either paragraph (j)(1) or (2) of this section. If, after the compliance dates specified in this subpart, any combustion device, recovery device, or recapture device subject to this subpart is subject to monitoring and recordkeeping requirements hazardous waste treatment, storage, and disposal facilities in 40 CFR part 265, subpart AA (Air Emission Standards for Process Vents) or subpart CC (Air Emission Standards for Tanks, Surface Impoundments, and Containers), the owner or operator may comply with either paragraph (j)(1) or (3) of this section. If the owner or operator elects to comply with either paragraph (j)(2) or (3) of this section, the owner or operator shall notify the Administrator of this choice in the Notification of Compliance Status required by § 63.1439(e)(5).

(1) The owner or operator shall comply with the monitoring, recordkeeping and reporting requirements of this subpart.

(2) The owner or operator shall comply with the monitoring, recordkeeping and reporting requirements in 40 CFR part 264, with the following exception. All excursions, as defined in § 63.1438(f), shall be reported in the periodic report. Compliance with this paragraph shall constitute compliance with the monitoring, recordkeeping and reporting requirements of this subpart.

(3) The owner or operator shall comply with the monitoring and recordkeeping requirements of 40 CFR part 265, subpart AA or subpart CC, and the periodic reporting requirements under 40 CFR part 264, subpart AA or subpart CC, that would apply to the device if the facility had final-permitted status, with the following exception. All excursions, as defined in § 63.1438(f), shall be reported in the periodic report. Compliance with this paragraph shall constitute compliance with the monitoring, recordkeeping and reporting requirements of this subpart.

(k) Paragraphs (k)(1) and (2) of this section address instances in which requirements from other regulations overlap for the same heat exchange

system(s) or waste management unit(s) that are subject to this subpart.

(1) After the applicable compliance date specified in this subpart, if a heat exchange system subject to this subpart is also subject to a standard identified in paragraph (k)(1)(i) or (ii) of this section, compliance with the applicable provisions of the standard identified in paragraph (k)(1)(i) or (ii) shall constitute compliance with the applicable provisions of this subpart with respect to that heat exchange system.

(i) 40 CFR part 63, subpart F.

(ii) A subpart of this part which requires compliance with the HON heat exchange system requirements in § 63.104 (e.g., 40 CFR part 63, subpart JJJ or U).

(2) After the applicable compliance date specified in this subpart, if any waste management unit subject to this subpart is also subject to a standard identified in paragraph (k)(2)(i) or (ii) of this section, compliance with the applicable provisions of the standard identified in paragraph (k)(2)(i) or (ii) shall constitute compliance with the applicable provisions of this subpart with respect to that waste management unit.

(i) 40 CFR part 63, subpart G.

(ii) A subpart of this part which requires compliance with the HON process wastewater provisions in §§ 63.132 through 63.147 (e.g., subpart JJJ or U).

(l) All terms in this subpart that define a period of time for completion of required tasks (e.g., monthly, quarterly, annual), unless specified otherwise in the section or subsection that imposes the requirement, refer to the standard calendar periods, unless altered by mutual agreement between the owner or operator and the Administrator in accordance with paragraph (l)(1) of this section.

(1) Notwithstanding time periods specified in this subpart for completion of required tasks, such time periods may be changed by mutual agreement between the owner or operator and the Administrator, as specified in the General Provisions in 40 CFR part 63, subpart A (e.g., a period could begin on the compliance date or another date, rather than on the first day of the standard calendar period). For each time period that is changed by agreement, the revised period shall remain in effect until it is changed. A new request is not necessary for each recurring period.

(2) Where the period specified for compliance is a standard calendar period, if the initial compliance date occurs after the beginning of the period, compliance shall be required according to the schedule specified in paragraphs

(l)(2)(i) or (ii) of this section, as appropriate.

(i) Compliance shall be required before the end of the standard calendar period within which the compliance deadline occurs, if there remains at least 2 weeks for tasks that shall be performed monthly, at least 1 month for tasks that shall be performed each quarter, or at least 3 months for tasks that shall be performed annually; or

(ii) In all other cases, compliance shall be required before the end of the first full standard calendar period after the period within which the initial compliance deadline occurs.

(3) In all instances where a provision of this subpart requires completion of a task during each of multiple successive periods, an owner or operator may perform the required task at any time during the specified period, provided that the task is conducted at a reasonable interval after completion of the task during the previous period.

§ 63.1423 Definitions.

(a) The following terms used in this subpart shall have the meaning given them in subparts A (§ 63.2), F (§ 63.101), G (§ 63.111), and H (§ 63.161) as specified after each term:

Acr (subpart A)
 Administrator (subpart A)
 Automated monitoring and recording system (subpart G)
 Boiler (subpart G)
 Bottoms receiver (subpart H)
 By-product (subpart F)
 Car-seal (subpart G)
 Closed-vent system (subpart G)
 Combustion device (subpart G)
 Commenced (subpart A)
 Compliance date (subpart A)
 Continuous monitoring system (subpart A)
 Emission standard (subpart A)
 EPA (subpart A)
 Equipment (subpart H)
 Flow indicator (subpart G)
 Fuel gas (subpart F)
 Fuel gas system (subpart F)
 Hard-piping (subpart G)
 Heat exchange system (subpart F)
 Impurity (subpart F)
 Incinerator (subpart G)
 Major source (subpart A)
 Malfunction (subpart A)
 Open-ended valve or line (subpart H)
 Operating permit (subpart F)
 Organic monitoring device (subpart G)
 Owner or operator (subpart A)
 Performance evaluation (subpart A)
 Performance test (subpart A)
 Permitting authority (subpart A)
 Plant site (subpart F)
 Potential to emit (subpart A)
 Primary fuel (subpart G)
 Process heater (subpart G)
 Process unit shutdown (subpart H)
 Reactor (subpart G)
 Recapture device (subpart G)
 Relief valve (subpart G)

Research and development facility (subpart F)
 Run (subpart A)
 Secondary fuel (subpart G)
 Sensor (subpart H)
 Specific gravity monitoring device (subpart G)
 Start-up, shutdown, and malfunction plan (subpart F)
 State (subpart A)
 Surge control vessel (subpart H)
 Temperature monitoring device (subpart G)
 Test method (subpart A)
 Total resource effectiveness index value (subpart G)
 Treatment process (subpart G)
 Visible emission (subpart A)

(b) All other terms used in this subpart shall have the meaning given them in this section.

Annual average concentration, as used in conjunction with the wastewater provisions, means the flow-weighted annual average concentration and is determined by the procedures in § 63.144(b), except as provided in § 63.1433(a)(2).

Annual average flow rate, as used in conjunction with the wastewater provisions, is determined by the procedures in § 63.144(c).

Batch cycle means the step or steps, from start to finish, that occur in a batch unit operation.

Batch unit operation means a unit operation involving intermittent or discontinuous feed into equipment, and, in general, involves the emptying of equipment after the batch cycle ceases and prior to beginning a new batch cycle. Mass, temperature, concentration and other properties of the process may vary with time. Addition of raw material and withdrawal of product do not simultaneously occur in a batch unit operation.

Catalyst extraction means the removal of the catalyst using either solvent or physical extraction method.

Construction means the on-site fabrication, erection, or installation of an affected source. Construction also means the on-site fabrication, erection, or installation of a process unit or a combination of process units which subsequently becomes an affected source or part of an affected source due to a change in primary product.

Continuous record means documentation, either in hard copy or computer readable form, of data values measured at least once during approximately equal intervals of 15 minutes and recorded at the frequency specified in § 63.1439(d).

Continuous recorder is defined in § 63.111, except that when the definition in § 63.111 reads "or records 15-minute or more frequent block average values," the phrase "or records

1-hour or more frequent block average values" shall apply for purposes of this subpart.

Continuous unit operation means a unit operation where the inputs and outputs flow continuously. Continuous unit operations typically approach steady-state conditions. Continuous unit operations typically involve the simultaneous addition of raw material and withdrawal of the product.

Control technique means any equipment or process control used for capturing, recovering, or oxidizing organic hazardous air pollutant vapors. Such equipment includes, but is not limited to, absorbers, adsorbers, boilers, condensers, flares, incinerators, process heaters, and scrubbers, or any combination thereof. Process control includes extended cookout (as defined in this section). Condensers operating as reflux condensers that are necessary for processing, such as liquid level control, temperature control, or distillation operation, shall be considered inherently part of the process and will not be considered control techniques.

Emission point means an individual process vent, storage vessel, wastewater stream, or equipment leak.

Epoxide means a chemical compound consisting of a three-membered cyclic ether. Only emissions of epoxides listed in Table 4 of this subpart (i.e., ethylene oxide and propylene oxide) are regulated by the provisions of this subpart.

Equipment leak means emissions of organic HAP from a pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, surge control vessel, bottoms receiver, or instrumentation system in organic HAP service.

Extended Cookout (ECO) means a control technique that reduces the amount of unreacted ethylene oxide (EO) and/or propylene oxide (PO) (epoxides) in the reactor. This is accomplished by allowing the product to react for a longer time period, thereby having less unreacted epoxides and reducing epoxides emissions that may have otherwise occurred.

Flexible operation unit means a process unit that manufactures different chemical products by periodically alternating raw materials fed to the process unit or operating conditions at the process unit. These units are also referred to as campaign plants or blocked operations.

Group 1 combination of batch process vents means a collection of process vents in a PMPU from batch unit operations that are associated with the use of a nonepoxide organic HAP to

make or modify the product that meet all of the following conditions:

(1) Has annual nonepoxide organic HAP emissions, determined in accordance with § 63.1428(b), of 11,800 kg/yr or greater, and

(2) Has a cutoff flow rate, determined in accordance with § 63.1428(e), that is greater than or equal to the annual average flow rate, determined in accordance with § 63.1428(d).

Group 2 combination of batch process vents means a collection of process vents in a PMPU from batch unit operations that are associated with the use of a nonepoxide organic HAP to make or modify the product that is not classified as a Group 1 combination of batch process vents.

Group 1 continuous process vent means a process vent from a continuous unit operation that is associated with the use of a nonepoxide organic HAP to make or modify the product that meets all of the following conditions:

(1) Has a flow rate greater than or equal to 0.005 standard cubic meters per minute.

(2) Has a total organic HAP concentration greater than or equal to 50 parts per million by volume, and

(3) Has a total resource effectiveness index value, calculated in accordance with § 63.1428(h)(1), less than or equal to 1.0.

Group 2 continuous process vent means a process vent from a continuous unit operation that is associated with the use of a nonepoxide organic HAP to make or modify the product that is not classified as a Group 1 continuous process vent.

Group 1 storage vessel means a storage vessel that meets the applicability criteria specified in Table 3 of this subpart.

Group 2 storage vessel means a storage vessel that does not fall within the definition of a Group 1 storage vessel.

Group 1 wastewater stream means a process wastewater stream at an existing or new affected source that meets the criteria for Group 1 status in § 63.132(c), with the exceptions listed in § 63.1433(a)(2) for the purposes of this subpart (i.e., for organic HAP listed on Table 4 of this subpart only).

Group 2 wastewater stream means any process wastewater stream as defined in § 63.101 at an existing affected source that does not meet the definition (in this section) of a Group 1 wastewater stream.

In organic hazardous air pollutant service or in organic HAP service means that a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 5 percent by weight of total organic HAP (as defined in this

section), as determined according to the provisions of § 63.180(d). The provisions of § 63.180(d) also specify how to determine that a piece of equipment is not in organic HAP service.

Initial start-up means the first time a new or reconstructed affected source begins production, or, for equipment added or changed as described in § 63.1420(g), the first time the equipment is put into operation to produce a polyether polyol. Initial start-up does not include operation solely for testing equipment. Initial start-up does not include subsequent start-ups of an affected source or portion thereof following malfunctions or shutdowns or following changes in product for flexible operation units. Further, for purposes of § 63.1422, initial start-up does not include subsequent start-ups of affected sources or portions thereof following malfunctions or process unit shutdowns.

Maintenance wastewater is defined in § 63.101, except that the term "polyether polyol manufacturing process unit" shall apply whenever the term "chemical manufacturing process unit" is used. Further, the generation of wastewater from the routine rinsing or washing of equipment in batch operation between batches is not maintenance wastewater, but is considered to be process wastewater, for the purposes of this subpart.

Make or modify the product means to produce the polyether polyol by polymerization of epoxides or other cyclic ethers with compounds having one or more reactive hydrogens, and to incorporate additives (e.g., preservatives, antioxidants, or diluents) in order to maintain the quality of the finished products before shipping. Making and modifying the product for this regulation does not include grafting, polymerizing the polyol, or reacting it with compounds other than EO or PO.

Maximum true vapor pressure is defined in § 63.111, except that the terms "transfer" and "transferred" shall not apply for the purposes of this subpart.

New process unit means a process unit for which the construction or reconstruction commenced after September 4, 1997.

On-site or on site means, with respect to records required to be maintained by this subpart or required by another subpart referenced by this subpart, a location within the plant site where the affected source is located. On-site storage of records includes, but is not limited to, a location at the affected source or PMPU to which the records pertain or a location elsewhere at the

plant site where the affected source is located.

Operating day refers to the 24-hour period defined by the owner or operator in the Notification of Compliance Status required by § 63.1439(e)(5). That 24-hour period may be from midnight to midnight or another 24-hour period. The operating day is the 24-hour period for which daily average monitoring values are determined.

Organic hazardous air pollutant(s) (organic HAP) means one or more of the chemicals listed in Table 4 of this subpart, or any other chemical which:

- (1) Is knowingly produced or introduced into the manufacturing process other than as an impurity; and
- (2) Is listed in Table 2 of 40 CFR part 63, subpart F in the HON.

Polyether polyol means a compound formed through the polymerization of EO or PO or other cyclic ethers with compounds having one or more reactive hydrogens (i.e., a hydrogen atom bonded to nitrogen, oxygen, phosphorus, sulfur, etc.) to form polyethers (i.e., compounds with two or more ether bonds). This definition of "polyether polyol" excludes hydroxy ethyl cellulose and materials regulated under 40 CFR part 63, subparts F, G, and H (the HON), such as glycols and glycol ethers.

Polyether polyol manufacturing process unit (PMPU) means a process unit that manufactures a polyether polyol as its primary product, or a process unit designated as a polyether polyol manufacturing unit in accordance with § 63.1420(e)(2). A polyether polyol manufacturing process unit consists of more than one unit operation. This collection of equipment includes purification systems, reactors and their associated product separators and recovery devices, distillation units and their associated distillate receivers and recovery devices, other associated unit operations, storage vessels, surge control vessels, bottoms receivers, product transfer racks, connected ducts and piping, combustion, recovery, or recapture devices or systems, and the equipment (i.e., all pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems that are associated with the PMPU) that are subject to the equipment leak provisions as specified in § 63.1434.

Pressure decay curve is the graph of the reactor pressure versus time from the point when epoxide feed is stopped until the reactor pressure is constant, indicating that most of the epoxide has reacted out of the vapor and liquid

phases. This curve shall be determined with no leaks or vents from the reactor.

Primary product is defined in and determined by the procedures specified in § 63.1420(e).

Process unit means a collection of equipment assembled and connected by pipes or ducts to process raw materials and to manufacture a product.

Process vent means a point of emission from a unit operation having a gaseous stream that is discharged to the atmosphere either directly or after passing through one or more combustion, recovery, or recapture devices. A process vent from a continuous unit operation is a gaseous emission stream containing more than 0.005 weight-percent total organic HAP. A process vent from a batch unit operation is a gaseous emission stream containing more than 225 kilograms per year (500 pounds per year) of organic HAP emissions. Unit operations that may have process vents are condensers, distillation units, reactors, or other unit operations within the PMPU. Process vents exclude pressure relief valve discharges, gaseous streams routed to a fuel gas system(s), and leaks from equipment regulated under § 63.1434. A gaseous emission stream is no longer considered to be a process vent after the stream has been controlled and monitored in accordance with the applicable provisions of this subpart.

Process wastewater means wastewater which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product. Examples are product tank drawdown or feed tank drawdown; water formed during a chemical reaction or used as a reactant; water used to wash impurities from organic products or reactants; equipment washes between batches in a batch process; water used to cool or quench organic vapor streams through direct contact; and condensed steam from jet ejector systems pulling vacuum on vessels containing organics.

Product means a compound or material which is manufactured by a process unit. By-products, isolated intermediates, impurities, wastes, and trace contaminants are not considered products.

Product class means a group of polyether polyols with a similar pressure decay curve (or faster pressure decay curves) that are manufactured within a given set of operating conditions representing the decline in pressure versus time. All products within a product class shall have an essentially similar pressure decay curve, and operate within a given set of

operating conditions. These operating conditions are: a minimum reaction temperature; the number of -OH groups in the polyol; a minimum catalyst concentration; the type of catalyst (e.g., self-catalyzed, base catalyst, or acid catalyst); the epoxide ratio, or a range for that ratio; and the reaction conditions of the system (e.g., the size of the reactor, or the size of the batch).

Reactor liquid means the compound or material made in the reactor, even though the substance may be transferred to another vessel. This material may require further modifications before becoming a final product, in which case the reactor liquid is classified as an "intermediate." This material may be complete at this stage, in which case the reactor liquid is classified as a "product."

Reconstruction means the replacement of components of an affected source or of a previously unaffected stationary source that becomes an affected source as a result of the replacement, to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and

(2) It is technologically and economically feasible for the reconstructed source to meet the provisions of this subpart.

Recovery device means an individual unit of equipment capable of and normally used for the purpose of recovering chemicals for fuel value (i.e., net positive heating value), use, reuse, or for sale for fuel value, use, or reuse. Examples of equipment that may be recovery devices include absorbers, carbon adsorbers, condensers (except reflux condensers), oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin film evaporation units. For the purposes of the monitoring, recordkeeping, or reporting requirements of this subpart, recapture devices are considered to be recovery devices.

Residual is defined in § 63.111, except that when the definition in § 63.111 uses the term "Table 9 compounds," the term "organic HAP listed in Table 9 of subpart G" shall apply, for the purposes of this subpart.

Shutdown means the cessation of operation of an affected source, a PMPU within an affected source, a waste management unit or unit operation within an affected source, equipment required or used to comply with this subpart, or the emptying or degassing of a storage vessel. The purposes for a

shutdown may include, but are not limited to, periodic maintenance, replacement of equipment, or equipment repairs. Shutdown does not include the normal periods between batch cycles. For continuous unit operations, shutdown includes transitional conditions due to changes in product for flexible operation units. For batch unit operations, shutdown does not include transitional conditions due to changes in product for flexible operation units. For purposes of the wastewater provisions, shutdown does not include the routine rinsing or washing of equipment between batch cycles.

Start-up means the setting into operation of an affected source, a PMPU within the affected source, a waste management unit or unit operation within an affected source, equipment required or used to comply with this subpart, or a storage vessel after emptying and degassing. For all processes, start-up includes initial start-up and operation solely for testing equipment. Start-up does not include the recharging of batch unit operations. For continuous unit operations, start-up includes transitional conditions due to changes in product for flexible operation units. For batch unit operations, start-up does not include transitional conditions due to changes in product for flexible operation units.

Steady-state conditions means that all variables (temperatures, pressures, volumes, flow rates, etc.) in a process do not vary significantly with time; minor fluctuations about constant mean values may occur.

Storage vessel means a tank or other vessel that is used to store liquids that contain one or more organic HAP.

Storage vessels do not include:

- (1) Vessels permanently attached to motor vehicles such as trucks, railcars, barges, or ships;
- (2) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere;
- (3) Vessels with capacities smaller than 38 cubic meters;
- (4) Vessels and equipment storing and/or handling material that contains no organic HAP, or organic HAP as impurities only;
- (5) Surge control vessels and bottoms receiver tanks;
- (6) Wastewater storage tanks; and
- (7) Storage vessels assigned to another process unit regulated under another subpart of part 63.

Total organic compounds (TOC) are those compounds, excluding methane and ethane, measured according to the

procedures of Method 18 or Method 25A of 40 CFR part 60, appendix A.

Unit operation means one or more pieces of process equipment used to make a single change to the physical or chemical characteristics of one or more process streams. Unit operations include, but are not limited to, reactors, distillation units, extraction columns, absorbers, decanters, condensers, and filtration equipment.

Vent stream, as used in reference to process vents, means the emissions from a process vent.

Waste management unit is defined in § 63.111, except that when the definition in § 63.111 uses the term "chemical manufacturing process unit," the term "PMPU" shall apply for the purposes of this subpart.

Wastewater means water that:

(1) Contains either

(i) An annual average concentration of organic HAP listed in Table 4 of this subpart of at least 5 parts per million by weight and has an annual average flow rate of 0.02 liter per minute or greater, or

(ii) An annual average concentration of organic HAP listed on Table 4 of this subpart of at least 10,000 parts per million by weight at any flow rate; and that

(2) Is discarded from a PMPU that is part of an affected source. Wastewater is process wastewater or maintenance wastewater.

§ 63.1424 Emission standards.

(a) Except as provided under paragraph (b) of this section, the owner or operator of an existing or new affected source shall comply with the provisions in:

- (1) Sections 63.1425 through 63.1430 for process vents;
- (2) Section 63.1432 for storage vessels;
- (3) Section 63.1433 for wastewater;
- (4) Section 63.1434 for equipment leaks;
- (5) Section 63.1435 for heat exchangers;
- (6) Section 63.1437 for additional test methods and procedures;
- (7) Section 63.1438 for monitoring levels and excursions; and
- (8) Section 63.1439 for general reporting and recordkeeping requirements.

(b) When emissions of different kinds (i.e., emissions from process vents subject to §§ 63.1425 through 63.1430, storage vessels subject to § 63.1432, process wastewater, and/or in-process equipment subject to § 63.149) are combined, and at least one of the emission streams would require control according to the applicable provision in the absence of combination with other

emission streams, the owner or operator shall comply with the requirements of either paragraph (b)(1) or (2) of this section.

(1) Comply with the applicable requirements of this subpart for each kind of emission in the stream as specified in paragraphs (a)(1) through (5) of this section; or

(2) Comply with the most stringent set of requirements that applies to any individual emission stream that is included in the combined stream, where either that emission stream would be classified as requiring control in the absence of combination with other emission streams, or the owner chooses to consider that emission stream to require control for the purposes of this paragraph.

§ 63.1425 Process vent control requirements.

(a) *Applicability of process vent control requirements.* For each process vent at an affected source, the owner or operator shall comply with the provisions of this section. Owners and operators of all affected sources using epoxides in the production of polyether polyols are subject to the requirements of paragraph (b) of this section. Owners or operators are subject to the requirements of paragraph (c) of this section only if epoxides are used in the production of polyether polyols and nonepoxide organic HAP are used to make or modify the product. Similarly, owners or operators are subject to the requirements of paragraph (d) of this section only if epoxides are used in the production of polyether polyols and organic HAP are used in catalyst extraction. The owner or operator of an affected source where polyether polyol products are produced using tetrahydrofuran shall comply with paragraph (f) of this section.

(b) *Requirements for epoxide emissions.* The owner or operator of an affected source where polyether polyol products are produced using epoxides shall reduce epoxide emissions from process vents from batch unit operations and continuous unit operations within each PMPU in accordance with either paragraph (b)(1) or (2) of this section.

(1) For new affected sources, the owner or operator shall comply with paragraph (b)(1)(i), (ii), or (iii) of this section. The owner or operator also has the option of complying with a combination of paragraphs (b)(1)(i) and (ii) of this section. If the owner or operator chooses to comply with a combination of paragraphs (b)(1)(i) and (ii) of this section, each process vent not controlled in accordance with paragraph (b)(1)(ii) of this section shall be part of

the group of applicable process vents that shall then comply with paragraph (b)(1)(i) of this section.

(i) Reduce the total epoxide emissions from the group of applicable process vents by an aggregated 99.9 percent;

(ii) Maintain an outlet concentration of total epoxides or TOC after each combustion, recapture, or recovery device of 20 ppmv or less; or

(iii) Maintain an emission factor of no greater than 4.43×10^{-3} kilogram epoxide emissions per megagram of product (4.43×10^{-3} pounds epoxide emissions per 1,000 pounds of product) for all process vents in the PMPU.

(2) For existing affected sources, the owner or operator shall comply with either paragraph (b)(2)(i), (ii), (iii), or (iv) of this section. The owner or operator also has the option of complying with a combination of paragraphs (b)(2)(ii) and (iii) of this section. If the owner or operator chooses to comply with a combination of paragraphs (b)(2)(ii) and (iii) of this section, each process vent that is not controlled in accordance with paragraph (b)(2)(iii) of this section shall be part of the group of applicable process vents that shall then comply with paragraph (b)(2)(ii) of this section. The owner or operator also has the option of complying with a combination of paragraphs (b)(2)(i) and (iii) of this section.

(i) Reduce the total epoxide emissions from each process vent using a flare;

(ii) Reduce the total epoxide emissions from the group of applicable process vents by an aggregated 98 percent;

(iii) Maintain an outlet concentration of total epoxides or TOC after each combustion, recapture or recovery devices of 20 ppmv or less; or

(iv) Maintain an emission factor of no greater than 1.69×10^{-2} kilogram epoxide emissions per megagram of product (1.69×10^{-2} pounds epoxide emissions per 1,000 pounds of product) for all process vents in the PMPU.

(c) *Requirements for nonepoxide organic HAP emissions from making or modifying the product.* The owner or operator of a new or existing source where polyether polyols are produced using epoxides, and where nonepoxide organic HAP are used to make or modify the product, shall comply with this paragraph. For each process vent from a continuous unit operation that is associated with the use of a nonepoxide organic HAP to make or modify the product, the owner or operator shall determine if the process vent is a Group 1 continuous process vent, as defined in § 63.1423. For the combination of process vents from batch unit operations

that are associated with the use of a nonepoxide organic HAP to make or modify the product, the owner or operator shall determine if the combination of process vents is a Group 1 combination of batch process vents, as defined in § 63.1423.

(1) *Requirements for Group 1 combinations of batch process vents.*

For each Group 1 combination of batch process vents, as defined in § 63.1423, the owner or operator shall comply with either paragraph (c)(1)(i) or (ii) of this section.

(i) Reduce nonepoxide organic HAP emissions using a flare.

(ii) Reduce nonepoxide organic HAP emissions by 90 percent using a combustion, recovery, or recapture device.

(2) *Requirements for Group 2 combinations of batch process vents.*

For each Group 2 combination of batch process vents, as defined in § 63.1423, the owner or operator reassess the group status when process changes occur, in accordance with the provisions of § 63.1428(g). No control requirements apply to these process vents.

(3) *Requirements for Group 1 continuous process vents.* For each Group 1 continuous process vent, as defined in § 63.1423, the owner or operator shall comply with either paragraph (c)(3)(i) or (ii) of this section.

(i) Reduce nonepoxide organic HAP emissions using a flare.

(ii) Reduce nonepoxide organic HAP emissions by 98 percent using a combustion, recovery, or recapture device.

(4) *Requirements for Group 2 continuous process vents.* For each Group 2 continuous process vent, as defined in § 63.1423, the owner or operator shall comply with either paragraph (c)(4)(i) or (ii) of this section.

(i) If the TRE for the process vent is greater than 1.0 but less than 4.0, the owner or operator shall comply with the monitoring provisions in § 63.1429, the recordkeeping provisions in § 63.1430(d), and recalculate the TRE index value when process changes occur, in accordance with the provisions in § 63.1428(h)(2).

(ii) If the TRE for the process vent is greater than 4.0, the owner or operator shall recalculate the TRE index value when process changes occur, in accordance with the provisions in § 63.1428(h)(2).

(d) *Requirements for nonepoxide organic HAP emissions from catalyst extraction.* The owner or operator of a new or existing affected source where polyether polyol products are produced using epoxide compounds shall comply with either paragraph (d)(1) or (2) of this

section. A PMPU that does not use any nonepoxide organic HAP in catalyst extraction is exempt from the requirements of this paragraph.

