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National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

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National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills

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 used in chemical recovery processes at kraft, soda, sulfite, and stand-alone semichemical pulp mills. Hazardous air pollutants (HAP) that are regulated by this final rule include gaseous organic HAP and HAP metals. The adverse health effects of exposure to these HAP can include cancer, reproductive and developmental effects, gastrointestinal effects, damage to the nervous system, and irritation to the eyes, skin, and respiratory system. Emissions of other pollutants from these sources include particulate matter (PM), volatile organic compounds (VOC), carbon monoxide (CO), sulfur dioxide (SO_2), and nitrogen oxides (NO_X).

This final rule implements section 112(d) of the Clean Air Act (CAA) and is based on the Administrator's determination that chemical recovery combustion sources at kraft, soda, sulfite, and stand-alone semichemical pulp mills are major sources of HAP emissions. The final rule is intended to protect public health by requiring chemical recovery combustion sources to meet standards reflecting the application of the maximum achievable control technology (MACT) to control HAP emissions from these sources. Implementation of this rule will reduce emissions of HAP by approximately 2,500 megagrams per year (Mg/yr) (2,700 tons per year (tpy)) and emissions of other pollutants by approximately 107,900 Mg/yr (118,900 tpy).

EFFECTIVE DATE: March 13, 2001.

ADDRESSES: Docket No. A–94–67, containing information considered by EPA in developing the promulgated standards, is available for public inspection between 8:00 a.m. and 5:30 p.m., Monday through Friday, excluding Federal holidays, at the following address: U.S. EPA, 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 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. Jeff Telander, Minerals and Inorganic 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) 541–5427, facsimile number (919) 541–5600, electronic mail address telander.jeff@epa.gov.

SUPPLEMENTARY INFORMATION:

Regulated Entities

Categories and entities potentially regulated by this action are those kraft, soda, sulfite, and stand-alone semichemical pulp mills with chemical recovery processes that involve the combustion of spent pulping liquor. Categories and entities potentially regulated by this action include:

Category	SIC code	NAICS code	Examples of regulated entities
Industry	2611, 2621, 2631	32211, 32212, 32213	Kraft, soda, sulfite, and stand-alone semichemical pulp mills.

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 § 63.860 of the final rule. If you have questions regarding the applicability of this action to a particular entity, consult the appropriate EPA Regional Office representative listed below:

U.S. EPA Region I—Director, Air Compliance Program; 1 Congress Street; Suite 1100 (SEA); Boston, MA 02114–2023; Phone: (617) 918–1650; Fax: (617) 918–1505.

U.S. EPA Region II—Air Compliance Branch; 290 Broadway; New York, NY 10007; Phone: (212) 637–4080; Fax: (212) 637–3998.

U.S. EPA Region III—Chief, Air Enforcement Branch (3AP12); 1650 Arch Street; Philadelphia, PA 19103–2029; Phone: (215) 814–3438; Fax: (215) 814–2134; Region III Office Website: http://www.epa.gov/reg3artd/hazpollut/hazairpol.htm.

U.S. EPA Region IV—Air and Radiation Technology Branch; Atlanta Federal Center; 61 Forsyth Street; Atlanta, Georgia 30303–3104; Phone: (404) 562–9105; Fax: (404) 562–9095.

U.S. EPA Region V—Air Enforcement and Compliance Assurance Branch (AE–17J); 77 West Jackson Boulevard; Chicago, IL 60604–3590; Phone: (312) 353–2088; Fax: (312) 353–8289.

U.S. EPA Region VI—Chief, Toxics Enforcement Section (6EN–AT); 1445 Ross Avenue; Dallas, TX 75202–2733; Phone: (214) 665–7224; Fax: (214) 665–7446; Region VI Office Website: www.epa.gov/region6.

U.S. EPA Region VII—901 N. 5th Street; Kansas City, KS 66101; Phone: (913) 551–7020; Fax: (913) 551–7844; http://www.epa.gov/region07/programs/artd/air/toxics/airtox1.htm.

U.S. EPA Region VIII—Air Enforcement Program (8ENF–T); 999 18th Street Suite 500; Denver, CO 80202; Phone: (303) 312–6312; Fax: (303) 312–6409.

U.S. EPA Region IX—Air Division; 75 Hawthorne Street; San Francisco, CA 94105; Phone: (415) 744–1219; Fax: (415) 744–1076.

U.S. EPA Region X—Office of Air Quality (OAQ–107); 1200 Sixth Avenue; Seattle, WA 98101; Phone: (206) 553–4273; Fax: (206) 553–0110.

Judicial Review

The NESHAP for chemical recovery combustion sources at kraft, soda, sulfite, and semichemical pulp mills was proposed on April 15, 1998 (63 FR 18783). Today's action announces EPA's final decisions on the rule. Under section 307(b)(1) of the 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 by March 13, 2001. Only those objections to this rule which were raised with reasonable specificity during the period for public comment may be raised during judicial review. Under section 307(b)(2) of the CAA, the requirements that are the subject of today's final rule may not be challenged later in civil or criminal proceedings brought by EPA to enforce these requirements.

World Wide Web (WWW)

In addition to being available in the docket, an electronic copy of today's final rule will also be available on the WWW through the Technology Transfer Network (TTN). Following the Administrator's signature, a copy of the rule will be posted on the TTN's policy and guidance page for newly proposed or final rules at 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 following outline is provided to aid in reading this preamble to the final rule.

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I. Background and Public Participation

Section 112 of the CAA requires EPA to list categories and subcategories of major sources and area sources of HAP and to establish NESHAP for the listed source categories and subcategories. Major sources of HAP are those that have the potential to emit greater than 9.07 Mg/yr (10 tpy) of any one HAP or 22.68 Mg/yr (25 tpy) of any combination of HAP.

Section 112 of the CAA requires that we establish NESHAP for the control of HAP from both new and existing major sources. The CAA requires the NESHAP to reflect the maximum degree of reduction in emissions of HAP that is achievable. This level of control is commonly referred to as MACT.

The MACT floor is the minimum control level allowed for NESHAP and is defined under section 112(d)(3) of the CAA. In essence, the MACT floor ensures that the standard is set at a level that assures that all major sources achieve the level of control at least as stringent as that already achieved by the better-controlled and lower-emitting sources in each source category or subcategory. For new sources, the MACT floor cannot be less stringent than the emission control that is achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than standards for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing 5 sources for categories or subcategories with fewer than 30 sources) (CAA section 112(d)(3)).

In developing MACT, we also consider control options that are more stringent than the floor. We may establish standards more stringent than the floor based on the consideration of the cost of achieving the emissions reductions, any non-air quality health and environmental impacts, and energy requirements (CAA section 112(d)(2)).

On July 16, 1992 (57 FR 31576), we published a list of source categories slated for regulation under section 112(c). That list included the pulp and paper production source category regulated by the standards being promulgated today. We proposed standards for chemical recovery combustion sources at kraft, soda, sulfite, and stand-alone semichemical pulp mills covered by this rule on April 15, 1998 (63 FR 18783).

As in the proposal, the final standards give existing sources 3 years from the date of promulgation to comply. Sources that begin construction or reconstruction after April 15, 1998 must comply with the standards for new sources by March 13, 2001 or upon startup, whichever is later. We believe these standards to be achievable by affected sources within the time provided.

Emissions limits, as well as monitoring, performance testing, recordkeeping, and reporting requirements are included in the final rule. All of these components are necessary to ensure that sources comply with the standards both initially and over time. However, we have made every effort to simplify the requirements in the rule.

The preamble for the proposed standards described the rationale for the proposed standards. Public comments were solicited at the time of proposal. The public comment period lasted from April 15, 1998 to June 15, 1998. Industry representatives, regulatory agencies, environmental groups, and the general public were given the opportunity to comment on the proposed rule and to provide additional information during and after the public comment period. Although we offered at proposal the opportunity for oral presentation of data, views, or arguments concerning the proposed rule, no one requested a hearing, and a hearing was not held.

We received a total of 35 letters containing comments on the proposed rule during and after the public comment period. Commenters included individual pulp and paper companies, an industry trade association, an environmental group, a local regulatory agency, an association of State and local regulatory agencies, and an association of air pollution control vendors. Today's final rule reflects our full consideration of all of the comments received. Major public comments on the proposed rule, along with our responses to those comments, are summarized in this preamble. See the Summary of Public Comments and Responses memorandum for a more detailed discussion of public comments and our responses (docket No. A–94–67).

II. Summary of Final Rule

A. Applicability

The final rule applies to all existing and new kraft, soda, sulfite, and stand-alone semichemical pulp mills with chemical recovery processes that involve the combustion of spent pulping liquor. Specifically, the affected sources that are regulated by today's final rule are each new nondirect contact evaporator (NDCE) recovery furnace and associated smelt dissolving tank (SDT) located at a kraft or soda pulp mill, each new direct contact evaporator (DCE) recovery furnace system and associated SDT located at a kraft or soda pulp mill, each new lime kiln located at a kraft or

soda pulp mill, each new or existing sulfite combustion unit located at a sulfite pulp mill, each new or existing semichemical combustion unit located at a stand-alone semichemical pulp mill, and each existing chemical recovery system located at a kraft or soda pulp mill. The chemical recovery system is defined as all existing DCE and NDCE recovery furnaces, SDT, and lime kilns at a kraft or soda pulp mill.

All existing kraft and soda pulp mills have chemical recovery processes that involve the combustion of spent pulping liquor. However, several existing sulfite and stand-alone semichemical pulp mills do not recover pulping chemicals by combusting spent liquor. Three of the 11 sulfite mills use a calcium-based sulfite process and do not have chemical recovery combustion units and, thus, are not impacted by this final rule. One of the 13 stand-alone semichemical pulp mills burns spent liquor in a power boiler and does not have chemical recovery; therefore, that mill also is not impacted by this final rule.

B. Standards

Today's final rule regulates HAP metals emissions and/or gaseous organic HAP emissions for chemical recovery combustion sources in the pulp and paper production source category. The promulgated standards are summarized in Table 1.

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TABLE 1. SUMMARY OF PROMULGATED STANDARDS[a]

Subcategory	Emission point	HAP metals standard		Alternate HAP metals standard ("bubble")		Gaseous organic HAP standard	
		Existing	New	Existing	New	Existing	New
Kraft and soda	Recovery furnaces (NDCE and DCE)	PM ≤ 0.10 gr/dscm (0.044 gr/dscf) at 8% oxygen	PM ≤0.034 g/dscm (0.015 gr/dscf) at 8% oxygen	Mill-specific PM emission limit (kg/Mg (lb/ton) BLS) based on calculated value of the sum of the individual emissions limits for recovery furnaces, SDT, and lime kilns. See equation 1 in §63.865(a)(1) of the final rule.	No "bubble" alternate standard for new sources	No standard	Gaseous organic HAP ≤ 0.012 kg/Mg (0.025 lb/ton) BLS (as measured by methanol)
	SDT	PM ≤ 0.10 kg/Mg (0.20 lb/ton) BLS	PM ≤ 0.06 kg/Mg (0.12 lb/ton) BLS			No standard[b]	No standard[b]
	Lime kilns	PM ≤ 0.15 g/dscm (0.064 gr/dscf) at 10% oxygen	PM ≤ 0.023 g/dscm (0.01 gr/dscf) at 10% oxygen			No standard[b]	No standard[b]
Sulfite	Sulfite combustion units	PM ≤ 0.092 g/dscm (0.040 gr/dscf) at 8% oxygen	PM ≤ 0.046 g/dscm (0.020 gr/dscf) at 8% oxygen	Not applicable	Not applicable	No standard[b]	No standard[b]
Stand-alone semi-chemical	Semichemical combustion units	No standard	No standard	Not applicable	Not applicable	Gaseous organic HAP ≤ 1.49 kg/Mg (2.97 lb/ton) BLS (as measured by THC) OR 90% reduction	Gaseous organic HAP ≤ 1.49 kg/Mg (2.97 lb/ton) BLS (as measured by THC) OR 90% reduction

[a] g/dscm = grams per dry standard cubic meter, gr/dscf = grains per dry standard cubic foot, kg/Mg = kilograms per megagram, lb/ton = pounds per ton, BLS = black liquor solids, and THC = total hydrocarbons.

[b] Emissions of gaseous organic HAP from these sources are regulated as part of the NESHAP for noncombustion sources at pulp and paper mills.

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The standards for each subcategory are discussed in the following sections by the pollutant regulated.

1. HAP Metals Standards for Kraft and Soda Pulp Mills

Today's rule promulgates PM emissions limits as a surrogate for HAP metals for new and existing recovery furnaces, SDT, and lime kilns at kraft and soda pulp mills. The PM emissions limits are established at the MACT floor level. For existing kraft and soda recovery furnaces and SDT, the MACT floor level corresponds (coincidentally) to the promulgated PM emissions limits in the new source performance standards (NSPS) for kraft pulp mills (43 FR 7568, February 23, 1978). We believe this level best represents the level of performance achievable by the average of the best-performing 12 percent of sources, considering normal process and operating variability. For existing kraft and soda lime kilns, the MACT floor level is more stringent than the NSPS because data indicate that the average of the best-performing 12 percent of sources can achieve a more stringent level.

The final rule also allows the use of a ''bubble compliance alternative'' for determining compliance with the HAP metals standards for existing process units (*i.e.*, recovery furnaces, SDT, and lime kilns) in the chemical recovery system at kraft and soda pulp mills. The bubble compliance alternative allows mills to set PM emissions limits for each existing process unit in the chemical recovery system at the mill such that, if these limits are met, the total emissions from all existing process units are less than or equal to a mill-specific bubble limit. This mill-specific bubble limit is calculated based on the promulgated emissions standards (referred to in the rule as reference concentrations or reference emissions rates) for each process unit and mill-specific gas flow rates and process rates. Equation 1 in § 63.865(a)(1) of the final rule will be used to calculate the bubble limit based on PM emissions.

As in the proposed rule, the bubble compliance alternative is not applicable to new affected sources under this rulemaking. Thus, all new affected sources at kraft and soda pulp mills are required to meet the individual emissions limitations set for those sources. Also, owners or operators of existing process units subject to the NSPS for kraft pulp mills are required to continue to meet the PM emissions standards of that rule, regardless of which option they choose for complying with today's HAP metals standards (because that standard is a separate regulatory requirement which remains in place).

Owners or operators that choose to comply with the HAP metals standards using the bubble compliance alternative are required to submit PM emissions limits to the Administrator for approval for each existing kraft or soda recovery furnace, SDT, and lime kiln at the mill. Before the PM emissions limits are approved, the owner or operator must submit documentation demonstrating that if the PM emissions limits for each emission source are met, the entire group of process units in the chemical recovery system are in compliance with the millwide allowable PM emission level. The allowable PM emission level is determined from the applicable bubble equation using the reference PM concentrations and reference PM emissions rates for each process unit and source-specific factors for exhaust gas flow rates and process rates. Once approved by the Administrator, the PM emissions limits are incorporated in the operating permit for the mill. Thereafter, the owner or operator of the kraft or soda pulp mill demonstrates compliance with the standards by demonstrating that each recovery furnace, SDT, and lime kiln emits less than or equal to the approved PM emission limit for that process unit. In addition, the PM emissions limits for any existing recovery furnace, SDT, or lime kiln subject to the 1978 NSPS for kraft pulp mills must be at least as stringent as the PM emissions limits established in the NSPS. An example of how the bubble compliance alternative can be used to establish PM emissions limits for process units in a chemical recovery system at an example mill is provided in the administrative record (Docket No. A–94–67).

With one exception, owners or operators that choose to comply with the HAP metals standards using the bubble compliance alternative must include all existing process units in a chemical recovery system in the bubble. Any existing process unit that can be classified as a stand-by unit (*i.e.*, a process unit that operates for less than 6,300 hours during any calendar year) cannot be included as part of a bubble. Owners or operators of stand-by units must accept the promulgated PM emissions limits shown in Table 1 for those units.

2. Gaseous Organic HAP Standards for Kraft and Soda Pulp Mills

Today's rule promulgates a gaseous organic HAP standard for new recovery furnaces using methanol as a surrogate for gaseous organic HAP. All new recovery furnaces at kraft and soda pulp mills must meet a gaseous organic HAP limit, as measured by methanol, of 0.012 kilogram per megagram (kg/Mg) (0.025 pound per ton (lb/ton)) of black liquor solids (BLS) fired. There are no gaseous organic HAP standards under today's rule for existing NDCE recovery furnaces or DCE recovery furnace systems.

3. HAP Metals Standards for Sulfite Pulp Mills

Today's rule promulgates PM emissions limits as a surrogate for HAP metals for new and existing sulfite combustion units. Existing sulfite combustion units must meet a PM emission limit of 0.092 gram per dry standard cubic meter (g/dscm) (0.040 grain per dry standard cubic foot (gr/dscf)) corrected to 8 percent oxygen. New sulfite combustion units must meet a PM emission limit of 0.046 g/dscm (0.020 gr/dscf) corrected to 8 percent oxygen.

4. Gaseous Organic HAP Standards for Stand-Alone Semichemical Pulp Mills

Today's rule promulgates gaseous organic HAP standards for existing and new semichemical combustion units using total hydrocarbon (THC) as a surrogate for gaseous organic HAP. All stand-alone semichemical pulp mills with existing or new chemical recovery combustion units must reduce gaseous organic HAP emissions (as measured by THC reported as carbon) from these units by 90 percent, or meet a gaseous organic HAP emission limit (as measured by THC reported as carbon) of 1.49 kg/Mg (2.97 lb/ton) of BLS fired.

C. Performance Test Requirements

The following discussion identifies the test methods to be used for compliance determinations.

Test Method 5, ''Determination of Particulate Emissions from Stationary Sources'' (40 CFR part 60, appendix A)—in conjunction with a measurement of oxygen concentration in the stack gas using either Test Method 3A, ''Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)'' (40 CFR part 60, appendix A) or Test Method 3B, ''Gas Analysis for the Determination of Emission Rate Correction Factor or Excess Air'' (40 CFR part 60, appendix A)—is the test method for determining compliance with the PM emissions limits for new and existing kraft and soda recovery furnaces, SDT, and lime kilns and for new and existing sulfite combustion units. Test Method 29, ''Determination of Metals Emissions from Stationary Sources'' (40 CFR part

60, appendix A) may be used as an alternative to Test Method 5 for measuring PM emissions. Test Method 17, ''Determination of Particulate Emissions from Stationary Sources (In-Stack Filtration Method)'' (40 CFR part 60, appendix A) may also be used as an alternative to Test Method 5 if a constant value of 0.009 g/dscm (0.004 gr/dscf) is added to the results of Test Method 17, and the stack temperature is no greater than 205 degrees Centigrade (°C) (400 degrees Fahrenheit (°F)).

Test Method 308, ''Procedure for Determination of Methanol Emissions from Stationary Sources'' (40 CFR part 63, appendix A) is the test method for determining compliance with the gaseous organic HAP emission limit for new kraft and soda NDCE recovery furnaces that are not equipped with dry electrostatic precipitator (ESP) systems and for DCE recovery furnace systems.

Test Method 25A, ''Determination of Total Gaseous Organic Concentration using a Flame Ionization Analyzer'' (40 CFR part 60, appendix A) is the test method for determining compliance with the gaseous organic HAP emission limit for new and existing combustion units at stand-alone semichemical pulp mills.

D. Monitoring Requirements

Each owner or operator of an affected source or process unit must install, operate, calibrate, and maintain a continuous monitoring system for each affected source or process unit. The owner or operator also must establish a range of values for each operating parameter (associated with a process operation or with an emission control device) to be monitored based upon values recorded during the initial performance test or during qualifying previous performance tests using the required test methods. If values from previous performance tests are used to establish the operating parameter range, the owner or operator must certify that the control devices and processes had not been modified subsequent to the testing upon which the data used to establish the operating ranges were obtained. The owner or operator may conduct multiple performance tests to establish ranges of operating parameters. The owner or operator also may establish expanded or replacement ranges during subsequent performance tests. An exceedance of the operating parameters occurs when the measured operating parameter levels, averaged over a specified time period, are outside the established range for a predetermined duration. However, with the exception of opacity exceedances, no more than one exceedance would be attributed to an affected source or process unit during any given 24-hour period. The following paragraphs describe the operating parameters to be monitored, the averaging periods and frequency with which these parameters should be monitored, when corrective action is required to return operating parameters to levels that are within the established range, and when operating parameter exceedances constitute a violation of the emissions standards.

Owners or operators of existing kraft or soda recovery furnaces that are equipped with an ESP for PM control must install, calibrate, maintain, and operate continuous opacity monitoring systems (COMS). The COMS must perform at least one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period. If the average of ten consecutive 6-minute average values of opacity exceeds 20 percent, the owner or operator must initiate the corrective actions contained in the mill's startup, shutdown, and malfunction (SSM) plan. A violation of the applicable emissions standards would occur when opacity is greater than 35 percent for 6 percent or more of the operating time during any quarterly period.

Owners or operators of new kraft or soda recovery furnaces and new or existing kraft or soda lime kilns that are equipped with ESP for PM control must also install, calibrate, maintain, and operate COMS. The COMS must perform at least one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period. If the average of ten consecutive 6-minute average values of opacity exceeds 20 percent, the owner or operator must initiate the corrective actions contained in the facility's SSM plan. A violation of the applicable emissions standards would occur when opacity is greater than 20 percent for 6 percent or more of the operating time during any quarterly period.

Owners or operators using wet scrubbers to meet the PM emissions limits for any kraft or soda recovery furnace, SDT, or lime kiln or any sulfite combustion unit must install, calibrate, maintain, and operate a continuous monitoring system capable of determining and recording the pressure drop and scrubbing liquid flow rate at least once for each successive 15-minute period. If any 3-hour average of the pressure drop or scrubbing liquid flow rate falls outside the established range, the owner or operator must initiate the corrective actions included in the facility's SSM plan. A violation of the applicable emissions standards occurs when six or more 3-hour average values of either parameter are outside the established range during any 6-month reporting period.

Owners or operators using regenerative thermal oxidizers (RTO) to comply with the gaseous organic HAP emission standard for chemical recovery combustion units at stand-alone semichemical mills must establish a minimum RTO operating temperature that indicates at least a 90 percent reduction in HAP emissions (as measured by THC reported as carbon), or outlet HAP emissions (as measured by THC reported as carbon) of less than or equal to 1.49 kg/Mg (2.97 lb/ton) of BLS fired. To ensure ongoing compliance, the owner or operator must install, calibrate, maintain, and operate a monitoring system to measure and record the RTO operating temperature for each successive 15-minute period. If any 1-hour average of the operating temperature falls below the minimum established temperature, the owner or operator must initiate the corrective actions contained in the facility's SSM plan. A violation of the applicable emissions standards occurs when any 3-hour average of the RTO operating temperature falls below the minimum established temperature.

The owner or operator of an affected source or process unit that uses a wet scrubber, ESP, or RTO to comply with today's standards may monitor alternative operating parameters subject to prior written approval by the Administrator, as specified in § 63.8(f).

The owner or operator of an affected source or process unit that is complying with today's standards through operational changes or by a control device other than those described above must submit a plan proposing parameters to be monitored, parameter ranges, and monitoring frequencies to be used to determine ongoing compliance, subject to approval by the Administrator. If any 3-hour average value of a monitored parameter falls outside the established range, the owner or operator must initiate the corrective actions included in the facility's SSM plan. A violation of the emissions standards occurs when six or more 3-hour average values of a monitored parameter are outside the established range during any 6-month reporting period.

Owners or operators complying with the gaseous organic HAP standard for new kraft and soda recovery furnaces through the use of an NDCE recovery furnace equipped with a dry ESP system are not required to perform any continuous parameter monitoring for

gaseous organic HAP. However, each owner or operator must maintain onsite a certification statement signed by a responsible mill official that an NDCE recovery furnace equipped with a dry ESP system is in use.

E. Recordkeeping and Reporting Requirements

In addition to all of the recordkeeping and reporting requirements outlined in § 63.10, owners or operators of kraft, soda, sulfite, and stand-alone semichemical pulp mills must maintain the following records for each affected source or process unit: Records of the BLS firing rates for all recovery furnaces at kraft and soda pulp mills and spent liquor solids firing rates for all chemical recovery combustion units at sulfite and stand-alone semichemical pulp mills, records of the lime production rates (calculated as calcium oxide) for all kraft and soda lime kilns, records of all parameter monitoring data, records and documentation of supporting calculations for compliance determinations, records of the established monitoring parameter ranges for each affected source or process unit, and records of all certifications made in order to determine compliance with the gaseous organic HAP standards. Consistent with requirements in the NESHAP General Provisions in subpart A of 40 CFR part 63 and the operating permit program in 40 CFR part 70, all records must be maintained for a minimum of 5 years.

III. Summary of Changes Since Proposal

A. Applicability

At proposal, we defined affected source as each kraft and soda NDCE recovery furnace and associated SDT, each kraft and soda DCE recovery furnace and associated SDT, each kraft and soda lime kiln, each sulfite combustion unit, and each semichemical combustion unit. However, this definition would have prevented mills from averaging emissions of HAP metals or the PM surrogate for HAP metals across their existing recovery furnaces, SDT, and lime kilns (a bubble compliance alternative which we proposed). To allow averaging across these existing emission points, we have revised the definition of affected source to include existing NDCE recovery furnaces, DCE recovery furnaces, SDT, and lime kilns as process units within a chemical recovery system affected source.

As in the proposed rule, new sources are not eligible for the bubble compliance alternative under this rulemaking, given that state-of-the-art equipment design and add-on controls can be integrated and installed most cost-effectively during construction of new sources. New sources can be designed and constructed with maximized compliance in mind. Also, sources classified as new by virtue of being reconstructed can be reconstructed with maximized compliance in mind. Therefore, we have not revised the definition of affected source for new sources. Each new kraft and soda recovery furnace and associated SDT, and each new kraft and soda lime kiln will continue to be defined as an affected source by itself.

B. Definitions

Because of the changes in definition of affected source in the final rule, we have added definitions for ''chemical recovery system'' and ''process unit'' to § 63.861 in the final rule. Chemical recovery system is defined as all existing DCE and NDCE recovery furnaces, SDT, and lime kilns at a kraft or soda pulp mill. Process unit is defined as an existing DCE or NDCE recovery furnace, SDT, or lime kiln in a chemical recovery system at a kraft or soda pulp mill.

To take into account the development of gasification technology as a replacement for conventional recovery furnace systems, we have added a definition for ''black liquor gasification'' to § 63.861 in the final rule. Black liquor gasification is defined as the thermochemical conversion of black liquor into a combustible gaseous product. For the same reason, we also have revised the definitions for ''recovery furnace,'' ''kraft recovery furnace,'' ''semichemical combustion unit,'' and ''soda recovery furnace'' to include black liquor gasification.

In order to eliminate any confusion with the term ''PM,'' we have replaced the term ''PM HAP'' with ''HAP metals'' throughout the final rule. Therefore, the definition for ''HAP metals'' in § 63.861 of today's rule replaces the definition for ''PM HAP.''

C. Standards

In the proposed rule, we included a standard whereby existing kraft and soda lime kilns must ensure that the concentration of PM in the exhaust gases discharged to the atmosphere is less than or equal to 0.15 g/dscm (0.067 gr/dscf) corrected to 10 percent oxygen. We have decided not to promulgate this PM standard because this proposed standard does not reflect the performance of MACT (*i.e.,* the surrogate PM emissions levels achievable by the best-performing lime kilns, which are controlled by ESP). We have revised the PM standard for existing lime kilns in the final rule to be equivalent to the revised HAP metals MACT floor PM level of 0.15 g/dscm (0.064 gr/dscf) corrected to 10 percent oxygen. (There is also a bubble compliance alternative, whereby, as explained earlier, PM emissions from the recovery furnace, SDT, and lime kiln could in essence be summed so long as the summed emissions are no greater than the sum of the otherwise-applicable MACT emission standard for each unit.)