(1) Reduce emissions of nonepoxide organic HAP from all process vents associated with catalyst extraction using a flare; or

(2) Reduce emissions of nonepoxide organic HAP from the sum total of all process vents associated with catalyst extraction by an aggregated 90 percent for each PMPU.

(e) [Reserved]

(f) *Requirements for process vents at PMPUs that produce polyether polyol products using tetrahydrofuran.* For each process vent in a PMPU that uses tetrahydrofuran (THF) to produce one or more polyether polyol products that is, or is part of, an affected source, the owner or operator shall comply with the HON process vent requirements in §§ 63.113 through 63.118, except as provided for in paragraphs (f)(1) through (10) of this section.

(1) When December 31, 1992 is referred to in the HON process vent requirements in § 63.113, it shall be replaced with September 4, 1997, for the purposes of this subpart.

(2) When § 63.151(f), alternative monitoring parameters, and § 63.152(e), submission of an operating permit application, are referred to in §§ 63.114(c) and 63.117(e), § 63.1439(f), alternative monitoring parameters, and § 63.1439(e)(8), submission of an operating permit application, respectively, shall apply for the purposes of this subpart.

(3) When the Notification of Compliance Status requirements contained in § 63.152(b) are referred to in §§ 63.114, 63.117, and 63.118, the Notification of Compliance Status requirements contained in § 63.1439(e)(5) shall apply for the purposes of this subpart.

(4) When the Periodic Report requirements contained in § 63.152(c) are referred to in §§ 63.117 and 63.118, the Periodic Report requirements contained in § 63.1439(e)(6) shall apply for the purposes of this subpart.

(5) When the definition of excursion in § 63.152(c)(2)(ii)(A) is referred to in § 63.118(f)(2), the definition of excursion in § 63.1438(f) shall apply for the purposes of this subpart.

(6) When § 63.114(e) specifies that an owner or operator shall submit the information required in § 63.152(b) in order to establish the parameter monitoring range, the owner or operator shall comply with the provisions of § 63.1438 for establishing the parameter monitoring level and shall comply with § 63.1439(e)(5)(ii) or § 63.1439(e)(8) for

the purposes of reporting information related to the establishment of the parameter monitoring level, for the purposes of this subpart. Further, the term "level" shall apply whenever the term "range" is used in §§ 63.114, 63.117, and 63.118.

(7) When reports of process changes are required under § 63.118(g), (h), (i), or (j), paragraphs (f)(7)(i) through (iv) of this section shall apply for the purposes of this subpart.

(i) For the purposes of this subpart, whenever a process change, as defined in § 63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent, the owner or operator shall submit a report within 180 days after the process change is made or the information regarding the process change is known to the owner or operator. This report may be included in the next Periodic Report. A description of the process change shall be included in this report.

(ii) Whenever a process change, as defined in § 63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0, the owner or operator shall submit a report within 180 days after the process change is made or the information regarding the process change is known to the owner or operator, unless the flow rate is less than 0.005 standard cubic meters per minute. This report may be included in the next Periodic Report. A description of the process change shall be included in this report.

(iii) Whenever a process change, as defined in § 63.115(e), is made that causes a Group 2 process vent with a flow rate less than 0.005 standard cubic meter per minute (scmm) to become a Group 2 process vent with a flow rate of 0.005 scmm or greater and a TRE index value less than or equal to 4.0, the owner or operator shall submit a report within 180 days after the process change is made or the information regarding the process change is known to the owner or operator, unless the organic HAP concentration is less than 50 ppmv. This report may be included in the next Periodic Report. A description of the process change shall be submitted with the report.

(iv) Whenever a process change, as defined in § 63.115(e), is made that causes a Group 2 process vent with an organic HAP concentration less than 50 parts per million by volume (ppmv) to become a Group 2 process vent with an organic HAP concentration of 50 ppmv or greater and a TRE index value less than or equal to 4.0, the owner or operator shall submit a report within 180 days after the process change is

made or the information regarding the process change is known to the owner or operator, unless the flow rate is less than 0.005 standard cubic meters per minute. This report may be included in the next Periodic Report. A description of the process change shall be submitted with this report.

(8) When § 63.118 refers to § 63.152(f), the recordkeeping requirements in § 63.1439(d) shall apply for the purposes of this subpart.

(9) When §§ 63.115 and 63.116 refer to Table 2 of 40 CFR part 63, subpart F, the owner or operator shall only consider organic HAP as defined in this subpart.

(10) When the provisions of § 63.116(c)(3) and (4) specify that Method 18, 40 CFR part 60, appendix A shall be used, Method 18 or Method 25A, 40 CFR part 60, appendix A may be used for the purposes of this subpart. The use of Method 25A, 40 CFR part 60, appendix A shall comply with paragraphs (f)(10)(i) and (ii) of this section.

(i) The organic HAP used as the calibration gas for Method 25A, 40 CFR part 60, appendix A shall be the single organic HAP representing the largest percent by volume of the emissions.

(ii) The use of Method 25A, 40 CFR part 60, appendix A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

§ 63.1426 Process vent requirements for determining organic HAP concentration, control efficiency, and aggregated organic HAP emission reduction for a PMPU.

(a) *Use of a flare.* When a flare is used to comply with § 63.1425(b)(1)(i) (in combination with other control techniques), (b)(2)(i), (c)(1)(i), (c)(3)(i), or (d)(1), the owner or operator shall comply with § 63.1437(c), and is not required to demonstrate the control efficiency for the flare, if the owner or operator chooses to assume a 98 percent control efficiency for that flare, as allowed under paragraph (e)(2)(i) of this section. In order to use only a flare to comply with § 63.1425(b)(1)(i), or to use a flare and apply a control efficiency greater than 98 percent, an owner or operator shall submit a request in accordance with § 63.6(g) in either the Precompliance Report described in § 63.1439(e)(4), or in a supplement to the precompliance report, as described in § 63.1439(e)(4)(vii).

(b) *Exceptions to performance tests.* An owner or operator is not required to conduct a performance test when a combustion, recovery, or recapture

device specified in paragraphs (b)(1) through (6) of this section is used to comply with § 63.1425(b), (c), or (d).

(1) A boiler or process heater with a design heat input capacity of 44 megawatts or greater.

(2) A boiler or process heater where the process vent stream is introduced with the primary fuel or is used as the primary fuel.

(3) A combustion, recovery, or recapture device for which a performance test was conducted within the preceding 5-year period, using the same Methods specified in this section and either no deliberate process changes have been made since the test, or the owner or operator can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes. The operating parameters reported under the previous performance test shall be sufficient to meet the parameter monitoring requirements in this subpart.

(4) A boiler or process heater burning hazardous waste for which the owner or operator:

(i) Has been issued a final hazardous waste permit under 40 CFR part 270 and complies with the requirements for hazardous waste burned in boilers and industrial furnaces in 40 CFR part 266, subpart H; or

(ii) Has certified compliance with the interim status requirements for hazardous waste burned in boilers and industrial furnaces in 40 CFR part 266, subpart H.

(5) A hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270 and complies with the requirements for incinerators in 40 CFR part 264, subpart O, or has certified compliance with the interim status requirements for incinerators in 40 CFR part 265, subpart O.

(6) Combustion, recovery or recapture device (except for condensers) performance may be determined by using the design evaluation described in paragraph (f) of this section, provided that the combustion, recovery or recapture device receives less than 10 tons per year (9.1 megagrams per year) of uncontrolled organic HAP emissions from one or more PMPUs, determined in accordance with paragraph (d) of this section. If a combustion, recovery or recapture device exempted from testing in accordance with this paragraph receives more than 10 tons per year (9.1 megagrams per year) of uncontrolled organic HAP emissions from one or more PMPUs, the owner or operator shall comply with the performance test requirements in paragraph (c) of this

section and shall submit the test report in the next Periodic Report.

(c) *Determination of organic HAP concentration and control efficiency.* Except as provided in paragraphs (a) and (b) of this section, an owner or operator using a combustion, recovery, or recapture device to comply with an epoxide or organic HAP percent reduction efficiency requirement in § 63.1425(b)(1)(i), (b)(2)(ii), (c)(1)(ii), (c)(3)(ii), or (d)(2); an epoxide concentration limitation in § 63.1425(b)(1)(ii) or (b)(2)(ii); or an annual epoxide emission limitation in § 63.1425(b)(1)(iii) or (b)(2)(iv), shall conduct a performance test using the applicable procedures in paragraphs (c)(1) through (4) of this section. The organic HAP or epoxide concentration and percent reduction may be measured as total epoxide, total organic HAP, or as TOC minus methane and ethane according to the procedures specified. When conducting testing in accordance with this section, the owner or operator is only required to measure HAP of concern for the specific requirement for which compliance is being determined. For instance, to determine compliance with the epoxide emission requirement of § 63.1425(b), the owner or operator is only required to measure epoxide control efficiency or outlet concentration.

(1) *Sampling site location.* The sampling site location shall be determined as specified in paragraphs (c)(1)(i) and (ii) of this section.

(i) For determination of compliance with a percent reduction of total epoxide requirement in § 63.1425(b)(1)(i), (b)(2)(iii), or a percent reduction of total organic HAP requirement in § 63.1425(c)(1)(ii), (c)(3)(ii), or (d)(2), sampling sites shall be located at the inlet of the combustion, recovery, or recapture device as specified in paragraphs (c)(1)(i)(A), (B), and (C) of this section, and at the outlet of the combustion, recovery, or recapture device.

(A) For process vents from continuous unit operations, the inlet sampling site shall be determined in accordance with either paragraph (c)(1)(i)(A)(1) or (2) of this section.

(1) To demonstrate compliance with either the provisions for epoxide emissions in § 63.1425(b) or the provisions for nonepoxide organic HAP emissions from catalyst extraction in § 63.1425(d), the inlet sampling site shall be located after the exit from the continuous unit operation but before any recovery devices, or

(2) To demonstrate compliance with the requirements for nonepoxide organic HAP emissions from the use of

nonepoxide organic HAP in making or modifying the product in § 63.1425(c), the inlet sampling site shall be located after all control techniques to reduce epoxide emissions and after the final nonepoxide organic HAP recovery device.

(B) For process vents from batch unit operations, the inlet sampling site shall be determined in accordance with either paragraph (c)(1)(i)(B)(1) or (2) of this section.

(1) To demonstrate compliance with either the provisions for epoxide emissions in § 63.1425(b) or the provisions for nonepoxide organic HAP emissions from catalyst extraction in § 63.1425(d), the inlet sampling site shall be located after the exit from the batch unit operation but before any recovery device.

(2) To demonstrate compliance with the requirements for nonepoxide organic HAP emissions in making or modifying the product in § 63.1425(c), the inlet sampling site shall be located after all control techniques to reduce epoxide emissions but before any nonepoxide organic HAP recovery device.

(C) If a process vent stream is introduced with the combustion air or as a secondary fuel into a boiler or process heater with a design capacity less than 44 megawatts, selection of the location of the inlet sampling sites shall ensure the measurement of total organic HAP or TOC (minus methane and ethane) concentrations in all process vent streams and primary and secondary fuels introduced into the boiler or process heater.

(ii) To determine compliance with a parts per million by volume total epoxide or TOC limit in § 63.1425(b)(1)(ii) or (b)(2)(iii), the sampling site shall be located at the outlet of the combustion, recovery, or recapture device.

(2) [Reserved]

(3) *Testing conditions and calculation of TOC or total organic HAP concentration.* (i) Testing conditions shall be as specified in paragraphs (c)(3)(i)(A) through (E) of this section, as appropriate.

(A) Testing of process vents from continuous unit operations shall be conducted at maximum representative operating conditions, as described in § 63.1437(a)(1). Each test shall consist of three 1-hour runs. Gas stream volumetric flow rates shall be measured at approximately equal intervals of about 15 minutes during each 1-hour run. The organic HAP concentration (of the HAP of concern) shall be determined from samples collected in an integrated sample over the duration of each 1-hour

test run, or from grab samples collected simultaneously with the flow rate measurements (at approximately equal intervals of about 15 minutes). If an integrated sample is collected for laboratory analysis, the sampling rate shall be adjusted proportionally to reflect variations in flow rate. For gas streams from continuous unit operations, the organic HAP concentration or control efficiency used to determine compliance shall be the average organic HAP concentration or control efficiency of the three test runs.

(B) Testing of process vents from batch unit operations shall be conducted at absolute worst-case conditions or hypothetical worst-case conditions, as defined in paragraphs (c)(3)(i)(B)(1) through (5) of this section. Worst-case conditions are limited to the maximum production allowed in a State or Federal permit or regulation and the conditions specified in § 63.1437(a)(1). Gas stream volumetric flow rates shall be measured at 15-minute intervals, or at least once during the emission episode. The organic HAP or TOC concentration shall be determined from samples collected in an integrated sample over the duration of the test, or from grab samples collected simultaneously with the flow rate measurements (at approximately equal intervals of about 15 minutes). If an integrated sample is collected for laboratory analysis, the sampling rate shall be adjusted proportionally to reflect variations in flow rate.

(1) Absolute worst-case conditions are defined by the criteria presented in paragraph (c)(3)(i)(B)(1)(i) or (ii) of this section if the maximum load is the most challenging condition for the control device. Otherwise, absolute worst-case conditions are defined by the conditions in paragraph (c)(3)(i)(B)(1)(iii) of this section.

(i) The period in which the inlet to the control device will contain at least 50 percent of the maximum HAP load (in lbs) capable of being vented to the control device over any 8-hour period. An emission profile as described in paragraph (c)(3)(i)(B)(3)(i) of this section shall be used to identify the 8-hour period that includes the maximum projected HAP load.

(ii) A period of time in which the inlet to the control device will contain the highest HAP mass loading rate capable of being vented to the control device. An emission profile as described in paragraph (c)(3)(i)(B)(3)(i) of this section shall be used to identify the period of maximum HAP loading.

(iii) The period of time when the HAP loading or stream composition (including non-HAP) is most challenging for the control device. These conditions include, but are not limited to the following: periods when the stream contains the highest combined VOC and HAP load described by the emission profiles in paragraph (c)(3)(i)(B)(3) of this section; periods when the streams contain HAP constituents that approach limits of solubility for scrubbing media; or

periods when the streams contain HAP constituents that approach limits of adsorptivity for carbon adsorption systems.

(2) Hypothetical worst-case conditions are simulated test conditions that, at a minimum, contain the highest hourly HAP load of emissions that would be predicted to be vented to the control device from the emissions profile described in paragraph (c)(3)(i)(B)(3)(ii) or (iii) of this section.

(3) The owner or operator shall develop an emission profile for the vent to the control device that describes the characteristics of the vent stream at the inlet to the control device under worst case conditions. The emission profile shall be developed based on any one of the procedures described in paragraphs (c)(3)(i)(B)(3)(i) through (iii) of this section, as required by paragraph (c)(3)(i)(B) of this section.

(i) The emission profile shall consider all emission episodes that could contribute to the vent stack for a period of time that is sufficient to include all processes venting to the stack and shall consider production scheduling. The profile shall describe the HAP load to the device that equals the highest sum of emissions from the episodes that can vent to the control device in any given period, not to exceed 1 hour. Emissions per episode shall be divided by the duration of the episode only if the duration of the episode is longer than 1 hour, and emissions per episode shall be calculated using the procedures specified in Equation 1:

$$E = \sum_{i=1}^n P_i MW_i \times \frac{(V)(t)}{(R)(T)} \times \frac{P_T}{P_T - \sum_{j=1}^m (P_j)} \quad \text{[Equation 1]}$$

Where:

E = Mass of HAP emitted.

V = Purge flow rate at the temperature and pressure of the vessel vapor space.

R = Ideal gas law constant.

T = Temperature of the vessel vapor space (absolute).

P_i = Partial pressure of the individual HAP.

P_j = Partial pressure of individual condensable VOC compounds (including HAP).

P_T = Pressure of the vessel vapor space.

MW_i = Molecular weight of the individual HAP.

t = Time of purge.

n = Number of HAP compounds in the emission stream.

i = Identifier for a HAP compound.

j = Identifier for a condensable compound.

m = Number of condensable compounds (including HAP) in the emission stream.

(ii) The emission profile shall consist of emissions that meet or exceed the highest emissions that would be expected under actual processing conditions. The profile shall describe equipment configurations used to generate the emission events, volatility of materials processed in the equipment, and the rationale used to identify and characterize the emission events. The emissions may be based on using compounds more volatile than compounds actually used in the process(es), and the emissions may be

generated from all equipment in the process(es) or only selected equipment.

(iii) The emission profile shall consider the capture and control system limitations and the highest emissions that can be routed to the control device, based on maximum flow rate and concentrations possible because of limitations on conveyance and control equipment (e.g., fans, LEL alarms and safety bypasses).

(4) Three runs, each at a minimum of the complete duration of the batch venting episode or 1 hour, whichever is shorter, and a maximum of 8 hours, are required for performance testing. Each run shall occur over the same worst-case conditions, as defined in paragraph (c)(3)(i)(B) of this section.

(5) If a condenser is used to control the process vent stream(s), the worst case emission episode(s) shall represent a period of time in which a process vent from the batch cycle or combination of cycles (if more than one cycle is vented through the same process vent) will require the maximum heat removal capacity, in Btu/hr, to cool the process vent stream to a temperature that, upon calculation of HAP concentration, will yield the required removal efficiency for the entire cycle. The calculation of maximum heat load shall be based on the emission profile described in paragraph (c)(3)(i)(B)(3) of this section that will allow calculation of sensible and latent heat loads.

(ii) The concentration of either TOC (minus methane or ethane) or total organic HAP (of the HAP of concern) shall be calculated according to paragraph (c)(3)(ii)(A) or (B) of this section.

(A) The TOC concentration (C_{TOC}) is the sum of the concentrations of the individual components and shall be computed for each run using Equation 2:

$$C_{\text{TOC}} = \sum_{j=1}^n \frac{\left(\sum_{i=1}^x C_{ji} \right)}{x} \quad \text{[Equation 2]}$$

Where:

C_{TOC} = Concentration of TOC (minus methane and ethane), dry basis, parts per million by volume.

C_{ji} = Concentration of sample component j of sample i, dry basis, parts per million by volume.

n = Number of components in the sample.

x = Number of samples in the sample run.

(B) The total organic HAP concentration (C_{HAP}) shall be computed according to Equation 2, except that only the organic HAP species shall be summed.

(iii) The concentration of TOC or total organic HAP shall be corrected to 3 percent oxygen if a combustion device is used.

(A) The emission rate correction factor or excess air, integrated sampling and analysis procedures of Method 3B of 40 CFR part 60, appendix A shall be used to determine the oxygen concentration (% O_{2d}). The samples shall be taken during the same time that the TOC (minus methane or ethane) or total organic HAP samples are taken.

(B) The concentration corrected to 3 percent oxygen shall be computed using Equation 3, as follows:

$$C_c = C_m \left(\frac{17.9}{20.9 - \%O_{2d}} \right) \quad \text{[Equation 3]}$$

Where:

C_c = Concentration of TOC or organic HAP corrected to 3 percent oxygen, dry basis, parts per million by volume.

C_m = Concentration of TOC (minus methane and ethane) or organic HAP, dry basis, parts per million by volume.

% O_{2d} = Concentration of oxygen, dry basis, percent by volume.

(4) *Test methods.* When testing is conducted to measure emissions from an affected source, the test methods specified in paragraphs (c)(4)(i) through (iv) of this section shall be used, as applicable.

(i) For sample and velocity traverses, Method 1 or 1A of appendix A of part 60 shall be used, as appropriate, except that references to particulate matter in Method 1A do not apply for the purposes of this subpart.

(ii) The velocity and gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A, as appropriate.

(iii) The concentration measurements shall be determined using the methods described in paragraphs (c)(4)(iii)(A) through (C) of this section.

(A) Method 18 of appendix A of part 60 may be used to determine the HAP concentration in any control device efficiency determination.

(B) Method 25 of appendix A of part 60 may be used to determine total gaseous nonmethane organic concentration for control efficiency determinations in combustion devices.

(C) Method 25A of appendix A of part 60 may be used to determine the HAP or TOC concentration for control device efficiency determinations under the conditions specified in Method 25 of appendix A of part 60 for direct measurements of an effluent with a flame ionization detector, or in demonstrating compliance with the 20 ppmv standard, the instrument shall be calibrated on methane or the predominant HAP. If calibrating on the predominant HAP, the use of Method 25A of appendix A of part 60 shall comply with paragraphs (c)(4)(iii)(C) (1) through (3) of this section.

(1) The organic HAP used as the calibration gas for Method 25A of appendix A of part 60 shall be the single organic HAP representing the largest percent by volume.

(2) The use of Method 25A, 40 CFR part 60, appendix A, is acceptable if the response from the high level calibration gas is at least 20 times the standard

deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(3) The span value of the analyzer shall be less than 100 ppmv.

(iv) Alternatively, any other method or data that have been validated according to the applicable procedures in 40 CFR part 63, appendix A, Method 301 may be used.

(5) *Calculation of percent reduction efficiency.* The following procedures shall be used to calculate percent reduction efficiency:

(i) Test duration shall be as specified in paragraphs (c)(3)(i)(A) through (B) of this section, as appropriate.

(ii) The mass rate of either TOC (minus methane and ethane) or total organic HAP of the HAP of concern (E_i , E_o) shall be computed.

(A) The following equations shall be used:

$$E_i = K_2 \left(\sum_{j=1}^n C_{ij} M_{ij} \right) Q_i \quad \text{[Equation 4]}$$

$$E_o = K_2 \left(\sum_{j=1}^n C_{oj} M_{oj} \right) Q_o \quad \text{[Equation 5]}$$

Where:

C_{ij} , C_{oj} = Concentration of sample component j of the gas stream at the inlet and outlet of the combustion, recovery, or recapture device, respectively, dry basis, parts per million by volume.

E_i , E_o = Mass rate of TOC (minus methane and ethane) or total organic HAP at the inlet and outlet of the combustion, recovery, or recapture device, respectively, dry basis, kilogram per hour.

M_{ij} , M_{oj} = Molecular weight of sample component j of the gas stream at the inlet and outlet of the combustion, recovery, or recapture device, respectively, gram/gram-mole.

Q_i , Q_o = Flow rate of gas stream at the inlet and outlet of the combustion, recovery, or recapture device, respectively, dry standard cubic meter per minute.

K_2 = Constant, 2.494×10^{-6} (parts per million) $^{-1}$ (gram-mole per standard cubic meter) (kilogram/gram) (minute/hour), where standard temperature (gram-mole per standard cubic meter) is 20 °C.

(B) Where the mass rate of TOC is being calculated, all organic compounds (minus methane and ethane) measured by Method 18 of 40 CFR part 60, appendix A are summed using Equations 4 and 5 in paragraph (c)(5)(ii)(A) of this section.

(C) Where the mass rate of total organic HAP is being calculated, only the organic HAP species shall be summed using Equations 4 and 5 in paragraph (c)(5)(ii)(A) of this section.

(iii) The percent reduction in TOC (minus methane and ethane) or total organic HAP shall be calculated using Equation 6 as follows:

$$R = \frac{E_i - E_o}{E_i} (100) \quad [\text{Equation 6}]$$

Where:

R = Control efficiency of combustion, recovery, or recapture device, percent.

E_i = Mass rate of TOC (minus methane and ethane) or total organic HAP at the inlet to the combustion, recovery, or recapture device as calculated under paragraph (c)(5)(ii) of this section, kilograms TOC per hour or kilograms organic HAP per hour.

E_o = Mass rate of TOC (minus methane and ethane) or total organic HAP at the outlet of the combustion, recovery, or recapture device, as calculated under paragraph (c)(5)(ii) of this section, kilograms TOC per hour or kilograms organic HAP per hour.

(iv) If the process vent stream entering a boiler or process heater with a design capacity less than 44 megawatts is introduced with the combustion air or as a secondary fuel, the weight-percent reduction of total organic HAP or TOC (minus methane and ethane) across the device shall be determined by comparing the TOC (minus methane and ethane) or total organic HAP in all combusted process vent streams and primary and secondary fuels with the TOC (minus methane and ethane) or total organic HAP, respectively, exiting the combustion device.

(d) *Determination of uncontrolled organic HAP emissions.* For each process vent at a PMPU that is complying with the process vent control requirements in § 63.1425(b)(1)(i), (b)(1)(iii), (b)(2)(ii), (b)(2)(iv), (c)(1)(ii), or (d)(2) using a combustion, recovery, or recapture device, the owner or operator shall determine the

uncontrolled organic HAP emissions in accordance with the provisions of this paragraph, with the exceptions noted in paragraph (d)(1) of this section. The provisions of § 63.1427(c)(1) shall be used to calculate uncontrolled epoxide emissions prior to the onset of an extended cook out.

(1) *Exemptions.* The owner or operator is not required to determine uncontrolled organic HAP emissions for process vents in a PMPU if the conditions in paragraph (d)(1)(i), (ii), or (iii) of this section are met.

(i) For PMPUs where all process vents subject to the epoxide emission reduction requirements of § 63.1425(b) are controlled at all times using a combustion, recovery, or recapture device, or extended cookout, the owner or operator is not required to determine uncontrolled epoxide emissions.

(ii) For PMPUs where the combination of process vents from batch unit operations associated with the use of nonepoxide organic HAP to make or modify the product is subject to the Group 1 requirements of § 63.1425(c)(1), the owner or operator is not required to determine uncontrolled nonepoxide organic HAP emissions for those process vents if every process vent from a batch unit operation associated with the use of nonepoxide organic HAP to make or modify the product in the PMPU is controlled at all times using a combustion, recovery, or recapture device.

(iii) For PMPUs where all process vents associated with catalyst extraction that are subject to the organic emission reduction requirements of § 63.1425(d)(2) are controlled at all times using a combustion, recovery, or recapture device, the owner or operator is not required to determine uncontrolled organic HAP emissions for those process vents.

(2) *Process vents from batch unit operations.* The uncontrolled organic HAP emissions from an individual batch cycle for each process vent from a batch unit operation shall be determined using the procedures in the NESHAP for Group I Polymers and

Resins (40 CFR part 63, subpart U), § 63.488(b)(1) through (9). Uncontrolled emissions from process vents from batch unit operations shall be determined after the exit from the batch unit operation but before any recovery device.

(3) *Process vents from continuous unit operations.* The uncontrolled organic HAP emissions for each process vent from a continuous unit operation in a PMPU shall be determined at the location specified in paragraph (d)(3)(i) of this section, using the procedures in paragraph (d)(3)(ii) of this section.

(i) For process vents subject to either the provisions for epoxide emissions in § 63.1425(b) or the provisions for organic HAP emissions from catalyst extraction in § 63.1425(d), uncontrolled emissions shall be determined after the exit from the continuous unit operation but before any recovery device.

(ii) The owner or operator shall determine the hourly uncontrolled organic HAP emissions from each process vent from a continuous unit operation in accordance with paragraph (c)(4)(ii) of this section, except that the emission rate shall be determined at the location specified in paragraph (d)(2)(i) of this section.

(e) *Determination of organic HAP emission reduction for a PMPU.* (1) The owner or operator shall determine the organic HAP emission reduction for process vents in a PMPU that are complying with § 63.1425(b)(1)(i), (b)(2)(ii), (c)(1)(ii), or (d)(2) using Equation 7. The organic HAP emission reduction shall be determined for each group of process vents subject to the same paragraph (i.e., paragraph (b), (c), or (d)) of § 63.1425. For instance, process vents that emit epoxides are subject to paragraph (b) of § 63.1425. Therefore, if the owner or operator of an existing affected source is complying with the 98 percent reduction requirement in § 63.1425(b)(2)(ii), the organic HAP (i.e., epoxide) emission reduction shall be determined for the group of vents in a PMPU that are subject to this paragraph.

$$RED_{PMPU} = \left(\frac{\sum_{i=1}^n (E_{unc,i}) \left(\frac{R_i}{100} \right)}{\sum_{i=1}^n (E_{unc,i}) + \sum_{j=1}^m (E_{unc,j})} \right) * 100 \quad [\text{Equation 7}]$$

Where:

RED_{PMPU} = Organic HAP emission reduction for the group of process vents

subject to the same paragraph of § 63.1425, percent.