The proposed rule included a compliance option whereby existing kraft and soda recovery furnaces, SDT, and lime kilns could meet a standard for individual HAP metals, rather than for the PM surrogate for HAP metals (63 FR 18758, 18765, and 18769, April 15, 1998; proposed § 63.862). We have decided not to promulgate this alternative HAP metals standard because this proposed standard does not reflect the performance of MACT (*i.e.,* the HAP metals emissions levels achievable by the best-performing sources) and also because it would have other significant technical deficiencies. (See docket No. A–94–67.) (Necessarily, we also are not promulgating the bubble compliance alternative associated with this HAP metals option.)

D. Performance Test Requirements

To correct an oversight in the proposed rule, we have added an oxygen correction equation for volumetric gas flow rates to the final rule under new § 63.865(b)(4). The equation will be used to correct gas streams to the same oxygen content as the associated emission limit (*e.g.,* 8 percent oxygen for recovery furnaces, 10 percent oxygen for lime kilns). For the same reason, we also revised the PM emission limit equations for the bubble compliance alternative in paragraphs (a)(1), (2)(i), and (2)(iii) of § 63.865 for the final rule to reflect the oxygen correction for volumetric gas flow rates. Because SDT exhaust conditions already approximate ambient air conditions, we have removed the oxygen correction in the PM emission limit equation for SDT in § 63.865(a)(2)(ii) from the final rule. We have also clarified the oxygen correction equation in § 63.865(b)(2), which is used to correct PM concentrations, for the final rule.

E. Monitoring Requirements

In order to account for any recovery furnaces that might use a wet scrubber, we have revised the wet scrubber monitoring provisions in § 63.864(a)(2), (c)(1)(ii), and (c)(2)(ii) for the final rule

to include kraft or soda recovery furnaces. We have clarified the opacity corrective action provisions in § 63.864(c)(1)(i) of the final rule to state that affected sources or process units are required to implement corrective action when the average of ten consecutive 6-minute averages results in a measurement greater than 20 percent opacity. We also have revised the opacity violation provisions in § 63.864(c)(2)(i) and (ii) to clarify in the final rule that a violation of the applicable emission standard would occur when the opacity is greater than the specified level for 6 percent or more of the operating time in any quarterly period.

F. Reporting Requirements

We have revised the excess emissions reporting provisions of § 63.867(c) for the final rule to clarify that reporting excess emissions below the violation thresholds of § 63.864(c) does not constitute a violation of the applicable standard.

G. Delegation of Authority

We have revised the delegation of authority provisions in § 63.868 for the final rule to include the following authorities which will be retained by the Administrator and not transferred to a State: Approval of alternatives to standards in § 63.862 under § 63.6(g), approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90, approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90, and approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90. These authorities are retained because any requests by sources for alternative standards must be considered by EPA and acted upon in a notice and comment rulemaking. We cannot delegate authorities that may alter the stringency of the standard, that require Federal oversight for national consistency, or that may require Federal rulemaking. Requests to revise standards for the source category (or portions thereof) must be addressed through the subpart E rulemaking process for alternative standards.

IV. Summary of Responses to Major Comments

This section summarizes the major comments we received on the proposed rule and our responses to those comments. A more comprehensive summary of comments and responses can be found in docket No. A–94–67.

Comment: Commenters questioned the proposed MACT floor of ''no control'' for gaseous organic HAP emissions from existing NDCE recovery furnaces and stated that the performance of dry ESP systems should be the basis of the MACT floor for gaseous organic HAP emissions from existing NDCE recovery furnaces. One commenter provided a list of 13 NDCE recovery furnaces equipped with dry ESP systems, which is a sufficient number of recovery furnaces to define the MACT floor. A commenter also noted that wet to dry ESP system conversion is a cost-effective control option.

Response: We are not basing the MACT floor for existing NDCE recovery furnaces on this technology for the following reasons. We have concluded that existing NDCE recovery furnaces do not represent the ''best'' or ''maximum achievable'' technology. It is possible that black liquor gasification is a means of reducing gaseous organic HAP emissions from chemical recovery operations that provides environmental benefits (notably energy savings) which are superior to those provided by NDCE recovery furnaces (whether equipped with wet or dry ESP systems). Compared with NDCE recovery furnace performance, development of the proposed gasification technology promises reduced consumption of fossil fuel, increased efficiency in energy conversion and chemical recovery, elimination of the smelt-water explosion hazard (inherent to the operation of conventional recovery furnaces), reduced maintenance costs, and significantly lower environmental emissions of criteria pollutants (PM, SO_2, NO_X, VOC precursors to ozone, and CO) and greenhouse gases (63 FR 26607, May 8, 2000, Proposed Final Project Agreement for Georgia-Pacific XL Project).

Because gasification systems do not require the use of an ESP, the costs that would be incurred by converting a wet ESP system to a dry ESP system are not recoverable if the NDCE recovery furnace is replaced with a gasification system. Therefore, if we require existing NDCE recovery furnaces with wet ESP systems by virtue of a MACT floor to retrofit to dry ESP systems, we would tend to eliminate the incentive for the industry to replace the NDCE recovery furnaces with gasification systems before the end of the useful life of the dry ESP systems. Thus, it is our view that a MACT floor requirement which results in retrofitting to dry ESP systems would create disincentives that would discourage possible conversion to the even more promising gasification technology, so that such a requirement need not be considered to be ''MACT.'' See *Portland Cement Ass'n* v. *EPA,* 486 F.2d 375, 385 (D.C. Cir. 1973); *Essex Chemical Corp.* v. *Ruckelshaus,* 486 F.2d 427, 439 (D.C. Cir. 1973) (in establishing technology-based standards, EPA must consider counter-productive effects of a control technology in determining whether it is a ''best'' technology).

In a related matter, there is a further question as to whether existing DCE recovery furnaces should be subject to MACT floor or beyond-the-floor standards for gaseous organic HAP. We considered whether to require conversion of DCE recovery furnace systems to NDCE recovery furnaces with dry ESP systems as a beyond-the-floor standard. The capital costs of this retrofitting would be in the billions of dollars and would not be justified by the amount of HAP removed. Moreover, we do not view NDCE recovery furnaces with dry ESP systems as MACT for existing DCE recovery furnaces because it would create the same disincentives for conversion to gasification just discussed, including potentially foregoing significant energy-saving opportunities. (See CAA section 112(d)(2), which includes energy impacts as a relevant consideration in beyond-the-floor determinations.) Consequently, we are not adopting a beyond-the-floor standard for DCE recovery furnaces.

It would also be highly anomalous to adopt a MACT floor based on the performance of NDCE recovery furnaces with dry ESP systems, for the following reason. As explained above, we are not adopting a beyond-the-floor standard for existing DCE recovery furnaces, and the MACT floor for existing DCE recovery furnaces is ''no control.'' This would yield the result that a MACT floor determination would apply only to NDCE recovery furnaces—the better-performing furnace type. Hence the anomaly—the only type of existing recovery furnace to incur regulatory costs would be the better-performing NDCE recovery furnaces. Although, as also explained above, we currently do not view gaseous organic HAP control of existing NDCE or DCE recovery furnaces as MACT in order to preserve incentives for conversion of the furnaces to gasification systems, in determining that there should be no further control of these units under CAA section 112(d) at the present time, we are also swayed by avoiding the anomaly of controlling only NDCE recovery furnaces.

We also note that the new source standard for recovery furnaces reflects the performance of NDCE recovery furnaces equipped with dry ESP systems. We could not base the standard

on the performance of gasification at this time because accurate data documenting performance on pulp and paper combustion sources do not yet exist. Obtaining accurate performance data on gasification systems is one of the purposes of the proposed Final Project Agreement for the Georgia-Pacific XL Project (63 FR 26607, May 8, 2000). In any case, we also do not believe that this standard poses the same potential to discourage use of gasification. First, we expect that sources using gasification technology will be able to meet the standard. Second, we are prepared to exercise flexibility as to compliance dates for any new source basing its compliance on use of gasification technology, consistent with the statute (63 FR 26607, May 8, 2000).

Comment: Several commenters objected to the proposed beyond-the-floor MACT standard for gaseous organic HAP emissions from existing semichemical combustion units that are not fluidized-bed reactors. Commenters also claimed that the proposed emission limit is not supportable for some types of chemical recovery combustion units, such as recovery furnaces.

Response: We disagree with the commenters. Based on available emissions data and our RTO cost estimates, RTO represent a cost-effective control strategy for meeting the proposed gaseous organic HAP emissions limits. (See docket No. A–94–67.)

Comment: A commenter provided data for kraft and soda recovery furnaces, SDT, and lime kilns which the commenter believes show a lack of correlation between outlet emissions of PM and outlet emissions of HAP metals. According to the commenter, variations in raw materials and processes have a greater effect on uncontrolled HAP metals emissions, and, therefore, controlled emissions, than the type of control device used. According to the commenter, there is not a straight correlation between reducing PM and reducing HAP metals.

Response: Regarding the commenter's suggestion that there is a lack of statistical correlation between HAP metals emissions and PM emissions, we agree that the ratio of the mass of HAP metals to the total mass of PM emitted varies from source to source. Additionally, the amount of HAP metals in PM at each source varies. We do not agree with the commenters' assertion that PM is an inappropriate surrogate for particulate HAP metals emissions. Hazardous air pollutant metals are a component of PM, and control devices designed for PM removal also remove particulate HAP metals at a similar rate. Therefore, emission control efficiencies, determined by measuring emissions at both the inlet and the outlet of the control device, are similar for both PM and particulate HAP metals. Outlet PM emissions are a good indicator of the performance of the control device, and there is no doubt that PM is an appropriate surrogate for particulate HAP metals.

Also, after reviewing available HAP metals emissions data, we conclude that there are insufficient data to establish numerical HAP metals emissions limits that reflect MACT. Consequently, we have chosen not to promulgate the proposed numerical HAP metals emissions limits and the associated HAP metals bubble compliance alternative.

Comment: A number of commenters objected to the proposed emissions limits for PM (as a surrogate for HAP metals) for existing sources. Commenters suggested that the PM emissions limits be recalculated using additional PM emissions data because they believe that many units operate well below the emissions levels selected for the proposed MACT floors. Commenters also took issue with our using the PM standards in the NSPS for Kraft Pulp Mills as the basis for the HAP metals MACT floors for existing kraft and soda combustion sources and noted that we failed to account for the fact that the technology reflected in the NSPS for Kraft Pulp Mills is an old technology and that numerous sources are achieving emissions reductions well beyond the NSPS.

Response: We disagree with the commenters regarding their objections to the proposed PM emissions limits for existing kraft and soda recovery furnaces and SDT. We believe that the MACT floor PM emissions limits for recovery furnaces and SDT are justified due to the variability in PM emissions from these sources and the uncertainties about why the same types of control equipment perform at different levels under comparable circumstances. Therefore, we believe that the standards in the final rule reasonably reflect the level of performance achievable in practice by the average of the best-performing 12 percent of sources.

For existing lime kilns, the control devices that we thought were representative of the HAP metals MACT floor were ESP, high-efficiency venturi scrubbers, and ESP and scrubbers in combination. However, lime kilns equipped with ESP consistently show lower PM emissions than lime kilns equipped with scrubbers, and it is apparent that there are a sufficient number of lime kilns equipped with ESP to be representative of the HAP metals MACT floor. (That is, sufficient numbers of sources are equipped with ESP such that the level of performance of a lime kiln equipped with an ESP represents the level of performance achievable by the average of the best-performing 12 percent of existing kraft and soda lime kilns.) Therefore, today's action corrects that error and recalculates the PM emission limitation achievable by the technology that represents the MACT floor for existing lime kilns based on the performance of a lime kiln equipped with a properly designed and operated ESP.

Based on available data from monthly and annual compliance tests, lime kilns equipped with ESP can achieve PM emissions as low as 0.0023 g/dscm (0.001 gr/dscf) and as high as 0.15 g/dscm (0.064 gr/dscf) at 10 percent oxygen. To account for this variability in PM emissions from lime kiln ESP, we are setting the HAP metals MACT floor for existing lime kilns at 0.15 g/dscm (0.064 gr/dscf) at 10 percent oxygen, which is slightly less than the proposed HAP metals MACT floor of 0.15 g/dscm (0.067 gr/dscf) at 10 percent oxygen.

The best-performing lime kiln ESP (which represents MACT for HAP metals for new lime kilns) is more than twice the size (*i.e.,* has twice the specific collecting area) of typical lime kiln ESP, and its performance remains the basis for the new source MACT standard. Therefore, today's action does not differ from the proposed standard for HAP metals for new lime kilns.

V. Summary of Impacts

A. Air Quality Impacts

At the current level of control, emissions of HAP (HAP metals and gaseous organic HAP) are approximately 20,400 Mg/yr (22,500 tpy), and emissions of other pollutants (PM, VOC, CO, SO_2, NO_X) are approximately 507,100 Mg/yr (559,000 tpy). Implementation of today's final rule is expected to reduce emissions of HAP, PM, VOC, CO, and SO_2, and slightly increase emissions of NO_X. The EPA estimates that emissions of HAP will be reduced by approximately 2,500 Mg/yr (2,700 tpy) and emissions of other pollutants by approximately 107,900 Mg/yr (118,900 tpy).

B. Cost Impacts

The estimated capital cost of control for today's final rule is $241 million (1997$) and includes the cost to purchase and install both the control equipment and monitoring equipment. Most (89 percent) of the capital cost can be attributed to the PM controls for

kraft, soda, and sulfite combustion units.

The estimated annual cost of the rule is $32.2 million/yr (1997$) and accounts for the year-to-year operating expenses associated with the control equipment and the monitoring equipment, in addition to the capital recovery expense associated with the equipment purchases. Most (79 percent) of the annual cost can be attributed to the PM controls for kraft, soda, and sulfite combustion units.

The total average costs for annual recordkeeping and reporting activities required by the final rule are estimated to be $962,600/yr (1997$) through the third year after the effective date and $5.4 million/yr (1997$) through the third year after the compliance date.

These capital and annualized cost estimates are intended to represent the maximum expected costs of the NESHAP and do not account for the potential cost savings achieved by mills that will successfully use the bubble compliance alternative.

C. Economic Impacts

This section presents a summary of EPA's evaluation of the economic impacts of today's final rule. A more detailed analysis of the economic impacts of this rule, as well as the recently promulgated NESHAP for noncombustion pulp and paper sources (*i.e.,* MACT I and MACT III) and promulgated effluent limitation guidelines, is discussed in the Economic Analysis for the 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—Phase 1 (DCN 14649; hereafter, the Economic Analysis, or EA). The EPA estimates that the pulp and paper industry will incur total capital costs of $240 million (1997$) under the final rule. Overall, EPA projects total annualized compliance expenditures of $30 million (1997$).

Price increases of less than 0.5 percent are anticipated for bleached papergrade kraft and soda, dissolving kraft, dissolving sulfite, papergrade sulfite, and semichemical pulps and products. A price increase of 1.4 percent is expected for unbleached kraft pulps. Based on our economic modeling of the impacts of such changes, we do not anticipate any facility closures nor firm failures as a result of compliance with this final rule. In addition, we expect that production decreases, employment changes, and impacts on international trade will be minimal.

D. Benefits Analysis

Implementation of today's final rule is expected to reduce emissions of HAP, PM, VOC, CO, and SO_2, while it is expected to slightly increase emissions of NO_X. Such pollutants can potentially cause adverse health effects and can have welfare effects, such as impaired visibility and reduced crop yields. In the benefits analysis, we have not conducted detailed air quality modeling to evaluate the magnitude and extent of the potential impacts from individual pulp and paper facilities. Nevertheless, to the extent that emissions from these facilities cause adverse effects, this final rule would mitigate such impacts.

1. Qualitative Description of Pollutant Effects

This final rule is designed to reduce the emissions of HAP, as defined in section 112 of the CAA. Several of these HAP are classified as known, probable, or possible human carcinogens. They have also been shown to cause other adverse health effects, such as damage to the eye, central nervous system, liver, kidney, and respiratory system depending upon the exposures to these emissions. The types of studies in which these various effects have been reported include: (1) Epidemiological studies of health effects occurring in human populations (*e.g.*, the general population, or workers exposed in the workplace), (2) case reports that document human exposure incidents (*e.g.*, accidental releases or poisonings), (3) carefully controlled laboratory exposures of volunteer human subjects, and (4) laboratory studies on animals.

Emissions of VOC and NO_X interact in the presence of sunlight to create ground-level ozone. Recent scientific evidence shows an association between elevated ozone concentrations and increases in hospital admissions for a variety of respiratory illnesses and indicates that ground-level ozone not only affects people with impaired respiratory systems (such as asthmatics), but healthy adults and children as well. Adverse welfare effects of ozone exposure include damage to crops, tree seedlings, ornamentals (shrubs, grass, *etc.*), and forested ecosystems.

The reactions between VOC and NO_X to form ozone depend on the balance in concentrations of each pollutant found in the ambient air. For example, when the concentration of NO_X is high relative to the concentration of VOC, VOC reductions are effective in limiting ozone formation, while NO_X reductions in that situation are ineffective. This rule is expected to increase NO_X emissions slightly, but also decrease VOC emissions. The increase in NO_X under this rule is not expected to cause significant adverse health or welfare impacts because the magnitude of the NO_X increase (less than 500 Mg/yr) is very small relative to the total NO_X inventory.

The VOC emission reductions from this rule occur primarily in rural attainment areas. These areas tend to be NO_X limited; therefore, VOC reductions are not expected to affect ozone concentrations. The low-end estimate of VOC benefits relates to emissions reductions (3,400 Mg/yr) occurring in ozone nonattainment areas. Since ozone nonattainment areas are typically urban areas that are VOC limited, these emissions reductions are likely to be effective in limiting ozone formation. The high-end of the range of VOC benefits includes all VOC emissions reductions (31,000 Mg/yr) expected to occur for this rule. This estimate is included to account for the uncertainty as to whether specific rural areas are NO_X limited.

Exposure to PM has been associated with the following adverse human health effects: Premature mortality, aggravation of respiratory and cardiovascular disease, changes in lung function and increased respiratory symptoms, alterations in lung tissue and structure, and altered respiratory tract defense mechanisms. In general, exposed populations at greater risk from these effects are the following: individuals with respiratory disease and cardiovascular disease, individuals with infectious disease, elderly individuals, asthmatic individuals, and children. Reduced welfare is associated with elevated concentrations of fine particles, which reduce visibility, damage materials, and cause soiling. The reductions in PM emissions under this rule (approximately 21,000 Mg/yr) are intended to decrease the adverse effects of PM, to the extent that populations or scenic destinations are located within pollutant transport distance of pulp and paper facilities.

Carbon monoxide is a colorless, odorless gas that is toxic to mammals. When inhaled, it combines with hemoglobin, which reduces the oxygen-carrying capacity of blood and results in less oxygen being transported to vital organs of the body. This can have detrimental effects on the cardiovascular and central nervous systems. There are numerous studies that support the association between ambient CO levels and adverse health effects which have been cited in the Air Quality Criteria Document for Carbon Monoxide (EPA Document No. 600/P–99/001F, June 2000). The reduction of

CO emissions under this rule is intended to diminish these potential effects.

Sulfur dioxide oxidizes in water to form both sulfurous and sulfuric acids. When SO_2 dissolves in the atmosphere in rain, fog, or snow, the acidity of the deposition can corrode various materials and cause damage to both aquatic and terrestrial ecosystems. Sulfur dioxide can also transform into $PM_{2.5}$, (*i.e.*, particulate matter with an aerodynamic diameter less than or equal to 2.5 micrometers). Emissions of SO_2 are reduced slightly (20 Mg/yr) under this rule.

2. Monetized Air Quality Benefits

We used a benefit transfer method to value a subset of the emissions reductions for the MACT II rule. Monetized benefit values are estimated for only VOC, SO_2, and PM emissions reductions expected to result from this rule. This method relies on a benefits analysis conducted for the Ozone and PM national ambient air quality standards (NAAQS). The benefits analysis conducted for the NAAQS involves the same pollutants that are impacted by this pulp and paper rulemaking, and we assume the values from the NAAQS analysis are applicable to this final rule. The NAAQS analysis valued the national-level benefits achieved from a single, ''representative'' year under a new set of standards. The benefits (in dollars) per ton of reduction of each pollutant were then applied to the projected reductions of the same pollutants under this final rule.

We assume that the relationship of emission changes with the health and welfare effects associated with the NAAQS-estimated ozone and PM concentrations correspond to the projected changes in emissions from pulp and paper mills. No air quality modeling was conducted to evaluate potential changes in human exposure under the rule, so the actual magnitude and timing of human health benefits are unknown.

In some cases, we did consider the location of mills when applying the NAAQS benefits per ton figures. For VOC monetized benefits, a low-end estimate included emissions only in ozone nonattainment areas, which was compared to a high-end estimate that used all VOC emissions. For SO_2, the benefit transfer values differed between mills located in the eastern and western portions of the United States. Some benefit categories were not monetized at all, due to a lack of sufficient data. Nevertheless, the largest monetized benefits are derived from PM reductions, for which we used nationwide emission estimates and assume that the distributions of exposed populations from the ozone and PM studies are similar to those exposed to pulp and paper mill emissions.

The EPA estimates that the rule would reduce HAP emissions by approximately 2,500 Mg/yr; VOC emissions by approximately 31,000 Mg/yr (3,400 Mg/yr in ozone nonattainment areas); CO emissions by 56,000 Mg/yr; PM emissions by approximately 21,000 Mg/yr; and SO_2 emissions by 20 Mg/yr; and increase NO_X emissions by approximately 500 Mg/yr. Based upon the previously discussed emissions reductions, we estimate that the monetary benefits of the rule range between $280 million and $370 million (1997$) for a representative year.

This rule is expected to result in reductions in PM emissions for particles of varying sizes. We expect most PM reductions to be in the size range of PM_{10} and below. This assumption is based upon the fact that existing chemical recovery process sources typically have PM controls in place which have removed most of the large particles associated with uncontrolled emissions. However, it is likely that a small fraction of emissions reductions will be for particles above PM_{10}. Reductions in emissions of particle sizes greater than 10 micrometers may not result in the same benefits as particles of sizes less than 10 micrometers. As such, PM-related benefits reported for this rule represent an upper-bound estimate on the applicable PM emissions reductions.

These figures suggest that the benefits of today's final rule may be significantly greater than the projected costs. Chapter 4 of the EA presents a detailed description of the methodology used to monetize the benefits of the rule.

E. Non-Air Environmental Impacts

The quantity of PM collected will increase when recovery furnace PM control devices are upgraded or replaced to comply with today's final HAP metals standards. However, no increases in solid waste disposal are expected because existing mills have sufficient capacity within the chemical recovery process to recycle the additional PM collected.

If owners or operators choose to replace wet scrubbers with ESP to comply with the HAP metals standard for lime kilns, the generation of wastewater will be reduced. The significance of the reduction in wastewater will depend on whether the scrubber discharge had previously been recycled and reused. If wet scrubbers are replaced by ESP (and there was no prior recycle or reuse of scrubber discharge), EPA estimates that wastewater discharge will decrease nationwide by about 35 billion liters per year (9.3 billion gallons per year) following implementation of the rule.

F. Energy Impacts

The overall energy demand (*i.e.*, electricity plus natural gas) is expected to decrease by about 13,700 megawatt-hours per year (MWh/yr) nationwide under today's final rule. Electricity requirements are expected to decrease by about 17,800 MWh/yr under the final rule. This net decrease in electricity requirements includes an expected increase of about 39,600 MWh/yr when PM control devices on kraft and soda recovery furnaces and SDT and sulfite combustion units are upgraded or replaced, an expected increase of 18,400 MWh/yr when gaseous organic HAP controls (*i.e.*, RTO) are added to semichemical combustion units, and an expected decrease of about 75,900 MWh/yr if wet scrubbers are replaced by ESP to provide increased control of PM emissions from kraft and soda lime kilns. Natural gas requirements are expected to increase by about 4,100 MWh/yr when gaseous organic HAP controls are added to semichemical combustion units. This estimate is based on an increase of 0.4 million cubic meters per year (14 million cubic feet per year) of natural gas, assuming 1,024 British thermal units per cubic foot of natural gas.

VI. Administrative Requirements

A. Executive Order 12866, Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51736, October 4, 1993), 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.

Pursuant to the terms of Executive Order 12866, OMB has notified EPA that this action is a ''significant regulatory action'' because it will have an annual effect on the economy of $100 million or more. Consequently, this action was submitted to OMB for review under Executive Order 12866. Any written comments from OMB and written EPA responses are available in the docket (see **ADDRESSES** section of this preamble).

B. Executive Order 13132, Federalism

Executive Order 13132, entitled ''Federalism'' (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' is defined in the Executive Order to include regulations that have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.'' Under Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the regulation. The EPA also may not issue a regulation that has federalism implications and that preempts State law unless EPA consults with State and local officials early in the process of developing the regulation.

This final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. Thus, the requirements of section 6 of the Executive Order do not apply to this rule.

C. 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 final rule does not significantly or uniquely affect the communities of Indian tribal governments. No tribal governments own or operate kraft, soda, sulfite, or stand-alone semichemical pulp mills. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

D. 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 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, EPA must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned rule is preferable to other potentially effective and reasonably feasible alternatives that EPA considered.

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 Executive Order has the potential to influence the rule. This final rule is not subject to Executive Order 13045 because it is based on technology performance and not on health or safety risks.

E. Unfunded Mandates Reform Act of 1995

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 by State, local, and tribal governments, in the aggregate, or by 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 intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The EPA has determined that this rule (in conjunction with the MACT I and MACT III rules and the effluent guidelines recently promulgated for the pulp and paper industry) contains 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 1 year. According, EPA has prepared under section 202 of the UMRA a written statement, which is summarized below.

1. Statutory Authority

The statutory authority for this rulemaking is section 112 of the CAA.

Title III of the CAA Amendments was enacted to reduce the amount of nationwide air toxic emissions. Section 112(b) lists the 189 chemicals, compounds, or groups of chemicals deemed by Congress to be HAP. These toxic air pollutants are to be regulated by NESHAP. Hazardous air pollutant emissions from the pulp and paper production source category are being regulated under section 112(d) of the CAA. The NESHAP requires existing and new major sources to control emissions of HAP using MACT.

The pulp and paper production source category includes all mills that produce pulp and/or paper. The NESHAP for the source category are being developed in phases. This final NESHAP, referred to as MACT II, regulates chemical recovery combustion sources at kraft, soda, sulfite, and stand-alone semichemical pulp mills. The final NESHAP for noncombustion sources (*i.e.,* MACT I and MACT III) regulates noncombustion processes at mills that (1) chemically pulp wood fiber (using kraft, sulfite, soda, and semi-chemical methods) (MACT I), and (2) mechanically pulp wood fiber (*e.g.,* groundwood, thermomechanical, pressurized), pulp secondary fibers (deinked and nondeinked), and pulp nonwood (MACT III).

Regarding EPA's compliance with section 205(a), EPA did identify and consider a reasonable number of alternatives. A summary of these alternatives and their costs and environmental impacts is provided in the preamble to the proposed rule (63 FR 18773, April 15, 1998). Additional information on the costs and environmental impacts of the regulatory alternatives is presented in the Revised Nationwide Costs, Environmental Impacts, and Cost Effectiveness of Regulatory Alternatives for Kraft, Soda, Sulfite, and Semichemical Combustion Sources Memo (docket No. A–94–67).

The chosen alternative represents the MACT floor for chemical recovery combustion sources at kraft, soda, and sulfite pulp mills and is the least costly and least burdensome alternative for those sources. The chosen alternative also includes an option more stringent than the MACT floor for chemical recovery combustion sources at stand-alone semichemical pulp mills. However, EPA considers the cost effectiveness of the more stringent option for semichemical chemical recovery combustion sources (less than $2,900/Mg of HAP reduced) acceptable, especially when measured against the environmental benefits of reducing emissions of both HAP and non-HAP. Therefore, EPA concludes that the chosen alternative is the least costly and least burdensome alternative that achieves the objectives of section 112, as called for in section 205(a).

2. Social Costs and Benefits

The regulatory impact analysis prepared for MACT I, including the EPA's assessment of costs and environmental benefits, is detailed in the ''Regulatory Impacts Assessment of Proposed Effluent Guidelines and NESHAP for the Pulp, Paper, and Paperboard Industry,'' (EPA–821/R–93–020). The regulatory impacts assessment document was updated for the final rule for MACT I and III and the proposed rule for MACT II and is referred to as the Economic Analysis Document (docket No. A–94–67).

3. Future and Disproportionate Costs

The EPA does not believe that there will be any disproportionate budgetary effects of the rule on any particular areas of the country, particular governments or types of communities (*e.g.,* urban, rural), or particular industry segments.

4. Effects on the National Economy

The estimated direct cost to the pulp and paper industry of compliance with this rule is approximately $30 million (1997$) annually. Indirect costs of the rule to industries other than the pulp and paper industry, governments, tribes, and other affected entities are expected to be minor. The estimated annual cost of this rule is minimal when compared to the nominal gross domestic product of $8,318.4 billion reported for the Nation in 1997. This rule is expected to have little impact on domestic productivity, economic growth, full employment, creation of productive jobs, and on the international competitiveness of the U.S. goods and services.

5. Consultation With Government Officials

Although this rule does not affect any State, local, or tribal governments, EPA has consulted with State and local air pollution control officials. The EPA also has held numerous meetings on the proposed integrated rules with many of the stakeholders from the pulp and paper industry, including the AF&PA, the National Council of the Paper Industry for Air and Stream Improvement, numerous individual companies, vendors, and other interested parties. The EPA has added materials to the docket to document these meetings.

F. Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 et seq.

The RFA generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's rule on small entities, small entity is defined as: (1) A small business that has fewer than 750 employees for NAICS codes 32211, 32212, and 32213 (pulp, paper, and paperboard mills), (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000, and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's final rule on small entities, it has been determined that this action will not have a significant economic impact on a substantial number of small entities. The EPA has determined that three companies met the definition of small entity at the time of proposal. These three companies own only three of the 136 mills subject to today's final rule. The small business analysis reported in the EA shows that the affected mills have costs as a percentage of sales ratios of less than 1 percent, that these mills are not expected to close, nor are the owning companies expected to encounter financial distress as a result of this rule. An analysis of mergers and acquisitions subsequent to the baseline year of the analysis indicates that these three companies no longer meet the definition of small business.

G. Paperwork Reduction Act

The information collection requirements in this final rule will be submitted for approval to OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* The EPA has prepared an Information Collection Request (ICR) document (ICR No. 1805.01), and a copy may be obtained from Sandy Farmer by mail at Office of Environmental Information, Collection Strategies Division (2822), U.S. EPA, 1200 Pennsylvania Avenue NW, Washington, DC 20460, by electronic 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.

The information requirements in the final rule include mandatory notifications, records, and reports required by the NESHAP General Provisions. These information requirements are needed to confirm the compliance status of major sources, to identify any non-major sources not subject to the standard and any new or reconstructed sources subject to the standards, to confirm that emission control devices are being properly operated and maintained, and to ensure that the standards are being achieved. Based on the recorded and reported information, EPA can decide which facilities, records, or processes should be inspected. These recordkeeping and reporting requirements are specifically authorized under section 114 of the CAA. All information submitted to EPA for which a claim of confidentiality is made is safeguarded according to EPA's policies in 40 CFR part 2, subpart B.

The annual public recordkeeping and reporting burden for this collection of information (averaged over the first 3 years after the effective date of this rule) is estimated to total 21,500 labor hours per year, at a total annual cost of $958,300 (1997$). This estimate includes initial notifications, one-time performance test and report (with repeat tests where needed), one-time purchase and installation of monitoring system, one-time preparation of a startup, shutdown, and malfunction plan with immediate reports for any event when the procedures in the plan were not followed, compliance reports, and recordkeeping. Total capital costs associated with these requirements over the 3-year period of the ICR are estimated at $14,700, with annualized capital costs of $1,600 (1997$). Total operation and maintenance costs associated with these requirements are estimated at $2,700 (1997$).

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.

H. National Technology Transfer and Advancement Act of 1995

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995 (Pub. L. 104–113; 15 U.S.C. 272 note) directs EPA 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) developed or adopted by one or more voluntary consensus bodies. The NTTAA directs EPA to provide Congress, through annual reports to OMB, with explanations when an agency does not use available and applicable voluntary consensus standards.

This rulemaking involves the following technical standards: EPA Methods 1, 2, 3, 3A, 3B, 4, 5, 17, 25A, 29, and 308 (40 CFR part 60, appendix A; 40 CFR part 61, appendix B; 40 CFR part 63, appendix A). Consistent with the NTTAA, EPA conducted searches to identify voluntary consensus standards in addition to these EPA methods. For EPA Methods 3B and 308, no applicable voluntary consensus standards have been found at this time. The search and review results have been documented and are placed in the docket for this rule (Docket No. A–94–67).

The search for emissions testing procedures identified 19 voluntary consensus standards. The EPA determined that 15 of these 19 standards identified for measuring emissions of the HAP or surrogates subject to emissions limits in the rule would not be practical due to lack of equivalency, detail, and/or quality assurance/quality control requirements. Therefore, we did not use these voluntary consensus standards in this rulemaking. Four of the 19 consensus standards identified are under development or under EPA review. Therefore, we did not use these voluntary consensus standards in this rulemaking.

Section 63.865 of the rule lists the EPA test methods included in the rule. Most of these methods have been used by States and industry for more than 10 years. Nevertheless, under § 63.7(e)(2)(ii) and (f), the rule also allows any State or source to apply to EPA for permission to use an alternative method in place of any of the EPA test methods listed in § 63.865.

I. 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. 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 a ''major rule'' as defined by 5 U.S.C. 804(2). This rule will be effective March 13, 2001.

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedure, Air pollution control, Hazardous substances, Intergovernmental relations, Pulp and paper mills, Reporting and recordkeeping requirements.

Dated: December 15, 2000.

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. Part 63 is amended by adding subpart MM to read as follows:

Subpart MM—National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills

Sec.

63.860 Applicability and designation of affected source.
63.861 Definitions.
63.862 Standards.
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63.866 Recordkeeping requirements.
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63.868 Delegation of authority.
Table 1 to Subpart MM—General Provisions Applicability to Subpart MM

§ 63.860 Applicability and designation of affected source.

(a) The requirements of this subpart apply to the owner or operator of each kraft, soda, sulfite, or stand-alone semichemical pulp mill that is a major source of hazardous air pollutants (HAP) emissions as defined in § 63.2.

(b) *Affected sources.* The requirements of this subpart apply to each new or existing affected source listed in paragraphs (b)(1) through (6) of this section:

(1) Each existing chemical recovery system (as defined in § 63.861) located at a kraft or soda pulp mill.

(2) Each new nondirect contact evaporator (NDCE) recovery furnace and associated smelt dissolving tank(s) located at a kraft or soda pulp mill.

(3) Each new direct contact evaporator (DCE) recovery furnace system (as defined in § 63.861) and associated smelt dissolving tank(s) located at a kraft or soda pulp mill.

(4) Each new lime kiln located at a kraft or soda pulp mill.

(5) Each new or existing sulfite combustion unit located at a sulfite pulp mill.

(6) Each new or existing semichemical combustion unit located at a stand-alone semichemical pulp mill.

(c) The requirements of the General Provisions in subpart A of this part that apply to the owner or operator subject to the requirements of this subpart are identified in Table 1 to this subpart.

§ 63.861 Definitions.

All terms used in this subpart are defined in the Clean Air Act, in subpart A of this part, or in this section. For the purposes of this subpart, if the same term is defined in subpart A or any other subpart of this part and in this section, it must have the meaning given in this section.

Black liquor means spent cooking liquor that has been separated from the pulp produced by the kraft, soda, or semichemical pulping process.

Black liquor gasification means the thermochemical conversion of black liquor into a combustible gaseous product.

Black liquor oxidation (BLO) system means the vessels used to oxidize the black liquor, with air or oxygen, and the associated storage tank(s).

Black liquor solids (BLS) means the dry weight of the solids in the black liquor that enters the recovery furnace or semichemical combustion unit.

Black liquor solids firing rate means the rate at which black liquor solids are fed to the recovery furnace or the semichemical combustion unit.

Chemical recovery combustion source means any source in the chemical recovery area of a kraft, soda, sulfite or stand-alone semichemical pulp mill that is an NDCE recovery furnace, a DCE recovery furnace system, a smelt dissolving tank, a lime kiln, a sulfite combustion unit, or a semichemical combustion unit.

Chemical recovery system means all existing DCE and NDCE recovery furnaces, smelt dissolving tanks, and lime kilns at a kraft or soda pulp mill. Each existing recovery furnace, smelt dissolving tank, or lime kiln is considered a process unit within a chemical recovery system.

Direct contact evaporator (DCE) recovery furnace means a kraft or soda recovery furnace equipped with a direct contact evaporator that concentrates strong black liquor by direct contact between the hot recovery furnace exhaust gases and the strong black liquor.

Direct contact evaporator (DCE) recovery furnace system means a direct contact evaporator recovery furnace and any black liquor oxidation system, if present, at the pulp mill.

Dry electrostatic precipitator (ESP) system means an electrostatic precipitator with a dry bottom (*i.e.,* no black liquor, water, or other fluid is used in the ESP bottom) and a dry particulate matter return system (*i.e.,* no black liquor, water, or other fluid is used to transport the collected PM to the mix tank).

Hazardous air pollutants (HAP) metals means the sum of all emissions of antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, and selenium as measured by EPA Method 29 (40 CFR part 60, appendix A) and with all nondetect data treated as one-half of the method detection limit.

Kraft pulp mill means any stationary source that produces pulp from wood by cooking (digesting) wood chips in a solution of sodium hydroxide and sodium sulfide. The recovery process used to regenerate cooking chemicals is also considered part of the kraft pulp mill.

Kraft recovery furnace means a recovery furnace that is used to burn black liquor produced by the kraft pulping process, as well as any recovery furnace that burns black liquor produced from both the kraft and semichemical pulping processes, and includes the direct contact evaporator, if applicable. Includes black liquor gasification.

Lime kiln means the combustion unit (*e.g.,* rotary lime kiln or fluidized-bed calciner) used at a kraft or soda pulp mill to calcine lime mud, which consists primarily of calcium carbonate, into quicklime, which is calcium oxide (CaO).

Lime production rate means the rate at which dry lime, measured as CaO, is produced in the lime kiln.

Method detection limit means the minimum concentration of an analyte that can be determined with 99 percent confidence that the true value is greater than zero.

Modification means, for the purposes of § 63.862(a)(1)(ii)(E)(*1*), any physical change (excluding any routine part replacement or maintenance) or operational change (excluding any operational change that occurs during a start-up, shutdown, or malfunction) that is made to the air pollution control device that could result in an increase in PM emissions.

Nondetect data means, for the purposes of this subpart, any value that is below the method detection limit.

Nondirect contact evaporator (NDCE) recovery furnace means a kraft or soda recovery furnace that burns black liquor that has been concentrated by indirect contact with steam.

Particulate matter (PM) means total particulate matter as measured by EPA Method 5, EPA Method 17 (§ 63.865(b)(1)), or EPA Method 29 (40 CFR part 60, appendix A).

Process unit means an existing DCE or NDCE recovery furnace, smelt dissolving tank, or lime kiln in a chemical recovery system at a kraft or soda mill.

Recovery furnace means an enclosed combustion device where concentrated black liquor produced by the kraft or soda pulping process is burned to recover pulping chemicals and produce steam. Includes black liquor gasification.

Regenerative thermal oxidizer (RTO) means a thermal oxidizer that transfers heat from the exhaust gas stream to the inlet gas stream by passing the exhaust stream through a bed of ceramic stoneware or other heat-absorbing medium before releasing it to the atmosphere, then reversing the gas flow so the inlet gas stream passes through the heated bed, raising the temperature of the inlet stream close to or at its ignition temperature.

Semichemical combustion unit means any equipment used to combust or pyrolyze black liquor at stand-alone semichemical pulp mills for the purpose

of chemical recovery. Includes black liquor gasification.

Similar process units means all existing DCE and NDCE recovery furnaces, smelt dissolving tanks, or lime kilns at a kraft or soda pulp mill.

Smelt dissolving tanks (SDT) means vessels used for dissolving the smelt collected from a kraft or soda recovery furnace.

Soda pulp mill means any stationary source that produces pulp from wood by cooking (digesting) wood chips in a sodium hydroxide solution. The recovery process used to regenerate cooking chemicals is also considered part of the soda pulp mill.

Soda recovery furnace means a recovery furnace used to burn black liquor produced by the soda pulping process and includes the direct contact evaporator, if applicable. Includes black liquor gasification.

Stand-alone semichemical pulp mill means any stationary source that produces pulp from wood by partially digesting wood chips in a chemical solution followed by mechanical defibrating (grinding), and has an onsite chemical recovery process that is not integrated with a kraft pulp mill.

Sulfite combustion unit means a combustion device, such as a recovery furnace or fluidized-bed reactor, where spent liquor from the sulfite pulping process (i.e., red liquor) is burned to recover pulping chemicals.

Sulfite pulp mill means any stationary source that produces pulp from wood by cooking (digesting) wood chips in a solution of sulfurous acid and bisulfite ions. The recovery process used to regenerate cooking chemicals is also considered part of the sulfite pulp mill.

Total hydrocarbons (THC) means the sum of organic compounds measured as carbon using EPA Method 25A (40 CFR part 60, appendix A).

§ 63.862 Standards.

(a) *Standards for HAP metals: existing sources.* (1) Each owner or operator of an existing kraft or soda pulp mill must comply with the requirements of either paragraph (a)(1)(i) or (ii) of this section.

(i) Each owner or operator of a kraft or soda pulp mill must comply with the PM emissions limits in paragraphs (a)(1)(i)(A) through (C) of this section.

(A) The owner or operator of each existing kraft or soda recovery furnace must ensure that the concentration of PM in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 gram per dry standard cubic meter (g/dscm) (0.044 grain per dry standard cubic foot (gr/dscf)) corrected to 8 percent oxygen.

(B) The owner or operator of each existing kraft or soda smelt dissolving tank must ensure that the concentration of PM in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 kg/Mg (0.20 lb/ton) of black liquor solids fired.

(C) The owner or operator of each existing kraft or soda lime kiln must ensure that the concentration of PM in the exhaust gases discharged to the atmosphere is less than or equal to 0.15 g/dscm (0.064 gr/dscf) corrected to 10 percent oxygen.

(ii) As an alternative to meeting the requirements of § 63.862(a)(1)(i), each owner or operator of a kraft or soda pulp mill may establish PM emissions limits for each existing kraft or soda recovery furnace, smelt dissolving tank, and lime kiln that operates 6,300 hours per year or more by:

(A) Establishing an overall PM emission limit for each existing process unit in the chemical recovery system at the kraft or soda pulp mill using the methods in § 63.865(a)(1) and (2).

(B) The emissions limits for each kraft recovery furnace, smelt dissolving tank, and lime kiln that are used to establish the overall PM limit in paragraph (a)(1)(ii)(A) of this section must not be less stringent than the emissions limitations required by § 60.282 of part 60 of this chapter for any kraft recovery furnace, smelt dissolving tank, or lime kiln that is subject to the requirements of § 60.282.

(C) Each owner or operator of an existing kraft or soda recovery furnace, smelt dissolving tank, or lime kiln must ensure that the PM emissions discharged to the atmosphere from each of these sources are less than or equal to the applicable PM emissions limits, established using the methods in § 63.865(a)(1), that are used to establish the overall PM emissions limits in paragraph (a)(1)(ii)(A) of this section.

(D) Each owner or operator of an existing kraft or soda recovery furnace, smelt dissolving tank, or lime kiln must reestablish the emissions limits determined in paragraph (a)(1)(ii)(A) of this section if either of the actions in paragraphs (a)(1)(ii)(D)(*1*) and (*2*) of this section are taken:

(*1*) The air pollution control system for any existing kraft or soda recovery furnace, smelt dissolving tank, or lime kiln for which an emission limit was established in paragraph (a)(1)(ii)(A) of this section is modified (as defined in § 63.861) or replaced; or

(*2*) Any kraft or soda recovery furnace, smelt dissolving tank, or lime kiln for which an emission limit was established in paragraph (a)(1)(ii)(A) of this section is shut down for more than 60 consecutive days.

(iii) Each owner or operator of an existing kraft or soda recovery furnace, smelt dissolving tank, or lime kiln that operates less than 6,300 hours per year must comply with the applicable PM emissions limits for that process unit provided in paragraph (a)(1)(i) of this section.

(2) The owner or operator of each existing sulfite combustion unit must ensure that the concentration of PM in the exhaust gases discharged to the atmosphere is less than or equal to 0.092 g/dscm (0.040 gr/dscf) corrected to 8 percent oxygen.

(b) *Standards for HAP metals: new sources.* (1) The owner or operator of any new kraft or soda recovery furnace must ensure that the concentration of PM in the exhaust gases discharged to the atmosphere is less than or equal to 0.034 g/dscm gr/dscf) corrected to 8 percent oxygen.

(2) The owner or operator of any new kraft or soda smelt dissolving tank must ensure that the the concentration of PM in the exhaust gases discharged to the atmosphere is less than or equal to 0.06 kg/Mg (0.12 lb/ton) of black liquor solids fired.

(3) The owner or operator of any new kraft or soda lime kiln must ensure that the concentration of PM in the exhaust gases discharged to the atmosphere is less than or equal to 0.023 g/dscm (0.010 gr/dscf) corrected to 10 percent oxygen.

(4) The owner or operator of any new sulfite combustion unit must ensure that the concentration of PM in the exhaust gases discharged to the atmosphere is less than or equal to 0.046 g/dscm (O.020 gr/dscf) corrected to 8 percent oxygen.

(c) *Standards for gaseous organic HAP.* (1) The owner or operator of any new recovery furnace at a kraft or soda pulp mill must ensure that the concentration or gaseous organic HAP, as meauared by methanol, discharged to the atmosphere is no greater than 0.012 kg/Mg (0.025 lb/ton) of black liquor solids fired.

(2) The owner or operator of each existing or new semichemical combustion unit must ensure that:

(i) The concentration of gaseous organic HAP, as measured by total hydrocarbons reported as carbon, discharged to the atmosphere is less than or equal to 1.49 kg/Mg (2.97 lb/ton) of black liquor solids fired; or

(ii) The gaseous organic HAP emissions, as measured by total hydrocarbons reported as carbon, are reduced by at least 90 percent prior to

discharge of the gases to the atmosphere.

§ 63.863 Compliance dates.

(a) The owner or operator of an existing affected source or process unit must comply with the requirements in this subpart no later than January 12, 2004.

(b) The owner or operator of a new affected source that has an initial startup date after January 12, 2001, must comply with the requirements in this subpart immediately upon startup of the affected source, expect as specified in § 63.6(b).

§ 63.864 Monitoring requirements.

(a) *General.* (1) The owner or operator of each affected kraft or soda recovery furnace or lime kiln equipped with as ESP must install, calibrate, maintain, and operate a continuous opacity monitoring system that can be used to determine opacity at least once every successive 10-second period and calculate and record each successive 6-minute average opacity using the procedures in §§ 63.6(h) and 63.8.

(2) The owner or operator of each affected kraft or soda recovery furnace, kraft or soda lime kiln, sulfite combustion unit, or kraft or soda smelt dissolving tank equipped with a wet scrubber must install, calibrate, maintain, and operate a continuous monitoring system that can be used to determine and record the pressure drop across the scrubber and the scrubbing liquid flow rate at least once every successive 15-minute period using the procedures in §63.8(c), as well as the procedures in paragraphs (a)(2)(i) and (ii) of this section:

(i) The monitoring device used for the continuous measurement of the pressure drop of the gas stream across the scrubber must be certified by the manufacturer to the accurate to within a gage pressure of ±500 pascals (±2 inches of water gage pressure); and

(ii) The monitoring device used for continuous measurement of the scrubbing liquid flow rate must be certified by the manufacturer to be accurate within ±5 percent of the design scrubbing liquid flow rate.

(3) The owner or operator of each affected semichemical combustion unit equipped with an RTO must install, calibrate, maintain, and operate a continuous monitoring system that can be used to determine and record the operating temperature of the RTO at least once every successive 15-minute period using the procedures in § 63.8(c). The monitor must compute and record the operating temperature at the point of incineration of effluent gases that are emitted using a temperature monitor accurate to within ±1 percent of the temperature being measured.

(4) The owner or operator of each affected source or process unit that uses a control device listed in paragraphs (a)(1) through (3) of this section may monitor alternative control device operating parameters subject to prior written approval by the Administrator.

(5) The owner or operator of each affected source or process unit that uses an air pollution control system other than those listed in paragraphs (a)(1) through (3) of this section must monitor the parameters as approved by the Administrator using the methods and procedures in § 63.865(f).

(6) The owner or operator of each affected source or process unit complying with the gaseous organic HAP emissions limitations of § 63.862(c)(1) through the use of an NDCE recovery furnace equipped with a dry ESP system is not required to conduct any performance testing or any continuous monitoring to demonstrate compliance with the gaseous organic HAP emission limitation.

(b) *Initial compliance determination.* (1) The owner or operator of each affected source or process unit subject to the requirements of this subpart is required to conduct an initial performance test using the test methods and procedures listed in §§ 63.7 and 63.865, except as provided in paragraph (b)(3) of this section.

(2) *Determination of operating ranges.* (i) During the initial performance test required in paragraph (b)(1) of this section, the owner or operator of any affected source or process unit must establish operating ranges for the monitoring parameters in paragraphs (a)(2) through (5) of this section, as appropriate; or

(ii) The owner or operator may base operating ranges on values recorded during previous performance tests or conduct additional performance tests for the specific purpose of establishing operating ranges, provided that test data used to establish the operating ranges are or have been obtained using the test methods required in this subpart. The owner or operator of the affected source or process unit must certify that all control techniques and processes have not been modified subsequent to the testing upon which the data used to establish the operating parameter ranges were obtained.

(iii) The owner or operator of an affected source or process unit may establish expanded or replacement operating ranges for the monitoring parameter values listed in paragraphs (a)(2) through (5) of this section and established in paragraph (b)(2)(i) or (ii) of this section during subsequent performance tests using the test methods in § 63.865.

(3) An initial performance test is not required to be conducted in order to determine compliance with the emissions limitations of § 63.862(c)(1) if the affected source or process unit includes an NDCE recovery furnace equipped with a dry ESP system.

(4) After the Administrator has approved the PM emissions limits for each kraft or soda recovery furnace, smelt dissolving tank, and lime kiln, the owner or operator complying with an overall PM emission limit established in § 63.862(a)(1)(ii) must demonstrate compliance with the HAP metals standard by demonstrating compliance with the approved PM emissions limits for each affected kraft or soda recovery furnace, smelt dissolving tank, and lime kiln, using the test methods and procedures in § 63.865(b).

(c) *On-going compliance provisions.* (1) Following the compliance date, owners or operators of all affected sources or process units are required to implement corrective action, as specified in the startup, shutdown, and malfunction plan prepared under § 63.866(a) if the monitoring exceedances in paragraphs (c)(1)(i) through (v) of this section occur:

(i) For a new or existing kraft or soda recovery furnace or lime kiln equipped with an ESP, when the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity;

(ii) For a new or existing kraft or soda recovery furnace, kraft or soda smelt dissolving tank, kraft or soda lime kiln, or sulfite combustion unit equipped with a wet scrubber, when any 3-hour average parameter value is outside the range of values established in paragraph (b)(2) of this section.

(iii) For a new or existing semichemical combustion unit equipped with an RTO, when any 1-hour average temperature falls below the temperature established in paragraph (b)(2) of this section;

(iv) For an affected source or process unit equipped with an alternative emission control system approved by the Administrator, when any 3-hour average value is outside the range of parameter values established in paragraph (b)(2) of this section; and

(v) For an affected source or process unit that is monitoring alternative operating parameters established in paragraph (a)(4) of this section, when any 3-hour average value is outside the range of parameter values established in paragraph (b)(2) of this section.

(2) Following the compliance date, owners or operators of all affected sources or process units are in violation of the standards of § 63.862 if the monitoring exceedances in paragraphs (c)(2)(i) through (vi) of this section occur:

(i) For an existing kraft or soda recovery furnace equipped with an ESP, when opacity is greater than 35 percent for 6 percent or more of the operating time within any quarterly period;

(ii) For a new kraft or soda recovery furnace or a new or existing lime kiln equipped with an ESP, when opacity is greater than 20 percent for 6 percent or more of the operating time within any quarterly period;

(iii) For a new or existing kraft or soda recovery furnace, kraft or soda smelt dissolving tank, kraft or soda lime kiln, or sulfite combustion unit equipped with a wet scrubber, when six or more 3-hour average parameter values within any 6-month reporting period are outside the range of values established in paragraph (b)(2) of this section;

(iv) For a new or existing semichemical combustion unit equipped with an RTO, when any 3-hour average temperature falls below the temperature established in paragraph (b)(2) of this section;

(v) For an affected source or process unit equipped with an alternative air pollution control system approved by the Administrator, when six or more 3-hour average values within any 6-month reporting period are outside the range of parameter values established in paragraph (b)(2) of this section; and

(vi) For an affected source or process unit that is monitoring alternative operating parameters established in paragraph (a)(4) of this section, when six or more 3-hour average values within any 6-month reporting period are outside the range of parameter values established in paragraph (b)(2) of this section.

(3) For purposes of determining the number of nonopacity monitoring exceedances, no more than one exceedance will be attributed in any given 24-hour period.

§ 63.865 Performance test requirements and test methods.

(a) The owner or operator of a process unit seeking to comply with a PM emission limit under § 63.862(a)(1)(ii)(A) must use the procedures in paragraphs (a)(1) through (4) of this section:

(1) Determine the overall PM emission limit for the chemical recovery system at the mill using Equation 1 of this section as follows:

$$EL_{PM} = \left[\left(C_{ref,\,RF}\right)\left(Q_{RFtot}\right) + \left(C_{ref,\,LK}\right)\left(Q_{LKtot}\right)\right](F1)/\left(BLS_{tot}\right) + ER1_{ref,\,SDT} \qquad \text{(Eq. 1)}$$

Where:

EL_{PM}=overall PM emission limit for all existing process units in the chemical recovery system at the kraft or soda pulp mill, kg/Mg (lb/ton) of black liquor solids fired.

$C_{ref,\,RF}$=reference concentration of 0.10 g/dscm (0.044 gr/dscf) corrected to 8 percent oxygen for existing kraft or soda recovery furnaces.

QRF_{tot}=sum of the average volumetric gas flow rates measured during the performance test and corrected to 8 percent oxygen for all existing recovery furnaces in the chemical recovery system at the kraft or soda pulp mill, dry standard cubic meters per minute (dscm/min) (dry standard cubic feet per minute [dscf/min]).

$C_{ref,\,LK}$=reference concentration of 0.15 g/dscm (0.064 gr/dscf) corrected to 10 percent oxygen for existing kraft or soda lime kilns.

Q_{LKtot}=sum of the average volumetric gas flow rates measured during the performance test and corrected to 10 percent oxygen for all existing lime kilns in the chemical recovery system at the kraft or soda pulp mill, dscm/min (dscf/min).

F1=conversion factor, 1.44 minutes•;kilogram/day•gram (min•kg/d•g) (0.206 minutes•pound/day•grain [min•lb/d•gr]).