$E_{unc,i}$ = Uncontrolled organic HAP emissions from process vent i that is controlled using a combustion,

recovery, or recapture device, or extended cookout, kg/batch cycle for process vents from batch unit operations, kg/hr for process vents from continuous unit operations.

n = Number of process vents in the PMPU that are subject to the same paragraph of § 63.1425 and that are controlled using a combustion, recovery, or recapture device, or extended cookout.

R_i = Control efficiency of the combustion, recovery, or recapture device, or extended cookout, used to control organic HAP emissions from vent i , determined in accordance with paragraph (e)(2) of this section.

$E_{unc,j}$ = Uncontrolled organic HAP emissions from process vent j that is not controlled using a combustion, recovery, or recapture device, kg/batch cycle for process vents from batch unit operations, kg/hr for process vents from continuous unit operations.

m = Number of process vents in the PMPU that are subject to the same paragraph of § 63.1425 and that are not controlled using a combustion, recovery, or recapture device.

(2) The control efficiency, R_i , shall be assigned as specified below in paragraph (e)(2)(i), (ii), (iii), or (iv) of this section.

(i) If the process vent is controlled using a flare (and the owner or operator has not previously obtained approval to assume a control efficiency greater than 98 percent in accordance with § 63.6(g)) or a combustion device specified in paragraph (b)(1), (2), (4), or (5) of this section, and a performance test has not been conducted, the control efficiency shall be assumed to be 98 percent.

(ii) If the process vent is controlled using a combustion, recovery, or recapture device for which a performance test has been conducted in accordance with the provisions of paragraph (c) of this section, or for which a performance test that meets the requirements of paragraph (b)(3) of this section has been previously performed, the control efficiency shall be the efficiency determined by the performance test.

(iii) If epoxide emissions from the process vent are controlled using extended cookout, the control efficiency shall be the efficiency determined in accordance with § 63.1427(e).

(iv) If the process vent is controlled using a flare, and the owner or operator has obtained approval to assume a control efficiency greater than 98 percent in accordance with § 63.6(g), the control efficiency shall be the efficiency approved in accordance with § 63.6(g).

(f) *Design evaluation.* A design evaluation is required for those control

techniques that receive less than 10 tons per year (9.1 megagrams per year) of uncontrolled organic HAP emissions from one or more PMPU, if the owner or operator has chosen not to conduct a performance test for those control techniques in accordance with paragraph (b)(6) of this section. The design evaluation shall include documentation demonstrating that the control technique being used achieves the required control efficiency under worst-case conditions, as determined from the emission profile described in § 63.1426(c)(3)(i)(B)(3)(i).

(1) Except for ECO whose design evaluation is presented in paragraph (f)(2) of this section, to demonstrate that a control technique meets the required control efficiency, a design evaluation shall address the composition and organic HAP concentration of the vent stream, immediately preceding the use of the control technique. A design evaluation shall also address other vent stream characteristics and control technique operating parameters, as specified in any one of paragraphs (f)(1)(i) through (vi) of this section, depending on the type of control technique that is used. If the vent stream is not the only inlet to the control technique, the owner or operator shall also account for all other vapors, gases, and liquids, other than fuels, received into the control technique from one or more PMPUs, for purposes of the efficiency determination.

(i) For an enclosed combustion technique used to comply with the provisions of § 63.1425(b)(1), (c)(1), or (d), with a minimum residence time of 0.5 seconds and a minimum temperature of 760° C, the design evaluation shall document that these conditions exist.

(ii) For a combustion control technique that does not satisfy the criteria in paragraph (f)(1)(i) of this section, the design evaluation shall document the control efficiency and address the characteristics listed in paragraphs (f)(1)(ii)(A) through (C) of this section, depending on the type of control technique.

(A) For a thermal vapor incinerator, in the design evaluation the owner or operator shall consider the autoignition temperature of the organic HAP, shall consider the vent stream flow rate, and shall establish the design minimum and average temperatures in the combustion zone and the combustion zone residence time.

(B) For a catalytic vapor incinerator, in the design evaluation the owner or operator shall consider the vent stream flow rate and shall establish the design

minimum and average temperatures across the catalyst bed inlet and outlet.

(C) For a boiler or process heater, in the design evaluation the owner or operator shall consider the vent stream flow rate; shall establish the design minimum and average flame zone temperatures and combustion zone residence time; and shall describe the method and location where the vent stream is introduced into the flame zone.

(iii) For a condenser, in the design evaluation the owner or operator shall consider the vent stream flow rate, relative humidity, and temperature, and shall establish the design outlet organic HAP compound concentration level, design average temperature of the exhaust vent stream, and the design average temperatures of the coolant fluid at the condenser inlet and outlet. The temperature of the gas stream exiting the condenser shall be measured and used to establish the outlet organic HAP concentration.

(iv) For a carbon adsorption system that regenerates the carbon bed directly onsite as part of the control technique (such as a fixed-bed adsorber), in the design evaluation the owner or operator shall consider the vent stream flow rate, relative humidity, and temperature, and shall establish the design exhaust vent stream organic compound concentration level, adsorption cycle time, number and capacity of carbon beds, type and working capacity of activated carbon used for the carbon beds, design total regeneration stream mass or volumetric flow over the period of each complete carbon bed regeneration cycle, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of the carbon. For vacuum desorption, the pressure drop shall also be included.

(v) For a carbon adsorption system that does not regenerate the carbon bed directly onsite as part of the control technique (such as a carbon canister), in the design evaluation the owner or operator shall consider the vent stream mass or volumetric flow rate, relative humidity, and temperature, and shall establish the design exhaust vent stream organic compound concentration level, capacity of the carbon bed, type and working capacity of activated carbon used for the carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control technique and source operating schedule.

(vi) For a scrubber, in the design evaluation the owner or operator shall consider the vent stream composition, constituent concentrations, liquid-to-

vapor ratio, scrubbing liquid flow rate and concentration, temperature, and the reaction kinetics of the constituents with the scrubbing liquid. The design evaluation shall establish the design exhaust vent stream organic compound concentration level and shall include the additional information in paragraphs (f)(1)(vi) (A) and (B) of this section for trays and a packed column scrubber.

(A) Type and total number of theoretical and actual trays.

(B) Type and total surface area of packing for entire column and for individual packed sections, if the column contains more than one packed section.

(2) For ECO, the design evaluation shall establish the minimum duration (time) of the ECO, the maximum pressure at the end of the ECO, or the maximum epoxide concentration in the reactor liquid at the end of the ECO for each product class.

§ 63.1427 Process vent requirements for processes using extended cookout as an epoxide emission reduction technique.

(a) *Applicability of extended cookout requirements.* Owners or operators of affected sources that produce polyether polyols using epoxides, and that are using ECO as a control technique to reduce epoxide emissions in order to comply with percent emission reduction requirements in § 63.1425(b)(1)(i) or (b)(2)(ii) shall comply with the provisions of this section. The owner or operator that is using ECO in order to comply with the emission factor requirements in § 63.1425(b)(1)(iii) or § 63.1425(b)(2)(iv) shall demonstrate that the specified emission factor is achieved by following the requirements in § 63.1431. If additional control devices are used to further reduce the HAP emissions from a process vent already controlled by ECO, then the owner or operator shall also comply with the testing, monitoring, recordkeeping, and reporting

requirements associated with the additional control device, as specified in §§ 63.1426, 63.1429, and 63.1430, respectively.

(1) For each product class, the owner or operator shall determine the batch cycle percent epoxide emission reduction for the most difficult to control product in the product class, where the most difficult to control product is the polyether polyol that is manufactured with the slowest pressure decay curve.

(2) The owner or operator may determine the batch cycle percent epoxide emission reduction by directly measuring the concentration of the unreacted epoxide, or by using process knowledge, reaction kinetics, and engineering knowledge, in accordance with paragraph (a)(2)(i) of this section.

(i) If the owner or operator elects to use any method other than direct measurement, the epoxide concentration shall be determined by direct measurement for one product from each product class and compared with the epoxide concentration determined using the selected estimation method, with the exception noted in paragraph (a)(2)(ii) of this section. If the difference between the directly determined epoxide concentration and the calculated epoxide concentration is less than 25 percent, then the selected estimation method will be considered to be an acceptable alternative to direct measurement for that class.

(ii) If uncontrolled epoxide emissions prior to the end of the ECO are less than 10 tons per year (9.1 megagrams per year), the owner or operator is not required to perform the direct measurement required in paragraph (a)(2)(i) of this section. Uncontrolled epoxide emissions prior to the end of the ECO shall be determined by the procedures in paragraph (d)(1) of this section.

(b) *Define the end of epoxide feed.*

The owner or operator shall define the end of the epoxide feed in accordance with paragraph (b)(1) or (2) of this section.

(1) The owner or operator shall determine the concentration of epoxide in the reactor liquid at the point in time when all epoxide has been added to the reactor and prior to any venting. This concentration shall be determined in accordance with the procedures in paragraph (f)(1)(i) of this section.

(2) If the conditions in paragraphs (b)(2)(i), (ii), and (iii) of this section are met, the end of the epoxide feed may be defined by the reactor epoxide partial pressure at the point in time when all epoxide reactants have been added to the reactor. This reactor epoxide partial pressure shall be determined in accordance with the procedures in paragraph (g) of this section.

(i) No epoxide is emitted before the end of the ECO;

(ii) Extended cookout is the only control technique to reduce epoxide emissions; and

(iii) The owner or operator elects to determine the percent epoxide emission reduction for the ECO using reactor epoxide partial pressure in accordance with paragraph (e)(2) of this section.

(c) *Define the onset of the ECO.* The owner or operator shall calculate the uncontrolled emissions for the batch cycle by calculating the epoxide emissions, if any, prior to the onset of the ECO, plus the epoxide emissions at the onset of the ECO. The onset of the ECO is defined as the point in time when the combined unreacted epoxide concentration in the reactor liquid is equal to 25 percent of the concentration of epoxides at the end of the epoxide feed, which was determined in accordance with paragraph (b) of this section.

(1) The uncontrolled epoxide emissions for the batch cycle shall be determined using Equation 8.

$$E_{e,u} = (C_{liq,i})(V_{liq,i})(D_{liq,i}) + (C_{vap,i})(V_{vap,i})(D_{vap,i}) + (E_{epox,bef}) \quad \text{[Equation 8]}$$

Where:

$E_{e,u}$ = Uncontrolled epoxide emissions at the onset of the ECO, kilograms per (kg)/batch.

$C_{liq,i}$ = Concentration of epoxide in the reactor liquid at the onset of the ECO, which is equal to 25 percent of the concentration of epoxide at the end of the epoxide feed, determined in accordance with

paragraph (b)(1) of this section, weight percent.

$V_{liq,i}$ = Volume of reactor liquid at the onset of the ECO, liters.

$D_{liq,i}$ = Density of reactor liquid, kg/liter.

$C_{vap,i}$ = Concentration of epoxide in the reactor vapor space at the onset of the ECO, determined in accordance with paragraph (f)(2) of this section, weight percent.

$V_{vap,i}$ = Volume of the reactor vapor space at the onset of the ECO, liters.

$D_{vap,i}$ = Vapor density of reactor vapor space at the onset of the ECO, kg/liter.

$E_{epox,bef}$ = Epoxide emissions that occur prior to the onset of the ECO, determined in accordance with the provisions of § 63.1426(d), kilograms.

(2) If the conditions in paragraphs (b)(2)(i), (ii), and (iii) of this section are met, the owner or operator may define the onset of the ECO as the point in time

when the reactor epoxide partial pressure equals 25 percent of the reactor epoxide partial pressure at the end of the epoxide feed, and is not required to determine the uncontrolled epoxide emissions in accordance with paragraph (c)(1) of this section.

(d) *Determine emissions at the end of the ECO.* The owner or operator shall calculate the epoxide emissions at the end of the ECO, where the end of the ECO is defined as the point immediately before the time when the reactor contents are emptied and/or the reactor

vapor space purged to the atmosphere or to a combustion, recovery, or recapture device.

(1) The epoxide emissions at the end of the ECO shall be determined using Equation 9.

$$E_{e,E} = (C_{liq,f})(V_{liq,f})(D_{liq,f}) + (C_{vap,f})(V_{vap,f})(D_{vap,f}) \quad \text{[Equation 9]}$$

Where:

$E_{e,E}$ = Epoxide emissions at the end of the ECO, kg.
 $C_{liq,f}$ = Concentration of epoxide in the reactor liquid at the end of the ECO, determined in accordance with paragraph (f)(1) of this section, weight percent.
 $V_{liq,f}$ = Volume of reactor liquid at the end of the ECO, liters.
 $D_{liq,f}$ = Density of reactor liquid, kg/liter.
 $C_{vap,f}$ = Concentration of epoxide in the reactor vapor space as it exits the

reactor at the end of the ECO, determined in accordance with paragraph (f)(2) of this section, weight percent.

$V_{vap,f}$ = Volume of the reactor vapor space as it exits the reactor at the end of the ECO, liters.

$D_{vap,f}$ = Vapor density of reactor vapor space at the end of the ECO, kg/liter.

(2) If the conditions in paragraphs (b)(2)(i), (ii), and (iii) of this section are

met, the owner or operator may determine the reactor epoxide partial pressure at the end of the ECO instead of determining the uncontrolled epoxide emissions at the end of the ECO in accordance with paragraph (d)(1) of this section.

(e) *Determine percent epoxide emission reduction.* (1) The owner or operator shall determine the percent epoxide emission reduction for the batch cycle using Equation 10.

$$R_{batchcycle} = \left[\frac{E_{e,u} - (E_{e,E}) \left(1 - \frac{R_{addon,i}}{100}\right) + (E_{e,o}) \left(1 - \frac{R_{addon,j}}{100}\right)}{E_{e,u}} \right] * 100 \quad \text{[Equation 10]}$$

Where:

$R_{batchcycle}$ = Epoxide emission reduction for the batch cycle, percent.

$E_{e,E}$ = Epoxide emissions at the end of the ECO determined in accordance with paragraph (d)(1) of this section, kilograms.

$R_{addon,i}$ = Control efficiency of combustion, recovery, or recapture device that is used to control epoxide emissions after the ECO, determined in accordance with the provisions of § 63.1426(c), percent.
 $E_{e,o}$ = Epoxide emissions that occur before the end of the ECO, determined in accordance with the provisions of § 63.1426(d), kilograms.

$R_{addon,j}$ = Control efficiency of combustion, recovery, or recapture device that is used to control epoxide emissions that occur before the end of the ECO, determined in accordance with the provisions of § 63.1426(c), percent.

$E_{e,u}$ = Uncontrolled epoxide emissions determined in accordance with paragraph (c)(1) of this section, kilograms.

(2) If the conditions in paragraphs (b)(2)(i), (ii), and (iii) of this section are met, the owner or operator may determine the percent epoxide emission reduction for the batch cycle using

reactor epoxide partial pressure and Equation 11, instead of using the procedures in paragraph (e)(1) of this section.

Where:

$R_{batchcycle}$ = Epoxide emission reduction for the batch cycle, percent.

$P_{epox,i}$ = Reactor epoxide partial pressure at the onset of the ECO, determined in accordance with paragraph (c)(2) of this section, mm Hg.

$P_{epox,f}$ = Reactor epoxide partial pressure at the end of the ECO, determined in accordance with paragraph (c)(2) of this section, mm Hg.

(f) *Determination of epoxide concentrations.* The owner or operator shall determine the epoxide concentrations in accordance with the procedures in this paragraph.

(1) The owner or operator shall determine the concentration of epoxide in the reactor liquid using either direct measurement in accordance with paragraph (f)(1)(i) of this section, or reaction kinetics in accordance with paragraph (f)(1)(ii) of this section. An owner or operator may also request to use an alternative methodology in accordance with paragraph (f)(1)(iii) of this section.

(i) The owner or operator shall submit a standard operating procedure for obtaining the liquid sample, along with

the test method used to determine the epoxide concentration. This information shall be submitted in the Precompliance Report.

(ii) Determine the epoxide concentration in the reactor liquid using Equation 12. [Equation 12]

$$C_{liq,f} = C_{liq,i} e^{-kt} \quad \text{[Equation 12]}$$

$C_{liq,f}$ = Concentration of epoxide in the reactor liquid at the end of the time period, weight percent.

$C_{liq,i}$ = Concentration of epoxide in the reactor liquid at the beginning of the time period, weight percent.

k = Reaction rate constant, 1/hr.
 t = Time, hours.

Note: This equation assumes a first order reaction with respect to epoxide concentration, where:

(iii) If the owner/operator deems that the methods listed in paragraphs (f)(1)(i) and (ii) of this section are not appropriate for the reaction system for a PMPU, then the owner/operator may submit a request for the use of an alternative method.

(2) The owner or operator shall determine the concentration of epoxide in the reactor vapor space using either direct measurement in accordance with paragraph (f)(2)(i) of this section, or by engineering estimation in accordance

with paragraph (f)(2)(ii) of this section. An owner or operator may also request to use an alternative methodology in accordance with paragraph (f)(2)(iii) of this section.

(i) The owner or operator shall take two representative samples from a bleed valve off the reactor's process vent. The owner or operator shall determine the total epoxide concentration using 40 CFR part 60, appendix A, Method 18.

(ii) Determine the epoxide concentration in the vapor space using Raoult's Law or another appropriate phase equilibrium equation and the liquid epoxide concentration,

determined in accordance with paragraph (f)(1) of this section.

(iii) If the owner/operator deems that the methods listed in paragraphs (f)(1)(i) and (ii) of this section are not appropriate for the reaction system for a PMPU, then the owner/operator may submit a request for the use of an alternative method.

(g) *Determination of pressure.* The owner or operator shall determine the total pressure of the system using standard pressure measurement devices calibrated according to the manufacturer's specifications or other written procedures that provide adequate assurance that the equipment

would reasonably be expected to monitor accurately.

(h) *Determination if pressure decay curves are similar.* The owner or operator shall determine the pressure decay curve as defined in § 63.1423. Products with similar pressure decay curves constitute a product class. To determine if two pressure decay curves are similar when the pressure decay curves for products have different starting and finishing pressures, the owner or operator shall determine the time when the pressure has fallen to half its total pressure by using Equation 13:

$$\text{Time} (P_{\text{half}^1}) - \text{Time} (P_{\text{half}^2}) < 20 \% T_{\text{AVG}} P_{\text{AVG}} \quad [\text{Equation 13}]$$

Where:

P_{half^1} = Half the total pressure of the epoxide for product 1.

Time (P_{half^1}) = Time when the pressure has fallen to half its total pressure for product 1.

P_{half^2} = Half the total pressure of the epoxide for product 2.

Time (P_{half^2}) = Time when the pressure has fallen to half its total pressure for product 2.

$T_{\text{AVG}} P_{\text{AVG}}$ = The average time to cookout to the point where the epoxide pressure is 25 percent of the epoxide pressure at the end of the feed step for products 1 and 2.

(i) *ECO monitoring requirements.* The owner or operator using ECO shall comply with the monitoring requirements of this paragraph to demonstrate continuous compliance with this subpart. Paragraphs (i)(1) through (3) of this section address monitoring of the extended cookout.

(1) To comply with the provisions of this section, the owner or operator shall monitor one of the parameters listed in paragraphs (i)(1)(i) through (iii) of this section, or may utilize the provision in paragraph (i)(1)(iv) of this section.

(i) Time from the end of the epoxide feed;

(ii) The epoxide partial pressure in the closed reactor;

(iii) Direct measurement of epoxide concentration in the reactor liquid at the end of the ECO, when the reactor liquid is still in the reactor, or after the reactor liquid has been transferred to another vessel; or

(iv) An owner or operator may submit a request to the Administrator to monitor a parameter other than the parameters listed in paragraphs (i)(1)(i) through (iii) of this section, as described in § 63.1439(f).

(2) During the determination of the percent epoxide emission reduction in paragraphs (b) through (e) of this section, the owner or operator shall establish, as a level that shall be maintained during periods of operation, one of the parameters in paragraphs (i)(2)(i) through (iii) of this section, or may utilize the procedure in paragraph (i)(2)(iv) of this section, for each product class.

(i) The time from the end of the epoxide feed to the end of the ECO;

(ii) The reactor epoxide partial pressure at the end of the ECO;

(iii) The epoxide concentration in the reactor liquid at the end of the ECO, when the reactor liquid is still in the reactor, or after the reactor liquid has been transferred to another vessel; or

(iv) An owner or operator may submit a request to the Administrator to monitor a parameter other than the parameters listed in paragraphs (i)(2)(i) through (iii) of this section, as described in § 63.1439(f).

(3) For each batch cycle where ECO is used to reduce epoxide emissions, the owner or operator shall record the value of the monitored parameter at the end of the ECO. This parameter is then compared with the level established in accordance with paragraph (i)(2) of this section to determine if an excursion has occurred. An ECO excursion is defined as one of the situations described in paragraphs (i)(3)(i) through (v) of this section.

(i) When the time from the end of the epoxide feed to the end of the ECO is less than the time established in paragraph (i)(2)(i) of this section;

(ii) When the reactor epoxide partial pressure at the end of the ECO is greater than the partial pressure established in paragraph (i)(2)(ii) of this section;

(iii) When the epoxide concentration in the reactor liquid at the end of the ECO is greater than the epoxide concentration established in paragraph (i)(2)(iii) of this section;

(iv) When the parameter is not measured and recorded at the end of the ECO; or

(v) When the alternative monitoring parameter is outside the range established under § 63.1439(f) for proper operation of the ECO as a control technique.

(j) *Recordkeeping requirements.* (1) The owner or operator shall maintain the records specified in paragraphs (j)(1)(i) and (ii) of this section, for each product class. The owner or operator shall also maintain the records related to the initial determination of the percent epoxide emission reduction specified in paragraphs (j)(1)(iii) through (x) of this section, as applicable, for each product class.

(i) Operating conditions of the product class, including:

- (A) Pressure decay curve;
- (B) Minimum reaction temperature;
- (C) Number of reactive hydrogens in the raw material;
- (D) Minimum catalyst concentration;
- (E) Ratio of EO/PO at the end of the epoxide feed; and
- (F) Reaction conditions, including the size of the reactor or batch.

(ii) A listing of all products in the product class, along with the information specified in paragraphs (j)(1)(i)(A) through (F) of this section, for each product.

(iii) The concentration of epoxide at the end of the epoxide feed, determined in accordance with paragraph (b)(1) of this section.

(iv) The concentration of epoxide at the onset of the ECO, determined in

accordance with paragraph (c) of this section.

(v) The uncontrolled epoxide emissions at the onset of the ECO, determined in accordance with paragraph (c)(1) of this section. The records shall also include all the background data, measurements, and assumptions used to calculate the uncontrolled epoxide emissions.

(vi) The epoxide emissions at the end of the ECO, determined in accordance with paragraph (d)(1) of this section. The records shall also include all the background data, measurements, and assumptions used to calculate the epoxide emissions.

(vii) The percent epoxide reduction for the batch cycle, determined in accordance with paragraph (e)(1) of this section. The records shall also include all the background data, measurements, and assumptions used to calculate the percent reduction.

(viii) The parameter level, established in accordance with paragraph (i)(3) of this section.

(ix) If epoxide emissions occur before the end of the ECO, the owner or operator shall maintain records of the time and duration of all such emission episodes that occur during the initial demonstration of batch cycle efficiency.

(x) If the conditions in paragraphs (b)(2)(i), (ii), and (iii) of this section are met, the owner or operator is not required to maintain the records specified in paragraphs (j)(1)(iii) through (iv) of this section, but shall maintain the records specified in paragraphs (j)(1)(x)(A), (B), and (C) of this section.

(A) The reactor epoxide partial pressure at the following times:

(1) At end of the epoxide feed, determined in accordance with paragraph (b)(2) of this section;

(2) At the onset of the ECO, established in accordance with paragraph (c)(2) of this section; or

(3) At the end of the ECO, determined in accordance with paragraph (d)(2) of this section.

(B) The percent epoxide reduction for the batch cycle, determined in accordance with paragraph (e)(2) of this section. The records shall also include all the measurements and assumptions used to calculate the percent reduction.

(C) The reactor epoxide partial pressure at the end of the ECO.

(2) The owner or operator shall maintain the records specified in paragraphs (j)(2)(i) through (iv) of this section.

(i) For each batch cycle, the product being produced and the product class to which it belongs.

(ii) For each batch cycle, the owner or operator shall record the value of the parameter monitored in accordance with paragraph (i)(3) of this section.

(iii) If a combustion, recovery, or recapture device is used in conjunction with ECO, the owner or operator shall record the information specified in § 63.1430(d) and comply with the monitoring provisions in § 63.1429.

(iv) If a combustion, recovery, or recapture device is used to reduce emissions, the owner or operator shall maintain the records specified in § 63.1430(d).

(v) If epoxide emissions occur before the end of the ECO, the owner or operator shall maintain records of the time and duration of all such emission episodes.

(k) *Reporting requirements.* The owner or operator shall comply with the reporting requirements in this paragraph.

(1) The information specified in paragraphs (k)(1)(i) through (ii) of this section shall be provided in the Precompliance Report, as specified in § 63.1439(e)(4).

(i) A standard operating procedure for obtaining the reactor liquid sample and a method that will be used to determine the epoxide concentration in the liquid, in accordance with paragraph (f)(1)(i) of this section.

(ii) A request to monitor a parameter other than those specified in paragraph (i)(1)(i), (ii), or (iii) of this section, as provided for in paragraph (i)(1)(iv) of this section.

(2) The information specified in paragraphs (k)(2)(i) through (iv) of this section shall be provided in the Notification of Compliance Status, as specified in § 63.1439(e)(5).

(i) For each product class, the information specified in paragraphs (k)(2)(i)(A) through (C) of this section.

(A) The operating conditions of this product class, as specified in paragraph (j)(1)(i) of this section.

(B) A list of all products in the product class.

(C) The percent epoxide emission reduction, determined in accordance with paragraph (e) of this section.

(ii) The parameter for each product class, as determined in accordance with paragraph (i)(2) of this section.

(iii) If a combustion, recovery, or recapture device is used in addition to ECO to reduce emissions, the information specified in § 63.1430(g)(1).

(iv) If epoxide emissions occur before the end of the ECO, a listing of the time and duration of all such emission episodes that occur during the initial demonstration of batch cycle efficiency.

(3) The information specified in paragraphs (k)(3)(i) through (iii) of this

section shall be provided in the Periodic Report, as specified in § 63.1439(e)(6).

(i) Reports of each batch cycle for which an ECO excursion occurred, as defined in paragraph (i)(3) of this section.

(ii) Notification of each batch cycle when the time and duration of epoxide emissions before the end of the ECO, recorded in accordance with paragraph (j)(2)(iv) of this section, exceed the time and duration of the emission episodes during the initial epoxide emission percentage reduction determination, as recorded in paragraph (j)(1)(viii) of this section.

(iii) If a combustion, recovery, or recapture device is used to reduce emissions, the information specified in § 63.1430(h).

(l) *New polyether polyol products.* If an owner or operator wishes to utilize ECO as a control option for a polyether polyol not previously assigned to a product class and reported to the Agency in accordance with either paragraph (k)(2)(i)(B), (l)(1)(ii), or (l)(2)(iii) of this section, the owner or operator shall comply with the provisions of paragraph (l)(1) or (2) of this section.

(1) If the operating conditions of the new polyether polyol are consistent with the operating conditions for an existing product class, the owner or operator shall comply with the requirements in paragraphs (l)(1)(i) and (ii) of this section.

(i) The owner or operator shall update the list of products for the product class required by paragraph (j)(1)(ii) of this section, and shall record the information in paragraphs (j)(1)(i)(A) through (F) of this section for the new product.

(ii) Within 180 days after the production of the new polyether polyol, the owner or operator shall submit a report updating the product list previously submitted for the product class. This information may be submitted along with the next Periodic Report.

(2) If the operating conditions of the new polyether polyol do not conform with the operating characteristics of an existing product class, the owner or operator shall establish a new product class and shall comply with provisions of paragraphs (l)(2)(i) through (iii) of this section.