BLS_{tot}=sum of the average black liquor solids firing rates of all existing recovery furnaces in the chemical recovery system at the kraft or soda pulp mill measured during the performance test, megagrams per day (Mg/d) (tons per day [tons/d]) of black liquor solids fired.

$ER1_{ref,\,SDT}$=reference emission rate of 0.10 kg/Mg (0.20 lb/ton) of black liquor solids fired for existing kraft or soda smelt dissolving tanks.

(2) Establish an emission limit for each kraft or soda recovery furnace, smelt dissolving tank, and lime kiln; and, using these emissions limits, determine the overall PM emission rate for the chemical recovery system at the mill using the procedures in paragraphs (a)(2)(i) through (v) of this section, such that the overall PM emission rate calculated in paragraph (a)(2)(v) of this section is less than or equal to the overall PM emission limit determined in paragraph (a)(1) of this section, as appropriate.

(i) The PM emission rate from each affected recovery furnace must be determined using Equation 2 of this section as follows:

$$ER_{RF} = (F1)\left(C_{EL,\,RF}\right)\left(Q_{RF}\right)/(BLS) \qquad \text{(Eq. 2)}$$

Where:

ER_{RF}=emission rate from each recovery furnace, kg/Mg (lb/ton) of black liquor solids.

F1=conversion factor, 1.44 min•kg/d•g (0.206 min•/d•gr).

$C_{EL,\,RF}$=PM emission limit proposed by owner or operator for the recovery furnace, g/dscm (gr/dscf) corrected to 8 percent oxygen.

Q_{RF}=average volumetric gas flow rate from the recovery furnace measured during the performance test and corrected to 8 percent oxygen, dscm/min (dscf/min).

BLS=average black liquor solids firing rate of the recovery furnace measured during the performance test, Mg/d (ton/d) of black liquor solids.

(ii) The PM emission rate from each affected smelt dissolving tank must be determined using Equation 3 of this section as follows:

$$ER_{SDT} = (F1)\left(C_{EL,\,SDT}\right)\left(Q_{SDT}\right)/(BLS) \qquad \text{(Eq. 3)}$$

Where:

ER_{SDT}=emission rate from each SDT, kg/Mg (lb/ton) of black liquor solids fired.

F1=conversion factor, 1.44 min•kg/d•g (0.206 min•lb/d•gr).

$C_{EL,\ SDT}$=PM emission limit proposed by owner or operator for the smelt dissolving tank, g/dscm (gr/dscf).

Q_{SDT}=average volumetric gas flow rate from the smelt dissolving tank measured during the performance test, dscm/min (dscf/min).

BLS=average black liquor solids firing rate of the associated recovery furnace measured during the performance test, Mg/d (ton/d) of black liquorsolids fired. If more than one SDT is used to dissolve the smelt from a given recovery furnace, then the black liquor solids firing rate of the furnace must be proportioned according to the size of the SDT.

(iii) The PM emission rate from each affected lime kiln must be determined using Equation 4 of this section as follows:

$$ER_{LK} = (F1)(C_{EL,\ LK})(Q_{LK})(CaO_{tot}/BLS_{tot})/(CaO_{LK}) \qquad \text{(Eq. 4)}$$

Where:

ER_{LK}=emission rate from each lime kiln, kg/Mg (lb/ton) of black liquor solids.

F1=conversion factor, 1.44 min•kg/d•g (0.206 min•lb/d•gr).

$C_{EL,LK}$=PM emission limit proposed by owner or operator for the lime kiln, g/dscm (gr/dscf) corrected to 10 percent oxygen.

Q_{LK}=average volumetric gas flow rate from the lime kiln measured during the performance test and corrected to 10 percent oxygen, dscm/min (dscf/min).

CaO_{LK}=lime production rate of the lime kiln, measured as CaO during the performance test, Mg/d (ton/d) of CaO.

CaO_{tot}=sum of the average lime production rates for all existing lime kilns in the chemical recovery system at the mill measured as CaO during the performance test, Mg/d (ton/d).

BLS_{tot}=sum of the average black liquor solids firing rates of all recovery furnaces in the chemical recovery system at the mill measured during the performance test, Mg/d (ton/d) of black liquor solids.

(iv) If more than one similar process unit is operated in the chemical recovery system at the kraft or soda pulp mill, Equation 5 of this section must be used to calculate the overall PM emission rate from all similar process units in the chemical recovery system at the mill and must be used in determining the overall PM emission rate for the chemical recovery system at the mill:

$$ER_{PUtot} = ER_{PU1}(PR_{PU1}/PR_{tot}) + \ . \ . \ . \ + (ER_{PUi})(PR_{PUi}/PR_{tot}) \qquad \text{(Eq. 5)}$$

Where:

ER_{PUtot}=overall PM emission rate from all similar process units, kg/Mg (lb/ton) of black liquor solids fired.

ER_{PU1}=PM emission rate from process unit No. 1, kg/Mg (lb/ton) of black liquor solids fired, calculated using Equation 2, 3, or 4 in paragraphs (a)(2)(i) through (iii) of this section.

PR_{PU1}=black liquor solids firing rate in Mg/d (ton/d) for process unit No. 1, if process unit is a recovery furnace or SDT. The CaO production rate in Mg/d (ton/d) for process unit No. 1, if process unit is a lime kiln.

PR_{tot}=total black liquor solids firing rate in Mg/d (ton/d) for all recovery furnaces in the chemical recovery system at the kraft or soda pulp mill if the similar process units are recovery furnaces or SDT, or the total CaO production rate in Mg/d (ton/d) for all lime kilns in the chemical recovery system at the mill if the similar process units are lime kilns.

ER_{PUi}=PM emission rate from process unit No. i, kg/Mg (lb/ton) of black liquor solids fired.

PR_{PUi}=black liquor solids firing rate in Mg/d (ton/d) for process unit No. i, if process unit is a recovery furnace or SDT. The CaO production rate in Mg/d (ton/d) for process unit No. i, if process unit is a lime kiln.

i=number of similar process units located in the chemical recovery system at the kraft or soda pulp mill.

(v) The overall PM emission rate for the chemical recovery system at the mill must be determined using Equation 6 of this section as follows:

$$ER_{tot} = ER_{RFtot} + ER_{SDTtot} + ER_{LKtot} \qquad \text{(Eq. 6)}$$

Where:

ER_{tot}=overall PM emission rate for the chemical recovery system at the mill, kg/Mg (lb/ton) of black liquor solids fired.

ER_{RFtot}=PM emission rate from all kraft or soda recovery furnaces, calculated using Equation 2 or 5 in paragraphs (a)(2)(i) and (iv) of this section, where applicable, kg/Mg (lb/ton) of black liquor solids fired.

ER_{SDTtot}=PM emission rate from all smelt dissolving tanks, calculated using Equation 3 or 5 in paragraphs (a)(2)(ii) and (iv) of this section, where applicable, kg/Mg (lb/ton) of black liquor solids fired.

ER_{LKtot}=PM emission rate from all lime kilns, calculated using Equation 4 or 5 in paragraphs (a)(2)(iii) and (iv) of this section, where applicable, kg/Mg (lb/ton) of black liquor solids fired.

(3) For purposes of determining the volumetric gas flow rate used in this section for each kraft or soda recovery furnace, smelt dissolving tank, and lime kiln, Methods 1 through 4 in appendix A of 40 CFR part 60 must be used.

(4) Process data measured during the performance test must be used to determine the black liquor solids firing rate on a dry basis and the CaO production rate.

(b) The owner or operator seeking to determine compliance with § 63.862(a) must use the procedures in paragraphs (b)(1) through (4) of this section.

(1) For purposes of determining the concentration of PM emitted from each kraft or soda recovery furnace, sulfite combustion unit, smelt dissolving tank or lime kiln, Method 5 or 29 in appendix A of 40 CFR part 60 must be used, except that Method 17 in appendix A of 40 CFR part 60 may be used in lieu of Method 5 or Method 29 if a constant value of 0.009 g/dscm (0.004 gr/dscf) is added to the results of Method 17, and the stack temperature is no greater than 205°C (400°F). The sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8 dscf). Water must be used as the cleanup solvent instead of acetone in the sample recovery procedure.

(2) For sources complying with paragraph (a)(1) or (2) of § 63.862, the PM concentration must be corrected to the appropriate oxygen concentration using Equation 7 of this section as follows:

$$C_{corr} = C_{meas} \times (21 - X)/(21 - Y) \qquad \text{(Eq. 7)}$$

Where:
C_{corr}=the measured concentration corrected for oxygen, g/dscm (gr/dscf).
C_{meas}=the measured concentration uncorrected for oxygen, g/dscm (gr/dscf).
X=the corrected volumetric oxygen concentration (8 percent for kraft or soda recovery furnaces and sulfite combustion units and 10 percent for kraft or soda lime kilns).
Y=the measured average volumetric oxygen concentration.

(3) Method 3A or 3B in appendix A of 40 CFR part 60 must be used to determine the oxygen concentration. The gas sample must be taken at the same time and at the same traverse points as the particulate sample.

(4) For purposes of complying with paragraph (a)(1) or (2) of § 63.862, the volumetric gas flow rate must be corrected to the appropriate oxygen concentration using Equation 8 of this section as follows:

$$Q_{corr} = Q_{meas} \times (21 - X)/(21 - Y) \qquad \text{(Eq. 8)}$$

Where:
Q_{corr} = the measured volumetric gas flow rate corrected for oxygen, dscm/min (dscf/min).
Q_{meas} = the measured volumetric gas flow rate uncorrected for oxygen, dscm/min (dscf/min).
X = the corrected volumetric oxygen concentration (8 percent for kraft or soda recovery furnaces and sulfite combustion units and 10 percent for kraft or soda lime kilns).
Y = the measured average volumetric oxygen concentration.

(c) The owner or operator seeking to determine compliance with the gaseous organic HAP standard in § 63.862(c)(1) without using an NDCE recovery furnace equipped with a dry ESP system must use Method 308 in appendix A of this part. The sampling time and sample volume for each run must be at least 60 minutes and 0.014 dscm (0.50 dscf), respectively.

(1) The emission rate from any new NDCE recovery furnace must be determined using Equation 9 of this section as follows:

$$ER_{NDCE} = (MR_{meas})/(BLS) \qquad \text{(Eq. 9)}$$

Where:
ER_{NDCE} = methanol emission rate from the NDCE recovery furnace, kg/Mg (lb/ton) of black liquor solids fired.
MR_{meas} = measured methanol mass emission rate from the NDCE recovery furnace, kg/hr (lb/hr).
BLS = average black liquor solids firing rate of the NDCE recovery furnace, Mg/hr (ton/hr); determined using process data measured during the performance test.

(2) The emission rate from any new DCE recovery furnace system must be determined using Equation 10 of this section as follows:

$$ER_{DCE} = \left[(MR_{meas,\,RF})/BLS_{RF}\right] + \left[(MR_{meas,\,BLO})/BLS_{BLO}\right] \qquad \text{(Eq. 10)}$$

Where:
ER_{DCE} = methanol emission rate from each DCE recovery furnace system, kg/Mg (lb/ton) of black liquor solids fired.
$MR_{meas,RF}$ = average measured methanol mass emission rate from each DCE recovery furnace, kg/hr (lb/hr).
$MR_{meas,BLO}$ = average measured methanol mass emission rate from the black liquor oxidation system, kg/hr (lb/hr).
BLS_{RF} = average black liquor solids firing rate for each DCE recovery furnace, Mg/hr (ton/hr); determined using process data measured during the performance test.
BLS_{BLO} = the average mass rate of black liquor solids treated in the black liquor oxidation system, Mg/hr (ton/hr); determined using process data measured during the performance test.

(d) The owner or operator seeking to determine compliance with the gaseous organic HAP standards in § 63.862(c)(2) for semichemical combustion units must use Method 25A in appendix A of 40 CFR part 60. The sampling time must be at least 60 minutes.

(1) The emission rate from any new or existing semichemical combustion unit must be determined using Equation 11 of this section as follows:

$$ER_{SCCU} = (THC_{meas})/(BLS) \qquad \text{(Eq. 11)}$$

Where:
ER_{SCCU} = THC emission rate from each semichemical combustion unit, kg/Mg (lb/ton) of black liquor solids fired.
THC_{meas} = measured THC mass emission rate, kg/hr (lb/hr).
BLS = average black liquor solids firing rate, Mg/hr (ton/hr); determined using process data measured during the performance test.

(2) If the owner or operator of the semichemical combustion unit has selected the percentage reduction standards for THC, under § 63.862(c)(2)(ii), the percentage reduction in THC emissions is computed using Equation 12 of this section as follows, provided that Ei and Eo are measured simultaneously:

$$(\%R_{THC}) = \left(\frac{E_i - E_o}{E_i}\right) \times 100 \qquad \text{(Eq. 12)}$$

Where:
$\%R_{THC}$ = percentage reduction of total hydrocarbons emissions achieved.
E_i = measured THC mass emission rate at the THC control device inlet, kg/hr (lb/hr).
E_o = measured THC mass emission rate at the THC control device outlet, kg/hr (lb/hr).

(e) The owner or operator seeking to comply with the continuous parameter monitoring requirements of § 63.864(b)(2) must continuously monitor each parameter and determine the arithmetic average value of each parameter during each 3-run performance test. Multiple 3-run performance tests may be conducted to establish a range of parameter values.

(f) The owner or operator of an affected source or process unit seeking to demonstrate compliance with the standards in § 63.862 using a control technique other than those listed in § 63.864(a)(1) through (3) must provide to the Administrator a monitoring plan that includes a description of the control device, test results verifying the performance of the control device, the appropriate operating parameters that will be monitored, and the frequency of measuring and recording to establish continuous compliance with the standards. The monitoring plan is subject to the Administrator's approval. The owner or operator of the affected source or process unit must install, calibrate, operate, and maintain the monitor(s) in accordance with the monitoring plan approved by the Administrator. The owner or operator must include in the information submitted to the Administrator proposed performance specifications and quality assurance procedures for the monitors. The Administrator may request further information and will approve acceptable test methods and procedures.

§ 63.866 Recordkeeping requirements.

(a) *Startup, shutdown, and malfunction plan.* The owner or operator must develop and implement a written plan as described in § 63.6(e)(3) that contains specific procedures to be followed for operating the source 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 standards. In addition to the information required in § 63.6(e), the plan must include the requirements in paragraphs (a)(1) and (2) of this section.

(1) Procedures for responding to any process parameter level that is inconsistent with the level(s) established under § 63.864(b)(2), including the procedures in paragraphs (a)(1)(i) and (ii) of this section:

(i) Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

(ii) Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

(2) The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (a)(2)(i) and (ii) of this section:

(i) A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

(ii) An inspection schedule for each continuous monitoring system required under § 63.864 to ensure, at least once in each 24-hour period, that each continuous monitoring system is properly functioning.

(b) The owner or operator of an affected source or process unit must maintain records of any occurrence when corrective action is required under § 63.864(c)(1), and when a violation is noted under § 63.864(c)(2).

(c) In addition to the general records required by § 63.10(b)(2), the owner or operator must maintain records of the information in paragraphs (c)(1) through (6) of this section:

(1) Records of black liquor solids firing rates in units of megagrams/day or tons/day for all recovery furnaces and semichemical combustion units;

(2) Records of CaO production rates in units of megagrams/day or tons/day for all lime kilns;

(3) Records of parameter monitoring data required under § 63.864, including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

(4) Records and documentation of supporting calculations for compliance determinations made under §§ 63.865(a) through (e);

(5) Records of monitoring parameter ranges established for each affected source or process unit;

(6) Records certifying that an NDCE recovery furnace equipped with a dry ESP system is used to comply with the gaseous organic HAP standard in § 63.862(c)(1).

§ 63.867 Reporting requirements.

(a) *Notifications.* The owner or operator of any affected source or process unit must submit the applicable notifications from subpart A of this part, as specified in Table 1 of this subpart.

(b) *Additional reporting requirements for HAP metals standards.* (1) Any owner or operator of a group of process units in a chemical recovery system at a mill complying with the PM emissions limits in § 63.862(a)(1)(ii) must submit the PM emissions limits determined in § 63.865(a) for each affected kraft or soda recovery furnace, smelt dissolving tank, and lime kiln to the Administrator for approval. The emissions limits must be submitted as part of the notification of compliance status required under subpart A of this part.

(2) Any owner or operator of a group of process units in a chemical recovery system at a mill complying with the PM emissions limits in § 63.862(a)(1)(ii) must submit the calculations and supporting documentation used in § 63.865(a)(1) and (2) to the Administrator as part of the notification of compliance status required under subpart A of this part.

(3) After the Administrator has approved the emissions limits for any process unit, the owner or operator of a process unit must notify the Administrator before any of the actions in paragraphs (b)(3)(i) through (iv) of this section are taken:

(i) The air pollution control system for any process unit is modified or replaced;

(ii) Any kraft or soda recovery furnace, smelt dissolving tank, or lime kiln in a chemical recovery system at a kraft or soda pulp mill complying with the PM emissions limits in § 63.862(a)(1)(ii) is shut down for more than 60 consecutive days;

(iii) A continuous monitoring parameter or the value or range of values of a continuous monitoring parameter for any process unit is changed; or

(iv) The black liquor solids firing rate for any kraft or soda recovery furnace during any 24-hour averaging period is

increased by more than 10 percent above the level measured during the most recent performance test.

(4) An owner or operator of a group of process units in a chemical recovery system at a mill complying with the PM emissions limits in § 63.862(a)(1)(ii) and seeking to perform the actions in paragraph (b)(3)(i) or (ii) of this section must recalculate the overall PM emissions limit for the group of process units and resubmit the documentation required in paragraph (b)(2) of this section to the Administrator. All modified PM emissions limits are subject to approval by the Administrator.

(c) *Excess emissions report.* The owner or operator must report quarterly if measured parameters meet any of the conditions specified in paragraph (c)(1) or (2) of § 63.864. This report must contain the information specified in § 63.10(c) of this part as well as the number and duration of occurrences when the source met or exceeded the conditions in § 63.864(c)(1), and the number and duration of occurrences when the source met or exceeded the conditions in § 63.864(c)(2). Reporting excess emissions below the violation thresholds of § 63.864(c) does not constitute a violation of the applicable standard.

(1) When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

(2) The owner or operator of an affected source or process unit subject to the requirements of this subpart and subpart S of this part may combine excess emissions and/or summary reports for the mill.

§ 63.868 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 112(d) of the Clean Air Act, the authorities contained in paragraph (b) of this section must be retained by the Administrator and not transferred to a State.

(b) The authorities which will not be delegated to States are listed in paragraphs (b)(1) through (4) of this section:

(1) Approval of alternatives to standards in § 63.862 under § 63.6(g).

(2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.

(3) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.

(4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

TABLE 1 TO SUBPART MM—GENERAL PROVISIONS APPLICABILITY TO SUBPART MM

General provisions reference	Summary of requirements	Applies to supbart MM	Explanation
63.1(a)(1)	General applicability of the General Provisions	Yes	Additional terms defined in § 63.861; when overlap between subparts A and MM of this part, subpart MM takes precedence.
63.1(a)(2)–(14)	General applicability of the General Provisions	Yes.	
63.1(b)(1)	Initial applicability determination.	No.	Subpart MM specifies the applicability in § 63.860.
63.1(b)(2)	Title V operating permit—see 40 CFR part 70	Yes	All major affected sources are required to obtain a title V permit.
63.1(b)(3)	Record of the applicability determination	No	All affected sources are subject to subpart MM according to the applicability definition of subpart MM.
63.1(c)(1)	Applicability of subpart A of this part after a relevant standard has been set.	Yes	Subpart MM clarifies the applicability of each paragraph of subpart A of this part to sources subject to subpart MM.
63.1(c)(2)	Title V permit requirement	Yes	All major affected sources are required to obtain a title V permit. There are no area sources in the pulp and paper mill source category.
63.1(c)(3)	[Reserved]	NA..	
63.1(c)(4)	Requirements for existing source that obtains an extension of compliance.	Yes.	
63.1(c)(5)	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 § 63.861; when overlap between subparts A and MM of this part occurs, subpart MM takes precedence.
63.3	Units and abbreviations	Yes.	
63.4	Prohibited activities and circumvention	Yes.	
63.5(a)	Construction and reconstruction—applicability	Yes.	
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.	
63.5(e)	Construction/reconstruction approval	Yes.	

TABLE 1 TO SUBPART MM—GENERAL PROVISIONS APPLICABILITY TO SUBPART MM—Continued

General provisions reference	Summary of requirements	Applies to supbart MM	Explanation
63.5(f)	Construction/reconstruction approval based on prior State preconstruction review.	Yes.	
63.6(a)(1)	Compliance with standards and maintenance requirements—applicability.	Yes.	
63.6(a)(2)	Requirements for area source that increases emissions to become major.	Yes.	
63.6(b)	Compliance dates for new and reconstructed sources.	Yes.	
63.6(c)	Compliance dates for existing sources	Yes	Subpart MM specifically stipulates the compliance schedule for existing sources.
63.6(d)	[Reserved]	NA.	
63.6(e)	Operation and maintenance requirements	Yes.	
63.6(f)	Compliance with nonopacity emissions standards.	Yes.	
63.6(g)	Compliance with alternative nonopacity emissions standards.	Yes.	
63.6(h)	Compliance with opacity and visible emissions (VE) standards.	Yes	Subpart MM does not contain any opacity or VE standards; however, § 63.864 specifies opacity monitoring requirements.
63.6(i)	Extension of compliance with emissions standards.	Yes.	
63.6(j)	Exemption from compliance with emissions standards.	Yes.	
63.7(a)(1)	Performance testing requirements—applicability.	Yes	§ 63.864(a)(6) specifies the only exemption from performance testing allowed under subpart MM.
63.7(a)(2)	Performance test dates	Yes.	
63.7(a)(3)	Performance test requests by Administrator under CAA section 114.	Yes.	
63.7(b)(1)	Notification of performance test	Yes.	
63.7(b)(2)	Notification of delay in conducting a scheduled performance test.	Yes.	
63.7(c)	Quality assurance program	Yes.	
63.7(d)	Performance testing facilities	Yes.	
63.7(e)	Conduct of performance tests	Yes.	
63.7(f)	Use of an alternative test method	Yes.	
63.7(g)	Data analysis, recordkeeping, and reporting	Yes.	
63.7(h)	Waiver of performance tests	Yes	§ 63.864(a)(6) specifies the only exemption from performance testing allowed under subpart MM.
63.8(a)	Monitoring requirements—applicability	Yes	See § 63.864.
63.8(b)	Conduct of monitoring	Yes	See § 63.864.
63.8(c)	Operation and maintenance of CMS	Yes	See § 63.864.
63.8(d)	Quality control program	Yes	See § 63.864.
63.8(e)(1)	Performance evaluation of CMS	Yes.	
63.8(e)(2)	Notification of performance evaluation	Yes.	
63.8(e)(3)	Submission of site-specific performance evaluation test plan.	Yes.	
63.8(e)(4)	Conduct of performance evaluation and performance evaluation dates.	Yes.	
63.8(e)(5)	Reporting performance evaluation results	Yes.	
63.8(f)	Use of an alternative monitoring method	Yes.	
63.8(g)	Reduction of monitoring data	Yes.	
63.9(a)	Notification requirements—applicability and general information.	Yes.	
63.9(b)	Initial notifications	Yes.	
63.9(c)	Request for extension of compliance	Yes.	
63.9(d)	Notification that source subject to special compliance requirements.	Yes.	
63.9(e)	Notification of performance test	Yes.	
63.9(f)	Notification of opacity and VE observations	Yes	Subpart MM does not contain any opacity or VE standards; however, § 63.864 specifies opacity monitoring requirements.
63.9(g)(1)	Additional notification requirements for sources with CMS.	Yes.	
63.9(g)(2)	Notification of compliance with opacity emissions standard.	Yes	Subpart MM does not contain any opacity or VE emissions standards; however, § 63.864 specifies opacity monitoring requirements.
63.9(g)(3)	Notification that criterion to continue use of alternative to relative accuracy testing has been exceeded.	Yes.	

TABLE 1 TO SUBPART MM—GENERAL PROVISIONS APPLICABILITY TO SUBPART MM—Continued

General provisions reference	Summary of requirements	Applies to supbart MM	Explanation
63.9(h)	Notification of compliance status	Yes.	
63.9(i)	Adjustment to time periods or postmark deadlines for submittal and review of required communications.	Yes.	
63.9(j)	Change in information already provided	Yes.	
63.10(a)	Recordkeeping requirements—applicability and general information.	Yes	See § 63.866.
63.10(b)(1)	Records retention	Yes.	
63.10(b)(2)	Information and documentation to support notifications and demonstrate compliance.	Yes.	
63.10(b)(3)	Records retention for sources not subject to relevant standard.	Yes	Applicability requirements are given in § 63.860.
63.10(c)	Additional recordkeeping requirements for sources with CMS..	Yes.	
63.10(d)(1)	General reporting requirements	Yes.	
63.10(d)(2)	Reporting results of performance tests	Yes.	
63.10(d)(3)	Reporting results of opacity or VE observations.	Yes	Subpart MM does not include any opacity or VE standards; however, § 63.864 specifies opacity monitoring requirements.
63.10(d)(4)	Progress reports	Yes.	
63.10(d)(5)	Periodic and immediate startup, shutdown, and malfunction reports.	Yes.	
63.10(e)	Additional reporting requirements for sources with CMS.	Yes.	
63.10(f)	Waiver of recordkeeping and reporting requirements.	Yes.	
63.11	Control device requirements for flares	No	The use of flares to meet the standards in subpart MM is not anticipated.
63.12	State authority and delegations	Yes.	
63.13	Addresses of State air pollution control agencies and EPA Regional Offices.	Yes.	
63.14	Incorporations by reference	Yes.	
63.15	Availability of information and confidentiality	Yes.	

[FR Doc. 01–65 Filed 1–11–01; 8:45 am]

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Federal Register

Thursday,
April 11, 2002

Part II

Environmental Protection Agency

40 CFR Part 63

National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[FRL–7163–7]

RIN 2060–AF28

National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action establishes final national emission standards for hazardous air pollutants (NESHAP) for certain types of affected sources at petroleum refineries. The affected sources include catalytic cracking units (CCU), catalytic reforming units, and sulfur recovery units, as well as associated by-pass lines. The EPA has identified petroleum refineries as major sources of hazardous air pollutants (HAP). Hazardous air pollutants that would be reduced by this final rule include organics (acetaldehyde, benzene, formaldehyde, hexane, phenol, toluene, and xylene); reduced sulfur compounds (carbonyl sulfide, carbon disulfide); inorganics (hydrogen chloride, chlorine); and particulate metals (antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, and nickel). The health effects of exposure to these HAP can include cancer, respiratory irritation, and damage to the nervous system. These final standards implement section 112(d) of the Clean Air Act (CAA) by requiring all petroleum refineries that are major sources to meet standards reflecting the application of the maximum achievable control technology (MACT). When fully implemented, this rule will reduce HAP emissions from the affected sources by nearly 11,000 tons per year tpy—an 87 percent reduction from current levels. Emissions of other pollutants such as volatile organic compounds (VOC), particulate matter (PM), carbon monoxide (CO), and hydrogen sulfide will be reduced by about 60,000 tpy.

EFFECTIVE DATE: April 11, 2002.

ADDRESSES: Docket No. A–97–36 contains supporting information used in developing this rule. The docket is located at the U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460 in room M–1500, Waterside Mall (ground floor), and may be inspected from 8:30 a.m. to 5:30 p.m., Monday through Friday, excluding legal holidays.