(i) The owner or operator shall establish the batch cycle percent epoxide emission reduction in accordance with paragraphs (b) through (g) of this section for the product class.

(ii) The owner or operator shall establish the records specified in

paragraph (j)(1) of this section for the product class.

(iii) Within 180 days of the production of the new polyether polyol, the owner or operator shall submit a report containing the information specified in paragraphs (k)(2)(i) and (ii) of this section.

(m) *Polyether polyol product changes.* If a change in operation, as defined in paragraph (m)(1) of this section, occurs for a polyether polyol that has been assigned to a product class and reported to the Agency in accordance with paragraph (k)(2)(i)(B), (l)(1)(ii), or (l)(2)(iii) of this section, the owner or operator shall comply with the provisions of paragraphs (m)(2) through (3) of this section.

(1) A change in operation for a polyether polyol is defined as a change in any one of the parameters listed in paragraphs (m)(1)(i) through (ix) of this section.

(i) A significant change in reaction kinetics:

- (ii) Use of a different oxide reactant;
- (iii) Use of a different EO/PO ratio;
- (iv) A lower reaction temperature;
- (v) A lower catalyst feed on a mole/mole fraction OH basis;
- (vi) A shorter cookout;
- (vii) A lower reactor pressure;
- (viii) A different type of reaction, (e.g., a self-catalyzed vs. catalyzed reaction);

or

(ix) A marked change in reaction conditions (e.g., a markedly different liquid level).

(2) If the operating conditions of the product after the change in operation remain within the operation conditions of the product class to which the product was assigned, the owner or operator shall update the records specified in paragraphs (j)(1)(i)(A) through (F) of this section for the product.

(3) If the operating conditions of the product after the change in operation are outside of the operating conditions of the product class to which the product was assigned, the owner or operator shall comply with the requirements in paragraph (m)(3)(i) or (ii) of this section, as appropriate.

(i) If the new operating conditions of the polyether polyol are consistent with the operating conditions for another existing product class, the owner or operator shall comply with the requirements in paragraphs (m)(3)(i)(A) and (B) of this section.

(A) The owner or operator shall update the list of products for the product class that the product is leaving, and for the product class that the product is entering, and shall record the new information in paragraphs

(j)(1)(i)(A) through (F) of this section for the product.

(B) Within 180 days after the change in operating conditions for the polyether polyol product, the owner or operator shall submit a report updating the product lists previously submitted for the product class. This information may be submitted along with the next Periodic Report.

(ii) If the new operating conditions of the polyether polyol product do not conform with the operating characteristics of an existing product class, the owner or operator shall establish a new product class and shall comply with provisions of paragraphs (m)(3)(ii)(A) through (C) of this section.

(A) The owner or operator shall establish the batch cycle percent epoxide emission reduction in accordance with paragraphs (b) through (g) of this section for the product class.

(B) The owner or operator shall establish the records specified in paragraph (j)(1) of this section for the product class.

(C) Within 180 days of the change in operating conditions for the polyether polyol, the owner or operator shall submit a report containing the information specified in paragraphs (k)(2)(i) and (ii) of this section.

§ 63.1428 Process vent requirements for group determination of PMPUs using a nonepoxide organic HAP to make or modify the product.

(a) *Process vents from batch unit operations.* The owner or operator shall determine, for each PMPU located at an affected source, if the combination of all process vents from batch unit operations that are associated with the use of nonepoxide organic HAP to make or modify the product is a Group 1 combination of batch process vents, as defined in § 63.1423. The annual uncontrolled nonepoxide organic HAP emissions, determined in accordance with paragraph (b) of this section, and annual average flow rate, determined in accordance with paragraph (c) of this section, shall be determined for all process vents from batch unit operations associated with the use of a nonepoxide organic HAP to make or modify the product, with the exception of those vents specified in paragraph (i) of this section, at the location after all applicable control techniques have been applied to reduce epoxide emissions in accordance with paragraph (a)(1) or (2) of this section.

(1) If the owner or operator is using a combustion, recovery, or recapture device to reduce epoxide emissions, this location shall be at the exit of the

combustion, recovery, or recapture device.

(2) If the owner or operator is using ECO to reduce epoxide emissions, this location shall be at the exit from the batch unit operation. For the purpose of these determinations, the primary condenser operating as a reflux condenser on a reactor or distillation column shall be considered part of the unit operation.

(b) *Determination of annual nonepoxide organic HAP emissions.* The owner or operator shall determine, for each PMPU, the total annual nonepoxide organic HAP emissions from the combination of all process vents from batch unit operations that are associated with the use of a nonepoxide organic HAP to make or modify the product in accordance with paragraphs (b)(1) and (2) of this section.

(1) The annual nonepoxide organic HAP emissions for each process vent from a batch unit operation associated with the use of a nonepoxide organic HAP to make or modify the product shall be determined using the batch process vent procedures in the NESHAP for Group I Polymers and Resins (40 CFR part 63, subpart U), § 63.488(b).

(2) The owner or operator shall sum the annual nonepoxide organic HAP emissions from all individual process vents from batch unit operations in a PMPU, determined in accordance with paragraph (b)(1) of this section, to obtain the total nonepoxide organic HAP emissions from the combination of process vents associated with the use of a nonepoxide organic HAP to make or modify the product, for the PMPU.

(c) *Minimum emission level exemption.* If the annual emissions of TOC or nonepoxide organic HAP from the combination of process vents from batch unit operations that are associated with the use of nonepoxide organic HAP to make or modify a polyether polyol for a PMPU are less than 11,800 kg/yr, the owner or operator of that PMPU is not required to comply with the provisions in paragraphs (d) and (e) of this section.

(d) *Determination of average flow rate and annual average flow rate.* The owner or operator shall determine, for each PMPU, the total annual average flow rate for the combination of all process vents from batch unit operations that are associated with the use of a nonepoxide organic HAP to make or modify a product in accordance with paragraphs (d)(1) and (2) of this section.

(1) The annual average flow rate for each process vent from batch unit operations that is associated with the use of nonepoxide organic HAP to make or modify the product shall be determined using the batch process vent

procedures in the NESHAP for Group I Polymers and Resins (40 CFR part 63, subpart U), § 63.488(e).

(2) The owner or operator shall sum the annual average flow rates from the individual process vents from batch unit operations in a PMPU, determined in

accordance with paragraph (d)(1) of this section, to obtain the total annual average flow rate for the combination of process vents associated with the use of a nonepoxide organic HAP to make or modify the product, for the PMPU.

(e) *Determination of cutoff flow rate.* For each PMPU at an affected source that uses nonepoxide organic HAP to make or modify the product, the owner or operator shall calculate the cutoff flow rate using Equation 14.

$$CFR = (0.00437)(AE) - 51.6 \quad [\text{Equation 14}]$$

Where:

CFR = Cutoff flow rate, standard cubic meters per minute (scmm).

AE = Annual TOC or nonepoxide organic HAP emissions from the combination of process vents from batch unit operations that are associated with the use of nonepoxide organic HAP to make or modify the product, as determined in paragraph (b)(2) of this section, kg/yr.

(f) [Reserved]

(g) *Process changes affecting Group 2 combinations of process vents in a PMPU that are from batch unit operations.* Whenever process changes, as described in paragraph (g)(1) of this section, are made that affect a Group 2 combination of batch process vents and that could reasonably be expected to change the group status from Group 2 to Group 1, the owner or operator shall comply with paragraphs (g)(2) and (3) of this section.

(1) Examples of process changes include, but are not limited to, increases in production capacity or production rate, changes in feedstock type or catalyst type; or whenever there is replacement, removal, or modification of recovery equipment considered part of the batch unit operation. Any change that results in an increase in the annual nonepoxide organic HAP emissions from the estimate used in the previous group determination constitutes a process change for the purpose of these provisions. Process changes do not include: process upsets; unintentional, temporary process changes; and changes that are within the margin of variation on which the original group determination was based.

(2) For each process affected by a process change, the owner or operator shall redetermine the group status by repeating the procedures specified in paragraphs (b) through (e) of this section, as applicable, and determining if the combination of process vents is a Group 1 combination of batch process vents, as defined in § 63.1423. Alternatively, engineering assessment, as described in § 63.488(b)(6)(i), may be used to determine the effects of the process change.

(3) Based on the results of paragraph (g)(2) of this section, the owner or operator shall comply with either paragraph (g)(3)(i) or (ii) of this section.

(i) If the redetermination described in paragraph (g)(2) of this section indicates that the group status of the combination of process vents from batch unit operations in a PMPU that are associated with the use of nonepoxide organic HAP to make or modify the product changes from Group 2 to Group 1 as a result of the process change, the owner or operator shall submit a report as specified in § 63.1439(e)(6)(iii)(D)(1) and shall comply with Group 1 combination of batch process vents provisions in this subpart, as specified in § 63.1420(g)(3).

(ii) If the redetermination described in paragraph (g)(2) of this section indicates no change in group status, the owner or operator is not required to submit a report.

(h) *Process vents from continuous unit operations.* (1) The owner or operator shall determine the total resource effectiveness (TRE) index value for each process vent from a continuous unit operation that is associated with the use of nonepoxide organic HAP to make or modify the product. To determine the TRE index value, the owner or operator shall conduct a TRE determination and calculate the TRE index value according to the HON process vent group determination procedures in § 63.115(d)(1) or (2) and the TRE equation in § 63.115(d)(3). The TRE index value shall be determined at the location after all applicable control techniques have been applied to reduce epoxide emissions in accordance with paragraph (h)(1)(i), (ii), or (iii) of this section.

(i) If the owner or operator uses one or more nonepoxide recovery devices after all control techniques to reduce epoxide emissions, this location shall be after the last nonepoxide recovery device.

(ii) If the owner or operator does not use a nonepoxide recovery device after a combustion, recovery, or recapture device to reduce epoxide emissions, this location shall be at the exit of the

combustion, recovery, or recapture device.

(iii) If the owner or operator does not use a nonepoxide recovery device after extended cookout to reduce epoxide emissions, this location shall be at the exit from the continuous unit operation. For the purpose of these determinations, the primary condenser operating as a reflux condenser on a reactor or distillation column shall be considered part of the unit operation.

(2) The owner or operator of a Group 2 continuous process vent shall recalculate the TRE index value as necessary to determine whether the process vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the process vent to Group 1. Examples of process changes include, but are not limited to, increases in production capacity or production rate, changes in feedstock type or catalyst type, or whenever there is replacement, removal, or addition of recovery equipment. For purposes of this paragraph, process changes do not include: process upsets; unintentional, temporary process changes; and changes that are within the range on which the original TRE calculation was based.

(i) The TRE index value shall be recalculated based on measurements of process vent stream flow rate, TOC, and nonepoxide organic HAP concentrations, and heating values as specified in the HON process vent group determination procedures in § 63.115(a), (b), (c), and (d), as applicable, or on best engineering assessment of the effects of the change. Engineering assessments shall meet the specifications in § 63.115(d)(1).

(ii) Where the recalculated TRE index value is less than or equal to 1.0, or, where the TRE index value before the process change was greater than 4.0 and the recalculated TRE index value is less than or equal to 4.0 but greater than 1.0, the owner or operator shall submit a report as specified in the process vent reporting and recordkeeping provisions in § 63.1430(j) or (k), and shall comply with the appropriate provisions in the process vent control requirements in § 63.1425 by the dates specified in

§ 63.1422 (the section describing compliance dates for sources subject to this subpart).

(iii) Where the recalculated TRE index value is greater than 4.0, the owner or operator is not required to submit a report.

(i) *Combination of process vents from batch unit operations and process vents from continuous unit operations.* If an owner or operator combines a process vent from a batch unit operation that is associated with the use of a nonepoxide organic HAP to make or modify the product with a process vent from a continuous unit operation that is associated with the use of a nonepoxide prior to the epoxide control technique, or prior to a nonepoxide recovery device that is after the epoxide control technique, then the provisions in paragraphs (i)(1) and (2) of this section shall apply.

(1) The process vent from the batch unit operation is not required to be included in the group determination required by paragraphs (a) through (e) of this section.

(2) The TRE index value of the combined stream shall be determined in accordance with paragraph (h) of this section, and the TRE index value shall be calculated during a period when nonepoxide organic HAP emissions are being generated by the batch unit operation.

§ 63.1429 Process vent monitoring requirements.

(a) *Monitoring equipment requirements.* The owner or operator of a process vent that uses a combustion, recovery, or recapture device to comply with the process vent control requirements in § 63.1425(b)(1), (b)(2), (c)(1), (c)(3), or (d) shall install monitoring equipment specified in paragraph (a)(1), (2), (3), (4), (5), (6), or (7) of this section, depending on the type of device used. Also, the owner or operator that uses a recovery or recapture device to comply with § 63.1425(c)(4) shall install monitoring equipment as specified in paragraph (a)(4), (5), (6), or (7) of this section. All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturers' specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(1) Where an incinerator is used, a temperature monitoring device equipped with a continuous recorder is required.

(i) Where an incinerator other than a catalytic incinerator is used, a

temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs.

(ii) Where a catalytic incinerator is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.

(2) Where a flare is used, the following monitoring equipment is required: a device (including but not limited to a thermocouple, ultra-violet beam sensor, or infrared sensor) capable of continuously detecting the presence of a pilot flame.

(3) Where a boiler or process heater of less than 44 megawatts design heat input capacity is used, the following monitoring equipment is required: a temperature monitoring device in the firebox equipped with a continuous recorder. Any boiler or process heater in which all process vent streams are introduced with primary fuel or are used as the primary fuel is exempt from this requirement.

(4) Where an absorber is used, a scrubbing liquid flow rate meter or a pressure monitoring device is required and should be equipped with a continuous recorder. If an acid or base absorbent is used, a pH monitoring device to monitor scrubber effluent is also required. If two or more absorbers in series are used, a scrubbing liquid flow rate meter, or a pressure monitoring device, equipped with a continuous recorder, is required for each absorber in the series. An owner or operator may submit a request to instead install the scrubbing liquid flow rate meter, or a pressure monitoring device, equipped with a continuous recorder, on only the final absorber in a series, in accordance with the alternative parameter monitoring reporting requirements in § 63.1439(f).

(5) Where a condenser is used, a condenser exit temperature (product side) monitoring device equipped with a continuous recorder is required.

(6) Where a carbon adsorber is used, an integrating regeneration stream flow monitoring device having an accuracy of +10 percent or better, capable of recording the total regeneration stream mass or volumetric flow for each regeneration cycle, and a carbon bed temperature monitoring device, capable of recording the carbon bed temperature after each regeneration and within 15 minutes of completing any cooling cycle are required.

(7) As an alternative to paragraphs (a)(4) through (6) of this section, the owner or operator may install an organic

monitoring device equipped with a continuous recorder.

(b) *Alternative parameters.* An owner or operator of a process vent may request approval to monitor parameters other than those listed in paragraph (a) of this section. The request shall be submitted according to the procedures specified in the process vent reporting and recordkeeping requirements in § 63.1430(j) and the alternative parameter monitoring reporting requirements in § 63.1439(f). Approval shall be requested if the owner or operator:

(1) Uses a combustion device other than an incinerator, boiler, process heater, or flare; or

(2) For a Group 2 continuous process vent, maintains a TRE greater than 1.0 but less than or equal to 4.0 without a recovery device or with a recovery device other than the recovery devices listed in paragraph (a) of this section; or

(3) Uses one of the combustion, recovery, or recapture devices listed in paragraph (a) of this section, but seeks to monitor a parameter other than those specified in paragraph (a) of this section.

(c) *Monitoring of bypass lines.* The owner or operator of a process vent using a process vent system that contains bypass lines that could divert a process vent stream away from the combustion, recovery, or recapture device used to comply with the process vent control requirements in § 63.1425(b), (c), or (d) shall comply with paragraph (c)(1) or (2) of this section. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to paragraphs (c)(1) or (2) of this section.

(1) Properly install, maintain, and operate a flow indicator that takes a reading at least once at approximately equal intervals of about 15 minutes. Records shall be generated as specified in the process vent reporting and recordkeeping provisions in § 63.1430(d)(3). The flow indicator shall be installed at the entrance to any bypass line that could divert emissions away from the combustion, recovery, or recapture device and to the atmosphere; or

(2) Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and emissions are not diverted through the bypass line. Records shall be generated as specified in the process

vent reporting and recordkeeping provisions in § 63.1430(d)(4)(i).

(d) *Establishment of parameter monitoring levels.* Parameter monitoring levels for process vents from continuous or batch unit operations using a combustion, recovery, or recapture device to comply with the process vent control requirements in § 63.1425(b), (c), or (d) shall be established as specified in paragraphs (d)(1) through (3) of this section.

(1) For each parameter monitored under paragraph (a) or (b) of this section, the owner or operator shall establish a level, defined as either a maximum or minimum operating parameter as denoted in Table 5 of this subpart (the table listing the monitoring, recordkeeping, and reporting requirements for process vents from batch unit operations), that indicates that the combustion, recovery, or recapture device is operated in a manner to ensure compliance with the provisions of this subpart. The level shall be established in accordance with the procedures specified in the process vent control requirements in § 63.1430(d). The level may be based upon a prior performance test conducted for determining compliance with a regulation promulgated by the EPA, and the owner or operator is not required to conduct a performance test under the process vent requirements for determining organic HAP concentration, control efficiency, and aggregated organic HAP emission reductions in § 63.1426, provided that the prior performance test meets the conditions of § 63.1426(b)(3).

(2) The established level, along with supporting documentation, shall be submitted in the Notification of Compliance Status or the operating permit application as required in the Notification of Compliance Status requirements in § 63.1439(e)(5) or in the operating permit application requirements in § 63.1439(e)(8), respectively.

(3) The operating day shall be defined as part of establishing the parameter monitoring level and shall be submitted with the information in paragraph (d)(2) of this section. The definition of operating day shall specify the time(s) at which an operating day begins and ends.

§ 63.1430 Process vent reporting and recordkeeping requirements.

(a) [Reserved]

(b) *Records to demonstrate compliance.* The owner or operator complying with the process vent control requirements in § 63.1425(b), (c), or (d)

shall keep the following records, as applicable, readily accessible:

(1) When using a flare to comply with the process vent control requirements in § 63.1425(b)(2)(i), (c)(1)(i), (c)(3)(i), or (d)(1):

(i) The flare design (i.e., steam-assisted, air-assisted, or non-assisted);

(ii) All visible emission readings, heat content determinations, flow rate determinations, and exit velocity determinations made during the flare specification determination required by § 63.1437(c); and

(iii) All periods during the flare specification determination required by § 63.1437(c) when all pilot flames are absent.

(2) The following information when using a combustion, recovery, or recapture device (other than a flare) to achieve compliance with the process vent control requirements in § 63.1425(b), (c), or (d):

(i) For a combustion, recovery, or recapture device being used to comply with a percent reduction requirement of § 63.1425(b)(1)(i), (b)(2)(ii), (c)(1)(ii), (c)(3)(ii), or (d)(2), or the annual epoxide emission limitation in § 63.1425(b)(1)(iii) or (b)(2)(iv), the percent reduction of organic HAP or TOC achieved, as determined using the procedures specified in the process vent requirements in § 63.1426;

(ii) For a combustion device being used to comply with an outlet concentration limitation of § 63.1425(b)(1)(ii) or (b)(2)(iii), the concentration of organic HAP or TOC outlet of the combustion device, as determined using the procedures specified in the process vent requirements in § 63.1426;

(iii) For a boiler or process heater, a description of the location at which the process vent stream is introduced into the boiler or process heater;

(iv) For a boiler or process heater with a design heat input capacity of less than 44 megawatts and where the process vent stream is introduced with combustion air or is used as a secondary fuel and is not mixed with the primary fuel, the percent reduction of organic HAP or TOC achieved, as determined using the procedures specified in § 63.1426.

(c) *Records related to the establishment of parameter monitoring levels.* For each parameter monitored according to the process vent monitoring requirements in § 63.1429(a) and Table 5 of this subpart, or for alternate parameters and/or parameters for alternate control techniques monitored according to the alternative parameter monitoring reporting requirements in § 63.1439(f) as allowed

under § 63.1429(b), maintain documentation showing the establishment of the level that indicates that the combustion, recovery, or recapture device is operated in a manner to ensure compliance with the provisions of this subpart, as required by the process vent monitoring requirements in § 63.1429(d).

(d) *Records to demonstrate continuous compliance.* The owner or operator that uses a combustion, recovery, or recapture device to comply with the process vent control requirements in § 63.1425(b), (c), or (d) shall keep the following records readily accessible:

(1) Continuous records of the equipment operating parameters specified to be monitored under the process vent monitoring requirements in § 63.1429(a) as applicable, and listed in Table 5 of this subpart, or specified by the Administrator in accordance with the alternative parameter monitoring reporting requirements in § 63.1439(f), as allowed under § 63.1429(b). These records shall be kept as specified under § 63.1439(d), except as specified in paragraphs (d)(1)(i) and (ii) of this section.

(i) For flares, the records specified in Table 5 of this subpart shall be maintained in place of continuous records.

(ii) For carbon adsorbers used for process vents from batch unit operations, the records specified in Table 5 of this subpart shall be maintained in place of daily averages.

(2) Records of the daily average value for process vents from continuous unit operations or batch unit operations of each continuously monitored parameter, except as provided in paragraphs (d)(2)(i) and (ii) of this section.

(i) Monitoring data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments shall not be included in computing the daily averages. In addition, monitoring data recorded during periods of non-operation of the process (or specific portion thereof) resulting in cessation of organic HAP emissions, (or periods of start-up, shutdown, or malfunction) shall not be included in computing the daily averages.

(ii) If all recorded values for a monitored parameter during an operating day are above the minimum or below the maximum parameter monitoring level established in accordance with the process vent monitoring requirements in § 63.1429(d), the owner or operator may record that all values were above the

minimum or below the maximum level established, rather than calculating and recording a daily average for that operating day.

(3) Hourly records of whether the flow indicator for bypass lines specified under § 63.1429(c)(1) was operating and whether a diversion was detected at any time during the hour. Also, records of the time(s) of all periods when the process vent was diverted from the combustion, recovery, or recapture device, or the flow indicator specified in § 63.1429(c)(1) was not operating.

(4) Where a seal or closure mechanism is used to comply with the process vent monitoring requirements for bypass lines in § 63.1429(c)(2), hourly records of flow are not required. For compliance with § 63.1429(c)(2), the owner or operator shall record whether the monthly visual inspection of the seals or closure mechanism has been done, and shall record the occurrence of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type configuration has been checked out, and records of any car-seal that has been broken.

(5) Records specifying the times and duration of periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high level adjustments. In addition, records specifying any other periods of process or combustion, recovery, or recapture device operation when monitors are not operating.

(e) *Records related to the group determination for process vents that are associated with the use of nonepoxide organic HAP to make or modify the product.* (1) *Process vents from batch unit operations.* Except as provided in paragraphs (e)(1)(vi) and (vii) of this section, the owner or operator of an affected source shall maintain the records specified in paragraphs (e)(1)(i) through (v) of this section for each PMPU that uses a nonepoxide organic HAP to make or modify the product in batch unit operations. The records required to be maintained by this paragraph are limited to the information developed and used to make the group determination under the process vent requirements for processes using a nonepoxide organic HAP to make or modify the product in § 63.1428(a) through (e), as appropriate. If an owner or operator did not need to develop certain information (e.g., annual average flow rate) to determine the group status, the owner or operator is not required to develop additional information. The owner or operator may elect Group 1 status for process vents without making a Group 1/Group 2 determination. In

such event, none of the records specified in paragraphs (e)(1)(i) through (v) are required.

(i) A description of, and an emission estimate for, each batch emission episode, and the total emissions associated with one batch cycle for each unique product class made in the PMPU.

(ii) Total annual uncontrolled TOC or nonepoxide organic HAP emissions from the combination of process vents from batch unit operations associated with the use of nonepoxide organic HAP to make or modify the product, as determined in accordance with the process vent requirements for group determinations in § 63.1428(b).

(iii) The annual average flow rate for the combination of process vents from batch unit operations associated with the use of organic HAP to make or modify the product, as determined in accordance with the process vent requirements for group determinations in § 63.1428(d).

(iv) The cutoff flow rate, determined in accordance with the process vent requirements for group determinations in § 63.1428(e).

(v) The results of the PMPU group determination (i.e., whether the combination of process vents is Group 1 or Group 2).

(vi) If the combination of all process vents from batch unit operations associated with the use of an organic HAP to make or modify the product is subject to the Group 1 batch process vent control requirements for nonepoxide HAP emissions from making or modifying the product in § 63.1425(c)(1), none of the records in paragraphs (b)(1)(i) through (v) of this section are required.

(vii) If the total annual emissions from the combination of process vents from batch unit operations associated with the use of an organic HAP to make or modify the product are less than 11,800 kg per year, only the records in paragraphs (b)(1)(i) and (ii) of this section are required.

(2) *Process vents from continuous unit operations.* The owner or operator of an affected source that uses nonepoxide organic HAP to make or modify the product in continuous unit operations shall keep records regarding the measurements and calculations performed to determine the TRE index value of each process vent stream. The owner or operator of Group 1 continuous process vents that are subject to the control requirements of § 63.1425(c)(3) is not required to keep these records.

(f) *Records for Group 2 process vents that are associated with the use of*

nonepoxide organic HAP to make or modify the product. The following records shall be maintained for PMPUs with a Group 2 combination of batch process vents and/or one or more Group 2 continuous process vents.

(1) *Process vents from batch unit operations—emission records.* The owner or operator shall maintain records of the combined total annual nonepoxide organic HAP emissions from process vents associated with the use of nonepoxide organic HAP to make or modify the product for each PMPU where the combination of these process vents is classified as Group 2.

(2) *Process vents from continuous unit operations—monitoring records for vents with TRE between 1.0 and 4.0.* The owner or operator using a recovery device or other means to achieve and maintain a TRE index value greater than 1.0 but less than 4.0 as specified in the HON process vent requirements in § 63.113(a)(3) or § 63.113(d) shall keep the following records readily accessible:

(i) Continuous records of the equipment operating parameters specified to be monitored under § 63.114(b) and listed in Table 5 of this subpart or specified by the Administrator in accordance with § 63.114(c) and § 63.117(e); and

(ii) Records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in § 63.152(f). If carbon adsorber regeneration stream flow and carbon bed regeneration temperature are monitored, the records specified in Table 5 of this subpart shall be kept instead of the daily averages.

(3) *Process vents from continuous unit operations—records related to process changes.* The owner or operator subject to the provisions of this subpart who has elected to demonstrate compliance with the TRE index value greater than 4.0 under § 63.113(e) or greater than 1.0 under § 63.113(a)(3) or § 63.113(d) shall keep readily accessible records of:

(i) Any process changes as defined in § 63.115(e); and

(ii) Any recalculation of the TRE index value pursuant to § 63.115(e).

(4) *Process vents from continuous unit operations—records for vents with a flow rate less than 0.005 standard cubic meter per minute.* The owner or operator who elects to comply by maintaining a flow rate less than 0.005 standard cubic meter per minute under § 63.113(f), shall keep readily accessible records of:

(i) Any process changes as defined in § 63.115(e) that increase the process vent stream flow rate;

(ii) Any recalculation or measurement of the flow rate pursuant to § 63.115(e); and

(iii) If the flow rate increases to 0.005 standard cubic meter per minute or greater as a result of the process change, the TRE determination performed according to the procedures of § 63.115(d).

(5) *Process vents from continuous unit operations—records for vents with an organic HAP concentration less than 50 parts per million.* The owner or operator who elects to comply by maintaining an organic HAP concentration less than 50 parts per million by volume organic HAP concentration under § 63.113(g) shall keep readily accessible records of:

(i) Any process changes as defined in § 63.115(e) that increase the organic HAP concentration of the process vent stream;

(ii) Any recalculation or measurement of the concentration pursuant to § 63.115(e); and

(iii) If the organic HAP concentration increases to 50 parts per million by volume or greater as a result of the process change, the TRE determination performed according to the procedures of § 63.115(d).

(g) *Notification of Compliance Status.* The owner or operator of an affected source shall submit the information specified in paragraphs (g)(1) through (3) of this section, as appropriate, as part of the Notification of Compliance Status specified in § 63.1439(e)(5).

(1) For the owner or operator complying with the process vent control requirements in § 63.1425(b), (c)(1), (c)(3), or (d), the information specified in paragraph (b) of this section related to the compliance demonstration, and the information specified in paragraph (c) of this section related to the establishment of parameter monitoring levels,

(2) For each PMPU where the combination of process vents from batch unit operations that are associated with the use of nonepoxide organic HAP to make or modify the product is Group 2, the information related to the group determination specified in paragraph (e)(1) of this section.

(3) For each process vent from a continuous unit operation that is associated with the use of nonepoxide organic HAP to make or modify the product that is Group 2, the information related to the group determination specified in paragraph (e)(2) of this section.

(h) *Periodic Reports.* The owner or operator of an affected source shall submit Periodic Reports of the recorded information specified in paragraphs (h)(1) through (6) of this section, as

appropriate, according to the schedule for submitting Periodic Reports in § 63.1439(e)(6)(i).

(1) Reports of daily average values of monitored parameters for all operating days when the daily average values recorded under paragraph (d)(2) of this section were above the maximum, or below the minimum, level established in the Notification of Compliance Status or operating permit.

(2) Reports of the duration of periods when monitoring data are not collected for each excursion caused by insufficient monitoring data as defined in § 63.1438(f)(1)(iv), (f)(2)(i)(B), or (f)(3)(ii).

(3) Reports of the times and durations of all periods recorded under paragraph (d)(3) of this section when the process vent stream is diverted from the combustion, recovery, or recapture device through a bypass line.

(4) Reports of all periods recorded under paragraph (d)(4) of this section in which the seal mechanism is broken, the bypass line valve position has changed, or the key to unlock the bypass line valve was checked out.

(5) Reports of the times and durations of all periods recorded under paragraph (d)(1)(i) of this section in which all pilot flames of a flare were absent.

(6) Reports of all carbon bed regeneration cycles during which the parameters recorded under paragraph (d)(1)(ii) of this section were above the maximum, or below the minimum, levels established in the Notification of Compliance Status or operating permit.

(i) *Reports of process changes.* Whenever a process change, as defined in § 63.1420(g)(3), is made that causes a Group 2 combination of batch process vents at a PMPU that are associated with the use of nonepoxide organic HAP to make or modify the product to become Group 1, the owner or operator shall submit a report within 180 days after the process change is made or the information regarding the process change is known to the owner or operator. This report may be included in the next Periodic Report or in a separate submittal to the Administrator, as specified in § 63.1439(e)(6)(iii)(D)(1). A description of the process change shall be submitted with the report.

(j) *Reporting requirements for Group 2 continuous process vents.* (1) Whenever a process change, as defined in § 63.1420(g)(3), is made that causes a Group 2 continuous process vent with a TRE greater than 4.0 to become a Group 2 continuous process vent with a TRE less than 4.0, the owner or operator shall submit a report within 180 calendar days after the process change is made or the information regarding the

process change is known, unless the flow rate is less than 0.005 standard cubic meters per minute. The report may be submitted as part of the next periodic report. The report shall include:

(i) A description of the process change;

(ii) The results of the recalculation of the TRE index value required under § 63.1428(h)(2), and recorded under paragraph (f)(3) of this section; and

(iii) A statement that the owner or operator will comply with the process vent monitoring requirements specified in § 63.1429, as appropriate.

(2) Whenever a process change, as defined in § 63.1420(g)(3), is made that causes a Group 2 continuous process vent with a flow rate less than 0.005 standard cubic meters per minute to become a Group 2 continuous process vent with a flow rate of 0.005 standard cubic meters per minute or greater, the owner or operator shall submit a report within 180 calendar days after the process change is made or the information regarding the process change is known, unless the organic HAP concentration is less than 50 ppmv. The report may be submitted as part of the next periodic report. The report shall include:

(i) A description of the process change;

(ii) The results of the calculation of the TRE index value required under § 63.1428(h)(2), and recorded under paragraph (f)(3) of this section; and

(iii) A statement that the owner or operator will comply with the process vent monitoring requirements specified in § 63.1429, as appropriate.

(3) Whenever a process change, as defined in § 63.1420(g)(3), is made that causes a Group 2 continuous process vent with an organic HAP concentration less than 50 ppmv to become a Group 2 continuous process vent with an organic HAP concentration of 50 ppmv or greater and a TRE index value less than 4.0, the owner or operator shall submit a report within 180 calendar days after the process change is made or the information regarding the process change is known, unless the flow rate is less than 0.005 standard cubic meters per minute. The report may be submitted as part of the next periodic report. The report shall include:

(i) A description of the process change;

(ii) The results of the calculation of the TRE index value required under § 63.1428(h)(2), and recorded under paragraph (f)(3) of this section; and

(iii) A statement that the owner or operator will comply with the process

vent monitoring requirements specified in § 63.1429, as appropriate.

(k) *Alternative requests.* If an owner or operator uses a combustion, recovery, or recapture device other than those specified in the process vent monitoring requirements in § 63.1429(a)(1) through (7) and listed in Table 5 of this subpart; requests approval to monitor a parameter other than those specified in § 63.1429(a)(1) through (7) and listed in Table 5 of this subpart; or uses ECO and requests to monitor a parameter other than those listed in § 63.1427(i)(1)(i) through (iii), as allowed under § 63.1427(i)(1)(iv), the owner or operator shall submit a description of planned reporting and recordkeeping procedures, as specified in § 63.1439(f)(3), as part of the Precompliance Report as required under § 63.1439(e)(4), or to the Administrator as a separate submittal. The Administrator will specify appropriate reporting and recordkeeping requirements as part of the review of the Precompliance Report.

§ 63.1431 Process vent annual epoxides emission factor plan requirements.

(a) *Applicability of emission factor plan requirements.* An owner or operator electing to comply with an annual epoxide emission factor limitation in § 63.1425(b)(1)(iii) or

(b)(2)(iv) shall develop and implement an epoxides emission factor plan in accordance with the provisions of this section.

(b) *Emission factor plan requirements.* The owner or operator shall develop an epoxides emission factor plan.

(1) If epoxide emissions are maintained below the epoxide emission factor limitation through the use of a combustion, recovery, or recapture device (without extended cookout), the owner or operator shall develop and implement the plan in accordance with paragraph (c) of this section.

(2) If epoxide emissions are maintained below the epoxide emission factor limitation through the use of extended cookout (without a combustion, recovery, or recapture device), the owner or operator shall develop and implement the plan in accordance with paragraph (d) of this section.

(3) If epoxide emissions are maintained below the epoxide emission factor limitation through the use of extended cookout in conjunction with a combustion, recovery, or recapture device, the owner or operator shall develop and implement the plan in accordance with paragraph (e) of this section.

(c) *Compliance with epoxide emission factor limitation using a combustion,*

recovery, or recapture device. (1) The owner or operator shall notify the Agency of the intent to use a combustion, recovery, or recapture device to comply with the epoxide emission factor limitation in § 63.1425(b)(1)(iii) or (b)(2)(iv). The owner or operator shall prepare an estimate of the annual epoxide emissions and the actual production rate in accordance with paragraphs (c)(1)(i) through (iv) of this section. This notification and emission estimate shall be submitted in the Precompliance Report as specified in § 63.1439(e)(4), or in the operating permit application, as allowed in § 63.1439(e)(8).

(i) Annual uncontrolled epoxide emissions. These emission estimates shall be determined in accordance with the batch process vent group determination procedures in the NESHAP for Group I Polymers and Resins (40 CFR part 63, subpart U, § 63.488(b)) and shall be based on anticipated production.

(ii) A description of the combustion, recovery, or recapture device, along with the expected percent efficiency.

(iii) Annual emissions after the combustion, recovery, or recapture device. The expected annual emissions after control shall be determined using Equation 15.

$$AE_{\text{control}} = (AE_{\text{uncontrolled}}) \left[\left(1 - \frac{R}{100} \right) \right] \quad \text{[Equation 15]}$$

Where:

AE_{control} = Annual epoxide emissions after control, kg/yr.

$AE_{\text{uncontrolled}}$ = Annual uncontrolled epoxide emissions, determined in accordance with paragraph (c)(1)(i) of this section, kg/yr.

R = Expected control efficiency of the combustion, recovery, or recapture device, percent, as determined in § 63.1426(c).

(iv) The actual annual production rate means the annual mass of polyether polyol product produced from the applicable PMPU. This production rate shall be for the same annual time period as the annual emission estimate as calculated in accordance with paragraph (c)(1)(iii) of this section.

(2) The owner or operator shall conduct a performance test in accordance with § 63.1426(c) to determine the epoxide control efficiency of the combustion, recovery, or recapture device. The owner or operator shall then recalculate the annual epoxide emissions after control using

Equation 15, except that the control efficiency, R, shall be the measured control efficiency. This information shall be submitted as part of the Notification of Compliance Status, as provided in § 63.1439(e)(5).

(3) The owner or operator shall comply with the process vent monitoring provisions in § 63.1429.

(4) The owner or operator shall comply with the process vent recordkeeping requirements in paragraphs § 63.1430(b) through (d), and the process vent reporting requirements in § 63.1430(g)(1) and (h).

(d) *Compliance with epoxide emission factor limitation using extended cookout.* (1) The owner or operator shall notify the Agency of the intent to use extended cookout to comply with the epoxide emission factor limitation in § 63.1425(b)(1)(iii) or (b)(2)(iv). The owner or operator shall prepare an estimate of the annual epoxide emissions after the extended cookout. This notification and emission estimate shall be submitted in the Precompliance

Report as specified in § 63.1439(e)(4), or in the operating permit application, as allowed in § 63.1439(e)(8).

(2) The owner or operator shall determine the annual epoxide emissions in accordance with § 63.1427(d), based on anticipated production. This information shall be submitted as part of the Notification of Compliance Status, as provided in § 63.1439(e)(5).

(3) The owner or operator shall comply with the ECO monitoring provisions in § 63.1427(i).

(4) The owner or operator shall comply with the process vent recordkeeping and reporting requirements in § 63.1430.

(e) *Compliance with the epoxide emission factor limitation through the use of extended cookout in conjunction with one or more combustion, recovery, and/or recapture device.* (1) The owner or operator shall notify the Agency of the intent to use extended cookout in conjunction with one or more combustion, recovery, and/or recapture device to comply with the annual

epoxide emission factor limitation in § 63.1425(b)(1)(iii) or (b)(2)(iv). The owner or operator shall prepare an estimate of the annual epoxide emissions after control. This notification and emission estimate shall be submitted in the Precompliance Report as specified in § 63.1439(e)(4), or in the operating permit application, as allowed under § 63.1439(e)(8).

(2) The owner or operator shall determine the annual epoxide emissions after control. This information shall be submitted as part of the Notification of Compliance Status, as provided in § 63.1439(e)(5).

(3) The owner or operator shall comply with the ECO monitoring provisions in § 63.1427(i).

(4) The owner or operator shall comply with the ECO recordkeeping and reporting requirements in § 63.1427(j) and (k).

(f) *Compliance with epoxide emission factor limitation without using extended cookout or a combustion, recovery, or recapture device.* (1) The owner or operator shall notify the Agency of the intent to comply with the epoxide emission factor limitation in § 63.1425(b)(1)(iii) or (b)(2)(iv) without the use of ECO or a combustion, recovery, or recapture device. The owner or operator shall prepare an estimate of the annual epoxide emissions. This notification and emission estimate shall be submitted in the Precompliance Report as specified in § 63.1439(e)(4), or in the operating permit application, as allowed in § 63.1439(e)(8).

(2) Each year after the compliance date, the owner or operator shall calculate the epoxides emission factor for the previous year. This information shall be submitted in the second Periodic Report submitted each year, as specified in § 63.1439(e)(6).

§ 63.1432 Storage vessel provisions.

(a) For each storage vessel located at an affected source, the owner or operator shall comply with the HON storage vessel requirements of §§ 63.119 through 63.123 and the HON leak inspection provisions in § 63.148, with the differences noted in paragraphs (b) through (p) of this section, for the purposes of this subpart.

(b) When the term "storage vessel" is used in the HON storage vessel requirements in §§ 63.119 through 63.123, the definition of this term in § 63.1423 shall apply for the purposes of this subpart.

(c) When the term "Group 1 storage vessel" is used in the HON storage vessel requirements in §§ 63.119 through 63.123, the definition of this

term in § 63.1423 shall apply for the purposes of this subpart.

(d) When the term "Group 2 storage vessel" is used in the HON storage vessel requirements in §§ 63.119 through 63.123, the definition of this term in § 63.1423 shall apply for the purposes of this subpart.

(e) When the HON storage vessel requirements in § 63.119 refer to "December 31, 1992," the phrase "September 4, 1997" shall apply instead, for the purposes of this subpart.

(f) When the HON storage vessel requirements in § 63.119 refer to "April 22, 1994," the phrase "June 1, 1999," shall apply instead, for the purposes of this subpart.

(g) The owner or operator of an affected source shall comply with this paragraph instead of § 63.120(d)(1)(ii) for the purposes of this subpart. If the combustion, recovery, or recapture device used to comply with § 63.119(e) is also used to comply with any of the requirements found in §§ 63.1425 through 63.1431 and/or § 63.1433, the performance test required in or accepted by §§ 63.1425 through 63.1431 and/or § 63.1433 is acceptable for demonstrating compliance with the HON storage vessel requirements in § 63.119(e), for the purposes of this subpart. The owner or operator will not be required to prepare a design evaluation for the combustion, recovery, or recapture device as described in § 63.120(d)(1)(i), if the performance test meets the criteria specified in paragraphs (g)(1) and (2) of this section.

(1) The performance test demonstrates that the combustion, recovery, or recapture device achieves greater than or equal to the required control efficiency specified in the HON storage vessel requirements in § 63.119(e)(1) or (2), as applicable; and

(2) The performance test is submitted as part of the Notification of Compliance Status required by § 63.1439(e)(5).

(h) When the HON storage vessel requirements in § 63.120(d)(3)(i) uses the term "operating range," the term "level," shall apply instead, for the purposes of this subpart.

(i) For purposes of this subpart, the monitoring plan required by the HON storage vessel requirements in § 63.120(d)(2) shall specify for which combustion, recovery, or recapture device the owner or operator has selected to follow the procedures for continuous monitoring specified in § 63.1438. For the combustion, recovery, or recapture device(s) for which the owner or operator has selected not to follow the procedures for continuous monitoring specified in § 63.1438, the monitoring plan shall include a

description of the parameter(s) to be monitored to ensure that the combustion, recovery, or recapture device is being properly operated and maintained, an explanation of the criteria used for selection of that parameter(s), and the frequency with which monitoring will be performed (e.g., when the liquid level in the storage vessel is being raised), as specified in § 63.120(d)(2)(i).

(j) For purposes of this subpart, the monitoring plan required by § 63.122(b) shall be included in the Notification of Compliance Status required by § 63.1439(e)(5).

(k) When the HON Notification of Compliance Status requirements contained in § 63.152(b) are referred to in §§ 63.120, 63.122, and 63.123, the Notification of Compliance Status requirements contained in § 63.1439(e)(5) shall apply for the purposes of this subpart.

(l) When the HON Periodic Report requirements contained in § 63.152(c) are referred to in §§ 63.120, 63.122, and 63.123, the Periodic Report requirements contained in § 63.1439(e)(6) shall apply for the purposes of this subpart.

(m) When other reports as required in § 63.152(d) are referred to in § 63.122, the reporting requirements contained in § 63.1439(e)(7) shall apply for the purposes of this subpart.

(n) When the HON Initial Notification requirements contained in § 63.151(b) are referred to in § 63.119 through § 63.123, the owner or operator shall comply with the Initial Notification requirements contained in § 63.1439(e)(3), for the purposes of this subpart.

(o) When the determination of equivalence criteria in § 63.102(b) are referred to in the HON storage vessel requirements in § 63.121(a), the General Provisions' alternative nonopacity emission provisions in § 63.6(g) shall apply for the purposes of this subpart.

(p) The compliance date for storage vessels at affected sources subject to the provisions of this section is specified in § 63.1422.

(q) In addition to the records required by § 63.123, the owner or operator shall maintain records of all times when the storage tank is being filled (i.e., when the liquid level in the storage vessel is being raised). These records shall consist of documentation of the time when each filling period begins and ends.

§ 63.1433 Wastewater provisions.

(a) *Process wastewater.* Except as specified in paragraph (c) of this section, the owner or operator of each

affected source shall comply with the HON wastewater requirements in §§ 63.132 through 63.147 for each process wastewater stream originating at an affected source, with the HON leak inspection requirements in § 63.148, and with the HON requirements in § 63.149 for equipment that is subject to § 63.149, with the differences noted in paragraphs (a)(1) through (20) of this section. Further, the owner or operator of each affected source shall comply with the requirements of § 63.105(a) for maintenance wastewater, as specified in paragraph (b) of this section.

(1) Owners and operators of affected sources are not required to comply with the HON new source wastewater requirements in § 63.132(b)(1) and § 63.132(d), for the purposes of this subpart. Owners or operators of all new affected sources, as defined in this subpart, shall comply with the HON requirements for existing sources in §§ 63.132 through 63.149.

(2) When the HON requirements in §§ 63.132 through 63.149 refer to Table 9 or Table 36 of 40 CFR part 63, subpart G, the owner or operator is only required to consider organic HAP listed in Table 9 or Table 36 of 40 CFR part 63, subpart G, that are also listed on Table 4 of this subpart, for the purposes of this subpart. Owners and operators are exempt from all requirements in §§ 63.132 through 63.149 that pertain solely and exclusively to organic HAP listed on Table 8 of 40 CFR part 63, subpart G. In addition, when §§ 63.132 through 63.149 refer to List 1 or List 2, as listed in Table 36 of 40 CFR part 63, subpart G, the owner or operator is only required to consider organic HAP contained in those lists that are also listed on Table 4 of this subpart, for the purposes of this subpart.

(3) When the determination of equivalence criteria in § 63.102(b) is referred to in §§ 63.132, 63.133, and 63.137, the General Provisions' alternative nonopacity emission standard provisions in § 63.6(g) shall apply for the purposes of this subpart.

(4) When the HON storage vessel requirements contained in §§ 63.119 through 63.123 are referred to in §§ 63.132 through 63.148, the HON storage vessel requirements in §§ 63.119 through 63.123 are applicable, with the exception of the differences referred to in the storage vessel requirements in § 63.1432, for the purposes of this subpart.

(5) When the HON process wastewater reporting requirements in § 63.146(a) require the submission of a request for approval to monitor alternative parameters according to the procedures specified in § 63.151(g) or

§ 63.152(e), the owner or operator requesting to monitor alternative parameters shall follow the procedures specified in § 63.1439(f), for the purposes of this subpart.

(6) When the HON process wastewater recordkeeping requirements in § 63.147(d) require the owner or operator to keep records of the daily average value of each continuously monitored parameter for each operating day as specified in the HON recordkeeping provisions in § 63.152(f), the owner or operator shall instead keep records of the daily average value of each continuously monitored parameter as specified in § 63.1439(d), for the purposes of this subpart.

(7) When the HON requirements in §§ 63.132 through 63.149 refer to an "existing source," the term "existing affected source," as defined in § 63.1420(a)(3) shall apply, for the purposes of this subpart.

(8) When the HON requirements in §§ 63.132 through 63.149 refer to a "new source," the term "new affected source," as defined in § 63.1420(a)(4) shall apply, for the purposes of this subpart.

(9) When the HON process wastewater provisions in § 63.132 (a) and (b) refer to the "applicable dates specified in § 63.100 of subpart F of this part," the applicable compliance dates specified in § 63.1422 shall apply, for the purposes of this subpart.

(10) Whenever the HON process wastewater provisions in §§ 63.132 through 63.147 refer to a Group 1 wastewater stream or a Group 2 wastewater stream, the definitions of these terms contained in § 63.1423 shall apply, for the purposes of this subpart.

(11) When the HON control requirements for certain liquid streams in open systems, in § 63.149(d), refer to "§ 63.100(f) of subpart F," the phrase "§ 63.1420(c)," shall apply for the purposes of this subpart. In addition, where § 63.149(d) states "and the item of equipment is not otherwise exempt from controls by the provisions of subparts A, F, G, or H of this part," the phrase "and the item of equipment is not otherwise exempt from controls by the provisions of subparts A, F, G, H, or PPP of this part," shall apply for the purposes of this subpart.

(12) When the HON control requirements for certain liquid streams in open systems, in § 63.149(e) (1) and (2), refer to "a chemical manufacturing process unit subject to the new source requirements of 40 CFR 63.100(l) (1) or (2)," the phrase "a new affected source as described in § 63.1420(a)(4)," shall apply for the purposes of this subpart.

(13) When the HON Notification of Compliance Status requirements contained in § 63.152(b) are referred to in the HON process wastewater provisions in § 63.138 or § 63.146, the Notification of Compliance Status requirements contained in § 63.1439(e)(5) shall apply for the purposes of this subpart. In addition, when the HON process wastewater provisions in § 63.138 or § 63.146 require that information be reported according to § 63.152(b) in the HON Notification of Compliance Status, owners or operators of affected sources shall report the specified information in the Notification of Compliance Status required by § 63.1439(e)(5), for the purposes of this subpart.

(14) When the HON Periodic Report requirements contained in § 63.152(c) are referred to in the HON process wastewater provisions in § 63.146, the Periodic Report requirements contained in § 63.1439(e)(6) shall apply for the purposes of this subpart. In addition, when § 63.146 requires that information be reported in the HON Periodic Reports required in § 63.152(c), owners or operators of affected sources shall report the specified information in the Periodic Reports required in § 63.1439(e)(6), for the purposes of this subpart.

(15) When the term "range" is used in the HON requirements in §§ 63.132 through 63.149, the term "level" shall be used instead, for the purposes of this subpart. This level shall be determined using the procedures specified in parameter monitoring procedures in § 63.1438.

(16) When the HON process wastewater monitoring and inspection provisions in § 63.143(f) specify that the owner or operator shall establish the range that indicates proper operation of the treatment process or control technique, the owner or operator shall instead comply with the requirements § 63.1438 (c) or (d) for establishing parameter level maximums/minimums, for the purposes of this subpart.

(17) When the HON process wastewater provisions in § 63.146(b) (7) and (8) require that "the information on parameter ranges specified in § 63.152(b)(2)" be reported in the HON Notification of Compliance Status, owners and operators of affected sources are instead required to report the information on parameter levels in the Notification of Compliance Status as specified in § 63.1439(e)(5)(ii), for the purposes of this subpart.

(18) For the purposes of this subpart, the owner or operator is not required to comply with the HON process wastewater emission reduction provisions in § 63.138(g).

(19) When the provisions of HON process wastewater provisions in § 63.139(c)(1)(ii), § 63.145(d)(4), or § 63.145(i)(2) specify that Method 18, 40 CFR part 60, appendix A shall be used, Method 18 or Method 25A, 40 CFR part 60, appendix A may be used for the purposes of this subpart. The use of Method 25A, 40 CFR part 60, appendix A shall comply with paragraphs (a)(19)(i) and (ii) of this section.

(i) The organic HAP used as the calibration gas for Method 25A, 40 CFR part 60, appendix A shall be the single organic HAP representing the largest percent by volume of the emissions.

(ii) The use of Method 25A, 40 CFR part 60, appendix A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(20) The owner or operator of a facility which receives a Group 1 wastewater stream, or a residual removed from a Group 1 wastewater stream, for treatment pursuant to the HON provisions in § 63.132(g) is subject to the requirements of § 63.132(g), with the differences identified in this section, and is not subject to the NESHAP from off-site waste and recovery operations in 40 CFR part 63, subpart DD, with respect to the received material.

(b) *Maintenance wastewater.* The owner or operator of each affected source shall comply with the HON maintenance wastewater requirements in § 63.105, with the exceptions noted in paragraphs (b)(1), (2), and (3) of this section.

(1) When the HON maintenance wastewater provisions in § 63.105(a) refer to "organic HAPs," the definition of "organic HAP" in § 63.1423 shall apply, for the purposes of this subpart.

(2) When the term "maintenance wastewater" is used in the HON maintenance wastewater provisions in § 63.105, the definition of "maintenance wastewater" in § 63.1423 shall apply, for the purposes of this subpart.

(3) When the term "wastewater" is used in the HON maintenance wastewater provisions in § 63.105, the definition of "wastewater" in § 63.1423 shall apply, for the purposes of this subpart.

(c) *Compliance date.* The compliance date for the affected source subject to the provisions of this section is specified in § 63.1422.

§ 63.1434 Equipment leak provisions.

(a) The owner or operator of each affected source shall comply with the HON equipment leak requirements in 40 CFR part 63, subpart H for all

equipment in organic HAP service, except as specified in paragraphs (b) through (g) of this section.

(b) The compliance date for the equipment leak provisions in this section is provided in § 63.1422(d).

(c) Affected sources subject to the HON equipment leak provisions in 40 CFR part 63, subpart I shall continue to comply with 40 CFR part 63, subpart I until the compliance date specified in § 63.1422. After the compliance date in § 63.1422, the source shall be subject to this subpart (40 CFR part 63, subpart PPP), and shall no longer be subject to 40 CFR part 63, subpart I. However, sources subject to 40 CFR part 63, subpart I that have elected to comply through a quality improvement program, as specified in the HON quality improvement plans for valves or pumps in § 63.175 or § 63.176 or both, may elect to continue these programs without interruption as a means of complying with this subpart. In other words, becoming subject to this subpart does not restart or reset the "compliance clock" as it relates to reduced burden earned through a quality improvement program.

(d) When the HON equipment leak Initial Notification requirements contained in § 63.182(a)(1) and § 63.182(b) are referred to in 40 CFR part 63, subpart H, the owner or operator shall comply with the Initial Notification requirements contained in § 63.1439(e)(3), for the purposes of this subpart. The Initial Notification shall be submitted no later than June 1, 2000 for existing sources, as stated in § 63.1439(e)(3)(ii)(A).

(e) The HON equipment leak Notification of Compliance Status required by § 63.182(a)(2) and § 63.182(c) shall be submitted within 150 days (rather than 90 days) of the applicable compliance date specified in § 63.1422 for the equipment leak provisions. The notification may be submitted as part of the Notification of Compliance Status required by § 63.1439(e)(5).

(f) The Periodic Reports required by § 63.182(a)(3) and § 63.182(d) may be submitted as part of the Periodic Reports required by § 63.1439(e)(6).

(g) If specific items of equipment, comprising part of a process unit subject to this subpart, are managed by different administrative organizations (e.g., different companies, affiliates, departments, divisions, etc.), those items of equipment may be aggregated with any PMPU within the affected source for all purposes under subpart H, providing there is no delay in achieving the applicable compliance date.

(h) The phrase "the provisions of subparts F, I, or PPP of this part" shall apply instead of the phrase "the provisions of subparts F or I of this part," and instead of the phrase "the provisions of subpart F or I of this part" throughout §§ 63.163 and 63.168, for the purposes of this subpart. In addition, the phrase "subparts F, I, and PPP" shall apply instead of the phrase "subparts F and I" in § 63.174(c)(2)(iii), for the purposes of this subpart.

§ 63.1435 Heat exchanger provisions.

(a) The owner or operator of each affected source shall comply with the requirements of § 63.104 for heat exchange systems, with the exceptions noted in paragraphs (b) through (e) of this section.

(b) When the term "chemical manufacturing process unit" is used in § 63.104, the term "polyether polyols manufacturing process unit" shall apply for the purposes of this subpart. Further, when the phrase "a chemical manufacturing process unit meeting the conditions of § 63.100(b)(1) through (3) of this subpart, except for chemical manufacturing process units meeting the condition specified in § 63.100(c) of this subpart" is used in § 63.104(a), the term "PMPU, except for PMPU meeting the conditions specified in § 63.1420(b)" shall apply for the purposes of this subpart.