FOR FURTHER INFORMATION CONTACT: For information on the basis for the rule, contact Mr. Robert B. Lucas, Waste and Chemical Process Group, Emission Standards Division (C439–03), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541–0884, electronic mail address, ''*lucas.bob@epa.gov;*'' for information concerning legal matters, contact Mr. Richard Vetter, Emission Standards Division (C439–03), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541–2127, electronic mail address, ''*vetter.rick@epa.gov*'' for questions concerning compliance determinations, contact Mr. Thomas Ripp, Office of Enforcement and Compliance Assurance (2223A), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, telephone number (202) 564–7003, electronic mail address, ''*ripp.tom@epa.gov*'' or for information on the test methods, contact Ms. Rima Howell, Emissions Monitoring and Analysis Division (D205–02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541–0443, electronic mail address, ''*howell.rima@epa.gov*''. For applicability determination questions, refer to the table in the **SUPPLEMENTARY INFORMATION** section.

SUPPLEMENTARY INFORMATION: *Docket.* The docket is an organized and complete file of all the information considered by the EPA in the development of this rule. The docket is a dynamic file because material is added throughout the rulemaking process. 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 rules 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 CAA.) Other material related to this rulemaking is available for review in the docket or copies may be mailed on request from the Air Docket by calling (202) 260–7548. A reasonable fee may be charged for copying docket materials.

World Wide Web (WWW). In addition to being available in the docket, an electronic copy of today's final rule will also be available on the WWW through the Technology Transfer Network (TTN). Following signature, a copy of the rule will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules at *http://www.epa.gov/ttn/oarpg.* 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.

Judicial Review. Today's action constitutes final administrative action on the proposed NESHAP for CCU, catalytic reforming units, and sulfur recovery units (63 FR 48890, September 11, 1998). Under section 307(b)(1) of the CAA, judicial review of the final rule is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by June 10, 2002. Under section 307(b)(2) of the CAA, 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.

Regional Contacts for Applicability Determination

Region I, Director, Air Compliance Programs, EPA New England, 1 Congress Street, Suite 1100 (SEA), Boston, MA 02114–2023, Phone contact: (617) 918–1656 FAX: (617) 918–1112.

Region II, U.S. EPA, 290 Broadway, New York, NY 10007–1866, Phone (212) 637–3000, FAX (212) 637–3526.

Region III, Dianne Walker (3AP11) U.S. EPA, 1650 Arch Street, Philadelphia, PA 19103–2029, Phone: (215) 814–3297, FAX: (215) 814–5103.

Region IV, Leonardo Ceron, U.S. EPA, 61 Forsyth Street, SW., Atlanta, GA 30303–3104, Phone: (404) 562–9900, FAX: (404–562–8174.

Region V, Kathy Keith U.S. EPA, 77 West Jackson Boulevard, Chicago, IL 60604–3507, Phone: (312) 353–6956, FAX: (312) 353–4135.

Region VI, U.S. EPA, Martin E. Brittain (214) 665–7206, Jonathan York (214) 665–7289, Barry Feldman (214) 665–7439, Fountain Place, 12th Floor, Suite 1200, 1445 Ross Avenue, Dallas, TX 75292–2733, FAX: (214) 665–2146.

Region VII, Bill Peterson, U.S. EPA, 726 Minnesota Avenue, Kansas City, KS 66101, Phone: (913) 551–7881, FAX: (913) 551–7467.

Region VIII, Art Palomares (303–312–6332), e-mail: *Palomares.Art@epa.gov,* Tami Thomas-Burton (303–312–6581). e-mail: Thomas-burton.tami@epa.gov, U.S. EPA, MACT Enforcement, 999 18th Street, Suite 500, ENF–T, Denver, Colorado 80202, FAX: 303–312–6409.

Region IX, John Kim, U.S. EPA, 75 Hawthorne Street (AIR–5), San Francisco, CA 94105, Phone: (415) 744–1263, FAX: (415) 744–2499.

Region X, Kai–Hon Shum, U.S. EPA, Office of Air Quality, 1200 Sixth Avenue (OAQ–107), Seattle, Washington 98101, Phone: (206) 553–2117, FAX: 206–553–0149.

Regulated Entities. Categories and entities potentially regulated by this action include:

Category	SIC code	NAIC	Examples of regulated entities
Industry	2911	32411	Petroleum refineries that operate CCU, catalytic reforming units, or sulfur recovery units.
Federal Government			Not affected.
State/local/tribal			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. To determine whether your facility is regulated by this action, you should examine the applicability criteria in § 63.1561 of the final rule. If you have any questions regarding the applicability of this action to a particular entity, consult the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

Outline. The information in this preamble is organized as follows:

I. Background
II. Summary of Final Rule and Changes Since Proposal
A. Who must comply with this rule?
B. What equipment is covered?
C. When must I comply?
D. What are the emission limitations and other standards?
E. How do I demonstrate initial compliance?
F. How do I demonstrate continuous compliance?
G. What are the notification, recordkeeping, and reporting requirements?
III. Summary of Environmental, Energy, and Economic Impacts
A. What are the air quality impacts?
B. What are the cost impacts?
C. What are the economic impacts?
D. What are the non-air health and environmental impacts?
E. What are the energy impacts?
IV. Summary of Major Comments and Responses
A. Why did we extend the compliance date?
B. What is the new alternative nickel emission limitation?
C. Why did we not change the proposed nickel emission limitation?
D. How did we change the proposed monitoring requirements?
V. Administrative Requirements
A. Executive Order 12866, Regulatory Planning and Review
B. Executive Order 13132, Federalism
C. Executive Order 13175, Consultation and Coordination with Indian Tribal Governments
D. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks
E. Executive Order 13211, Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution or Use
F. Unfunded Mandates Reform Act of 1995
G. Regulatory Flexibility Act (RFA), as Amended by Small Business Regulatory Enforcement Act of 1996 (SBREFA), 5 U.S.C. 601 *et seq.*
H. Paperwork Reduction Act
I. National Technology Transfer and Advancement Act of 1995
J. Congressional Review Act

I. Background

The CAA was created in part to protect and enhance the quality of the Nation's air resources to promote public health and welfare and the productive capability of its population. Section 112(d) of the CAA requires us (the EPA) to establish standards for all categories and subcategories of major sources of HAP and for area sources listed for regulation under section 112(c). Major sources are those that emit or have the potential to emit at least 10 tpy of any single HAP or 25 tpy of any combination of HAP. Area sources are stationary sources of HAP that are not major sources.

We received 40 public comments on the proposed NESHAP. Commenters included industry representatives and trade associations, State and local agencies, environmental groups, vendors, and technical experts. To provide interested individuals the opportunity for oral presentations of data, views, or arguments concerning the proposed rule, we held a public hearing on October 14, 1998, and extended the end of the public comment period from November 10, 1998, to December 1, 1998 (Docket A–97–36). Today's final rule reflects our full consideration of all the comments we received. Major public comments on the proposed rule along with our responses to these comments are summarized in this document. See the Response to Comment Document (Docket A–97–36) for detailed responses to all the comments.

II. Summary of Final Rule and Changes Since Proposal

We revised the overall format of the rule to make it easier to understand, implement, and enforce. Separate sections of this ''plain language'' final rule cover the requirements for each type of HAP (i.e., metal HAP, organic HAP, inorganic HAP, or overall HAP) from an affected source. Each section of the rule refers you (the refinery owner or operator) to tables at the end of the rule that list the specific rule requirements and give step-by-step instructions on how to demonstrate initial and continuous compliance.

For purposes of the final rule, the title has been changed to ''National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units'' to better describe the affected population. The source category list will be amended to reflect this name change in a separate action.

In the past year, six petroleum refining companies have signed voluntary settlements with EPA which will add controls for CCU and SRU that will comply with this final rule. We have not revised the impact estimates to reflect the controls resulting from these settlements.

A. Who Must Comply With This Rule?

The final rule (subpart UUU) applies to you if your petroleum refinery is a major source of HAP emissions and includes an affected source covered by the rule. Based on our data, we believe all 164 existing petroleum refineries in the U.S. and its territories are major

sources; 132 of these facilities have one or more of the affected sources subject to the rule requirements.

B. What Equipment Is Covered?

Section 63.1562 of the final rule identifies each type of affected source as well as equipment or processes not covered by the rule. As proposed, three types of existing, new, or reconstructed units are subject to the rule. These are:

- Each CCU that regenerates catalyst;
- Each catalytic reforming unit that regenerates catalyst; and
- Each sulfur recovery unit and the tail gas treatment unit serving it.

The rule also applies to each by-pass line serving a new, existing, or reconstructed affected source. We have clarified the applicability of the rule to emphasize that the unit is the affected source while the emission limits and standards apply to the specified type of vent associated with the unit.

The final rule applies only to the predominant type of CCU—those using a fluidized bed (i.e., fluid CCU). We also revised the applicability of the rule to exclude redundant sulfur recovery units not located at a petroleum refinery and used by the refinery only for emergency or maintenance backup. Consistent with the proposed rule, the final rule doesn't apply to a sulfur recovery unit that doesn't recover elemental sulfur, certain equipment associated with by-pass lines (i.e., low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, or pressure relief valves needed for safety reasons), or gaseous streams routed to a fuel gas system.

C. When Must I Comply?

Section 63.1563 of the final rule gives the compliance dates. As discussed further in section IV.A of this document, we have included provisions allowing an extended compliance date for existing fluid CCU located at a petroleum refinery that commits to hydrotreating the CCU feed to comply with the gasoline sulfur control requirements in the Tier 2 Motor Vehicle Emission Standards (40 CFR part 80) and the applicable emission limitations in subpart UUU. The compliance date for these existing affected sources will depend on when the refinery must meet the 30 parts per million (ppm) limit for gasoline sulfur content, but can't be any later than December 31, 2009. Otherwise, affected sources must comply within 3 years from today's date.

We also clarified the compliance dates for new or reconstructed affected sources. If you started your new or reconstructed affected source before today's date, you must comply with the applicable rule requirements by today. If you start your new or reconstructed affected source after today's date, you must comply with the rule requirements upon startup.

D. What Are the Emission Limitations and Other Standards?

The final rule includes emission limitations for HAP emissions of particulate metals and organic compounds from CCU, organic and inorganic compounds from catalytic reforming units, and reduced sulfur compounds from sulfur recovery units. An emission limitation means any emission limit, operating limit, opacity limit, or visible emissions limit. Surrogates are used in this rule to represent the HAP emissions. They allow easier, less expensive measurement and monitoring requirements. For CCU, PM and nickel (Ni) are used as surrogates for metal HAP. Carbon monoxide is used as a surrogate for organic HAP emissions. Total organic carbon (TOC) is a surrogate for organic HAP emissions from catalytic reforming units while hydrogen chloride (HCl) represents inorganic HAP emissions. Sulfur dioxide (SO_2) or total reduced sulfur (TRS) represent the reduced sulfur HAP emissions from sulfur recovery units.

We made no changes in the MACT floor determinations of control technologies serving as the basis of the proposed rule. The emission control technologies and limits are discussed in the preamble to the proposed NESHAP (63 FR 48890). However, we did revise in other respects the emission limitations and standards that reflect the performance of the MACT floor technologies.

In response to public comments, we clarified the requirements for affected sources also subject to the new source performance standard (NSPS) for petroleum refineries (40 CFR part 60, subpart J) and added new compliance options. If your affected source is also subject to the NSPS, complying with the NSPS emission limitations also allows you to comply with this rule. If your affected source isn't subject to the NSPS, you can elect to comply with the NSPS emission limitations in order to be in compliance with this rule.

As further discussed in section IV.B of this document, we also added a second Ni limit as another metal HAP compliance option for CCU. This alternative provides an emission limit formatted to account for the variable characteristics of these units. We added it to the rule both to credit and encourage hydrotreating of the CCU feed as a means of reducing metal HAP emissions to the atmosphere.

We also made a change to the TOC emission limit for catalytic reforming units in § 63.1562(b)(1)(iii) of the proposed rule. This provision exempted emissions during depressuring and purging operations if the reactor vent pressure or differential pressure between the reactor vent and the gas transfer system to the control device were under 1 pound per square inch gauge (psig). Since 5 psig is the limit in States with facilities representing the MACT floor, we revised this provision to state that the emission limitations do not apply to depressuring and purging when the reactor vent pressure is 5 psig or less.

The final rule also includes specific operating limits for monitored process or control device operating parameters. Operating limits also may apply if you choose to comply with certain options, such as the alternative Ni emission limitations for CCU.

Tables 1, 2, 8, and 9 to the final rule (subpart UUU) show the final emission limitations for CCU. Tables 15, 16, 22, and 23 to subpart UUU give the emission limitations for catalytic reforming units. The final emission limitations for sulfur recovery units are in Tables 29 and 30 to subpart UUU.

The final rule also includes work practice standards for HAP emissions from by-pass lines. A work practice standard may include a design, equipment, work practice, or operational requirement. Table 36 to subpart UUU lists the four options provided under the final rule. The final rule also includes work practice standards for all affected sources. These standards require you to prepare an operation, maintenance, and monitoring plan according to the rule requirements and comply with the procedures in the plan. This plan must be consistent with good air pollution control practices for minimizing emissions.

E. How Do I Demonstrate Initial Compliance?

You must install and operate the required continuous monitoring systems and show that you meet each emission limitation or work practice standard that applies to you. The requirements for demonstrating initial compliance differ by unit type and according to whether or not your affected source is also subject to the NSPS requirements.

If your CCU or sulfur recovery unit is also subject to the NSPS, you must meet the applicable emission limitations and monitoring requirements in this rule. These requirements in this case are the same as the NSPS. If you have already

done a performance test to demonstrate initial compliance with the NSPS, you aren't required to do another test to demonstrate initial compliance with the limits in this rule. If you have already done a performance test, you aren't required to do another one to show that your continuous opacity and emission monitoring systems meet the applicable performance specifications. You can demonstrate initial compliance for these affected sources by submitting a written statement in your Notification of Compliance Status certifying that you comply with the applicable NSPS requirements.

We have revised the requirements for affected sources not subject to the NSPS to account for the new compliance options, as well as revisions to monitoring requirements. Your requirements for demonstrating initial compliance will vary according to the compliance option you elect and the type of continuous monitoring system you must use.

1. HAP Metal Emissions From CCU

If you elect to comply with the NSPS, you must install and operate a continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent. The final rule also requires a continuous opacity monitoring system if your CCU has a fresh feed capacity of 20,000 barrels per day (or more) and uses an add-on control device other than a wet scrubber (e.g., an electrostatic precipitator) to control the catalyst regenerator vent emissions. You also must install and operate a continuous opacity monitoring system if your CCU isn't equipped with an add-on control device. If you use a continuous opacity monitoring system and elect to comply with either of the Ni limits, you also must install and operate a continuous parameter monitoring system to measure and record the gas flow rate. Or, you can use the approved alternative procedure in the final rule to determine the gas flow rate.

For a smaller CCU (fresh feed capacity 20,000 barrels per day or less) that uses an electrostatic precipitator to control emissions from the catalyst regenerator vent, you can use a continuous opacity monitoring system (with a continuous monitoring parameter system for gas flow rate if you elect either of the Ni options) or continuous parameter monitoring systems. The continuous parameter monitoring systems must measure and record the gas flow rate as well as the voltage and secondary current (or total power input).

If you use a wet scrubber to control emissions from your catalyst regenerator vent, you must use continuous parameter monitoring systems to measure and record the pressure drop across the scrubber, the gas flow rate, and the total liquid (or scrubbing liquor) flow rate, regardless of unit capacity. In response to comments, we exempted non-Venturi wet scrubbers of the jet-ejector design from monitoring requirements and operating limits for pressure drop.

Section 63.1573 of the final rule provides approved alternative monitoring procedures. If applicable, you can use these alternative procedures to determine the gas flow rate rather than a continuous parameter monitoring system.

You must prepare a site-specific test plan and do a performance test to demonstrate initial compliance with the applicable emission limitation(s). If you use a continuous opacity monitoring system and elect to meet the NSPS, you also must do a site-specific performance evaluation test plan and performance evaluation to show that your monitoring system meets the applicable performance specification.

If you use a continuous opacity monitoring system and elect the PM limit, you must use the performance test results to establish a site-specific opacity operating limit. If you elect either Ni limit, you must use the performance test results to establish a site-specific Ni operating limit based on opacity, gas flow rate, equilibrium catalyst Ni concentration, and coke burn-rate (depending on the format of the option you elect). You can use EPA Method 6010b, 6020, 7520, or 7521 in ''Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,'' EPA Publication SW–846, Revision 5 (April 1998) or an alternative method satisfactory to the Administrator to analyze the equilibrium catalyst Ni concentration. The final rule includes procedures for establishing each type of operating limit.

If you use continuous parameter monitoring systems for an electrostatic precipitator and elect the PM emission limitation, you must use the performance test results to establish operating limits for gas flow rate and voltage and secondary current (or total power input). If you elect either of the Ni limits, you must establish operating limits for the equilibrium catalyst Ni concentration. If you use a wet scrubber, you must use the performance test results to establish operating limits for pressure drop and liquid-to-gas ratio (if you elect the PM limit) as well as equilibrium catalyst Ni concentration (if you elect either of the Ni limits).

Table 3 to subpart UUU shows the requirements for continuous monitoring systems for HAP metal emissions from CCU. Table 4 to subpart UUU shows the performance test requirements under each of the four compliance options. You have demonstrated initial compliance with the metal HAP emission limitations if you meet the conditions in Table 5 to subpart UUU.

2. Organic HAP Emissions From CCU

Table 10 to subpart UUU shows the requirements for continuous monitoring systems for organic HAP emissions from CCU. If you elect to comply with the NSPS requirements, you must install and operate a continuous emission monitoring system to measure and record the concentration by volume (dry basis) of CO emissions from each catalyst regenerator vent.

If you don't elect to comply with the NSPS requirements, you must use continuous parameter monitoring systems. In response to comments, we have revised the proposed requirements for thermal incinerators to include a continuous parameter monitoring system to measure and record the oxygen content (percent dry basis) in the incinerator vent stream as well as the combustion zone temperature. If your unit is not equipped with a combustion control device, the final rule requires that you use a continuous emission monitoring system. Like the NSPS, if you can demonstrate that emissions from your vent average 50 ppm or less, the final rule does not require a continuous emission monitoring system or a continuous parameter monitoring system.

To demonstrate initial compliance, you must prepare a site-specific test plan and do a performance test to show that your vent meets the emission limit. If you use a continuous emission monitoring system and elect to comply with the NSPS, you also must prepare a site-specific performance evaluation test plan and do a performance evaluation to show that your system meets the applicable performance specification.

If you use continuous parameter monitoring systems, you must use the test results to establish operating limits for combustion zone temperature and oxygen concentration in the vent stream. We also clarified the performance test provisions for flares, which require a visible emissions test by Method 22 with a 2-hour observation period.

Table 11 to subpart UUU shows the performance test requirements for organic HAP emissions. You have demonstrated initial compliance with

the organic HAP emission limits if you meet the conditions in Table 12 to subpart UUU.

3. Organic HAP Emissions From Catalytic Reforming Units

Table 17 to subpart UUU shows the continuous monitoring system requirements for organic HAP emissions from catalytic reforming units. We didn't revise the proposed requirements for continuous monitoring systems for these units.

To demonstrate initial compliance, you must prepare a site-specific test plan and do a performance test to show that your vent meets the applicable emission limitation. We revised the proposed performance test procedures to remove Method 18 (40 CFR part 60, appendix A) for measurement of TOC concentration. You can use Method 25 or 25A for TOC concentration. We also clarified the requirements for flares (see section II.E of this document). Using the performance test results, you must establish operating limits for the combustion zone temperature of your combustion control device. Table 18 to subpart UUU shows the performance test requirements. You have demonstrated initial compliance with the emission limitations if you meet the conditions in Table 19 to subpart UUU.

4. Inorganic HAP Emissions From Catalytic Reforming Units

Table 24 to subpart UUU shows the continuous monitoring system requirements for inorganic HAP emissions from catalytic reforming units. We revised the proposed requirements for wet scrubbers to include a continuous parameter monitoring system to measure and record the pH of the water (or scrubbing liquid) exiting the scrubber instead of a continuous parameter monitoring system for pressure drop. You can also use the approved monitoring alternative for pH strips in lieu of a continuous parameter monitoring system. We also revised the proposed rule to include requirements for units with an internal scrubbing system (i.e., no add-on control device) based on use of colormetric tube sampling systems.

Table 25 to subpart UUU shows the performance test requirements for inorganic HAP emissions from catalytic reforming units. You must prepare a site-specific test plan and do a performance test to show that you meet the applicable emission limitation. We revised the proposed performance test requirements to specify that you can't make any test runs during the first hour or the last 6 hours of the cycle for a semi-regenerative or cyclic regeneration unit. Using the results of the performance test, you must establish operating limits for the liquid-to-gas ratio and pH of the scrubber water (or scrubbing liquid). If you don't use a control device, you must establish an operating limit for the HCl concentration using colormetric tubes. You can use Method 26 in 40 CFR part 60, appendix B, to measure emissions from these units. You have achieved initial compliance with the inorganic HAP emission standards if you meet the conditions in Table 26 to subpart UUU.

5. Organic HAP Emissions From Sulfur Recovery Units

Table 31 to subpart UUU shows the continuous monitoring system requirements for organic HAP emissions from sulfur recovery units. If you elect to comply with the NSPS requirements, you must install and operate a continuous emission monitoring system to measure and record the concentration (dry basis, zero percent excess air) of SO2 emissions exiting each exhaust stack for the unit if you use an oxidation or reduction control system followed by incineration. If you use a reduction control system without incineration, you must use continuous emission monitoring systems to measure and record the concentration of reduced sulfur and oxygen emissions. If you elect to comply with the TRS limit and use an incinerator to control emissions from your vent, you must install and operate a continuous emission monitoring system or a continuous parameter monitoring system to measure and record the combustion zone temperature and the oxygen content (percent, dry basis) in the vent stream of the incinerator. If you do not use an add-on control device to control emissions from your vent, you must install and operate a continuous emission monitoring system to measure and record the concentration of TRS.

You must prepare a site-specific test plan and do a performance test to show that emissions from your vent meet the applicable standard. If you use a continuous emission monitoring system and elect to meet the NSPS, you also must do a site-specific performance evaluation test plan and a performance evaluation to show that your system meets the applicable performance specification. If you use continuous parameter monitoring systems, you must establish operating limits for oxygen concentration as well as for combustion zone temperature. Table 32 to subpart UUU shows the performance test requirements for each option. You have demonstrated initial compliance if you meet the conditions specified in Table 33 to subpart UUU.

6. HAP Emissions From Bypass Lines

We revised the proposed standards for by-pass lines to include two new equipment options suggested by commenters. Table 37 to subpart UUU shows the performance test requirement applicable to a flow indicator, level recorder, or electronic valve position monitor. You have achieved initial compliance if you meet the applicable conditions for the work practice option you select shown in Table 38 to subpart UUU.

7. Continuous Monitoring System Requirements

We added new sections (§§ 63.1572 and 63.1573) to the final rule to clearly identify the requirements for monitor installation and operation and monitoring alternatives. Table 40 to subpart UUU shows the requirements for continuous opacity monitoring systems and continuous emission monitoring systems, which are the same as the NSPS. Table 41 to subpart UUU shows the requirements for installation and operation of continuous parameter monitoring systems. We have revised these requirements to include more detailed requirements for inspections and calibration checks as well as performance specifications for some types of systems. We also revised the rule to clarify that each continuous parameter monitoring system must measure and record on an hourly or hourly average basis and determine and record the daily average value.

The final rule also specifies that you operate your monitors (or collect data at all required intervals) at all times the affected source is operating. This does not apply to monitoring malfunctions, associated repairs, required quality assurance or control activities, and preapproved planned maintenance activities. You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations or to meet a minimum data availability requirement.

8. Performance Tests, Performance Evaluations, and Engineering Assessments

Section 63.1571 of the final rule contains general information and criteria you must meet for these activities. We have clarified the rule to specify that you can do your performance test at any time from today's date to your compliance date. In response to comments, we revised

§ 63.1564(e) of the proposed rule to require that the tests be done under normal operating conditions rather than at ''maximum representative operating capacity for the process.'' You must base your process or control device operating limits on the performance test measurements. However, unless you elect one of the two Ni options for metal HAP emissions from CCU, you can adjust the measured values, if necessary, using control device design specifications, manufacturer recommendations, or other applicable data. You must document any adjustment to the satisfaction of your permitting authority. We added special provisions to the rule for adjusting the Ni-related values.

This section of the rule also covers how to change your operating limit. While you can change your site-specific opacity operating limit or Ni operating limit only by doing a new performance test, you can change other operating limits for continuous parameter monitoring systems by doing another performance test, a performance test in conjunction with an engineering assessment, or by an engineering assessment. You must establish a revised limit if you make any change in the process or operating conditions that could affect control system performance or if you change the designated conditions after the last performance or compliance tests were done.

F. How Do I Demonstrate Continuous Compliance?

A new section, § 63.1570, of the final rule states your general requirements for complying with this rule. You must be in compliance with all of the non-opacity emission limits during the times specified in § 63.6(g)(1). You must be in compliance with the opacity emission limits during the times specified in § 63.6(h)(1). You must always operate and maintain your affected source, including air pollution and control and monitoring equipment, according to the provisions in § 63.6(e)(1)(i).

Subpart UUU requires that you develop and implement a startup, shutdown, and malfunction plan according to the requirements in § 63.6(e)(3). During periods of startup, shutdown, or malfunction, you must operate your affected source and control equipment according to your plan.

You must report each instance in which you did not meet each emission limitation or work practice standard that applies to you. This includes periods of startup, shutdown, and malfunction. These instances are deviations from the emission limitations and work practice standards that must be reported according the requirements in § 63.1575 of the final rule.

Consistent with §§ 63.6(e) and 63.7(e)(1), a deviation that occurs during a period of startup, shutdown, or malfunction is not a violation if you demonstrate to the Administrator's satisfaction that you were operating in accordance with your startup, shutdown, and malfunction plan. The Administrator will determine whether a deviation that occurs during a period of startup, shutdown, or malfunction is a violation according to the provisions in § 63.6(e). As proposed, multiple deviations from the same control device at the same time when you monitor process or control device operating parameters are a single deviation. You still must report each deviation.

You must demonstrate continuous compliance with each emission limitation and work practice standard that applies to you. To demonstrate continuous compliance with the emission limitations for CCU, you must meet each of the conditions specified in Tables 6 and 7 to subpart UUU (for metal HAP emissions) and Tables 13 and 14 to subpart UUU (for organic HAP emissions). For catalytic reforming units, you must meet each of the conditions in Tables 20 and 21 to subpart UUU (for organic HAP emissions) and Tables 27 and 28 to subpart UUU (for inorganic HAP emissions). For HAP emissions from sulfur recovery units, you must meet each of the conditions in Tables 34 and 35 to subpart UUU. Continuous compliance requirements for by-pass lines are in Table 39 to subpart UUU. We have revised the continuous compliance requirements to reflect the inclusion of new compliance options and monitoring requirements.

G. What Are the Notification, Recordkeeping, and Reporting Requirements?

Sections 63.1574 through 63.1576 of the final rule describe the requirements for notices, reports, and records. As proposed, you may be required to provide up to seven types of one-time notifications of applicability, intention to construct or reconstruct (including construction and startup dates), performance test dates, and compliance status.

We added a one-time notice for owner and operators to obtain an extension of compliance on the emission limitations for an existing CCU. To obtain the extension, the owner or operator must commit to adding hydrotreatment of the CCU feedstock to meet the final Tier 2 gasoline sulfur control standards (40 CFR part 80, subpart J).

We have streamlined the data requirements for the Notification of Compliance Status by removing certain information on operation, maintenance, and monitoring of affected sources and control systems. This information is to be included in a separate operation, maintenance, and monitoring plan submitted to your permitting authority for review and approval. The plan must cover each affected source, monitoring system or procedure, and control device or method. This plan also contains information such as the procedures you will use to monitor certain process or control device operating parameters, your quality assurance/quality control plan for continuous monitoring systems, and monitoring and maintenance schedules.

You must submit a semiannual compliance report containing the information specified in the rule. We revised the rule to require that you submit the report whether or not a deviation occurred during the reporting period. However, only summary information is required if no deviation occurred. As proposed, the rule does not require that you make emergency reports if actions taken are consistent with your startup, shutdown, and malfunction plan. If actions taken are not consistent with your plan, you must report the events and the response in your semiannual compliance report.

We also revised the proposed rule in response to comments to include provisions allowing the permitting authority to approve a period of planned routine maintenance for a refinery with multiple CCU served by a single wet scrubber emission control device. During this pre-approved time period, the refinery may take the control device and/or one of the process units out of service for maintenance while the remaining process unit(s) continues to operate. To obtain approval, you must submit a written request at least 6 months before the planned maintenance is scheduled to begin that contains the specified information and data. This includes:

- A description of the planned routine maintenance and why it is necessary;
- The date the maintenance will begin and end;
- A quantified estimate of the emissions (including HAP and criteria pollutants) that would be released with an analysis of the environmental benefits (i.e., emission reduction) that would result as opposed to delaying the maintenance until the next unit turnaround; and
- Actions to be taken to minimize emissions during the period.

You must include a copy of the request in the compliance report due for the period before the planned maintenance is scheduled to begin. In the compliance report due after the routine planned maintenance is complete, you must provide followup information on the maintenance including the number of hours the control device did not operate.

As proposed, you must keep records of the information and data required by § 63.10. This includes information and data you must record to show continuous compliance with the emission limitations and work practice standards. You also must keep records of any changes that affect the performance of your emission control system.

III. Summary of Environmental, Energy, and Economic Impacts

In response to comments, we revised the environmental impacts analysis in two major respects. First, we incorporated the most current (1998) facility-specific data available. We removed thermal (non-fluid) CCU from the analysis because these units are not subject to the final rule. Finally, we changed the HAP metal emission estimate methodology to allow more site-specific and unit-specific estimates based on equilibrium catalyst Ni concentrations. The revised environmental impacts analysis is available in the docket (Docket A–97–37).

A. What Are the Air Quality Impacts?

We estimate nationwide HAP emissions from process vents on CCU, catalytic reforming units, and sulfur recovery units at 12,700 tpy at the current level of control. Most of the 162 existing refineries will meet the requirements of the rule within 3 years for all affected sources. A small number of fluid CCU may be granted an extension of compliance to install hydrotreating unit(s). When this rule is fully implemented for all affected sources, nationwide HAP emissions will be reduced by about 11,000 tpy, an 87 percent reduction. Emissions of non-HAP such as VOC, CO, PM, and hydrogen sulfide will be reduced by about 55 percent from the current level of about 109,000 tpy. Little or no adverse secondary air impacts, water, or solid waste impacts are anticipated from the implementation of these standards.

B. What Are the Cost Impacts?

For most facilities, the costs of the rule will be incurred over the next 3 years. For a few facilities, the costs for fluid CCU will be incurred over the next 8 years as hydrotreatment units are installed to meet the requirements of Tier 2 and this rule. The nationwide capital and annualized costs of control equipment (1998 dollars) are estimated at $163 million and $37.2 million/yr, respectively. When fully implemented, this rule is expected to result in an overall annual national cost of $47.3 million. This includes a cost of $37.2 million for operation and maintenance of control devices and a monitoring, recordkeeping, and reporting cost of $10.1 million ($9.2 million for operation and maintenance of monitoring systems and $0.9 million for recordkeeping and reporting).

About 75 percent of the facilities are currently meeting at least one of the emission limits required under the final rule. The costs for this rule are for the small fraction of refineries not already meeting the standard. Based on our cost analysis, only 29 of the 124 CCU (23 percent) and 53 of the 185 sulfur recovery units (29 percent) will require new or upgraded controls. We estimate that 102 of the 177 catalytic reforming units will require new or upgraded control systems for HCl.

C. What Are the Economic Impacts?

The economic analysis for the proposed rule showed that the estimated price increase of refined petroleum products is 0.24 percent for refineries expected to incur compliance costs as a result of the rule. The estimated decrease in output is 0.17 percent of domestic refinery products. The decline in domestic production is due to higher imports and reduced quantity demanded due to higher prices. However, the value of domestic shipments is expected to increase by 0.07 percent because the estimated price increase more than offsets the lower production volume. Annual net exports (exports minus imports) are predicted to decrease by 0.76 percent. Employment in the industry is likely to decrease by 0.19 percent (136 jobs). No plant closures or significant regional impacts are expected. The impacts for the final rule are expected to be similar to those predicted for the proposed rule since the overall costs and number of affected facilities changed only slightly; both overall capital and annual costs and number of affected sources are estimated to be lower for the final rule. Therefore, a new economic analysis was not considered necessary and was not conducted for the final rule. For more information on the economic impact analysis methodology and results, consult the ''Economic Impact Analysis for the Petroleum Refinery NESHAP'' (Docket A–97–37).

D. What Are the Non-Air Health and Environmental Impacts?

The control requirements in this rule are based on air pollution control systems currently in widespread use throughout the petroleum refining industry. The reduction in emissions of HAP and criteria pollutants will result in reduced deposition to waterbodies. The reduction in VOC will reduce ozone formation resulting in less damage to agricultural crops and forests. A small increase in annual water usage, about 6.2 million gallons nationwide, will result from the increased use of wet scrubbers.

E. What Are the Energy Impacts?

The energy impacts also are about the same as the proposed rule. Once fully implemented, annual electric usage is expected to increase by about 67,000 megawatt-hours (MW-hrs), primarily for CCU and sulfur recovery unit control systems. National natural gas usage, primarily for sulfur recovery unit control systems, is expected to increase by about 1.5 billion cubic feet per year.

IV. Summary of Major Comments and Responses

A. Why Did We Extend the Compliance Date?

Comment: Several industry commenters urge us to defer or delay promulgation of the rule to allow time to coordinate with the Tier 2 gasoline sulfur control requirements and other rules such as the reformulated gasoline (RFG) Phase II standard and the revised national ambient air quality standard for PM. Their major concern is that plants will be required to install expensive controls that may be extraneous as soon as they are installed depending on the outcome of the Tier 2 and other rules.

Response: To comply with the Tier 2 gasoline sulfur control requirements, individual refineries ultimately will need to produce gasoline with an average sulfur content of 30 ppm. The majority of refineries will need to undertake major construction projects to meet this limit. Since these projects could require modification of CCU and other affected sources, we revised the schedule to delay promulgation of this rule until completion of the Tier 2, which was promulgated on February 10, 2000 (65 FR 6698).

For some refineries, the Tier 2 rule significantly impacts its CCU. These refineries will have construction projects adding hydrotreating of the feed to the CCU. For these refineries, we also extended the compliance date to allow more time for construction projects. We believe that this will encourage refinery

owners and operators to employ hydrotreating of the feedstock to comply with the Tier 2 rule. As discussed in more detail below, we believe that hydrotreating the feedstock has increased environmental benefits relative to other methods of reducing gasoline sulfur.

The extended compliance date for existing CCU is based on when and how a refinery produces low sulfur gasoline to meet the Tier 2 limit. Hydrotreating the feed to the CCU is one of the means of producing low sulfur gasoline. As discussed further below, hydrotreating the feedstock provides environmental benefits not realized with other methods of producing low sulfur gasoline. It is also, unfortunately, significantly more expensive than other methods of reducing the sulfur content of gasoline.

A refinery owner or operator must determine which technology to use in reducing gasoline sulfur to meet the fuel standards. A number of alternatives are available. Refineries may elect to hydrotreat after the CCU, to hydrotreat the CCU feedstock or to implement some other form of desulfurization technology. Hydrotreating the feedstock removes metals as well as sulfur. While hydrotreating the feedstock to the unit would allow greater flexibility within the overall refinery operations and would better position the refinery for any additional sulfur fuel standards that might be promulgated in the future, such as standards to reduce sulfur in diesel fuel (64 FR 26142, May 13, 1999), the cost of hydrotreating the CCU feed is considerably more than post-unit hydrotreating for desulfurization. Thus, despite the greater flexibility realized through hydrotreating the feedstock, there is an economic bias against its use to reduce gasoline sulfur to meet the fuel standards. We believe that this bias could increase substantially if we do not coordinate the compliance dates for these NESHAP and the Tier 2 rule. A substantial increase in the economic bias against hydrotreating the feedstock would likely result in less refineries implementing this method of reducing gasoline sulfur, thereby foregoing a potentially significant environmental benefit.

Some facilities will take longer than 3 years to comply with the Tier 2 standards. Should these facilities elect to install hydrotreatment units for the feed to the CCU, these new units will not be operating at the compliance date for the MACT standard, 3 years promulgation. To avoid non-compliance, an owner or operator would be required to install expensive PM controls to comply with the MACT standard. These new controls might then become redundant with the later startup of the hydrotreatment unit for the feed to the CCU. Therefore, if the owner or operator elects to install a hydrotreatment unit for the feed to the CCU, the MACT compliance date for the CCU becomes the same as the Tier 2 compliance date.

Linking the compliance dates for the two rules, in this particular instance for those refineries that elect to hydrotreat the CCU feedstock, will allow the refinery to coordinate both decision making and the actual construction projects and, thus, minimize disruption to the refinery operations. We believe that not linking the compliance dates for the two rules could result in an environmental benefit being foregone and that linking them will result in a net environmental benefit because the number of process unit shutdowns and startups would be minimized. Shutdowns and startups can result in considerably more emissions to the atmosphere than operations under normal conditions. An estimate of the emissions reductions that would result from linking the compliance dates for the CCU MACT standards and Tier 2 fuel standards is not possible at this time. This is because we lack information regarding how the refineries will choose to comply with the fuel standards and the uncertainties associated with startup and shutdown of these refinery operations.

Linking the MACT standards' compliance date to the Tier 2 fuel standards' compliance date (i.e., the date the refinery produces low sulfur gasoline at 30 ppm) will not result in an overall or complete delay of the MACT standards for all CCU. While we believe that linking the compliance dates will serve as an incentive to hydrotreat the CCU feedstock, we nevertheless expect that the majority of facilities will comply with the fuel standards without implementing CCU feedstock hydrotreating. In some cases, even those that elect to hydrotreat the feedstock will comply in 3 years or less to take advantage of the various pooling, averaging, banking, and trading options provided in the final Tier 2 standards. The remainder of refineries will begin production of low sulfur gasoline over the next 8-year period, although most are expected to be in full compliance (i.e., producing gasoline at the 30 ppm annual average) by the year 2006. In no case will refineries be allowed any later than December 31, 2009, to comply with the MACT standard for CCU, which corresponds to the final Tier 2 compliance date.

B. What Is the New Alternative Nickel Emission Limitation?

Comment: Several industry commenters urge us to include a rate-based Ni alternative of 0.007 lb Ni/1,000 lbs of coke burn-off in the final rule. According to the commenters, this approach avoids penalizing large units with low HAP emissions and equates to the NSPS for PM by using the highest or worst case Ni equilibrium concentration to convert PM to Ni. Most of the units that can comply with the PM limit cannot comply with the mass-based Ni limit due to their greater size. The commenters argue that larger units should not be subject to a more restrictive Ni limit than smaller units due to their greater processing capacity.

Environmental groups and one independent technical expert strongly disagree that we should provide the second Ni alternative at the level suggested by industry (i.e., 0.007 lb/1,000 lbs of coke burn-off). Commenters claim that this alternative is not technically equivalent to the MACT floor, is not protective of the environment as it is set at a level that allows all refiners to process heavy feeds with no control device, will actually increase emissions, and poses difficulties in ensuring continuous compliance.

Response: After careful review of all the information and data collected following proposal and received as part of the public comments, we decided to include an additional metal HAP alternative for CCU formatted in terms of Ni emissions per 1,000 lbs of coke burn-off. We concluded that this particular format (i.e., lb Ni/1,000 lbs of coke burn-off) does account for the wide variation of processing capacity within the industry and, with the new provisions added to the final rule, there are adequate means of ensuring continuous compliance.

We also concluded that the technical approach recommended by the industry commenters (using equilibrium catalyst Ni concentration to make a direct conversion of the PM emission standard to a Ni limit) is not appropriate. As discussed further in the Response to Comment Document, we must reject any method to derive a Ni emission limit in terms of lb Ni/1,000 lb coke burn-off based on the PM emission limit and some arbitrarily selected equilibrium catalyst concentration, whether it is a median, average or highest measured value. The emission limits calculated using these approaches do not correlate with actual emissions (in lb Ni/1,000 lbs coke burn-off) of any CCU, and the resulting Ni emission limits are not

''equivalent'' to the technology-based standard used as a basis of the PM emission limit that characterizes performance of the MACT floor technologies. This is because the equilibrium catalyst Ni concentration in no way reflects the performance of the MACT floor technology, as PM emissions. The equilibrium catalyst Ni concentration of a CCU is dependent on a complex mixture of operating and economic considerations; it is not totally dictated by the variability of Ni in the crude oil or the unit feed. In addition, we have no data or information to relate the equilibrium catalyst metals concentration to the best performing facilities (i.e., the equilibrium catalyst metal concentration does not reflect or relate to control device performance).

Although we do not accept the recommended approach in determining the emission limit based on an equilibrium catalyst conversion factor, we feel that the alternative format in terms of lb Ni/1,000 lb of coke burn-off has considerable merit. This particular format allows for flexible compliance on the part of the plant owner/operator. An emission limit expressed in this format can be met by using front-end hydrotreating, in-process operational changes, or end of pipe add-on controls alone or in combination.

In addition, to comply with the Tier 2 fuel standards, an owner or operator must choose one of a number of available methods of reducing sulfur in gasoline. One of those methods is to hydrotreat CCU feedstocks. This method of compliance has environmental benefits not realized with other methods. This is because feedstock hydrotreating has the potential to reduce Ni emissions from CCU, depending on what operating changes are made in the catalyst regeneration processes in conjunction with the feedstock hydrotreating. We believe that a Ni emission limit, in terms of lb Ni/1,000 lbs coke burn-off, has a potential to encourage feedstock hydrotreating as a means to comply with this limit and the Tier 2 fuel standards.

To determine an appropriate emission limit, we examined the available emissions data for the top performing CCU in terms of lb Ni emissions/1,000 lb coke burn-off rate. Although the currently available source test data are somewhat limited and are generally assumed to be representative of the lowest Ni emitters across the industry, they do allow an analysis following the basic criteria established for a MACT floor determination.

Through review of the emission data, we found that the average emission rates, as well as each individual test run result for the top-ranked CCU, are all below 0.001 lb Ni/1,000 lbs coke burn-off. Based on our data analysis, we determined that the emission limit of 0.001 lb Ni/1,000 lbs coke burn-off adequately characterizes performance of the MACT floor technology while taking into account process and measurement variability. This analysis provides an emission limit in the alternative format (Ni emissions per unit coke burn) that is reflective of the MACT floor technology. This emission limit is included in the final rule as an alternative format to the PM or Ni lb/hr limits that were also selected to characterize the performance of the MACT floor technologies. The determination of the emission limit formatted in terms of coke burn-off that is used to characterize the MACT floor technology is discussed in more detail in the Response to Comments Document (Docket A–97–36).

C. Why Did We Not Change the Proposed Nickel Emission Limitation?

Comment: Three commenters believe we should relax the proposed Ni emission limitation (lbs/hr) for metal HAP emissions from CCU. They question the method we used to determine the numerical emission limit that characterizes the MACT floor technology in this particular format. According to the commenters, our variability analysis is flawed for several reasons.

- We used the z-statistic rather than the student's t-statistic, which is appropriate for small samples from populations.
- We used the average relative standard deviation instead of the more representative maximum relative standard deviation.
- The analysis includes data known to be false or problematic.
- We used the 95 percent confidence level rather than the 98 percent interval, which the commenter claims is an EPA precedent.

The commenters also believe the level of emissions that would be excluded by the higher limit is trivial and of little environmental significance. Raising the limit would allow some refineries to avoid installing controls that are not cost effective and provide real *de minimus* relief. The commenters support a standard of 760 lbs/yr based on their approach.

Response: We acknowledge the quality assurance concerns regarding the results of certain Ni emission measurements and the use of larger confidence intervals about the average emission value in setting an emission limit that reflects use of the MACT floor technology. However, we also believe that the analysis must use the average of the top 12 percent or the 6th percentile facility, rather than the emissions of the 12th percentile facility. There are 124 fluid CCU in the U.S. and its territories; the 6th percentile of the industry would be represented by the emissions reductions achieved by the 7th and 8th ranked units. Reanalysis of the data, considering the reviewer's comments on the statistical approach while using the 6th percentile unit, yields an emission limit nearly identical to the proposed limit.

In response to this comment, we examined the emission rates of the top performing unit for which we have documented source test results. We found that the average emission rates, as well as each individual test run result for the top eight ranked units, are all below 200 lbs/yr. The 9th and 10th ranked units have similar average emission rates, but a wider fluctuation in the individual test run results. From the test data available, we determined that the proposed emission limit of 250 lbs/yr adequately characterizes the performance of the MACT floor technologies while taking into account process variability. For these reasons, we made no change in the proposed Ni lb/hr emission limit.

D. How Did We Change the Proposed Monitoring Requirements?

Comment: Environmental groups urge us to require continuous emission monitoring systems for HCl, TRS, and either CO, TOC, or total hydrocarbons (THC) for existing and new affected sources. They say these systems are commercially available, feasible (as stated in the background information document), ensure standards are met at all times, and provide better HAP monitoring. They say the cost of these systems is decreasing, and they may no longer be too costly. Also, the continuous monitoring of a process allows the operator greater flexibility in operation which could result in increased output, improved efficiency, and overall cost savings. Two commenters specifically request continuous emission monitoring systems for TRS limits. Due to the TRS emissions from refineries and numerous exceedances, more accurate information than operating parameter values is needed to assess compliance.

Response: We agree with the commenters' recommendations that the NSPS experience with continuous emission monitoring systems demonstrates their technical and economic feasibility for this industry,

provides better data, and needs to be encouraged.

In determining monitoring requirements, we looked at the various options. One of the options examined was requiring continuous emission or opacity monitors for all affected sources under this rule. We did not select this option because of the high capital and operating costs.

However, in response to these comments, we reexamined these options to look for ways to encourage their use or require their use if needed. As a result, we included options in the rule allowing plants to choose to comply with the NSPS monitoring requirements.

We also included requirements in the rule for continuous opacity monitoring systems for catalyst regenerator vents on any CCU with a fresh feed capacity greater than 20,000 barrels per day (and not using wet scrubbers). We also added continuous opacity monitors as a monitoring option for smaller units. Continuous opacity monitoring systems are already required for the larger units under Federal/State implementation plan requirements in 40 CFR part 51, appendix P; therefore, these costs are not attributable to the standard. We did not require a continuous opacity monitoring system for a unit with a wet scrubber because of interference from water vapor in wet scrubber exhaust gases. For these units, parameter monitoring is still the only monitoring method.

A continuous emission monitoring system for TRS or reduced sulfur emissions is also required in the final rule for any sulfur recovery unit with no add-on control device. The cost of continuous emission monitoring systems for these units is reasonable and does not pose any economic hardship for plants that do not use a control device. For units with add-on control devices, we are confident that the process or control device parameter monitoring allowed in place of continuous emission or opacity monitoring systems provides adequate assurance of continuous compliance.

V. Administrative Requirements

A. Executive Order 12866, Regulatory Planning and Review

Under Executive Order 12866 (58 FR 5173, 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 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 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.

Pursuant to the terms of Executive Order 12866, OMB has notified EPA that it considers this a ''significant regulatory action'' within the meaning of the Executive Order. EPA has submitted this action to OMB for review. Changes made in response to OMB suggestions or recommendations are documented in the public record.

B. Executive Order 13132, Federalism

Executive Order 13132, entitled ''Federalism'' (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' is defined in the Executive Order to include regulations that have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.''

Under section 6 of Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. The EPA also may not issue a regulation that has federalism implications and that preempts State law, unless the EPA consults with State and local officials early in the process of developing the proposed regulation.

This final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. None of the affected facilities are owned or operated by State governments. Thus, the requirements of section 6 of the Executive Order do not apply to this rule.

C. Executive Order 13175, Consultation and Coordination With Indian Tribal Governments

Executive Order 13175, entitled ''Consultation and Coordination with Indian Tribal Governments'' (65 FR 67249, November 6, 2000), requires EPA to develop an accountable process to ensure ''meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.'' ''Policies that have tribal implications'' is defined in the Executive Order to include regulations that have ''substantial direct effects on one or more Indian tribes, on the relationship between the Federal government and the Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes.''

This final rule does not have tribal implications. It will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this rule.

D. 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 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 EPA.

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. The EPA interprets Executive Order 13045 as applying only to

regulatory actions that are based on health or safety risks, such that the analysis required under section 5–501 of the Executive Order has the potential to influence the regulation. These final NESHAP are not subject to Executive Order 13045 because they are based on technology performance and not on health or safety risks.

E. Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use

This rule is not a ''significant energy action'' as defined in Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355 (May 22, 2001)) because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

F. Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, the 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 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 estimated costs of $100 million or more to either State, local, or tribal governments, in the aggregate, or to the private sector in any 1 year. The rule does not 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.

G. Regulatory Flexibility Act (RFA), As Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 et seq.

The EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this final rule. For the purposes of assessing the impacts of today's rule on small entities, small entities are defined as: (1) A firm having no more than 1,500 employees and no more than 75,000 barrels per day capacity of petroleum-based inputs, including crude oil or bona fide feedstocks; [1] according to Small Business Administration (SBA) size standards established under the North American Industry Classification System (NAICS); (2) a small government jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field. Small entities in NAICS 32411 only will be affected.

After considering the economic impacts of today's final rule on small entities, EPA has concluded that this action will not have a significant economic impact on a substantial number of small entities. We have determined that nine of the 23 small refiners own one or more of the affected sources. None of the 9 small refiners will need additional air pollution control equipment for CCU or sulfur recovery units. Only those costs for monitoring, reporting, and recordkeeping would be incurred by these firms. Six small refiners will need to add control equipment for catalytic reforming units. Annual total compliance costs for the nine affected small refiners would be less than 0.01 percent of estimated revenues. For more information, please consult the public docket for this final rule.

Although this final rule will not have a significant economic impact on a substantial number of small entities, EPA nonetheless has tried to reduce the impact of this rule on small entities. As discussed in the preamble to the proposed rule, EPA met with representatives of five small refineries and listened to their concerns. In response, we exercised the maximum degree of flexibility in minimizing impacts on small business through the alternative Nickel standard and subcategorization for catalytic reforming units. The rule reflects the minimum level of control allowed under the CAA. Since proposal, we have further reduced the economic impact on all refineries, including small businesses, by subcategorizing CCU and, in appropriate circumstances, extending the compliance date to coincide with the Tier 2 gasoline sulfur control rule.

H. Paperwork Reduction Act

The information collection requirements in this final rule are being submitted for approval to OMB under the requirements of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An information collection request (ICR) document has been prepared by EPA (ICR No. 1844.01), and a copy may be obtained from Sandy Farmer, Office of Environmental Information, Collection Strategies Division, U.S. Environmental Protection Agency (2137), 1200 Pennsylvania Avenue, NW., Washington, DC 20460, or by calling (202) 260–2740.

The information collection requirements in the final rule include mandatory notifications, records, and reports required by the NESHAP General Provisions (40 CFR part 63, subpart A). These information requirements are needed to confirm the compliance status of major sources, to identify any non-major sources not subject to the standard and any new or reconstructed sources subject to the standards, to confirm that emission control devices are being properly operated and maintained, and to ensure that the standards are being achieved. Based on the recorded and reported information, EPA can decide which facilities, records, or processes should be inspected. These recordkeeping and reporting requirements are specifically authorized under section 114 of the CAA (42 U.S.C. 7414). All information submitted to EPA for which a claim of

[1] Capacity includes owned or leased facilities as well as facilities under a processing agreement or an agreement such as an exchange agreement or a throughput. The total product to be delivered under the contract must be at least 90 percent refined by the successful bidder from either crude oil or bona fide feedstocks.

confidentiality is made will be safeguarded according to EPA policies in 40 CFR part 2, subpart B.

The annual public reporting and recordkeeping burden for this collection of information (averaged over the first 3 years after the effective date of this rule) is estimated to total 19,428 labor hours per year at a total annual cost of $1.3 million. This estimate includes initial notifications, a performance test, one-time preparation of a startup, shutdown, and malfunction plan and operation, maintenance, and monitoring plan, semiannual deviation summary reports, and recordkeeping for 132 plants expected to be subject to the rule during this ICR clearance period. Total capital costs associated with the monitoring equipment over the 3-year period of the ICR is estimated at $15.8 million; the annualized cost of capital is estimated at $1.1 million. This estimate includes the capital and startup costs associated with installation of monitoring equipment.

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 number for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15.

I. National Technology Transfer and Advancement Act of 1995

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104–113, § 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus in their 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., material specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. The NTTTA 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.

Consistent with the NTTAA, we conducted searches to identify voluntary consensus standards for use in emissions testing. The search for emissions testing procedures identified 34 voluntary consensus standards that appeared to have possible use in lieu of EPA standard reference methods. After reviewing the available standards, we determined that 26 of the candidate consensus standards identified for measuring emissions of the HAP or surrogates subject to the emission limitations in the rule would not be practical due to lack of equivalency, documentation, validation data, and other important technical and policy considerations. Eight of the remaining candidate consensus are under development or currently under EPA review. We plan to follow, review, and consider adopting these standards after their development and we complete further review.

One consensus standard, ASTM D6216–98, is practical for EPA use in Performance Specification 1 (PS–1) in 40 CFR part 60, appendix B, ''Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources.'' This ASTM method can best be used in place of the design specification verification procedures currently in sections 5 and 6 of PS–1. We proposed ASTM D6216–98 for incorporation by reference in another rulemaking (63 FR 50824, September 23, 1998). Comments from the proposal have been addressed and we expect to complete this action in the near future. For these reasons, we do not propose to adopt ASTM D6216–98 in lieu of PS–1 requirements as it would be impractical to us to act independently from the other rulemaking already undergoing promulgation, and because ASTM D6216 does not address all the requirements specified in PS–1.

Tables 4 and 40 in subpart UUU list the EPA test methods and performance specifications included in this rule. Most of these methods and performance specifications have been used by States and industry for more than 10 years. Nevertheless, as provided by § 63.7(f) of the NESHAP General Provisions (40 CFR part 63, subpart A), any State or facility may apply to EPA for permission to use an alternative method in place of any of the EPA test methods or performance specifications listed in the rule.

J. 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. 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, Petroleum refineries.

Dated: March 19, 2002.

Christine Todd Whitman,

Administrator.

For the reasons stated 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. Part 63 is amended by adding subpart UUU to read as follows:

Subpart UUU—National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units

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What This Subpart Covers

§ 63.1560 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (HAP) emitted from petroleum refineries. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards.

§ 63.1561 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a petroleum refinery that is located at a major source of HAP emissions.

(1) A petroleum refinery is an establishment engaged primarily in petroleum refining as defined in the Standard Industrial Classification (SIC) code 2911 and the North American Industry Classification (NAIC) code 32411, and used mainly for:

(i) Producing transportation fuels (such as gasoline, diesel fuels, and jet fuels), heating fuels (such as kerosene, fuel gas distillate, and fuel oils), or lubricants;

(ii) Separating petroleum; or

(iii) Separating, cracking, reacting, or reforming an intermediate petroleum

stream, or recovering a by-product(s) from the intermediate petroleum stream (e.g., sulfur recovery).

(2) A major source of HAP is a plant site that 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 HAP at a rate of 22.68 megagrams (25 tons) or more per year.

(b) [Reserved]

§ 63.1562 What parts of my plant are covered by this subpart?

(a) This subpart applies to each new, reconstructed, or existing affected source at a petroleum refinery.

(b) The affected sources are:

(1) Each catalytic cracking unit that regenerates catalyst.