(c) When the HON heat exchange system requirements in § 63.104(c)(3) and § 63.104(f)(1) specify that the monitoring plan and records required by § 63.104(f)(1)(i) through (iv) shall be kept as specified in the HON general compliance, reporting, and recordkeeping provisions in § 63.103(c), the provisions of the general recordkeeping and reporting requirements in § 63.1439(a) and the applicable provisions of the General Provisions in 40 CFR part 63, subpart A, as specified in Table 1 of this subpart, shall apply for the purposes of this subpart.

(d) When the HON heat exchange system requirements in § 63.104(f)(2) require information to be reported in the Periodic Reports required by the HON general reporting provisions in § 63.152(c), the owner or operator shall instead report the information specified in § 63.104(f)(2) in the Periodic Reports required by the general reporting requirements in § 63.1439(e)(6), for the purposes of this subpart.

(e) When the HON heat exchange system requirements in § 63.104 refer to Table 4 of 40 CFR part 63, subpart F or Table 9 of 40 CFR part 63, subpart G, the owner or operator is only required to consider organic HAP listed in Table 4

of 40 CFR part 63, subpart F or 40 CFR part 63, Table 9 of subpart G that are also listed on Table 4 of this subpart, for the purposes of this subpart.

§ 63.1436 [Reserved]

§ 63.1437 Additional requirements for performance testing.

(a) Performance testing shall be conducted in accordance with § 63.7(a)(1), (a)(3), (d), (e)(1), (e)(2), (e)(4), (g), and (h), with the exceptions specified in paragraphs (a)(1) through (4) of this section and the additions specified in paragraph (b) of this section.

(1) Performance tests shall be conducted according to the General Provisions' performance testing requirements in § 63.7(e)(1) and (2), except that for all emission sources except process vents from batch unit operations, performance tests shall be conducted during maximum representative operating conditions for the process achievable during one of the time periods described in paragraph (a)(1)(i) of this section, without causing any of the situations described in paragraph (a)(1)(ii) or (iii) of this section to occur. For process vents from batch unit operations, performance tests shall be conducted at absolute worst-case conditions, as defined in § 63.1426(c)(3)(i)(B), that are achievable during one of the time periods described in paragraph (a)(1)(i) of this section, without causing any of the situations described in paragraph (a)(1)(ii) or (iii) of this section to occur.

(i) The 6-month period that ends 2 months before the Notification of Compliance Status is due, according to § 63.1439(e)(5); or the 6-month period that begins 3 months before the performance test and ends 3 months after the performance test.

(ii) Causing damage to equipment; necessitating that the owner or operator make a product that does not meet an existing specification for sale to a customer; or necessitating that the owner or operator make a product in excess of demand.

(iii) Causing plant or testing personnel to be subject to unsafe conditions. Owners or operators that limit testing based on this paragraph shall maintain documentation that demonstrates the nature of the unsafe conditions and explains measures considered by the owner or operator to overcome these conditions. If requested, this documentation shall be provided to the Administrator.

(2) When the General Provisions' data analysis, recordkeeping, and reporting requirements in § 63.7(g) refer to the

Notification of Compliance Status requirements in § 63.9(h), the Notification of Compliance Status requirements in § 63.1439(e)(5) shall instead apply, for the purposes of this subpart.

(3) Because the General Provisions' site-specific test plan in § 63.7(c)(3) is not required, the General Provisions' requirement for the Administrator to approve or deny site-specific test plans, in § 63.7(h)(4)(ii), is not applicable for the purposes of this subpart.

(4) The owner or operator of an affected source 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 source 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 test date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.

(b) Data shall be reduced in accordance with the EPA approved methods specified in the applicable subpart or, if other test methods are used, the data and methods shall be validated according to the protocol in Method 301, 40 CFR part 63, appendix A.

(c) Notwithstanding any other provision of this subpart, if an owner or operator of an affected source uses a flare to comply with any of the requirements of this subpart, the owner or operator shall comply with paragraphs (c)(1) through (3) of this section. The owner or operator is not required to conduct a performance test to determine percent emission reduction or outlet organic HAP or TOC concentration. If a compliance demonstration has been conducted previously for a flare, using the techniques specified in paragraphs (c)(1) through (3) of this section, that compliance demonstration may be used to satisfy the requirements of this paragraph if either no deliberate process changes have been made since the compliance demonstration, or the results of the compliance demonstration reliably demonstrate compliance despite process changes.

(1) Conduct a visible emission test using the techniques specified in § 63.11(b)(4) of the General Provisions;

(2) Determine the net heating value of the gas being combusted, using the techniques specified in § 63.11(b)(6) of the General Provisions; and

(3) Determine the exit velocity using the techniques specified in either § 63.11(b)(7)(i) (and § 63.11(b)(7)(iii), where applicable) or § 63.11(b)(8) of the General Provisions, as appropriate.

§ 63.1438 Parameter monitoring levels and excursions.

(a) *Establishment of parameter monitoring levels.* The owner or operator of a combustion, recovery, or recapture device that has one or more parameter monitoring level requirements specified under this subpart shall establish a maximum or minimum level for each measured parameter. If a performance test is required by this subpart for a combustion, recovery, or recapture device, the owner or operator shall use the procedures in either paragraph (b) or (c) of this section to establish the parameter monitoring level(s). If a performance test is not required by this subpart for a combustion, recovery, or recapture device, the owner or operator may use the procedures in paragraph (b), (c), or (d) of this section to establish the parameter monitoring levels. When using the procedures specified in paragraph (c) or (d) of this section, the owner or operator shall submit the information specified in § 63.1439(e)(4)(viii) for review and approval, as part of the Precompliance Report.

(1) The owner or operator shall operate combustion, recovery, and recapture devices such that the daily average value of monitored parameters remains at or above the minimum established level, or remains at or below the maximum established level, except as otherwise provided in this subpart.

(2) As specified in § 63.1439(e)(5)(ii), all established levels, along with their supporting documentation and the definition of an operating day, shall be submitted as part of the Notification of Compliance Status.

(3) Nothing in this section shall be construed to allow a monitoring parameter excursion caused by an activity that violates other applicable provisions of 40 CFR part 63, subparts A, F, G, or H.

(b) *Establishment of parameter monitoring levels based exclusively on performance tests.* In cases where a performance test is required by this subpart, or the owner or operator of the affected source elects to do a performance test in accordance with the provisions of this subpart, and an owner or operator elects to establish a

parameter monitoring level for a combustion, recovery, or recapture device based exclusively on parameter values measured during the performance test, the owner or operator of the affected source shall comply with the procedures in paragraph (b)(1) or (2) of this section, as applicable.

(1) *Process vents from continuous unit operations.* During initial compliance testing, the appropriate parameter shall be continuously monitored during the required 1-hour runs for process vents from continuous unit operations. The monitoring level(s) shall then be established as the average of the maximum (or minimum) point values from the three 1-hour test runs. The average of the maximum values shall be used when establishing a maximum level, and the average of the minimum values shall be used when establishing a minimum level.

(2) *Process vents from batch unit operations.* For process vents from batch unit operations, during initial compliance testing, the appropriate parameter shall be monitored continuously during the entire test period. The monitoring level(s) shall be those established during from the compliance test.

(c) *Establishment of parameter monitoring levels based on performance tests, supplemented by engineering assessments and/or manufacturer's recommendations.* Parameter monitoring levels established under this paragraph shall be based on the parameter values measured during the performance test supplemented by engineering assessments and/or manufacturer's recommendations. Performance testing is not required to be conducted over the entire range of expected parameter values. The information specified in paragraphs (c)(1) and (2) of this section shall be provided in the Notification of Compliance Status.

(1) The specific level of the monitored parameter(s) for each emission point.

(2) The rationale for the specific level for each parameter for each emission point, including any data and calculations used to develop the level and a description of why the level indicates proper operation of the combustion, recovery, or recapture device.

(d) *Establishment of parameter monitoring based on engineering assessments and/or manufacturer's recommendations.* If a performance test is not required by this subpart for a combustion, recovery, or recapture device, the maximum or minimum level may be based solely on engineering assessments and/or manufacturers'

recommendations. As required in paragraph (a)(2) of this section, the determined level and all supporting documentation shall be provided in the Notification of Compliance Status.

(e) *Monitoring violations.* (1) With the exception of excursions excused in accordance with paragraph (g) of this section, each excursion, as defined in paragraphs (f)(1)(i), (f)(2)(i)(A), (f)(2)(ii), (f)(3)(i), and (f)(4) of this section, constitutes a violation of the provisions of this subpart in accordance with paragraph (e)(1)(i), (ii), or (iii) of this section.

(i) For each condenser, each excursion constitutes a violation of the emission limit.

(ii) For each recovery or recapture device other than a condenser, where an organic monitoring device is used to monitor concentration, each excursion constitutes a violation of the emission limit.

(iii) For each combustion, recovery, or recapture device other than a condenser, each excursion constitutes a violation of the operating limit.

(2) With the exception of excursions excused in accordance with paragraph (g) of this section, each excursion, as defined in paragraphs (f)(1)(ii), (f)(1)(iii), (f)(2)(i)(B), and (f)(3)(i) of this section constitutes a violation of the operating limit.

(f) *Parameter monitoring excursion definitions.* Parameter monitoring excursions are defined in paragraphs (f)(1) through (3) of this section.

(1) With respect to storage vessels (where the applicable monitoring plan specifies continuous monitoring), process vents from continuous unit operations using combustion, recovery, or recapture devices for purposes of compliance, and for process wastewater streams, an excursion means any of the three cases listed in paragraphs (f)(1)(i) through (iii) of this section.

(i) The daily average value of one or more monitored parameters is above the maximum level or below the minimum level established for the given parameters.

(ii) The period of combustion, recovery, or recapture device operation, with the exception noted in paragraph (f)(1)(v) of this section, is 4 hours or greater in an operating day and monitoring data are insufficient, as defined in paragraph (f)(1)(iv) of this section, to constitute a valid hour of data for at least 75 percent of the operating hours.

(iii) The period of combustion, recovery, or recapture device operation, with the exception noted in paragraph (f)(1)(v) of this section, is less than 4 hours in an operating day and more

than 2 of the hours during the period of operation do not constitute a valid hour of data due to insufficient monitoring data, as defined in paragraph (f)(1)(iv) of this section.

(iv) Monitoring data are insufficient to constitute a valid hour of data, as used in paragraphs (f)(1)(ii) and (iii) of this section, if measured values are unavailable due to monitoring system breakdowns, repairs, calibrated checks, or zero (low-level) and high level adjustments, for any of the 15-minute periods within the hour. For data compression systems approved under § 63.1439(g)(3), monitoring data are insufficient to calculate a valid hour of data if there are less than four data measurements made during the hour.

(v) The periods listed in paragraphs (f)(1)(v)(A) through (D) of this section are not considered to be part of the period of combustion, recovery, or recapture device operation, for the purposes of paragraphs (f)(1)(ii) and (iii) of this section.

(A) Start-ups;

(B) Shutdowns;

(C) Malfunctions; or

(D) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.

(2) For storage vessels where the applicable monitoring plan does not specify continuous monitoring, an excursion is defined in paragraph (f)(2)(i) or (ii) of this section, as applicable.

(i) If the monitoring plan specifies monitoring a parameter and recording its value at specific intervals (such as every 15 minutes or every hour), either of the cases listed in paragraph (f)(2)(i)(A) or (B) of this section is considered a single excursion for the combustion device.

(A) When the average value of one or more parameters, averaged over the time during which the storage vessel is being filled (i.e., when the liquid level in the storage vessel is being raised), is above the maximum level or below the minimum level established for the given parameters.

(B) When monitoring data are insufficient. Monitoring data shall be considered insufficient when measured values are not available, due to monitoring system breakdowns, repairs, calibration checks, or zero (low-level) and high-level adjustments, for at least 75 percent of the specific intervals at which parameters are to be monitored and recorded, according to the storage vessel's monitoring plan, during which the storage vessel is being filled.

(ii) If the monitoring plan does not specify monitoring a parameter and

recording its value at specific intervals (for example, if the relevant operating requirement is to exchange a disposable carbon canister before expiration of its rated service life), the monitoring plan shall define an excursion in terms of the relevant operating requirement.

(3) With respect to process vents from batch unit operations, an excursion means one of the two cases listed in paragraphs (f)(3)(i) and (ii) of this section.

(i) When the daily average value of one or more monitored parameters is above the maximum or below the minimum established level for the given parameters.

(ii) When monitoring data are insufficient for an operating day. Monitoring data shall be considered insufficient when measured values are not available, due to monitoring system breakdowns, repairs, calibration checks, or zero (low-level) and high-level adjustments, for at least 75 percent of the 15-minute periods when batch emission episodes selected to be controlled are being vented to the control device during the operating day, using the procedures specified in paragraphs (f)(3)(ii)(A) through (D) of this section.

(A) Determine the total amount of time during the operating day when batch emission episodes selected to be controlled are being vented to the control device.

(B) Subtract the time during the periods listed in paragraphs (f)(3)(ii)(B)(1) through (4) of this section from the total amount of time determined above in paragraph (f)(3)(ii)(A) of this section, to obtain the operating time used to determine if monitoring data are insufficient.

(1) Start-ups;

(2) Shutdowns;

(3) Malfunctions; or

(4) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.

(C) Determine the total number of 15-minute periods in the operating time used to determine if monitoring data are insufficient, as was determined in accordance with paragraph (f)(3)(ii)(B) of this section.

(D) If measured values are not available for at least 75 percent of the total number of 15-minute periods determined in paragraph (f)(3)(ii)(C) of this section, the monitoring data are insufficient for the operating day.

(4) With respect to process vents using ECO to reduce epoxide emissions, an excursion means any of the situations described in § 63.1427(i)(3)(i) through (v). For each excursion, the

owner or operator shall be deemed out of compliance with the provisions of this subpart, in accordance with paragraph (e) of this section, except as provided in paragraph (g) of this section.

(g) *Excused excursions.* A number of excused excursions shall be allowed for each combustion, recovery, or recapture device for each semiannual period. The number of excused excursions for each semiannual period is specified in paragraphs (g)(1) through (6) of this section. This paragraph applies to affected sources required to submit Periodic Reports semiannually or quarterly. The first semiannual period is the 6-month period starting the date the Notification of Compliance Status is due.

(1) For the first semiannual period—six excused excursions.

(2) For the second semiannual period—five excused excursions.

(3) For the third semiannual period—four excused excursions.

(4) For the fourth semiannual period—three excused excursions.

(5) For the fifth semiannual period—two excused excursions.

(6) For the sixth and all subsequent semiannual periods—one excused excursion.

§ 63.1439 General recordkeeping and reporting provisions.

(a) *Data retention.* Unless otherwise specified in this subpart, the owner or operator of an affected source shall keep copies of all applicable records and reports required by this subpart for at least 5 years. All applicable records shall be maintained in such a manner that they can be readily accessed. The most recent 6 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provide access within 2 hours after a request. The remaining 4 and one-half years of records may be retained offsite. Records may be maintained in hard copy or computer-readable form including, but not limited to, on microfilm, computer, floppy disk, magnetic tape, or microfiche. If an owner or operator submits copies of reports to the applicable EPA Regional Office, the owner or operator is not required to maintain copies of reports. If the EPA Regional Office has waived the requirement of § 63.10(a)(4)(ii) for submittal of copies of reports, the owner or operator is not required to maintain copies of reports.

(b) *Subpart A requirements.* The owner or operator of an affected source shall comply with the applicable recordkeeping and reporting requirements in 40 CFR part 63, subpart

A (the General Provisions) as specified in Table 1 of this subpart. These requirements include, but are not limited to, the requirements specified in paragraphs (b)(1) and (2) of this section.

(1) *Start-up, shutdown, and malfunction plan.* The owner or operator of an affected source shall develop and implement a written start-up, shutdown, and malfunction plan as specified in the General Provisions' requirements for a Startup, Shutdown, and Malfunction Plan in § 63.6(e)(3).

This plan shall describe, in detail, procedures for operating and maintaining the affected source during periods of start-up, shutdown, and malfunction and a program for corrective action for malfunctioning process and air pollution control equipment used to comply with this subpart. A provision for ceasing to collect, during a start-up, shutdown, or malfunction, monitoring data that would otherwise be required by the provisions of this subpart may be included in the start-up, shutdown, and malfunction plan only if the owner or operator has demonstrated to the Administrator, through the Precompliance Report or a supplement to the Precompliance Report, that the monitoring system would be damaged or destroyed if it were not shut down during the start-up, shutdown, or malfunction. The owner or operator of the affected source shall keep the start-up, shutdown, and malfunction plan on site. In addition, if the start-up, shutdown, and malfunction plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the start-up, shutdown, and malfunction plan for a period of 5 years after each revision to the plan. If the new version of the start-up, shutdown, and malfunction plan includes a provision for ceasing to collect, during a start-up, shutdown, or malfunction, monitoring data that would otherwise be required, the owner or operator shall submit a supplement to the Precompliance Report to the Administrator for the Administrator's approval, documenting that the monitoring system would be damaged or destroyed if it were not shut down during the start-up, shutdown, or malfunction. Records associated with the plan shall be kept as specified in paragraphs (b)(1)(i)(A) and (B) of this section. Reports related to the plan shall be submitted as specified in paragraph (b)(1)(ii) of this section.

(i) The owner or operator shall keep the records specified in paragraphs (b)(1)(i)(A) and (B) of this section.

(A) Records of the occurrence and duration of each start-up, shutdown,

and malfunction of operation of process equipment or combustion, recovery, or recapture devices or continuous monitoring systems used to comply with this subpart during which excess emissions (as defined in § 63.1420(h)(4)) occur.

(B) For each start-up, shutdown, or malfunction during which excess emissions (as defined in § 63.1420(h)(4)) occur, records reflecting whether the procedures specified in the affected source's start-up, shutdown, and malfunction plan were followed, and documentation of actions taken that are not consistent with the plan. For example, if a start-up, shutdown, and malfunction plan includes procedures for routing a combustion, recovery, or recapture device to a backup combustion, recovery, or recapture device, records shall be kept of whether the plan was followed. These records may take the form of a "checklist," or other form of recordkeeping that confirms conformance with the start-up, shutdown, and malfunction plan for the event.

(ii) For the purposes of this subpart, the semiannual start-up, shutdown, and malfunction reports shall be submitted on the same schedule as the Periodic Reports required under paragraph (e)(6) of this section instead of according to the General Provisions' Periodic Reporting schedule specified in § 63.10(d)(5)(i). The reports shall include the information specified in paragraphs (b)(1)(i)(A) and (B) of this section and shall contain the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy.

(2) *Application for approval of construction or reconstruction.* For new affected sources, the owner or operator shall comply with the General Provisions' requirements for the application for approval of construction or reconstruction, as specified in § 63.5, excluding the provisions specified in § 63.5(d)(1)(ii)(H), (d)(1)(iii), (d)(2), and (d)(3)(ii).

(c) *Subpart H requirements.* The owner or operator of an affected source shall comply with the HON equipment leak reporting and recordkeeping requirements in 40 CFR part 63, subpart H, except as specified in § 63.1434(b) through (g).

(d) *Recordkeeping and documentation.* The owner or operator required to keep continuous records shall keep records as specified in paragraphs (d)(1) through (7) of this section, unless an alternative recordkeeping system has been requested and approved as specified in paragraph (g) of this section, and except

as provided in paragraph (h) of this section. If a monitoring plan for storage vessels pursuant to § 63.1432(i) requires continuous records, the monitoring plan shall specify which provisions, if any, of paragraphs (d)(1) through (7) of this section apply. As described in § 63.1432(i), certain storage vessels are not required to keep continuous records as specified in this paragraph. The owner or operator of such storage vessels shall keep records as specified in the monitoring plan required by § 63.1432(i).

(1) The monitoring system shall measure data values at least once during approximately equal 15-minute intervals.

(2) The owner or operator shall record either each measured data value or block average values for 1 hour or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values. The owner or operator of process vents from batch unit operations shall record each measured data value.

(3) Daily average values of each continuously monitored parameter shall be calculated for each operating day as specified in paragraphs (d)(3)(i) through (ii) of this section, except as specified in paragraphs (d)(6) and (7) of this section.

(i) The daily average value shall be calculated as the average of all parameter values recorded during the operating day, except as specified in paragraph (d)(7) of this section. The calculated average shall cover a 24-hour period if operation is continuous. If intermittent emissions episodes occur resulting in emissions being vented to a combustion, recapture, or recovery device for a period of less than 24 hours in the operating day, the daily average shall be calculated based only on the period when emissions are being vented to the combustion, recapture, or recovery device. For example, if a batch unit operation operates such that emissions are vented to a combustion device for 6 hours, then the daily average is the average of the temperature measurements taken during those 6 hours.

(ii) The operating day shall be the 24-hour period that the owner or operator specifies in the operating permit or the Notification of Compliance Status, for purposes of determining daily average values.

(4) [Reserved]

(5) [Reserved]

(6) If all recorded values for a monitored parameter during an operating day are above the minimum level or below the maximum level established in the Notification of Compliance Status or operating permit, the owner or operator may record that all values were above the minimum level or below the maximum level rather than calculating and recording a daily average for that operating day.

(7) Monitoring data recorded during periods identified in paragraphs (d)(7)(i) through (v) of this section shall not be included in any average computed under this subpart. Records shall be kept of the times and durations of all such periods and any other periods during process or combustion, recovery, or recapture device operation when monitors are not operating.

(i) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;

(ii) Start-ups;

(iii) Shutdowns;

(iv) Malfunctions; or

(v) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.

(8) For continuous monitoring systems used to comply with this subpart, records documenting the completion of calibration checks, and records documenting the maintenance of continuous monitoring systems that are specified in the manufacturer's instructions or that are specified in other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(9) The owner or operator of an affected source granted a waiver of recordkeeping or reporting requirements under the General Provisions' recordkeeping and reporting requirements in § 63.10(f) shall maintain the information, if any, specified by the Administrator as a condition of the waiver of recordkeeping or reporting requirements.

(e) *Reporting and notification.* In addition to the reports and notifications required by 40 CFR part 63, subpart A, as specified in this subpart, the owner or operator of an affected source shall prepare and submit the reports listed in paragraphs (e)(3) through (8) of this section, as applicable. All reports required by this subpart, and the schedule for their submittal, are listed in Table 8 of this subpart.

(1) *Violation of reporting requirements.* Owners and operators shall not be in violation of the reporting requirements of this paragraph (e) for failing to submit information required to

be included in a specified report if the owner or operator meets the requirements in paragraphs (e)(1)(i) through (iii) of this section. Examples of circumstances where this paragraph may apply include information related to newly-added equipment or emission points, changes in the process, changes in equipment required or utilized for compliance with the requirements of this subpart, or changes in methods or equipment for monitoring, recordkeeping, or reporting.

(i) The information was not known in time for inclusion in the report specified by this subpart.

(ii) The owner or operator has been diligent in obtaining the information.

(iii) The owner or operator submits a report according to the provisions of paragraphs (e)(1)(iii)(A) through (C) of this section.

(A) If this subpart expressly provides for supplements to the report in which the information is required, the owner or operator shall submit the information as a supplement to that report. The information shall be submitted no later than 60 days after it is obtained, unless otherwise specified in this subpart.

(B) If this subpart does not expressly provide for supplements, but the owner or operator must submit a request for revision of an operating permit pursuant to the State operating permit programs in part 70 or the Federal operating permit programs in part 71, due to circumstances to which the information pertains, the owner or operator shall submit the information with the request for revision to the operating permit.

(C) In any case not addressed by paragraph (e)(1)(iii)(A) or (B) of this section, the owner or operator shall submit the information with the first Periodic Report, as required by this subpart, which has a submission deadline at least 60 days after the information is obtained.

(2) *Submittal of reports.* All reports required under this subpart shall be sent to the Administrator at the applicable address listed in the General Provisions' list of addresses of State air pollution control agencies and EPA Regional Offices, in § 63.13. If acceptable to both the Administrator and the owner or operator of a source, reports may be submitted on electronic media.

(3) *Initial Notification.* The owner or operator of an existing or new affected source shall submit a written Initial Notification to the Administrator, containing the information described in paragraph (e)(3)(i) of this section, according to the schedule in paragraph (e)(3)(ii) of this section. The General Provisions' Initial Notification requirements in § 63.9(b)(2), (3), and (6)

shall not apply, for the purposes of this subpart.

(i) The Initial Notification shall include the following information:

(A) The name and address of the owner or operator;

(B) The address (physical location) of the affected source;

(C) An identification of the kinds of emission points within the affected source;

(D) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date; and

(E) A statement of whether or not the affected source is a major source.

(ii) The Initial Notification shall be submitted according to the schedule in paragraph (e)(3)(ii)(A), (B), or (C) of this section, as applicable.

(A) For an existing source, the Initial Notification shall be submitted no later than June 1, 2000.

(B) For a new source that has an initial start-up on or after August 30, 1999, the application for approval of construction or reconstruction required by the General Provisions in § 63.5(d) shall be submitted in lieu of the Initial Notification. The application shall be submitted as soon as practical before construction or reconstruction is planned to commence (but it need not be sooner than August 30, 1999).

(C) For a new source that has an initial start-up prior to August 30, 1999, the Initial Notification shall be submitted no later than August 30, 1999. The application for approval of construction or reconstruction described in the General Provisions' requirements in § 63.5(d) is not required for these sources.

(4) *Precompliance Report.* The owner or operator of an affected source requesting an extension for compliance; requesting approval to use alternative monitoring parameters, alternative continuous monitoring and recordkeeping, or alternative controls; requesting approval to incorporate a provision for ceasing to collect monitoring data, during a start-up, shutdown, or malfunction plan, when that monitoring equipment would be damaged if it did not cease to collect monitoring data, as permitted under § 63.1420(h)(3); or requesting approval to establish parameter monitoring levels according to the procedures contained in § 63.1438(c) or (d) shall submit a Precompliance Report according to the schedule described in paragraph (e)(4)(i) of this section. The Precompliance Report shall contain the information specified in paragraphs

(e)(4)(ii) through (viii) of this section, as appropriate.

(i) The Precompliance Report shall be submitted to the Administrator no later than 12 months prior to the compliance date. Unless the Administrator objects to a request submitted in the Precompliance Report within 45 days after its receipt, the request shall be deemed approved. For new affected sources, the Precompliance Report shall be submitted to the Administrator with the application for approval of construction or reconstruction required in paragraph (b)(2) of this section. Supplements to the Precompliance Report may be submitted as specified in paragraph (e)(4)(vii) of this section.

(ii) A request for an extension for compliance, as specified in § 63.1422(e), may be submitted in the Precompliance Report. The request for a compliance extension shall include the data outlined in the General Provisions' compliance requirements in § 63.6(i)(6)(i)(A), (B), and (D), as required in § 63.1422(e)(1).

(iii) The alternative monitoring parameter information required in paragraph (f) of this section shall be submitted in the Precompliance Report if, for any emission point, the owner or operator of an affected source seeks to comply through the use of a control technique other than those for which monitoring parameters are specified in this subpart or in 40 CFR part 63, subpart G, or seeks to comply by monitoring a different parameter than those specified in this subpart or in 40 CFR part 63, subpart G.

(iv) If the affected source seeks to comply using alternative continuous monitoring and recordkeeping as specified in paragraph (g) of this section, the owner or operator shall submit a request for approval in the Precompliance Report.

(v) The owner or operator shall report the intent to use alternative controls to comply with the provisions of this subpart in the Precompliance Report. The Administrator may deem alternative controls to be equivalent to the controls required by the standard, under the procedures outlined in the General Provisions' requirements for use of an alternative nonopacity emission standard, in § 63.6(g).