(2) Each catalytic reforming unit that regenerates catalyst.

(3) Each sulfur recovery unit and the tail gas treatment unit serving it.

(4) Each bypass line serving a new, existing, or reconstructed catalytic cracking unit, catalytic reforming unit, or sulfur recovery unit. This means each vent system that contains a bypass line (e.g., ductwork) that could divert an affected vent stream away from a control device used to comply with the requirements of this subpart.

(c) An affected source is a new affected source if you commence construction of the affected source after September 11, 1998, and you meet the applicability criteria in § 63.1561 at the time you commenced construction.

(d) Any affected source is reconstructed if you meet the criteria in § 63.2.

(e) An affected source is existing if it is not new or reconstructed.

(f) This subpart does not apply to:

(1) A thermal catalytic cracking unit.

(2) A sulfur recovery unit that does not recover elemental sulfur or where the modified reaction is carried out in a water solution which contains a metal ion capable of oxidizing the sulfide ion to sulfur (e.g., the LO–CAT II process).

(3) A redundant sulfur recovery unit not located at a petroleum refinery and used by the refinery only for emergency or maintenance backup.

(4) Equipment associated with bypass lines such as low leg drains, high point bleed, analyzer vents, open-ended valves or lines, or pressure relief valves needed for safety reasons.

(5) Gaseous streams routed to a fuel gas system.

§ 63.1563 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to the requirements in paragraphs (a)(1) and (2) of this section.

(1) If you startup your affected source before April 11, 2002, then you must comply with the emission limitations and work practice standards for new and reconstructed sources in this subpart no later than April 11, 2002.

(2) If you startup your affected source after April 11, 2002, you must comply with the emission limitations and work practice standards for new and reconstructed sources in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the emission limitations and work practice standards for existing affected sources in this subpart by no later than April 11, 2005 except as specified in paragraph (c) of this section.

(c) We will grant an extension of compliance for an existing catalytic cracking unit allowing additional time to meet the emission limitations and work practice standards for catalytic cracking units in §§ 63.1564 and 63.1565 if you commit to hydrotreating the catalytic cracking unit feedstock and to meeting the emission limitations of this subpart on the same date that your facility meets the final Tier 2 gasoline sulfur control standard (40 CFR part 80, subpart J). To obtain an extension, you must submit a written notification to your permitting authority according to the requirements in § 63.1574(e). Your notification must include the information in paragraphs (c)(1) and (2) of this section.

(1) Identification of the affected source with a brief description of the controls to be installed (if needed) to comply with the emission limitations for catalytic cracking units in this subpart.

(2) A compliance schedule, including the information in paragraphs (c)(2)(i) through (iv) of this section.

(i) The date by which onsite construction or the process change is to be initiated.

(ii) The date by which onsite construction or the process change is to be completed.

(iii) The date by which your facility will achieve final compliance with both the final Tier 2 gasoline sulfur control standard as specified in § 80.195, and the emission limitations and work practice standards for catalytic cracking units in this subpart. In no case will your permitting authority grant an extension beyond the date you are required to meet the Tier 2 gasoline sulfur control standard or December 31, 2009, whichever comes first. If you don't comply with the emission limitations and work practice standards for existing catalytic cracking units by the specified date, you will be out-of-compliance with the requirements for catalytic cracking units beginning April 11, 2005.

(iv) A brief description of interim emission control measures that will be taken to ensure proper operation and maintenance of the process equipment during the period of the compliance extension.

(d) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the requirements in paragraphs (d)(1) and (2) of this section apply.

(1) Any portion of the existing facility that is a new affected source or a new reconstructed source must be in compliance with the requirements of this subpart upon startup.

(2) All other parts of the source must be in compliance with the requirements of this subpart by no later than 3 years after it becomes a major source or, if applicable, the extended compliance date granted according to the requirements in paragraph (c) of this section.

(e) You must meet the notification requirements in § 63.1574 according to the schedule in § 63.1574 and in 40 CFR part 63, subpart A. Some of the notifications must be submitted before the date you are required to comply with the emission limitations and work practice standards in this subpart.

Catalytic Cracking Units, Catalytic Reforming Units, Sulfur Recovery Units, and Bypass Lines

§ 63.1564 What are my requirements for metal HAP emissions from catalytic cracking units?

(a) *What emission limitations and work practice standards must I meet?* You must:

(1) Meet each emission limitation in Table 1 of this subpart that applies to you. If your catalytic cracking unit is subject to the NSPS for PM in § 60.102 of this chapter, you must meet the emission limitations for NSPS units. If your catalytic cracking unit isn't subject to the NSPS for PM, you can choose from the four options in paragraphs (a)(1)(i) through (iv) of this section:

(i) You can elect to comply with the NSPS requirements (Option 1);

(ii) You can elect to comply with the PM emission limit (Option 2);

(iii) You can elect to comply with the Nickel (Ni) lb/hr emission limit (Option 3); or

(iv) You can elect to comply with the Ni lb/1,000 lbs of coke burn-off emission limit (Option 4).

(2) Comply with each operating limit in Table 2 of this subpart that applies to you.

(3) Prepare an operation, maintenance, and monitoring plan according to the requirements in § 63.1574(f) and operate at all times according to the procedures in the plan.

(4) The emission limitations and operating limits for metal HAP emissions from catalytic cracking units required in paragraphs (a)(1) and (2) of this section do not apply during periods of planned maintenance preapproved by the applicable permitting authority according to the requirements in § 63.1575(j).

(b) *How do I demonstrate initial compliance with the emission limitations and work practice standard?* You must:

(1) Install, operate, and maintain a continuous monitoring system(s) according to the requirements in § 63.1572 and Table 3 of this subpart.

(2) Conduct a performance test for each catalytic cracking unit not subject to the NSPS for PM according to the requirements in § 63.1571 and under the conditions specified in Table 4 of this subpart.

(3) Establish each site-specific operating limit in Table 2 of this subpart that applies to you according to the procedures in Table 4 of this subpart.

(4) Use the procedures in paragraphs (b)(4)(i) through (iv) of this section to determine initial compliance with the emission limitations.

(i) If you elect Option 1 in paragraph (a)(1)(i) of ths section, the NSPS requirements, compute the PM emission rate (lb/1,000 lbs of coke burn-off) for each run using Equations 1, 2, and 3 (if applicable) of this section as follows:

$$R_c = K_1 Q_r \left(\%CO_2 + \%CO\right) + K_2 Q_a - K_3 Q_r \left[\left(\%CO/2\right) + \%CO_2 + \%O_2\right] + K_3 Q_{oxy}\left(\%O_{xy}\right) \qquad \text{(Eq. 1)}$$

Where:

R_c = Coke burn-off rate, kg/hr (lb/hr);

Q_r = Volumetric flow rate of exhaust gas from catalyst regenerator before adding air or gas streams. Example: You may measure after an electrostatic precipitator, but you must measure before a carbon monoxide boiler, dscm/min (dscf/min);

Q_a = Volumetric flow rate of air to catalytic cracking unit catalyst regenerator, as determined from instruments in the catalytic cracking unit control room, dscm/min (dscf/min);

$\%CO_2$ = Carbon dioxide concentration in regenerator exhaust, percent by volume (dry basis);

%CO = Carbon monoxide concentration in regenerator exhaust, percent by volume (dry basis);

$\%O_2$ = Oxygen concentration in regenerator exhaust, percent by volume (dry basis);

K_1 = Material balance and conversion factor, 0.2982 (kg-min)/(hr-dscm-%) (0.0186 (lb-min)/(hr-dscf-%));

K_2 = Material balance and conversion factor, 2.088 (kg-min)/(hr-dscm) (0.1303 (lb-min)/(hr-dscf));

K_3 = Material balance and conversion factor, 0.0994 (kg-min)/(hr-dscm-%) (0.0062 (lb-min)/(hr-dscf-%));

Q_{oxy} = Volumetric flow rate of oxygen-enriched air stream to regenerator, as determined from instruments in the catalytic cracking unit control room, dscm/min (dscf/min); and

$\%O_{xy}$ = Oxygen concentration in oxygen-enriched air stream, percent by volume (dry basis).

$$E = \frac{K \times C_s \times Q_{sd}}{R_c} \qquad \text{(Eq. 2)}$$

Where:

E = Emission rate of PM, kg/1,000 kg (lb/1,000 lb) of coke burn-off;

C_s = Concentration of PM, g/dscm (lb/dscf);

Q_{sd} = Volumetric flow rate of the catalytic cracking unit catalyst regenerator flue gas as measured by Method 2 in appendix A to part 60 of this chapter, dscm/hr (dscf/hr);

R_c = Coke burn-off rate, kg coke/hr (1,000 lb coke/hr); and

K = Conversion factor, 1.0 (kg^2/g)/(1,000 kg) (1,000 lb/(1,000 lb)).

$$E_s = 1.0 + A\left(H/R_c\right)K' \qquad \text{(Eq. 3)}$$

Where:

E_s = Emission rate of PM allowed, kg/1,000 kg (1b/1,000 lb) of coke burn-off in catalyst regenerator;

1.0 = Emission limitation, kg coke/1,000 kg (lb coke/1,000 lb);

A = Allowable incremental rate of PM emissions, 0.18 g/million cal (0.10 lb/million Btu); and

H = Heat input rate from solid or liquid fossil fuel, million cal/hr (million Btu/hr). Make sure your permitting authority approves procedures for determining the heat input rate.

R_c = Coke burn-off rate, kg coke/hr (1,000 lb coke/hr) determined using Equation 1 of this section; and

K′ = Conversion factor to units to standard, 1.0 (kg^2/g)/(1,000 kg) (10^3 lb/(1,000 lb)).

(ii) If you elect Option 2 in paragraph (a)(1)(ii) of this section, the PM emission limit, compute your PM emission rate (lb/1,000 lbs of coke burn-off) using Equations 1 and 2 of this section and your site-specific opacity operating limit (if you use a continuous opacity monitoring system) using Equation 4 of this section as follows:

$$\text{Opacity Limit} = \text{Opacity}_{st} \times \left(\frac{1\ \text{lb/klb coke burn}}{\text{PMEmR}_{st}}\right) \qquad \text{(Eq. 4)}$$

Where:

Opacity limit = Maximum permissible hourly average opacity, percent, or 10 percent, whichever is greater;

Opacity_{st} = Hourly average opacity measured during the source test runs, percent; and

PMEmR_{st} = PM emission rate measured during the source test, lb/1,000 lbs coke burn.

$$E_{Ni_1} = C_{Ni} \times Q_{sd} \qquad \text{(Eq. 5)}$$

(iii) If you elect Option 3 in paragraph (a)(1)(iii) of this section, the Ni lb/hr emission limit, compute your Ni emission rate using Equation 5 of this section and your site-specific Ni operating limit (if you use a continuous opacity monitoring system) using Equations 6 and 7 of this section as follows:

Where:

E_{Ni1} = Mass emission rate of Ni, mg/hr (lb/hr); and

C_{Ni} = Ni concentration in the catalytic cracking unit catalyst regenerator flue gas as measured by Method 29 in appendix A to part 60 of this chapter, mg/dscm (lbs/dscf).

$$\text{Opacity}_1 = \frac{13\ \text{g Ni/hr}}{\text{NiEmR1}_{st}} \times \text{Opacity}_{st} \qquad \text{(Eq. 6)}$$

Where:

Opacity_1 = Opacity value for use in Equation 7 of this section, percent, or 10 percent, whichever is greater; and

NiEmR1_{st} = Average Ni emission rate calculated as the arithmetic average Ni emission rate using Equation 5 of this section for each of the performance test runs, g Ni/hr.

$$\text{Ni Operating Limit}_1 = \text{Opacity}_1 \times Q_{mon,st} \times \text{E-Cat}_{st} \qquad \text{(Eq. 7)}$$

Where:

Ni operating limit_1 = Maximum permissible hourly average Ni operating limit, percent-acfm-ppmw, i.e., your site-specific Ni operating limit;

$Q_{mon,st}$ = Hourly average actual gas flow rate as measured by the continuous parameter monitoring system during the performance test or using the alternative procedure in § 63.1573, acfm; and

E–Cat_{st} = Ni concentration on equilibrium catalyst measured during source test, ppmw.

(iv) If you elect Option 4 in paragraph (a)(1)(iv) of this section, the Ni lbs/1,000 lbs of coke burn-off emission limit, compute your Ni emission rate using Equations 1 and 8 of this section and your site-specific Ni operating limit (if you use a continuous opacity monitoring system) using Equations 9 and 10 of this section as follows:

$$E_{Ni_2} = \frac{C_{Ni} \times Q_{sd}}{R_c} \qquad \text{(Eq. 8)}$$

Where:

E_{Ni2} = Normalized mass emission rate of Ni, mg/kg coke (lb/1,000 lbs coke).

$$\text{Opacity}_2 = \frac{1.0\ \text{mg/kg coke}}{\text{NiEmR2}_{st}} \times \text{Opacity}_{st} \qquad \text{(Eq. 9)}$$

Where:

Opacity_2 = Opacity value for use in Equation 10 of this section, percent, or 10 percent, whichever is greater; and

NiEmR2_{st} = Average Ni emission rate calculated as the arithmetic average Ni emission rate using Equation 8 of this section for each of the performance test runs, mg/kg coke.

$$\text{Ni Operating Limit}_2 = \text{Opacity}_2 \times \text{E-Cat}_{st} \times \frac{Q_{mon,st}}{R_{c,st}} \qquad \text{(Eq. 10)}$$

Where:

Ni operating limit_2 = Maximum permissible hourly average Ni operating limit, percent-ppmw-acfm-hr/kg coke, i.e., your site-specific Ni operating limit; and

$R_{c,st}$ = Coke burn rate from Equation 1 of this section, as measured during the initial performance test, kg coke/hr.

(5) Demonstrate initial compliance with each emission limitation that applies to you according to Table 5 of this subpart.

(6) Demonstrate initial compliance with the work practice standard in paragraph (a)(3) of this section by submitting your operation, maintenance, and monitoring plan to your permitting authority as part of your Notification of Compliance Status.

(7) Submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.1574.

(c) *How do I demonstrate continuous compliance with the emission limitations and work practice standards?* You must:

(1) Demonstrate continuous compliance with each emission limitation in Tables 1 and 2 of this subpart that applies to you according to the methods specified in Tables 6 and 7 of this subpart.

(2) Demonstrate continuous compliance with the work practice standard in paragraph (a)(3) of this section by maintaining records to document conformance with the procedures in your operation, maintenance, and monitoring plan.

(3) If you use a continuous opacity monitoring system and elect to comply with Option 3 in paragraph (a)(1)(iii) of this section, determine continuous compliance with your site-specific Ni operating limit by using Equation 11 of this section as follows:

$$\text{Ni Operating Value}_1 = \text{Opacity} \times Q_{mon} \times \text{E-Cat} \qquad \text{(Eq. 11)}$$

Where:

Ni operating value$_1$ = Maximum permissible hourly average Ni standard operating value, %-acfm-ppmw;

Opacity = Hourly average opacity, percent;

Q_{mon} = Hourly average actual gas flow rate as measured by continuous parameter monitoring system or calculated by alternative procedure in § 63.1573, acfm; and

E-Cat = Ni concentration on equilibrium catalyst from weekly or more recent measurement, ppmw.

(4) If you use a continuous opacity monitoring system and elect to comply with Option 4 in paragraph (a)(1)(iv) of this section, determine continuous compliance with your site-specific Ni operating limit by using Equation 12 of this section as follows:

$$\text{Ni Operating Value}_2 = \frac{\text{Opacity} \times \text{E-Cat} \times Q_{mon}}{R_c} \qquad \text{(Eq. 12)}$$

Where:

Ni operating value$_2$ = Maximum permissible hourly average Ni standard operating value, percent-acfm-ppmw-hr/kg coke.

§ 63.1565 What are my requirements for organic HAP emissions from catalytic cracking units?

(a) *What emission limitations and work practice standards must I meet?* You must:

(1) Meet each emission limitation in Table 8 of this subpart that applies to you. If your catalytic cracking unit is subject to the NSPS for carbon monoxide (CO) in § 60.103 of this chapter, you must meet the emission limitations for NSPS units. If your catalytic cracking unit isn't subject to the NSPS for CO, you can choose from the two options in paragraphs (a)(1)(i) through (ii) of this section:

(i) You can elect to comply with the NSPS requirements (Option 1); or

(ii) You can elect to comply with the CO emission limit (Option 2).

(2) Comply with each site-specific operating limit in Table 9 of this subpart that applies to you.

(3) Prepare an operation, maintenance, and monitoring plan according to the requirements in § 63.1574(f) and operate at all times according to the procedures in the plan.

(4) The emission limitations and operating limits for organic HAP emissions from catalytic cracking units required in paragraphs (a)(1) and (2) of this section do not apply during periods of planned maintenance preapproved by the applicable permitting authority according to the requirements in § 63.1575(j).

(b) *How do I demonstrate initial compliance with the emission limitations and work practice standards?* You must:

(1) Install, operate, and maintain a continuous monitoring system according to the requirements in § 63.1572 and Table 10 of this subpart. Except:

(i) Whether or not your catalytic cracking unit is subject to the NSPS for CO in § 60.103 of this chapter, you don't have to install and operate a continuous emission monitoring system if you show that CO emissions from your vent average less than 50 parts per million (ppm), dry basis. You must get an exemption from your permitting authority, based on your written request. To show that the emissions average is less than 50 ppm (dry basis), you must continuously monitor CO emissions for 30 days using a CO continuous emission monitoring system that meets the requirements in § 63.1572.

(ii) If your catalytic cracking unit isn't subject to the NSPS for CO, you don't have to install and operate a continuous emission monitoring system or a continuous parameter monitoring system if you vent emissions to a boiler (including a ''CO boiler'') or process heater that has a design heat input capacity of at least 44 megawatts (MW).

(iii) If your catalytic cracking unit isn't subject to the NSPS for CO, you don't have to install and operate a continuous emission monitoring system or a continuous parameter monitoring system if you vent emissions to a boiler or process heater in which all vent streams are introduced into the flame zone.

(2) Conduct each performance test for a catalytic cracking unit not subject to the NSPS for CO according to the requirements in § 63.1571 and under the conditions specified in Table 11 of this subpart.

(3) Establish each site-specific operating limit in Table 9 of this subpart that applies to you according to the procedures in Table 11 of this subpart.

(4) Demonstrate initial compliance with each emission limitation that applies to you according to Table 12 of this subpart.

(5) Demonstrate initial compliance with the work practice standard in paragraph (a)(3) of this section by submitting the operation, maintenance, and monitoring plan to your permitting authority as part of your Notification of Compliance Status according to § 63.1574.

(6) Submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.1574.

(c) *How do I demonstrate continuous compliance with the emission limitations and work practice standards?* You must:

(1) Demonstrate continuous compliance with each emission limitation in Tables 8 and 9 of this subpart that applies to you according to the methods specified in Tables 13 and 14 of this subpart.

(2) Demonstrate continuous compliance with the work practice standard in paragraph (a)(3) of this section by complying with the procedures in your operation, maintenance, and monitoring plan.

§ 63.1566 What are my requirements for organic HAP emissions from catalytic reforming units?

(a) *What emission limitations and work practice standards must I meet?* You must:

(1) Meet each emission limitation in Table 15 of this subpart that applies to you. You can choose from the two options in paragraphs (a)(1)(i) through (ii) of this section:

(i) You can elect to vent emissions of total organic compounds (TOC) to a flare that meets the control device requirements in § 63.11(b) (Option 1); or

(ii) You can elect to use a control device to meet a TOC percent reduction standard or concentration limit, whichever is less stringent (Option 2).

(2) Comply with each site-specific operating limit in Table 16 of this subpart that applies to you.

(3) The emission limitations in Tables 15 and 16 of this subpart apply to emissions from catalytic reforming unit process vents that occur during depressuring and purging operations. These process vents include those used during unit depressurization, purging, coke burn, catalyst rejuvenation, and reduction or activation purge.

(4) The emission limitations in Tables 15 and 16 of this subpart do not apply to emissions from process vents during depressuring and purging operations when the reactor vent pressure is 5 pounds per square inch gauge (psig) or less.

(5) Prepare an operation, maintenance, and monitoring plan according to the requirements in § 63.1574(f) and operate at all times according to the procedures in the plan.

(b) *How do I demonstrate initial compliance with the emission limitations and work practice standard?* You must:

(1) Install, operate, and maintain a continuous monitoring system(s) according to the requirements in § 63.1572 and Table 17 of this subpart.

(2) Conduct each performance test for a catalytic reforming unit according to the requirements in § 63.1571 and under the conditions specified in Table 18 of this subpart.

(3) Establish each site-specific operating limit in Table 16 of this subpart that applies to you according to the procedures in Table 18 of this subpart.

(4) Use the procedures in paragraph (b)(4)(i) or (ii) of this section to determine initial compliance with the emission limitations.

(i) If you elect the percent reduction standard under Option 2, calculate the emission rate of TOC using Equation 1 of this section (if you use Method 25) or Equation 2 of this section (if you use Method 25A); then calculate the mass emission reduction using Equation 3 of this section as follows:

$$E = K_4 M_c Q_s \qquad \text{(Eq. 1)}$$

Where:

E = Emission rate of TOC in the vent stream, kilograms-C per hour;

K_4 = Constant, 6.0×10^{-5} (kilograms per milligram)(minutes per hour);

M_c = Mass concentration of total gaseous nonmethane organic as measured and calculated using Method 25 in appendix A to part 60 of this chapter, mg/dscm; and

Q_s = Vent stream flow rate, dscm/min, at a temperature of 20 degrees Celsius (C).

$$E = K_5 C_{TOC} Q_S \qquad \text{(Eq. 2)}$$

Where:

E = Emission rate of TOC in the vent stream, kilograms-C per hour;

K_5 = Constant, 9.0 x 10^{-5}(parts per million) $^{-1}$ (gram-mole per standard cubic meter) (gram-C per gram-mole-propane) (kilogram per gram) (minutes per hour), where the standard temperature (standard cubic meter) is at 20 degrees C (uses 36g–C/g.mole propane);

C_{TOC} = Concentration of TOC on a dry basis in ppmv as propane as measured by Method 25A in appendix A to part 60 of this chapter; and

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

$$\%\ \text{reduction} = \frac{E_i - E_o}{E_i} \times 100\% \qquad \text{(Eq. 3)}$$

Where:

E_i = Mass emission rate of TOC at control device inlet, kg/hr; and

E_o = Mass emission rate of TOC at control device outlet, kg/hr.

(5) If you elect the 20 parts per million by volume (ppmv) concentration limit, correct the measured TOC concentration for oxygen (O_2) content in the gas stream using Equation 4 of this section as follows:

$$C_{TOC,\,3\%O_2} = C_{TOC}\left(\frac{17.9\%}{20.9\% - \%O_2}\right) \qquad \text{(Eq. 4)}$$

(6) You are not required to do a TOC performance test if:

(i) You elect to vent emissions to a flare as provided in paragraph (a)(1)(i) of this section (Option 1); or

(ii) You elect the TOC percent reduction or concentration limit in paragraph (a)(1)(ii) of this section (Option 2), and you use a boiler or process heater with a design heat input capacity of 44 MW or greater or a boiler or process heater in which all vent streams are introduced into the flame zone.

(7) Demonstrate initial compliance with each emission limitation that applies to you according to Table 19 of this subpart.

(8) Demonstrate initial compliance with the work practice standard in paragraph (a)(5) of this section by submitting the operation, maintenance, and monitoring plan to your permitting authority as part of your Notification of Compliance Status.

(9) Submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.1574.

(c) *How do I demonstrate continuous compliance with the emission limitations and work practice standards?* You must:

(1) Demonstrate continuous compliance with each emission limitation in Tables 15 and 16 of this subpart that applies to you according to the methods specified in Tables 20 and 21 of this subpart.

(2) Demonstrate continuous compliance with the work practice standards in paragraph (a)(3) of this section by complying with the procedures in your operation, maintenance, and monitoring plan.

§ 63.1567 What are my requirements for inorganic HAP emissions from catalytic reforming units?

(a) *What emission limitations and work practice standards must I meet?* You must:

(1) Meet each emission limitation in Table 22 of this subpart that applies to you. These emission limitations apply during coke burn-off and catalyst rejuvenation. You can choose from the two options in paragraphs (a)(1)(i) through (ii) of this section:

(i) You can elect to use a control device to meet either a percent reduction standard for hydrogen chloride (HCl) emissions (Option 1); or

(ii) You can elect to meet an HCl concentration limit (Option 2).

(2) Meet each site-specific operating limit in Table 23 of this subpart that applies to you. These operating limits apply during coke burn-off and catalyst rejuvenation.

(3) Prepare an operation, maintenance, and monitoring plan according to the requirements in § 63.1574(f) and operate at all times according to the procedures in the plan.

(b) *How do I demonstrate initial compliance with the emission limitations and work practice standard?* You must:

(1) Install, operate, and maintain a continuous monitoring system(s) according to the requirements in § 63.1572 and Table 24 of this subpart.

(2) Conduct each performance test for a catalytic reforming unit according to the requirements in § 63.1571 and the conditions specified in Table 25 of this subpart.

(3) Establish each site-specific operating limit in Table 23 of this subpart that applies to you according to the procedures in Table 25 of this subpart.

(4) Demonstrate initial compliance with each emission limitation that applies to you according to Table 26 of this subpart.

(5) Demonstrate initial compliance with the work practice standard in paragraph (a)(3) of this section by submitting the operation, maintenance, and monitoring plan to your permitting authority as part of your Notification of Compliance Status.

(6) Submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.1574.

(c) *How do I demonstrate continuous compliance with the emission limitations and work practice standard?* You must:

(1) Demonstrate continuous compliance with each emission limitation in Tables 22 and 23 of this subpart that applies to you according to the methods specified in Tables 27 and 28 of this subpart.

(2) Demonstrate continuous compliance with the work practice standard in paragraph (a)(3) of this section by maintaining records to document conformance with the procedures in your operation, maintenance and monitoring plan.

§ 63.1568 What are my requirements for HAP emissions from sulfur recovery units?

(a) *What emission limitations and work practice standard must I meet?* You must:

(1) Meet each emission limitation in Table 29 of this subpart that applies to you. If your sulfur recovery unit is subject to the NSPS for sulfur oxides in § 60.104 of this chapter, you must meet the emission limitations for NSPS units. If your sulfur recovery unit isn't subject to the NSPS for sulfur oxides, you can choose from the options in paragraphs (a)(1)(i) through (ii) of this section:

(i) You can elect to meet the NSPS requirements (Option 1); or

(ii) You can elect to meet the total reduced sulfur (TRS) emission limitation (Option 2).

(2) Meet each operating limit in Table 30 of this subpart that applies to you.

(3) Prepare an operation, maintenance, and monitoring plan according to the requirements in § 63.1574(f) and operate at all times according to the procedures in the plan.

(b) *How do I demonstrate initial compliance with the emission limitations and work practice standards?* You must:

(1) Install, operate, and maintain a continuous monitoring system according to the requirements in § 63.1572 and Table 31 of this subpart.

(2) Conduct each performance test for a sulfur recovery unit not subject to the NSPS for sulfur oxides according to the requirements in § 63.1571 and under the conditions specified in Table 32 of this subpart.

(3) Establish each site-specific operating limit in Table 30 of this subpart that applies to you according to the procedures in Table 32 of this subpart.

(4) Correct the reduced sulfur samples to zero percent excess air using Equation 1 of this section as follows:

$$C_{adj} = C_{meas}\left[20.9_c/\left(20.9 - \%O_2\right)\right] \qquad \text{(Eq. 1)}$$

Where:

C_{adj} = pollutant concentration adjusted to zero percent oxygen, ppm or g/dscm;

C_{meas} = pollutant concentration measured on a dry basis, ppm or g/dscm;

20.9_c = 20.9 percent oxygen—0.0 percent oxygen (defined oxygen correction basis), percent;

20.9 = oxygen concentration in air, percent;

$\%O_2$ = oxygen concentration measured on a dry basis, percent.