(vi) If the owner or operator is requesting approval to incorporate a provision for ceasing to collect monitoring data, during a start-up, shutdown, or malfunction, into the start-up, shutdown, and malfunction plan, when that monitoring equipment would be damaged if it did not cease to collect monitoring data, the information specified in paragraphs (e)(4)(vi)(A) and

(B) of this section shall be supplied in the Precompliance Report or in a supplement to the Precompliance Report. The Administrator shall evaluate the supporting documentation and shall approve the request only if, in the Administrator's judgment, the specific monitoring equipment would be damaged by the contemporaneous start-up, shutdown, or malfunction.

(A) Documentation supporting a claim that the monitoring equipment would be damaged by the contemporaneous start-up, shutdown, or malfunction; and

(B) A request to incorporate such a provision for ceasing to collect monitoring data during a start-up, shutdown, or malfunction, into the start-up, shutdown, and malfunction plan.

(vii) Supplements to the Precompliance Report may be submitted as specified in paragraph (e)(4)(vii)(A) of this section, or as specified in paragraph (e)(4)(vii)(B) of this section. Unless the Administrator objects to a request submitted in a supplement to the Precompliance Report within 45 days after its receipt, the request shall be deemed approved.

(A) Supplements to the Precompliance Report may be submitted to clarify or modify information previously submitted.

(B) Supplements to the Precompliance Report may be submitted to request approval to use alternative monitoring parameters, as specified in paragraph (e)(4)(iii) of this section; to use alternative continuous monitoring and recordkeeping, as specified in paragraph (e)(4)(iv) of this section; to use alternative controls, as specified in paragraph (e)(4)(v) of this section; or to include a provision for ceasing to collect monitoring data during a start-up, shutdown, or malfunction, in the start-up, shutdown, and malfunction plan, when that monitoring equipment would be damaged if it did not cease to collect monitoring data, as specified in paragraph (e)(4)(vi) of this section.

(viii) If an owner or operator establishes parameter monitoring levels according to the procedures contained in the parameter monitoring provisions in § 63.1438(c) or (d), the following information shall be submitted in the Precompliance Report:

(A) Identification of which procedures (i.e., § 63.1438(c) or (d)) are to be used; and

(B) A description of how the parameter monitoring level is to be established. If the procedures in § 63.1438(c) are to be used, a description of how performance test data will be used shall be included.

(5) *Notification of Compliance Status.* For existing and new affected sources, a Notification of Compliance Status shall be submitted within 150 days after the compliance dates specified in § 63.1422. For equipment leaks subject to § 63.1434, the owner or operator shall submit the information specified in the HON equipment leak Notification of Compliance Status requirements in § 63.182(c), in the Notification of Compliance Status required by this paragraph. For all other emission points, including heat exchange systems, the Notification of Compliance Status shall contain the information listed in paragraphs (e)(5)(i) through (vii) of this section.

(i) The results of any emission point group determinations, process section applicability determinations, performance tests, inspections, continuous monitoring system performance evaluations, any other information required by the test method to be in the test report used to demonstrate compliance, values of monitored parameters established during performance tests, and any other information required to be included in a Notification of Compliance Status under the requirements for overlapping regulations in § 63.1422(j), the HON storage vessel reporting provisions in § 63.122 and the storage vessel provisions in § 63.1432, and the HON process wastewater reporting provisions in § 63.146. In addition, the owner or operator shall comply with paragraphs (e)(5)(i)(A) and (B) of this section.

(A) For performance tests, group determinations, or determination that controls are needed, the Notification of Compliance Status shall include one complete test report, as described in paragraph (e)(5)(i)(B) of this section, for each test method used for a particular kind of emission point. For additional tests performed for the same kind of emission point using the same method, the results and any other information required by the test method to be in the test report shall be submitted, but a complete test report is not required.

(B) A complete test report shall include a brief process description, sampling site description, description of sampling and analysis procedures and any modifications to standard procedures, quality assurance procedures, record of operating conditions during the test, record of preparation of standards (if the owner or operator prepares the standards), record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, documentation of calculations, and any other information

required by the test method to be in the test report.

(ii) For each monitored parameter for which a maximum or minimum level is required to be established under the HON process vent monitoring requirements in § 63.114(e) and the process vent monitoring requirements in § 63.1429(d), the HON process wastewater parameter monitoring requirements in § 63.143(f), paragraph (e)(8) of this section, or paragraph (f) of this section, the information specified in paragraphs (e)(5)(ii)(A) through (C) of this section shall be submitted. Further, as described in the storage vessel provisions in § 63.1432(k), for those storage vessels for which the parameter monitoring plan (required to be submitted under the HON Notification of Compliance Status requirements for storage vessels in § 63.120(d)(3)) specifies compliance with the parameter monitoring provisions of § 63.1438, the owner or operator shall provide the information specified in paragraphs (e)(5)(ii)(A) through (C) of this section for each monitoring parameter. For those storage vessels for which the parameter monitoring plan required to be submitted under the HON Notification of Compliance Status requirements for storage vessels in § 63.120(d)(2) does not require compliance with the provisions of § 63.1438, the owner or operator shall provide the information specified in § 63.120(d)(3) as part of the Notification of Compliance Status.

(A) The required information shall include the specific maximum or minimum level of the monitored parameter(s) for each emission point.

(B) The required information shall include the rationale for the specific maximum or minimum level for each parameter for each emission point, including any data and calculations used to develop the level and a description of why the level indicates that the combustion, recovery, or recapture device is operated in a manner to ensure compliance with the provisions of this subpart.

(C) The required information shall include a definition of the affected source's operating day, as specified in paragraph (d)(3)(ii) of this section, for purposes of determining daily average values of monitored parameters.

(iii) The determination of applicability for flexible operation units as specified in § 63.1420(e)(1)(iii).

(iv) The parameter monitoring levels for flexible operation units, and the basis on which these levels were selected, or a demonstration that these levels are appropriate at all times, as specified in § 63.1420(e)(7).

(v) The results for each predominant use determination made under § 63.1420(f)(1) through (7), for storage vessels assigned to an affected source subject to this subpart.

(vi) If any emission point is subject to this subpart and to other standards as specified in § 63.1422(j), and if the provisions of § 63.1422(j) allow the owner or operator to choose which testing, monitoring, reporting, and recordkeeping provisions will be followed, then the Notification of Compliance Status shall indicate which rule's requirements will be followed for testing, monitoring, reporting, and recordkeeping.

(vii) An owner or operator who transfers a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream for treatment pursuant to § 63.132(g) shall include in the Notification of Compliance Status the name and location of the transferee and a description of the Group 1 wastewater stream or residual sent to the treatment facility.

(6) *Periodic Reports.* For existing and new affected sources, the owner or operator shall submit Periodic Reports as specified in paragraphs (e)(6)(i) through (viii) of this section. In addition, for equipment leaks subject to § 63.1434, the owner or operator shall submit the information specified in the HON periodic reporting requirements in § 63.182(d), and for heat exchange systems subject to § 63.1434, the owner or operator shall submit the information specified in the HON heat exchange system reporting requirements in § 63.104(f)(2), as part of the Periodic Report required by this paragraph (e)(6).

(i) Except as specified in paragraphs (e)(6)(viii) of this section, a report containing the information in paragraph (e)(6)(ii) of this section or paragraphs (e)(6)(iii) through (vii) of this section, as appropriate, shall be submitted semiannually no later than 60 days after the end of each 180-day period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due. Subsequent reports shall cover each preceding 6-month period.

(ii) If none of the compliance exceptions in paragraphs (e)(6)(iii) through (vii) of this section occurred during the 6-month period, the Periodic Report required by paragraph (e)(6)(i) of this section shall be a statement that there were no compliance exceptions, as described in this paragraph, for the 6-month period covered by that report and that none of the activities specified in paragraphs (e)(6)(iii) through (vii) of this

section occurred during the period covered by that report.

(iii) For an owner or operator of an affected source complying with the provisions of §§ 63.1432 through 63.1433 for any emission point, Periodic Reports shall include:

(A) All information specified in the HON periodic reporting requirements in § 63.122(a)(4) for storage vessels and in § 63.146(c) through § 63.146(f) for process wastewater.

(B) The daily average values of monitored parameters for all excursions, as defined in § 63.1438(f).

(C) The periods when monitoring data were not collected shall be specified; and

(D) The information in paragraphs (e)(6)(iii)(D)(1) through (3) of this section, as applicable:

(1) Notification if a process change is made such that the group status of any emission point changes from Group 2 to Group 1. The owner or operator is not required to submit a notification of a process change if that process change caused the group status of an emission point to change from Group 1 to Group 2. However, until the owner or operator notifies the Administrator that the group status of an emission point has changed from Group 1 to Group 2, the owner or operator is required to continue to comply with the Group 1 requirements for that emission point. This notification may be submitted at any time.

(2) Notification if one or more emission points (other than equipment leak components subject to § 63.1434), or one or more PMPUs is added to an affected source. The owner or operator shall submit the information contained in paragraphs (e)(6)(iii)(D)(2)(i) and (ii) of this section.

(i) A description of the addition to the affected source.

(ii) Notification of the group status or control requirement for the additional emission point or all emission points in the PMPU.

(3) For process wastewater streams sent for treatment pursuant to § 63.132(g), reports of changes in the identity of the treatment facility or transferee.

(E) The information in paragraph (b)(1)(ii) of this section for reports of start-up, shutdown, and malfunction.

(iv) If any performance tests are reported in a Periodic Report, the following information shall be included:

(A) One complete test report shall be submitted for each test method used for a particular kind of emission point tested. A complete test report shall contain the information specified in paragraph (e)(5)(i)(B) of this section.

(B) For additional tests performed for the same kind of emission point using the same method, results and any other information required by the test method to be in the test report shall be submitted, but a complete test report is not required.

(v) The results for each change made to a primary product determination for a PMPU made under § 63.1420(e)(3) or (10).

(vi) The results for each reevaluation of the applicability of this subpart to a storage vessel that begins receiving material from (or sending material to) a process unit that was not included in the initial determination, or a storage vessel that ceases to receive material from (or send material to) a process unit that was included in the initial determination, in accordance with § 63.1420(f)(8).

(vii) The Periodic Report required by the equipment leak provisions in § 63.1434(f) shall be submitted as part of the Periodic Report required by paragraph (e)(6) of this section.

(viii) The owner or operator of an affected source shall submit quarterly reports for particular emission points and process sections as specified in paragraphs (e)(6)(viii)(A) through (D) of this section.

(A) The owner or operator of an affected source shall submit quarterly reports for a period of 1 year for an emission point or process section if the emission point or process section meets the conditions in paragraph (e)(6)(viii)(A)(1) or (2) of this section.

(1) A combustion, recovery, or recapture device for a particular emission point or process section has more excursions, as defined in § 63.1438(f), than the number of excused excursions allowed under § 63.1438(g) for a semiannual reporting period; or

(2) The Administrator requests the owner or operator to submit quarterly reports for that emission point or process section.

(B) The quarterly reports shall include all information specified in paragraphs (e)(6)(iii) through (vii) of this section, as applicable to the emission point or process section for which quarterly reporting is required under paragraph (e)(6)(viii)(A) of this section.

Information applicable to other emission points within the affected source shall be submitted in the semiannual reports required under paragraph (e)(6)(i) of this section.

(C) Quarterly reports shall be submitted no later than 60 days after the end of each quarter.

(D) After quarterly reports have been submitted for an emission point for 1 year without more excursions occurring

(during that year) than the number of excused excursions allowed under § 63.1438(g), the owner or operator may return to semiannual reporting for the emission point or process section.

(7) *Other reports.* The notifications of inspections required by the storage vessel provisions in § 63.1432 shall be submitted, as specified in the HON storage vessel provisions in § 63.122(h)(1) and (2), and in paragraphs (e)(7)(i) and (ii) of this section.

(i) When the conditions in the HON storage vessel provisions in §§ 63.1420(e)(3)(i) or 63.1420(e)(4)(i) are met, reports of changes to the primary product for a PMPU or process unit, as required by § 63.1420(e)(3)(ii) or § 63.1420(g)(3), respectively, shall be submitted.

(ii) Owners or operators of PMPU or emission points (other than equipment leak components subject to § 63.1434) that are subject to provisions for changes or additions to plant sites in § 63.1420(g)(1) or (2) shall submit a report as specified in paragraphs (e)(7)(ii)(A) and (B) of this section.

(A) Reports shall include:

(1) A description of the process change or addition, as appropriate;

(2) The planned start-up date and the appropriate compliance date, according to § 63.1420(g)(1) or (2); and

(3) Identification of the group status of emission points (except equipment leak components subject to the requirements in § 63.1434) specified in paragraphs (e)(7)(ii)(A)(3)(i) through (iii) of this section, as applicable.

(i) All the emission points in the added PMPU, as described in § 63.1420(g)(1).

(ii) All the emission points in an affected source designated as a new affected source under § 63.1420(g)(2)(i).

(iii) All the added or created emission points as described in § 63.1420(g)(2)(ii).

(4) If the owner or operator wishes to request approval to use alternative monitoring parameters, alternative continuous monitoring or recordkeeping, alternative controls, or wishes to establish parameter monitoring levels according to the procedures contained in § 63.1438(c) or (d), a Precompliance Report shall be submitted in accordance with paragraph (e)(7)(ii)(B) of this section.

(B) Reports shall be submitted as specified in paragraphs (e)(7)(ii)(B)(1) through (3) of this section, as appropriate.

(1) Owners or operators of an added PMPU subject to § 63.1420(g)(1) shall submit a report no later than 180 days prior to the compliance date for the PMPU.

(2) Owners or operators of an affected source designated as a new affected source under § 63.1420(g)(2)(i) shall submit a report no later than 180 days prior to the compliance date for the affected source.

(3) Owners and operators of any emission point (other than equipment leak components subject to § 63.1434) subject to § 63.1420(g)(2)(ii) shall submit a report no later than 180 days prior to the compliance date for those emission points.

(8) *Operating permit application.* An owner or operator who submits an operating permit application instead of a Precompliance Report shall submit the information specified in paragraph (e)(4) of this section, as applicable, with the operating permit application.

(f) *Alternative monitoring parameters.* The owner or operator who has been directed by any section of this subpart, or any section of another subpart referenced by this subpart, that specifically references this paragraph to set unique monitoring parameters, or who requests approval to monitor a different parameter than those listed in § 63.1432 for storage vessels, § 63.1427 for ECO, § 63.1429 for process vents, or § 63.143 for process wastewater shall submit the information specified in paragraphs (f)(1) through (3) of this section in the Precompliance Report, as required by paragraph (e)(4) of this section. The owner or operator shall retain for a period of 5 years each record required by paragraphs (f)(1) through (3) of this section.

(1) The required information shall include a description of the parameter(s) to be monitored to ensure the combustion, recovery, or recapture device; control technique; or pollution prevention measure is operated in conformance with its design and achieves the specified emission limit, percent reduction, or nominal efficiency, and an explanation of the criteria used to select the parameter(s).

(2) The required information shall include a description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation, the schedule for this demonstration, and a statement that the owner or operator will establish a level for the monitored parameter as part of the Notification of Compliance Status report required in paragraph (e)(5) of this section, unless this information has already been included in the operating permit application.

(3) The required information shall include a description of the proposed monitoring, recordkeeping, and reporting system, to include the frequency and content of monitoring,

recordkeeping, and reporting. Further, the rationale for the proposed monitoring, recordkeeping, and reporting system shall be included if either condition in paragraph (f)(3)(i) or (ii) of this section is met:

(i) If monitoring and recordkeeping is not continuous; or

(ii) If reports of daily average values will not be included in Periodic Reports when the monitored parameter value is above the maximum level or below the minimum level as established in the operating permit or the Notification of Compliance Status.

(g) *Alternative continuous monitoring and recordkeeping.* An owner or operator choosing not to implement the continuous parameter operating and recordkeeping provisions listed in § 63.1429 for process vents, and § 63.1433 for wastewater, may instead request approval to use alternative continuous monitoring and recordkeeping provisions according to the procedures specified in paragraphs (g)(1) through (4) of this section. Requests shall be submitted in the Precompliance Report as specified in paragraph (e)(4)(iv) of this section, and shall contain the information specified in paragraphs (g)(2)(ii) and (g)(3)(ii) of this section, as applicable.

(1) The provisions in the General Provisions requirements for the use of an alternative monitoring method in § 63.8(f)(5)(i) shall govern the review and approval of requests.

(2) An owner or operator of an affected source that does not have an automated monitoring and recording system capable of measuring parameter values at least once during approximately equal 15-minute intervals and that does not generate continuous records may request approval to use a nonautomated system with less frequent monitoring, in accordance with paragraphs (g)(2)(i) and (ii) of this section.

(i) The requested system shall include visual reading and recording of the value of the relevant operating parameter no less frequently than once per hour. Daily averages shall be calculated from these hourly values and recorded.

(ii) The request shall contain:

(A) A description of the planned monitoring and recordkeeping system;

(B) Documentation that the affected source does not have an automated monitoring and recording system;

(C) Justification for requesting an alternative monitoring and recordkeeping system; and

(D) Demonstration that the proposed monitoring frequency is sufficient to represent combustion, recovery, or

recapture device operating conditions, considering typical variability of the specific process and combustion, recovery, or recapture device operating parameter being monitored.

(3) An owner or operator may request approval to use an automated data compression recording system that does not record monitored operating parameter values at a set frequency (for example, once at approximately equal intervals of about 15 minutes), but that records all values that meet set criteria for variation from previously recorded values, in accordance with paragraphs (g)(3)(i) and (ii) of this section.

(i) The requested system shall be designed to:

(A) Measure the operating parameter value at least once during approximately equal 15-minute intervals;

(B) Record at least four values each hour during periods of operation;

(C) Record the date and time when monitors are turned off or on;

(D) Recognize unchanging data that may indicate the monitor is not functioning properly, alert the operator, and record the incident;

(E) Calculate daily average values of the monitored operating parameter based on all measured data; and

(F) If the daily average is not an excursion, as defined in § 63.1438(f), the data for that operating day may be converted to hourly average values and the four or more individual records for each hour in the operating day may be discarded.

(ii) The request shall contain:

(A) A description of the monitoring system and data compression recording system, including the criteria used to determine which monitored values are recorded and retained;

(B) The method for calculating daily averages; and

(C) A demonstration that the system meets all criteria in paragraph (g)(3)(i) of this section.

(4) An owner or operator may request approval to use other alternative monitoring systems according to the procedures specified in the General Provisions' requirements for using an alternative monitoring method in § 63.8(f)(4).

(h) *Reduced recordkeeping program.* For any parameter with respect to any item of equipment, the owner or operator may implement the recordkeeping requirements in paragraph (h)(1) or (2) of this section as alternatives to the continuous operating parameter monitoring and recordkeeping provisions that would otherwise apply under this subpart. The owner or operator shall retain for a

period of 5 years each record required by paragraph (h)(1) or (2) of this section.

(1) The owner or operator may retain only the daily average value, and is not required to retain more frequent monitored operating parameter values, for a monitored parameter with respect to an item of equipment, if the requirements of paragraphs (h)(1)(i) through (iv) of this section are met. An owner or operator electing to comply with the requirements of paragraph (h)(1) of this section shall notify the Administrator in the Notification of Compliance Status or, if the Notification of Compliance Status has already been submitted, in the Periodic Report immediately preceding implementation of the requirements of paragraph (h)(1) of this section.

(i) The monitoring system is capable of detecting unrealistic or impossible data during periods of operation other than start-ups, shutdowns or malfunctions (e.g., a temperature reading of -200°C on a boiler), and will alert the operator by alarm or other means. The owner or operator shall record the occurrence. All instances of the alarm or other alert in an operating day constitute a single occurrence.

(ii) The monitoring system generates, updated at least hourly throughout each operating day, a running average of the monitoring values that have been obtained during that operating day, and the capability to observe this running average is readily available to the Administrator on-site during the operating day. The owner or operator shall record the occurrence of any period meeting the criteria in paragraphs (h)(1)(ii)(A) through (C) of this section. All instances in an operating day constitute a single occurrence.

(A) The running average is above the maximum or below the minimum established limits;

(B) The running average is based on at least six 1-hour average values; and

(C) The running average reflects a period of operation other than a start-up, shutdown, or malfunction.

(iii) The monitoring system is capable of detecting unchanging data during periods of operation other than start-ups, shutdowns or malfunctions, except in circumstances where the presence of unchanging data are the expected operating condition based on past experience (e.g., pH in some scrubbers), and will alert the operator by alarm or other means. The owner or operator shall record the occurrence. All instances of the alarm or other alert in an operating day constitute a single occurrence.

(iv) The monitoring system will alert the owner or operator by an alarm or other means, if the running average parameter value calculated under paragraph (h)(1)(ii) of this section reaches a set point that is appropriately related to the established limit for the parameter that is being monitored.

(v) The owner or operator shall verify the proper functioning of the monitoring system, including its ability to comply with the requirements of paragraph (h)(1) of this section, at the times specified in paragraphs (h)(1)(v)(A) through (C) of this section. The owner or operator shall document that the required verifications occurred.

(A) Upon initial installation.

(B) Annually after initial installation.

(C) After any change to the

programming or equipment constituting the monitoring system, which might reasonably be expected to alter the monitoring system's ability to comply with the requirements of this section.

(vi) The owner or operator shall retain the records identified in paragraphs (h)(1)(vi)(A) through (D) of this section.

(A) Identification of each parameter, for each item of equipment, for which the owner or operator has elected to comply with the requirements of paragraph (h) of this section.

(B) A description of the applicable monitoring system(s), and how compliance will be achieved with each requirement of paragraphs (h)(1)(i) through (v) of this section. The description shall identify the location and format (e.g., on-line storage, log entries) for each required record. If the description changes, the owner or operator shall retain both the current and the most recent superseded description, as specified in paragraph (h)(1)(vi)(D) of this section.

(C) A description, and the date, of any change to the monitoring system that would reasonably be expected to affect its ability to comply with the requirements of paragraph (h)(1) of this section.

(D) The owner or operator subject to paragraph (h)(1)(vi)(B) of this section shall retain the current description of the monitoring system as long as the description is current. The current description shall, at all times, be retained on-site or be accessible from a central location by computer or other means that provides access within 2 hours after a request. The owner or operator shall retain all superseded descriptions for at least 5 years after the date of their creation. Superseded descriptions shall be retained on-site (or accessible from a central location by computer or other means that provides access within 2 hours after a request) for

at least 6 months after their creation. Thereafter, superseded descriptions may be stored off-site.

(2) If an owner or operator has elected to implement the requirements of paragraph (h)(1) of this section for a monitored parameter with respect to an item of equipment and a period of 6 consecutive months has passed without an excursion as defined in paragraph (h)(2)(iv) of this section, the owner or operator is no longer required to record the daily average value, for any operating day when the daily average is less than the maximum, or greater than the minimum established limit. With approval by the Administrator, monitoring data generated prior to the compliance date of this subpart shall be credited toward the period of 6 consecutive months, if the parameter limit and the monitoring accomplished during the period prior to the compliance date was required and/or approved by the Administrator.

(i) If the owner or operator elects not to retain the daily average values, the owner or operator shall notify the

Administrator in the next Periodic Report. The notification shall identify the parameter and unit of equipment.

(ii) If, on any operating day after the owner or operator has ceased recording daily average values as provided in paragraph (h)(2) of this section, there is an excursion as defined in paragraph (h)(2)(iv) of this section, the owner or operator shall immediately resume retaining the daily average value for each operating day and shall notify the Administrator in the next Periodic Report. The owner or operator shall continue to retain each daily average value until another period of 6 consecutive months has passed without an excursion as defined in paragraph (h)(2)(iv) of this section.

(iii) The owner or operator shall retain the records specified in paragraph (h)(1) of this section, for the duration specified in paragraph (h) of this section. For any calendar week, if compliance with paragraphs (h)(1)(i) through (iv) of this section does not result in retention of a record of at least one occurrence or measured parameter value, the owner or

operator shall record and retain at least one parameter value during a period of operation other than a start-up, shutdown, or malfunction.

(iv) For the purposes of paragraph (h) of this section, an excursion means that the daily average of monitoring data for a parameter is greater than the maximum, or less than the minimum established value, except as provided in paragraphs (h)(2)(iv)(A) and (B) of this section.

(A) The daily average value during any start-up, shutdown, or malfunction shall not be considered an excursion for purposes of paragraph (h)(2) of this section, if the owner or operator follows the applicable provisions of the start-up, shutdown, and malfunction plan required by the General Provisions in § 63.6(e)(3).

(B) An excused excursion, as described in § 63.1438(g), shall not be considered an excursion for the purposes of paragraph (h)(2) of this section.

TABLE 1 TO SUBPART PPP OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART PPP AFFECTED SOURCES

Reference	Applies to subpart PPP	Explanation
63.1(a)(1)	Yes	§ 63.1423 specifies definitions in addition to or that apply instead of definitions in § 63.2.
63.1(a)(2)	Yes.	
63.1(a)(3)	Yes	§ 63.1422(f) through (k) of this subpart and § 63.160(b) identify those standards which overlap with the requirements of subparts PPP and H and specify how compliance shall be achieved.
63.1(a)(4)	Yes	Subpart PPP (this table) specifies the applicability of each paragraph in subpart A to subpart PPP.
63.1(a)(5)	No	Reserved.
63.1(a)(6)–(8)	Yes.	
63.1(a)(9)	No	Reserved.
63.1(a)(10)	Yes.	
63.1(a)(11)	Yes.	
63.1(a)(12)–(14)	Yes.	
63.1(b)(1)	No	§ 63.1420(a) contains specific applicability criteria.
63.1(b)(2)	Yes.	
63.1(b)(3)	Yes.	
63.1(c)(1)	Yes	Subpart PPP (this table) specifies the applicability of each paragraph in subpart A to subpart PPP.
63.1(c)(2)	No	Area sources are not subject to subpart PPP.
63.1(c)(3)	No	Reserved.
63.1(c)(4)	Yes.	
63.1(c)(5)	Yes	Except that affected sources are not required to submit notifications overridden by this table.
63.1(d)	No	Reserved.
63.1(e)	Yes.	
63.2	Yes	§ 63.1423 specifies those subpart A definitions that apply to subpart PPP.
63.3	Yes.	
63.4(a)(1)–(3)	Yes.	
63.4(a)(4)	No	Reserved.
63.4(a)(5)	Yes.	
63.4(b)	Yes.	
63.4(c)	Yes.	
63.5(a)(1)	Yes	Except the terms "source" and "stationary source" should be interpreted as having the same meaning as "affected source".
63.5(a)(2)	Yes.	
63.5(b)(1)	Yes	Except § 63.1420(g) defines when construction or reconstruction is subject to new source standards.

TABLE 1 TO SUBPART PPP OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART PPP AFFECTED SOURCES—Continued

Reference	Applies to subpart PPP	Explanation
63.5(b)(2)	No	Reserved.
63.5(b)(3)	Yes.	
63.5(b)(4)	Yes	Except that the Initial Notification requirements in § 63.1439(e)(3) shall apply instead of the requirements in § 63.9(b).
63.5(b)(5)	Yes.	
63.5(b)(6)	Yes	Except that § 63.1420(g) defines when construction or reconstruction is subject to the new source standards.
63.5(c)	No	Reserved.
63.5(d)(1)(i)	Yes.	
63.5(d)(1)(ii)	Yes	Except that § 63.5(d)(1)(ii)(H) does not apply.
63.5(d)(1)(iii)	No	§ 63.1439(e)(5) and § 63.1434(e) specify Notification of Compliance Status requirements.
63.5(d)(2)	No.	
63.5(d)(3)	Yes	Except § 63.5(d)(3)(ii) does not apply, and equipment leaks subject to § 63.1434 are exempt.
63.5(d)(4)	Yes.	
63.5(e)	Yes.	
63.5(f)(1)	Yes.	
63.5(f)(2)	Yes	Except that where § 63.9(b)(2) is referred to, the owner or operator need not comply.
63.6(a)	Yes.	
63.6(b)(1)	Yes.	
63.6(b)(2)	Yes.	
63.6(b)(3)	Yes.	
63.6(b)(4)	Yes.	
63.6(b)(5)	Yes.	
63.6(b)(6)	No	Reserved.
63.6(b)(7)	No.	
63.6(c)(1)	Yes	§ 63.1422 specifies the compliance date.
63.6(c)(2)	No.	
63.6(c)(3)	No	Reserved.
63.6(c)(4)	No	Reserved.
63.6(c)(5)	Yes.	
63.6(d)	No	Reserved.
63.6(e)	Yes	Except as otherwise specified for individual paragraphs (below), and § 63.6(e) does not apply to Group 2 emission points. ^a
63.6(e)(1)(i)	No	This is addressed by § 63.1420(h)(4).
63.6(e)(1)(ii)	Yes.	
63.6(e)(1)(iii)	Yes.	
63.6(e)(2)	Yes.	
63.6(e)(3)(i)	Yes	For equipment leaks (subject to § 63.1434), the start-up, shutdown, and malfunction plan requirement of § 63.6(e)(3)(i) is limited to combustion, recovery, or recapture devices and is optional for other equipment. The start-up, shutdown, and malfunction plan may include written procedures that identify conditions that justify a delay of repair.
63.6(e)(3)(i)(A)	Yes	This is also addressed by § 63.1420(h)(4).
63.6(e)(3)(i)(B)	Yes.	
63.6(e)(3)(i)(C)	Yes.	
63.6(e)(3)(ii)	Yes.	
63.6(e)(3)(iii)	No	Recordkeeping and reporting are specified in § 63.1439(b)(1).
63.6(e)(3)(iv)	No	Recordkeeping and reporting are specified in § 63.1439(b)(1).
63.6(e)(3)(v)	No	Requirement is specified in § 63.1439(b)(1).
63.6(e)(3)(vi)	Yes.	
63.6(e)(3)(vii)	Yes.	
63.6(e)(3)(vii)(A)	Yes.	
63.6(e)(3)(vii)(B)	Yes	Except the plan shall provide for operation in compliance with § 63.1420(i)(4).
63.6(e)(3)(vii)(C)	Yes.	
63.6(e)(3)(viii)	Yes.	
63.6(f)(1)	Yes.	
63.6(f)(2)	Yes	Except 63.7(c), as referred to in § 63.6(f)(2)(iii)(D) does not apply, and except that § 63.6(f)(2)(ii) does not apply to equipment leaks subject to § 63.1434.
63.6(f)(3)	Yes.	
63.6(g)	Yes.	
63.6(h)	No	Subpart PPP does not require opacity and visible emission standards.
63.6(i)(1)	Yes.	
63.6(i)(2)	Yes.	
63.6(i)(3)	Yes.	
63.6(i)(4)(i)(A)	Yes.	
63.6(i)(4)(i)(B)	No	Dates are specified in § 63.1422(e) and § 63.1439(e)(4)(i) for all emission points except equipment leaks, which are covered under § 63.182(a)(6)(i).

TABLE 1 TO SUBPART PPP OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART PPP AFFECTED SOURCES—Continued

Reference	Applies to subpart PPP	Explanation
63.6(i)(4)(ii)	No.	
63.6(i)(5)(14)	Yes.	
63.6(i)(15)	No	Reserved.
63.6(i)(16)	Yes.	
63.6(j)	Yes.	
63.7(a)(1)	Yes.	
63.7(a)(2)	No	§ 63.1439(e)(5) and § 63.1439(e)(6) specify the submittal dates of performance test results for all emission points except equipment leaks; for equipment leaks, compliance demonstration results are reported in the Periodic Reports.
63.7(a)(3)	Yes.	
63.7(b)	No	§ 63.1437(a)(4) specifies notification requirements.
63.7(c)	No	Except if the owner or operator chooses to submit an alternative nonopacity emission standard for approval under § 63.6(g).
63.7(d)	Yes.	
63.7(e)(1)	Yes	Except that all performance tests shall be conducted during worst case operating conditions.
63.7(e)(2)	Yes.	
63.7(e)(3)	No	Subpart PPP specifies requirements.
63.7(e)(4)	Yes.	
63.7(f)	Yes	Since a site specific test plan is not required, the notification deadline in § 63.7(f)(2)(i) shall be 60 days prior to the performance test, and in § 63.7(f)(3) approval or disapproval of the alternative test method shall not be tied to the site specific test plan.
63.7(g)	Yes	Except that references to the Notification of Compliance Status report in § 63.9(h) are replaced with the requirements in § 63.1439(e)(5). In addition, equipment leaks subject to § 63.1434 are not required to conduct performance tests.
63.7(h)	Yes	Except § 63.7(h)(4)(ii) is not applicable, since the site-specific test plans in § 63.7(c)(2) are not required.
63.8(a)(1)	Yes.	
63.8(a)(2)	No.	
63.8(a)(3)	No	Reserved.
63.8(a)(4)	Yes.	
63.8(b)(1)	Yes.	
63.8(b)(2)	No	Support PPP specifies locations to conduct monitoring.
63.8(b)(3)	Yes.	
63.8(c)(1)	Yes.	
63.8(c)(1)(i)	Yes.	
63.8(c)(1)(ii)	No	For all emission points except equipment leaks, comply with § 63.1439(b)(1)(i)(B); for equipment leaks, comply with § 63.181(g)(2)(ii).
63.8(c)(1)(iii)	Yes.	
63.8(c)(2)	Yes.	
63.8(c)(3)	Yes.	
63.8(c)(4)	No	§ 63.1438 specifies monitoring requirements; not applicable to equipment leaks, because § 63.1434 does not require continuous monitoring systems.
63.8(c)(5)–(8)	No.	
63.8(d)	No.	
63.8(e)	No.	
63.8(f)(1)–(3)	Yes.	
63.8(f)(4)(i)	Yes	Except the timeframe for submitting request is specified in § 63.1439(f) or (g); not applicable to equipment leaks, because § 63.1434 (through subpart H) specifies acceptable alternative methods.
63.8(f)(4)(ii)	Yes.	
63.8(f)(4)(iii)	Yes.	
63.8(f)(5)(i)	Yes.	
63.8(f)(5)(ii)	No.	
63.8(f)(5)(iii)	Yes.	
63.8(f)(6)	No	Subpart PPP does not require CEM's.
63.8(g)	No	Data reduction procedures specified in § 63.1439(d) and (h); not applicable to equipment leaks.
63.9(a)	Yes.	
63.9(b)	No	The Initial Notification requirements are specified in § 63.1439(e)(3).
63.9(c)	Yes.	
63.9(d)	Yes.	
63.9(e)	No	§ 63.1437(a)(4) specifies notification deadline.
63.9(f)	No	Subpart PPP does not require opacity and visible emission standards.
63.9(g)	No.	
63.9(h)	No	§ 63.1439(e)(5) specifies Notification of Compliance Status requirements.
63.9(i)	Yes.	
63.9(j)	No.	
63.10(a)	Yes.	

TABLE 1 TO SUBPART PPP OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART PPP AFFECTED SOURCES—Continued

Reference	Applies to subpart PPP	Explanation
63.10(b)(1)	No	§ 63.1439(a) specifies record retention requirements. Subpart PPP specifies recordkeeping requirements.
63.10(b)(2)	No	
63.10(b)(3)	Yes.	§ 63.1439 specifies recordkeeping requirements.
63.10(c)	No	
63.10(d)(1)	Yes.	§ 63.1439(e)(5) and § 63.1439(e)(6) specify performance test reporting requirements; not applicable to equipment leaks.
63.10(d)(2)	No	
63.10(d)(3)	No	Subpart PPP does not require opacity and visible emission standards.
63.10(d)(4)	Yes.	
63.10(d)(5)	Yes	Except that reports required by § 63.10(d)(5)(i) shall be submitted at the same time as Periodic Reports specified in § 63.1439(e)(6). The start-up, shutdown, and malfunction plan, and any records or reports of start-up, shutdown, and malfunction do not apply to Group 2 emission points.
63.10(e)	No	
63.10(f)	Yes.	§ 63.1439 specifies reporting requirements.
63.11	Yes.	
63.12	Yes	Except that the authority of § 63.177 (for equipment leaks) will not be delegated to States.
63.13–63.15	Yes.	

^a The plan, and any records or reports of start-up, shutdown, and malfunction do not apply to Group 2 emission points.

TABLE 2 TO SUBPART PPP OF PART 63.—APPLICABILITY OF SUBPARTS F, G, H, AND U TO SUBPART PPP AFFECTED SOURCES

Reference	Applies to subpart PPP	Explanation	Applicable section of subpart PPP
Subpart F:			
63.100	No.	Several definitions from 63.101 are referenced at 63.1423	63.1423.
63.101	Yes		
63.102–63.103	No.	With the differences noted in 63.1435(b) through (d)	63.1435.
63.104	Yes		
63.105	Yes	With the differences noted in 63.1433(b)	63.1433.
63.106	No.		
Subpart G:			
63.110	No.	Several definitions from 63.111 are incorporated by reference into 63.1423.	63.1423.
63.111	Yes		
63.112	No.	For THF facilities, with the differences noted in 63.1425(f)(1) through (f)(10).	63.1425.
63.113–63.118	Yes		
	No	For epoxide facilities, except that 63.115(d) is used for TRE determinations.	63.1428.
63.119–63.123	Yes	With the differences noted in 63.1432(b) through 63.1432(p)	63.1432.
63.124–63.125	No	Reserved.	
63.126–63.130	No.	Reserved.	
63.131	No		
63.132–63.147	Yes	With the differences noted in 63.1433(a)(1) through 63.1433(a)(19).	63.1433.
63.148–63.149	Yes	With the differences noted in 63.1432(b) through 63.1432(p) and 63.1433(a)(1) through 63.1433(a)(19).	63.1432 and 63.1433.
63.150	No.		
63.151–63.152	No.		
Subpart H:			
63.160–63.182	Yes	Subpart PPP affected sources shall comply with all requirements of subpart H, with the differences noted in 63.1422(d), 63.1422(h), and 63.1434(b) through (g).	63.1434.
Subpart U:			
63.480–63.487	No.	Portions of 63.488(b) and (e) are cross-referenced in subpart PPP..	
63.488	Yes		
63.489–63.506	No.		

TABLE 3 TO SUBPART PPP OF PART 63.—GROUP 1 STORAGE VESSELS AT EXISTING AND NEW AFFECTED SOURCES

Vessel capacity (cubic meters)	Vapor Pressure ^a (kilopascals)
75 ≤ capacity < 151	≥ 13.1
capacity ≥ 151	≥ 5.2

^a Maximum true vapor pressure of total organic HAP at storage temperature.

TABLE 4 TO SUBPART PPP OF PART 63—KNOWN ORGANIC HAP FROM POLYETHER POLYOL PRODUCTS

Organic HAP/Chemical Name (CAS No.)
1,3 Butadiene (106990) Ethylene Oxide (75218) n-Hexane (110543) Methanol (67561) Propylene Oxide (75569) Toluene (108883)

CAS No. = Chemical Abstracts Service Registry Number

TABLE 5 TO SUBPART PPP OF PART 63.—PROCESS VENTS FROM BATCH UNIT OPERATIONS—MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

Control technique	Parameter to be monitored	Recordkeeping and reporting requirements for monitored parameters
Thermal Incinerator	Firebox temperature ^a	<ol style="list-style-type: none"> 1. Continuous records as specified in § 63.1429.^b 2. Record and report the average firebox temperature measured during the performance test—NCS.^c 3. Record the daily average firebox temperature as specified in § 63.1429. 4. Report all daily average temperatures that are below the minimum operating temperature established in the NCS or operating permit and all instances when monitoring data are not collected—PR.^{d,e}
Catalytic Incinerator	Temperature upstream and downstream of the catalyst bed.	<ol style="list-style-type: none"> 1. Continuous records as specified in § 63.1429.^b 2. Record and report the average upstream and downstream temperatures and the average temperature difference across the catalyst bed measured during the performance test—NCS.^c 3. Record the daily average upstream temperature and temperature difference across catalyst bed as specified in § 63.1429. 4. Report all daily average upstream temperatures that are below the minimum upstream temperature established in the NCS or operating permit—PR.^{d,e} 5. Report all daily average temperature differences across the catalyst bed that are below the minimum difference established in the NCS or operating permit—PR.^{d,e} 6. Report all instances when monitoring data are not collected.^e
Boiler or Process Heater with a design heat input capacity less than 44 megawatts and where the process vents are <i>not</i> introduced with or used as the primary fuel.	Firebox temperature ^a	<ol style="list-style-type: none"> 1. Continuous records as specified in § 63.1429.^b 2. Record and report the average firebox temperature measured during the performance test—NCS.^c 3. Record the daily average firebox temperature as specified in § 63.1429.^d 4. Report all daily average temperatures that are below the minimum operating temperature established in the NCS or operating permit and all instances when monitoring data are not collected—PR.^{d,e}
Flare	Presence of a flame at the pilot light.	<ol style="list-style-type: none"> 1. Hourly records of whether the monitor was continuously operating during batch emission episodes selected for control and whether a flame was continuously present at the pilot light during each hour. 2. Record and report the presence of a flame at the pilot light over the full period of the compliance determination—NCS.^c 3. Record the times and durations of all periods during batch emission episodes when all flames at the pilot light of a flare are absent or the monitor is not operating. 4. Report the times and durations of all periods during batch emission episodes selected for control when all flames at the pilot light of a flare are absent—Pr.^d
Absorber ^f	Liquid flow rate into or out of the scrubber, or the pressure drop across the scrubber.	<ol style="list-style-type: none"> 1. Records every 15 minutes, as specified in § 63.1429.^b 2. Record and report the average liquid flow rate into or out of the scrubber, or the pressure drop across the scrubber, measured during the performance test—NCS.

TABLE 5 TO SUBPART PPP OF PART 63.—PROCESS VENTS FROM BATCH UNIT OPERATIONS—MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS—Continued

Control technique	Parameter to be monitored	Recordkeeping and reporting requirements for monitored parameters
Condenser ^f	pH of the scrubber	3. Record the liquid flow rate into or out of the scrubber, or the pressure drop across the scrubber, every 15 minutes, as specified in § 63.1429. 4. Report all scrubber flow rates or pressure drop values that are below the minimum operating value established in the NCS or operating permit and all instances when monitoring data are not collected—PR. ^{d,c} 1. Once daily records as specified in § 63.1429. ^b 2. Record and report the average pH of the scrubber effluent measured during the performance test—NCS. ^c 3. Record at least once daily the pH of the scrubber effluent. 4. Report all pH scrubber effluent readings out of the range established in the NCS or operating permit and all instances when monitoring data are not collected—PR. ^{d,c} If a base absorbent is used, report all pH values that are below the minimum operating values. If an acid absorbent is used, report all pH values that are above the maximum operating values.
Condenser ^f	Exit (product side) temperature	1. Continuous records as specified in § 63.1429. ^b 2. Record and report the average exit temperature measured during the performance test—NCS. 3. Record the daily average exit temperature as specified in § 63.1429. 4. Report all daily average exit temperatures that are above the maximum operating temperature established in the NCS or operating permit and all instances when monitoring data are not collected—PR. ^{d,c}
Carbon Adsorber ^l	Total regeneration stream mass or volumetric flow during carbon bed regeneration cycle(s), and.	1. Record of total regeneration stream mass or volumetric flow for each carbon bed regeneration cycle. 2. Record and report the total regeneration stream mass or volumetric flow during each carbon bed regeneration cycle during the performance test—NCS. ^c 3. Report all carbon bed regeneration cycles when the total regeneration stream mass or volumetric flow is above the maximum flow rate established in the NCS or operating permit—PR. ^{d,c}
Carbon Adsorber ^l	Temperature of the carbon bed after regeneration and within 15 minutes of completing any cooling cycle(s).	1. Record the temperature of the carbon bed after each regeneration and within 15 minutes of completing any cooling cycle(s). 2. Record and report the temperature of the carbon bed after each regeneration and within 15 minutes of completing any cooling cycle(s) measured during the performance test—NCS. ^c 3. Report all carbon bed regeneration cycles when the temperature of the carbon bed after regeneration, or within 15 minutes of completing any cooling cycle(s), is above the maximum temperature established in the NCS or operating permit—PR. ^{d,c}
Absorber, Condenser, and Carbon Adsorber (as an alternative to the above).	Concentration level or reading indicated by an organic monitoring device at the outlet of the recovery device.	1. Continuous records as specified in § 63.1429. ^b 2. Record and report the average concentration level or reading measured during the performance test—NCS. 3. Record the daily average concentration level or reading as specified in § 63.1429. 4. Report all daily average concentration levels or readings that are above the maximum concentration or reading established in the NCS or operating permit and all instances when monitoring data are not collected—PR. ^{d,c}
All Combustion, recovery, or recapture devices.	Diversion to the atmosphere from the combustion, recovery, or recapture device or.	1. Hourly records of whether the flow indicator was operating during batch emission episodes selected for control and whether a diversion was detected at any time during the hour, as specified in § 63.1429. 2. Record and report the times of all periods during batch emission episodes selected for control when emissions are diverted through a bypass line, or the flow indicator is not operating—PR. ^d
All Combustion, recovery, or recapture devices.	Monthly inspections of sealed valves.	1. Records that monthly inspections were performed as specified in § 63.1429. 2. Record and report all monthly inspections that show that valves are in the diverting position or that a seal has been broken—PR. ^d

TABLE 5 TO SUBPART PPP OF PART 63.—PROCESS VENTS FROM BATCH UNIT OPERATIONS—MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS—Continued

Control technique	Parameter to be monitored	Recordkeeping and reporting requirements for monitored parameters
ECO	Time from the end of the epoxide feed, or the epoxide partial pressure in the reactor or direct measurement of epoxide concentration in the reactor liquid at the end of the ECO.	<ol style="list-style-type: none"> 1. Records at the end of each batch, as specified in § 63.1427(i). 2. Record and report the average parameter value of the parameters chosen, measured during the performance test. 3. Record the batch cycle ECO duration, epoxide partial pressure, or epoxide concentration in the liquid at the end of the ECO 4. Report all batch cycle parameter values outside of the ranges established in accordance with § 63.1427(i)(3) and all instances when monitoring data were not collected—PR.^{d,e}

^a Monitor may be installed in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange is encountered.

^b "Continuous records" is defined in § 63.111.

^c NCS = Notification of Compliance Status described in § 63.1429.

^d PR = Periodic Reports described in § 63.1429.

^e The periodic reports shall include the duration of periods when monitoring data are not collected as specified in § 63.1439.

^f Alternatively, these devices may comply with the organic monitoring device provisions listed at the end of this table.

TABLE 6 TO SUBPART PPP OF PART 63.—PROCESS VENTS FROM CONTINUOUS UNIT OPERATIONS—MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

Control technique	Parameter to be monitored	Recordkeeping and reporting requirements for monitored parameters
Thermal Incinerator	Firebox temperature ^a	<ol style="list-style-type: none"> 1. Continuous records as specified in § 63.1429.^b 2. Record and report the average firebox temperature measured during the performance test—NCS.^c 3. Record the daily average firebox temperature for each operating day. 4. Report all daily average temperatures that are below the minimum operating temperature established in the NCS or operating permit and all instances when sufficient monitoring data are not collected—PR.^{d,e}
Catalytic Incinerator	Temperature upstream and downstream of the catalyst bed.	<ol style="list-style-type: none"> 1. Continuous records as specified in § 63.1429.^b 2. Record and report the average upstream and downstream temperatures and the average temperature difference across the catalyst bed measured during the performance test—NCS.^c 3. Record the daily average upstream temperature and temperature difference across catalyst bed for each operating day. 4. Report all daily average upstream temperatures that are below the minimum upstream temperature established in the NCS or operating permit—PR.^{d,e} 5. Report all daily average temperature differences across the catalyst bed that are below the minimum difference established in the NCS or operating permit—PR.^{d,e} 6. Report all operating days when insufficient monitoring data are collected.^e
Boiler or Process Heater with a design heat input capacity less than 44 megawatts and where the process vents are <i>not</i> introduced with or used as the primary fuel.	Firebox temperature ^a	<ol style="list-style-type: none"> 1. Continuous records as specified in § 63.1429.^b 2. Record and report the average firebox temperature measured during the performance test—NCS.^c 3. Record the daily average firebox temperature for each operating day.^d 4. Report all daily average temperatures that are below the minimum operating temperature established in the NCS or operating permit and all instances when insufficient monitoring data are collected—PR.^{d,e}
Flare	Presence of a flame at the pilot light.	<ol style="list-style-type: none"> 1. Hourly records of whether the monitor was continuously operating and whether a flame was continuously present at the pilot light during each hour. 2. Record and report the presence of a flame at the pilot light over the full period of the compliance determination—NCS.^c 3. Record the times and durations of all periods when all flames at the pilot light of a flare are absent or the monitor is not operating. 4. Report the times and durations of all periods when all flames at the pilot light of a flare are absent—Pr.^d
Absorber ^f	Exit temperature of the absorbing liquid, and.	<ol style="list-style-type: none"> 1. Continuous records as specified in § 63.1429.^b 2. Record and report the exit temperature of the absorbing liquid averaged over the full period of the TRE determination—NCS.^c 3. Record the daily average exit temperature of the absorbing liquid for each operating day. 4. Report all the daily average exit temperatures of the absorbing liquid that are below the minimum operating value established in the NCS or operating—PR.^{d,e}

TABLE 6 TO SUBPART PPP OF PART 63.—PROCESS VENTS FROM CONTINUOUS UNIT OPERATIONS—MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS—Continued

Control technique	Parameter to be monitored	Recordkeeping and reporting requirements for monitored parameters
Condenser ^f	Exit specific gravity for the absorbing liquid.	1. Continuous records as specified in § 63.1429. ^b 2. Record and report the exit specific gravity averaged over the full period of the TRE determination—NCS. 3. Record the daily average exit specific gravity for each operating day. 4. Report all daily average exit specific gravity values that are below the minimum operating value established in the NCS or operating—PR. ^{d,c}
	Exit (product side) temperature	1. Continuous records as specified in § 63.1429. ^b 2. Record and report the exit temperature averaged over the full period of the TRE determination—NCS. 3. Record the daily average exit temperature for each operating day. 4. Report all daily average exit temperatures that are above the maximum operating temperature established in the NCS or operating—PR. ^{d,c}
Carbon Adsorber ^f	Total regeneration stream mass or volumetric flow during carbon bed regeneration cycle(s), and.	1. Record of total regeneration stream mass or volumetric flow for each carbon bed regeneration cycle. 2. Record and report the total regeneration stream mass or volumetric flow during each carbon bed regeneration cycle during the period of the TRE determination—NCS. ^c 3. Report all carbon bed regeneration cycles when the total regeneration stream mass or volumetric flow is above the maximum flow rate established in the NCS or operating permit—PR. ^{d,c}
	Temperature of the carbon bed after regeneration and within 15 minutes of completing any cooling cycle(s).	1. Record the temperature of the carbon bed after each regeneration and within 15 minutes of completing any cooling cycle(s). 2. Record and report the temperature of the carbon bed after each regeneration during the period of the TRE determination—NCS. ^c 3. Report all carbon bed regeneration cycles when the temperature of the carbon bed after regeneration is above the maximum temperature established in the NCS or operating permit—PR. ^{d,c}
Absorber, Condenser, and Carbon Adsorber (as an alternative to the above).	Concentration level or reading indicated by an organic monitoring device at the outlet of the recovery device.	1. Continuous records as specified in § 63.1429. ^b 2. Record and report the concentration level or reading averaged over the full period of the TRE determination—NCS. 3. Record the daily average concentration level or reading for each operating day. 4. Report all daily average concentration levels or readings that are above the maximum concentration or reading established in the NCS or operating—PR. ^{d,c}
All Combustion, recovery, or recapture devices.	Diversion to the atmosphere from the combustion, recovery, or recapture device or.	1. Hourly records of whether the flow indicator was operating and whether a diversion was detected at any time during each hour. 2. Record and report the times of all periods when the vent stream is diverted through a bypass line, or the flow indicator is not operating—PR. ^d
	Monthly inspections of sealed valves.	1. Records that monthly inspections were performed as specified in § 63.1429. 2. Record and report all monthly inspections that show that valves are in the diverting position or that a seal has been broken—PR. ^d

^a Monitor may be installed in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange is encountered.
^b "Continuous records" is defined in § 63.111.
^c NCS = Notification of Compliance Status described in § 63.1429.
^d PR = Periodic Reports described in § 63.1429.
^e The periodic reports shall include the duration of periods when monitoring data are not collected as specified in § 63.1439.
^f Alternatively, these devices may comply with the organic monitoring device provisions listed at the end of this table.

TABLE 7 TO SUBPART PPP OF PART 63.—OPERATING PARAMETERS FOR WHICH MONITORING LEVELS ARE REQUIRED TO BE ESTABLISHED FOR PROCESS VENTS STREAMS

Control technique	Parameters to be monitored	Established operating parameter(s)
Thermal incinerator	Firebox temperature	Minimum temperature.
Catalytic incinerator	Temperature upstream and downstream of the catalyst bed.	Minimum upstream temperature; and minimum temperature difference across the catalyst bed.
Boiler or process heater	Firebox temperature	Minimum temperature.
Absorber	Liquid flow rate or pressure drop; and pH of scrubber effluent, if an acid or base absorbent is used.	Minimum flow rate or pressure drop; and maximum pH if an acid absorbent is used, or minimum pH if a base absorbent is used.
Condenser	Exit temperature	Maximum temperature.

TABLE 7 TO SUBPART PPP OF PART 63.—OPERATING PARAMETERS FOR WHICH MONITORING LEVELS ARE REQUIRED TO BE ESTABLISHED FOR PROCESS VENTS STREAMS—Continued

Control technique	Parameters to be monitored	Established operating parameter(s)
Carbon adsorber	Total regeneration stream mass or volumetric flow during carbon bed regeneration cycle; and temperature of the carbon bed after regeneration (and within 15 minutes of completing any cooling cycle(s)).	Maximum mass or volumetric flow; and maximum temperature.
Extended Cookout (ECO)	Time from the end of the epoxide feed to the end of the ECO, or the reactor epoxide partial pressure at the end of the ECO, or the epoxide concentration in the reactor liquid at the end of the ECO.	Minimum duration, or maximum partial pressure at the end of ECO, or maximum epoxide concentration in the reactor liquid at the end of ECO.
Other devices (or as an alternate to the above). ^a	HAP concentration level or reading at outlet of device.	Maximum HAP concentration or reading.

^aConcentration is measured instead of an operating parameter.

TABLE 8 TO SUBPART PPP OF PART 63.—ROUTINE REPORTS REQUIRED BY THIS SUBPART

Reference	Description of Report	Due Date
§ 63.1439(b) and Subpart A	Refer to § 63.1439(b), Table 1 of this subpart, and to subpart A.	Refer to subpart A.
§ 63.1439(e)(3)	Initial notification	Existing affected sources: by 120 days after June 1, 1999. New affected sources w/initial start-up at least 90 days after June 1, 1999: submit the application for approval of construction or reconstruction in lieu of the Initial Notification. New affected sources w/initial start-up prior to 90 days after June 1, 1999: by 90 days after June 1, 1999.
§ 63.1439(e)(4)	Precompliance Report ^a	Existing affected sources: 12 months prior to compliance date. New affected sources: with the application for approval of construction or reconstruction.
§ 63.1439(e)(5)	Notification of Compliance Status ^b	Within 150 days after the compliance date.
§ 63.1439(e)(6)	Periodic Reports	Semiannually, no later than 60 days after the end of each 6-month period. See § 63.1439(e)(6)(i) for the due date for this report.
§ 63.1439(e)(6)(v)(iii)	Quarterly reports for sources with excursions (upon request of the Administrator).	No later than 60 days after the end of each quarter.
§ 63.506(e)(7)(i)	Storage Vessels Notification of Inspection.	At least 30 days prior to the refilling of each storage vessel or the inspection of each storage vessel.

^aThere may be two versions of this report due at different times; one for equipment subject to § 63.1434 and one for other emission points subject to this subpart.

^bThere will be two versions of this report due at different times; one for equipment subject to § 63.1434 and one for other emission points subject to this subpart.

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