(5) Demonstrate initial compliance with each emission limitation that applies to you according to Table 33 of this subpart.

(6) Demonstrate initial compliance with the work practice standard in paragraph (a)(3) of this section by submitting the operation, maintenance, and monitoring plan to your permitting authority as part of your notification of compliance status.

(7) Submit the notification of compliance status containing the results of the initial compliance demonstration according to the requirements in § 63.1574.

(c) *How do I demonstrate continuous compliance with the emission limitations and work practice standards?* You must:

(1) Demonstrate continuous compliance with each emission limitation in Tables 29 and 30 of this subpart that applies to you according to the methods specified in Tables 34 and 35 of this subpart.

(2) Demonstrate continuous compliance with the work practice standard in paragraph (a)(3) of this section by complying with the procedures in your operation, maintenance, and monitoring plan.

§ 63.1569 What are my requirements for HAP emissions from bypass lines?

(a) *What work practice standards must I meet?* (1) You must meet each work practice standard in Table 36 of this subpart that applies to you. You can choose from the four options in paragraphs (a)(1)(i) through (iv) of this section:

(i) You can elect to install an automated system (Option 1);

(ii) You can elect to use a manual lock system (Option 2);

(iii) You can elect to seal the line (Option 3); or

(iv) You can elect to vent to a control device (Option 4).

(2) As provided in § 63.6(g), we, the EPA, may choose to grant you permission to use an alternative to the work practice standard in paragraph (a)(1) of this section.

(3) You must prepare an operation, maintenance, and monitoring plan according to the requirements in § 63.1574(f) and operate at all times according to the procedures in the plan.

(b) *How do I demonstrate initial compliance with the work practice standards?* You must:

(1) If you elect the option in paragraph (a)(1)(i) of this section, conduct each performance test for a bypass line according to the requirements in § 63.1571 and under the conditions specified in Table 37 of this subpart.

(2) Demonstrate initial compliance with each work practice standard in Table 36 of this subpart that applies to you according to Table 38 of this subpart.

(3) Demonstrate initial compliance with the work practice standard in paragraph (a)(3) of this section by submitting the operation, maintenance, and monitoring plan to your permitting authority as part of your notification of compliance status.

(4) Submit the notification of compliance status containing the results of the initial compliance demonstration according to the requirements in § 63.1574.

(c) *How do I demonstrate continuous compliance with the work practice standards?* You must:

(1) Demonstrate continuous compliance with each work practice standard in Table 36 of this subpart that applies to you according to the requirements in Table 39 of this subpart.

(2) Demonstrate continuous compliance with the work practice standard in paragraph (a)(2) of this section by complying with the procedures in your operation, maintenance, and monitoring plan.

General Compliance Requirements

§ 63.1570 What are my general requirements for complying with this subpart?

(a) You must be in compliance with all of the non-opacity standards in this subpart during the times specified in § 63.6(f)(1).

(b) You must be in compliance with the opacity and visible emission limits in this subpart during the times specified in § 63.6(h)(1).

(c) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in § 63.6(e)(1)(i). During the period between the compliance date specified for your affected source and the date upon which continuous monitoring systems have been installed and validated and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(d) You must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in § 63.6(e)(3).

(e) During periods of startup, shutdown, and malfunction, you must operate in accordance with your SSMP.

(f) You must report each instance in which you did not meet each emission limitation and each operating limit in this subpart that applies to you. This includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet the work practice standards in this subpart that apply to you. These instances are deviations from the emission limitations and work practice standards in this subpart. These deviations must be reported according to the requirements in § 63.1575.

(g) Consistent with §§ 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with the SSMP. The SSMP must require that good air pollution control practices are used during those periods. The plan must also include elements designed to minimize the frequency of such periods (i.e., root cause analysis). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in § 63.6(e) and the contents of the SSMP.

§ 63.1571 How and when do I conduct a performance test or other initial compliance demonstration?

(a) *When must I conduct a performance test?* You must conduct performance tests and report the results by no later than 150 days after the compliance date specified for your source in § 63.1563 and according to the provisions in § 63.7(a)(2). If you are required to do a performance evaluation or test for a semi-regenerative catalytic reforming unit catalyst regenerator vent, you may do them at the first regeneration cycle after your compliance date and report the results in a followup Notification of Compliance Status report due no later than 150 days after the test.

(1) For each emission limitation or work practice standard where initial compliance is not demonstrated using a performance test, opacity observation, or visible emission observation, you must conduct the initial compliance demonstration within 30 calendar days after the compliance date that is specified for your source in § 63.1563.

(2) For each emission limitation where the averaging period is 30 days, the 30-day period for demonstrating initial compliance begins at 12:00 a.m. on the compliance date that is specified for your source in § 63.1563 and ends at 11:59 p.m., 30 calendar days after the compliance date that is specified for your source in § 63.1563.

(3) If you commenced construction or reconstruction between September 11, 1998 and April 11, 2002, you must demonstrate initial compliance with either the proposed emission limitation or the promulgated emission limitation no later than October 8, 2002 or within 180 calendar days after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(4) If you commenced construction or reconstruction between September 11, 1998 and April 11, 2002, and you chose to comply with the proposed emission limitation when demonstrating initial compliance, you must conduct a second compliance demonstration for the promulgated emission limitation by October 10, 2005, or after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(b) *What are the general requirements for performance test and performance evaluations?* You must:

(1) Conduct each performance test according to the requirements in § 63.7(e)(1).

(2) Except for opacity and visible emission observations, conduct three separate test runs for each performance test as specified in § 63.7(e)(3). Each test run must last at least 1 hour.

(3) Conduct each performance evaluation according to the requirements in § 63.8(e).

(4) Not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 63.7(e)(1).

(5) Calculate the average emission rate for the performance test by calculating the emission rate for each individual test run in the units of the applicable emission limitation using Equation 2, 5, or 8 of § 63.1564, and determining the arithmetic average of the calculated emission rates.

(c) *What procedures must I use for an engineering assessment?* You may choose to use an engineering assessment to calculate the process vent flow rate, net heating value, TOC emission rate, and total organic HAP emission rate expected to yield the highest daily emission rate when determining the emission reduction or outlet concentration for the organic HAP standard for catalytic reforming units. If you use an engineering assessment, you must document all data, assumptions, and procedures to the satisfaction of the applicable permitting authority. An engineering assessment may include the approaches listed in paragraphs (c)(1) through (c)(4) of this section. Other engineering assessments may be used but are subject to review and approval by the applicable permitting authority.

(1) You may use previous test results provided the tests are representative of current operating practices at the process unit, and provided EPA

methods or approved alternatives were used;

(2) You may use bench-scale or pilot-scale test data representative of the process under representative operating conditions;

(3) You may use maximum flow rate, TOC emission rate, organic HAP emission rate, or organic HAP or TOC concentration specified or implied within a permit limit applicable to the process vent; or

(4) You may use design analysis based on engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to:

(i) Use of material balances based on process stoichiometry to estimate maximum TOC concentrations;

(ii) Calculation of hourly average maximum flow rate based on physical equipment design such as pump or blower capacities; and

(iii) Calculation of TOC concentrations based on saturation conditions.

(d) *Can I adjust the process or control device measured values when establishing an operating limit?* If you do a performance test to demonstrate compliance, you must base the process or control device operating limits for continuous parameter monitoring systems on the results measured during the performance test. You may adjust the values measured during the performance test according to the criteria in paragraphs (d)(1) through (3) of this section.

(1) If you must meet the HAP metal emission limitations in § 63.1564, you elect the option in paragraph (a)(1)(iii) in § 63.1564 (Ni lb/hr), and you use continuous parameter monitoring systems, you must establish an operating limit for the equilibrium catalyst Ni concentration based on the laboratory analysis of the equilibrium catalyst Ni concentration from the initial performance test. Section 63.1564(b)(2) allows you to adjust the laboratory measurements of the equilibrium catalyst Ni concentration to the maximum level. You must make this adjustment using Equation 1 of this section as follows:

$$\text{Ecat-Limit} = \frac{13\ \text{g Ni/hr}}{\text{NiEmR1}_{st}} \times \text{Ecat}_{st} \qquad \text{(Eq. 1)}$$

Where:

Ecat-Limit = Operating limit for equilibrium catalyst Ni concentration, mg/kg;

NiEmR1_{st} = Average Ni emission rate calculated as the arithmetic average Ni emission rate using Equation 5 of this section for each performance test run, g Ni/hr; and

Ecat_{st} = Average equilibrium Ni concentration from laboratory test results, mg/kg.

(2) If you must meet the HAP metal emission limitations in § 63.1564, you elect the option in paragraph (a)(1)(iv) in § 63.1564 (Ni lb/1,000 lb of coke burn-off), and you use continuous parameter monitoring systems, you must establish an operating limit for the equilibrium catalyst Ni concentration based on the laboratory analysis of the equilibrium catalyst Ni concentration from the initial performance test. Section 63.1564(b)(2) allows you to adjust the laboratory measurements of the equilibrium catalyst Ni concentration to the maximum level. You must make this adjustment using Equation 2 of this section as follows:

$$\text{Ecat-Limit} = \frac{1.0\ \text{mg/kg coke burn-off}}{\text{NiEmR2}_{st}} \times \text{Ecat}_{st} \qquad \text{(Eq. 2)}$$

Where:

NiEmR2_{st} = Average Ni emission rate calculated as the arithmetic average Ni emission rate using Equation 8 of § 63.1564 for each performance test run, mg/kg coke burn-off.

(3) If you choose to adjust the equilibrium catalyst Ni concentration to the maximum level, you can't adjust any other monitored operating parameter (i.e., gas flow rate, voltage, pressure drop, liquid-to-gas ratio).

(4) Except as specified in paragraph (d)(3) of this section, if you use continuous parameter monitoring systems, you may adjust one of your monitored operating parameters (flow rate, voltage and secondary current, pressure drop, liquid-to-gas ratio) from the average of measured values during the performance test to the maximum value (or minimum value, if applicable) representative of worst-case operating conditions, if necessary. This adjustment of measured values may be done using control device design specifications, manufacturer recommendations, or other applicable information. You must provide supporting documentation and rationale in your Notification of Compliance Status, demonstrating to the satisfaction of your permitting authority, that your affected source complies with the applicable emission limit at the operating limit based on adjusted values.

(e) *Can I change my operating limit?* You may change the established operating limit by meeting the requirements in paragraphs (e)(1) through (3) of this section.

(1) You may change your established operating limit for a continuous parameter monitoring system by doing an additional performance test, a performance test in conjunction with an engineering assessment, or an engineering assessment to verify that, at the new operating limit, you are in compliance with the applicable emission limitation.

(2) You must establish a revised operating limit for your continuous parameter monitoring system if you make any change in process or operating conditions that could affect control system performance or you change designated conditions after the last performance or compliance tests were done. You can establish the revised operating limit as described in paragraph (e)(1) of this section.

(3) You may change your site-specific opacity operating limit or Ni operating limit only by doing a new performance test.

§ 63.1572 What are my monitoring installation, operation, and maintenance requirements?

(a) You must install, operate, and maintain each continuous emission monitoring system according to the requirements in paragraphs (a)(1) through (4) of this section.

(1) You must install, operate, and maintain each continuous emission monitoring system according to the requirements in Table 40 of this subpart.

(2) If you use a continuous emission monitoring system to meet the NSPS CO or SO_2 limit, you must conduct a performance evaluation of each continuous emission monitoring system according to the requirements in § 63.8 and Table 40 of this subpart. This requirement does not apply to an affected source subject to the NSPS that has already demonstrated initial compliance with the applicable performance specification.

(3) As specified in § 63.8(c)(4)(ii), each continuous emission monitoring system must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(4) Data must be reduced as specified in § 63.8(g)(2).

(b) You must install, operate, and maintain each continuous opacity monitoring system according to the requirements in paragraphs (b)(1) through (3) of this section.

(1) Each continuous opacity monitoring system must be installed, operated, and maintained according to the requirements in Table 40 of this subpart.

(2) If you use a continuous opacity monitoring system to meet the NSPS opacity limit, you must conduct a performance evaluation of each continuous opacity monitoring system according to the requirements in § 63.8 and Table 40 of this subpart. This requirement does not apply to an affected source subject to the NSPS that has already demonstrated initial compliance with the applicable performance specification.

(3) As specified in § 63.8(c)(4)(i), each continuous opacity monitoring system must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(c) You must install, operate, and maintain each continuous parameter monitoring system according to the requirements in paragraphs (c)(1) through (7) of this section.

(1) Each continuous parameter monitoring system must be installed, operated, and maintained according to the requirements in Table 41 of this subpart and in a manner consistent with the manufacturer's specifications or other written procedures that provide adequate assurance that the equipment will monitor accurately.

(2) The continuous parameter monitoring system must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data (or at least two if a calibration check is performed during that hour or if the continuous parameter monitoring system is out-of-control).

(3) Each continuous parameter monitoring system must have valid hourly average data from at least 75 percent of the hours during which the process operated.

(4) Each continuous parameter monitoring system must determine and record the hourly average of all recorded readings and if applicable, the daily average of all recorded readings for each operating day. The daily average must cover a 24-hour period if operation is continuous or the number of hours of operation per day if operation is not continuous.

(5) Each continuous parameter monitoring system must record the results of each inspection, calibration, and validation check.

(d) You must monitor and collect data according to the requirements in paragraphs (d)(1) and (2) of this section.

(1) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation (or collect data at all required intervals) at all times the affected source is operating.

(2) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities for purposes of this regulation, including data averages and calculations, for fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

§ 63.1573 What are my monitoring alternatives?

(a) *What is the approved alternative for monitoring gas flow rate?* You can elect to use this alternative to a continuous parameter monitoring system for the catalytic regenerator exhaust gas flow rate for your catalytic cracking unit if the unit does not introduce any other gas streams into the catalyst regeneration vent (i.e., complete combustion units with no additional combustion devices). If you select this alternative, you must use the same procedure for the performance test and for monitoring after the performance test.

(1) Install and operate a continuous parameter monitoring system to measure and record the hourly average volumetric air flow rate to the catalytic cracking unit regenerator. Or, you can determine and record the hourly average volumetric air flow rate to the catalytic cracking unit regenerator using the catalytic cracking unit control room instrumentation.

(2) Install and operate a continuous parameter monitoring system to measure and record the temperature of the gases entering the control device (or exiting the catalyst regenerator if you do not use an add-on control device).

(3) Calculate and record the hourly average actual exhaust gas flow rate using Equation 1 of this section as follows:

$$Q_{gas} = (1.12\ \text{scfm/dscfm}) \times (Q_{air} + Q_{oxy}) \times \left(\frac{Temp_{gas}}{273°\,K}\right) \times \left(\frac{P_{vent}}{1\ \text{atm.}}\right) \qquad \text{(Eq. 1)}$$

Where:

Q_{gas} = Hourly average actual gas flow rate, acfm;

1.12 = Default correction factor to convert gas flow from dry standard cubic feet per minute (dscfm) to standard cubic feet per minute (scfm);

Q_{air} = Volumetric flow rate of air to regenerator, as determined from the catalytic cracking unit control room instrumentations, dscfm;

Q_{oxy} = Volumetric flow rate of oxygen-enriched air stream to regenerator, as determined from the catalytic cracking unit control room instrumentations, dscfm;

$Temp_{gas}$ = Temperature of gas stream in vent measured as near as practical to the control device or opacity monitor, °K. For wet scrubbers, temperature of gas prior to the wet scrubber; and

P_{vent} = Absolute pressure in the vent measured as near as practical to the control device or opacity monitor, atm. When used in conjunction with opacity in the final vent stack, you can assume P_{vent} = 1 atm.

(b) *What is the approved alternative for monitoring pH levels?* If you use a wet scrubber to control inorganic HAP emissions from your vent on a catalytic reforming unit, you can measure and record the pH of the water (or scrubbing liquid) exiting the scrubber at least once an hour during coke burn-off and catalyst rejuvenation using pH strips as an alternative to a continuous parameter monitoring system. The pH strips must meet the requirements in Table 41 of this subpart.

(c) *Can I use another type of monitoring system?* You may request approval from your permitting authority to use an automated data compression system. An automated data compression system does not record monitored operating parameter values at a set frequency (e.g., once every hour) but records all values that meet set criteria for variation from previously recorded values. Your request must contain a description of the monitoring system and data recording system, including the criteria used to determine which monitored values are recorded and retained, the method for calculating daily averages, and a demonstration that the system meets all of the criteria in paragraphs (c)(1) through (5) of this section:

(1) The system measures the operating parameter value at least once every hour;

(2) The system records at least 24 values each day during periods of operation;

(3) The system records the date and time when monitors are turned off or on;

(4) The system recognizes unchanging data that may indicate the monitor is not functioning properly, alerts the operator, and records the incident; and

(5) The system computes daily average values of the monitored operating parameter based on recorded data.

(d) *Can I monitor other process or control device operating parameters?* You may request approval to monitor parameters other than those required in this subpart. You must request approval if:

(1) You use a control device other than a thermal incinerator, boiler, process heater, flare, electrostatic precipitator, or wet scrubber;

(2) You use a combustion control device (e.g., incinerator, flare, boiler or process heater with a design heat capacity of at least 44 MW, boiler or process heater where the vent stream is introduced into the flame zone), electrostatic precipitator, or scrubber but want to monitor a parameter other than those specified; or

(3) You wish to use another type of continuous emission monitoring system that provides direct measurement of a pollutant (i.e., a PM or multi-metals HAP continuous emission monitoring system, a carbonyl sulfide/carbon disulfide continuous emission monitoring system, a TOC continuous emission monitoring system, or HCl continuous emission monitoring system).

(e) *How do I request to monitor alternative parameters?* You must submit a request for review and approval or disapproval to the Administrator. The request must include the information in paragraphs (e)(1) through (5) of this section.

(1) A description of each affected source and the parameter(s) to be monitored to determine whether the affected source will continuously comply with the emission limitations and an explanation of the criteria used to select the parameter(s).

(2) A description of the methods and procedures that will be used to demonstrate that the parameter can be used to determine whether the affected source will continuously comply with the emission limitations and the schedule for this demonstration. You must certify that you will establish an operating limit for the monitored parameter(s) that represents the conditions in existence when the control device is being properly operated and maintained to meet the emission limitation.

(3) The frequency and content of monitoring, recording, and reporting, if monitoring and recording are not continuous. You also must include the rationale for the proposed monitoring, recording, and reporting requirements.

(4) Supporting calculations.

(5) Averaging time for the alternative operating parameter.

Notifications, Reports, and Records

§ 63.1574 What notifications must I submit and when?

(a) Except as allowed in paragraphs (a)(1) through (3) of this section, you must submit all of the notifications in §§ 63.6(h), 63.7(b) and (c), 63.8(e), 63.8(f)(4), 63.8(f)(6), and 63.9(b) through (h) that apply to you by the dates specified.

(1) You must submit the notification of your intention to construct or reconstruct according to § 63.9(b)(5) unless construction or reconstruction had commenced and initial startup had not occurred before April 11, 2002. In this case, you must submit the notification as soon as practicable before startup but no later than July 10, 2002. This deadline also applies to the application for approval of construction or reconstruction and approval of construction or reconstruction based on State preconstruction review required in §§ 63.5(d)(1)(i) and 63.5(f)(2).

(2) You must submit the notification of intent to conduct a performance test required in § 63.7(b) at least 30 calendar days before the performance test is scheduled to begin (instead of 60 days).

(3) If you are required to conduct a performance test, performance evaluation, design evaluation, opacity observation, visible emission observation, or other initial compliance demonstration, you must submit a notification of compliance status according to § 63.9(h)(2)(ii). You can submit this information in an operating permit application, in an amendment to an operating permit application, in a separate submission, or in any combination. In a State with an approved operating permit program where delegation of authority under section 112(l) of the CAA has not been requested or approved, you must provide a duplicate notification to the applicable Regional Administrator. If the required information has been submitted previously, you do not have to provide a separate notification of compliance status. Just refer to the earlier submissions instead of duplicating and resubmitting the previously submitted information.

(i) For each initial compliance demonstration that does not include a performance test, you must submit the Notification of Compliance Status no later than 30 calendar days following completion of the initial compliance demonstration.

(ii) For each initial compliance demonstration that includes a performance test, you must submit the notification of compliance status, including the performance test results, no later than 150 calendar days after the compliance date specified for your affected source in § 63.1573.

(b) As specified in § 63.9(b)(2), if you startup your new affected source before April 11, 2002, you must submit the initial notification no later than August 9, 2002.

(c) As specified in § 63.9(b)(3), if you start your new or reconstructed affected source on or after April 11, 2002, you must submit the initial notification no

later than 120 days after you become subject to this subpart.

(d) You also must include the information in Table 42 of this subpart in your notification of compliance status.

(e) If you request an extension of compliance for an existing catalytic cracking unit as allowed in § 63.1563(c), you must submit a notification to your permitting authority containing the required information by October 13, 2003.

(f) As required by this subpart, you must prepare and implement an operation, maintenance, and monitoring plan for each affected source, control system, and continuous monitoring system. The purpose of this plan is to detail the operation, maintenance, and monitoring procedures you will follow.

(1) You must submit the plan to your permitting authority for review and approval along with your notification of compliance status. While you do not have to include the entire plan in your part 70 or 71 permit, you must include the duty to prepare and implement the plan as an applicable requirement in your part 70 or 71 operating permit. You must submit any changes to your permitting authority for review and approval and comply with the plan until the change is approved.

(2) Each plan must include, at a minimum, the information specified in paragraphs (f)(2)(i) through (x) of this section.

(i) Process and control device parameters to be monitored for each affected source, along with established operating limits.

(ii) Procedures for monitoring emissions and process and control device operating parameters for each affected source.

(iii) Procedures that you will use to determine the coke burn-rate, the volumetric flow rate (if you use process data rather than direct measurement), and the rate of combustion of liquid or solid fossil fuels if you use an incinerator-waste heat boiler to burn the exhaust gases from a catalyst regenerator.

(iv) Procedures and analytical methods you will use to determine the equilibrium catalyst Ni concentration, the equilibrium catalyst Ni concentration monthly rolling average, and the hourly or hourly average Ni operating value.

(v) Procedures you will use to determine the pH of the water (or scrubbing liquid) exiting a wet scrubber if you use pH strips.

(vi) Procedures you will use to determine the HCl concentration of gases from a semi-regenerative catalytic reforming unit with an internal scrubbing system (i.e., no add-on control device) when you use a colormetric tube sampling system, including procedures for correcting for pressure (if applicable to the sampling equipment).

(vii) Procedures you will use to determine the gas flow rate for a catalytic cracking unit if you use the alternative procedure based on air flow rate and temperature.

(viii) Monitoring schedule, including when you will monitor and when you will not monitor an affected source (e.g., during the coke burn-off, regeneration process).

(ix) Quality control plan for each continuous opacity monitoring system and continuous emission monitoring system you use to meet an emission limit in this subpart. This plan must include procedures you will use for calibrations, accuracy audits, and adjustments to the system needed to meet applicable requirements for the system.

(x) Maintenance schedule for each affected source, monitoring system, and control device that is generally consistent with the manufacturer's instructions for routine and long-term maintenance.

§ 63.1575 What reports must I submit and when?

(a) You must submit each report in Table 43 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule, you must submit each report by the date in Table 43 of this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.1563 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your affected source in § 63.1563.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in § 63.1563.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to part 70 or 71 of this chapter, and if the permitting authority has established dates for submitting semiannual reports pursuant to § 70.6(a)(3)(iii)(A) or § 71.6(a)(3)(iii)(A) of this chapter, you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information required in paragraphs (c)(1) through (4) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If there are no deviations from any emission limitation that applies to you and there are no deviations from the requirements for work practice standards, a statement that there were no deviations from the emission limitations or work practice standards during the reporting period and that no continuous emission monitoring system or continuous opacity monitoring system was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.

(d) For each deviation from an emission limitation and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a continuous opacity monitoring system or a continuous emission monitoring system to comply with the emission limitation or work practice standard in this subpart, the compliance report must contain the information in paragraphs (c)(1) through (3) of this section and the information in paragraphs (d)(1) through (3) of this section.

(1) The total operating time of each affected source during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(3) Information on the number, duration, and cause for monitor downtime incidents (including

unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks).

(e) For each deviation from an emission limitation occurring at an affected source where you are using a continuous opacity monitoring system or a continuous emission monitoring system to comply with the emission limitation, you must include the information in paragraphs (d)(1) through (3) of this section and the information in paragraphs (e)(1) through (13) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date and time that each continuous opacity monitoring system or continuous emission monitoring system was inoperative, except for zero (low-level) and high-level checks.

(3) The date and time that each continuous opacity monitoring system or continuous emission monitoring system was out-of-control, including the information in § 63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period (recorded in minutes for opacity and hours for gases and in the averaging period specified in the regulation for other types of emission limitations), and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period and into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system during the reporting period (recorded in minutes for opacity and hours for gases and in the averaging time specified in the regulation for other types of standards), and the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system as a percent of the total source operating time during that reporting period.

(8) A breakdown of the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system during the reporting period into periods that are due to monitoring equipment malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes.

(9) An identification of each HAP that was monitored at the affected source.

(10) A brief description of the process units.

(11) The monitoring equipment manufacturer(s) and model number(s).

(12) The date of the latest certification or audit for the continuous opacity monitoring system or continuous emission monitoring system.

(13) A description of any change in the continuous emission monitoring system or continuous opacity monitoring system, processes, or controls since the last reporting period.

(f) You also must include the information required in paragraphs (f)(1) through (2) of this section in each compliance report, if applicable.

(1) A copy of any performance test done during the reporting period on any affected unit. The report may be included in the next semiannual report. The copy must include a complete report for each test method used for a particular kind of emission point tested. For additional tests performed for a similar emission point using the same method, you must submit the results and any other information required, but a complete test report is not required. A complete test report contains a brief process description; a simplified flow diagram showing affected processes, control equipment, and sampling point locations; sampling site data; 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; 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.

(2) Any requested change in the applicability of an emission standard (e.g., you want to change from the PM standard to the Ni standard for catalytic cracking units or from the HCl concentration standard to percent reduction for catalytic reforming units) in your periodic report. You must include all information and data necessary to demonstrate compliance with the new emission standard selected and any other associated requirements.

(g) You may submit reports required by other regulations in place of or as part of the compliance report if they contain the required information.

(h) The reporting requirements in paragraphs (h)(1) and (2) of this section apply to startups, shutdowns, and malfunctions:

(1) When actions taken to respond are consistent with the plan, you are not required to report these events in the semiannual compliance report and the reporting requirements in §§ 63.6(e)(3)(iii) and 63.10(d)(5) do not apply.

(2) When actions taken to respond are not consistent with the plan, you must report these events and the response taken in the semiannual compliance report. In this case, the reporting requirements in §§ 63.6(e)(3)(iv) and 63.10(d)(5) do not apply.

(i) If the applicable permitting authority has approved a period of planned maintenance for your catalytic cracking unit according to the requirements in paragraph (j) of this section, you must include the following information in your compliance report.

(1) In the compliance report due for the 6-month period before the routine planned maintenance is to begin, you must include a full copy of your written request to the applicable permitting authority and written approval received from the applicable permitting authority.

(2) In the compliance report due after the routine planned maintenance is complete, you must include a description of the planned routine maintenance that was performed for the control device during the previous 6-month period, and the total number of hours during those 6 months that the control device did not meet the emission limitations and monitoring requirements as a result of the approved routine planned maintenance.

(j) If you own or operate multiple catalytic cracking units that are served by a single wet scrubber emission control device (e.g., a Venturi scrubber), you may request the applicable permitting authority to approve a period of planned routine maintenance for the control device needed to meet requirements in your operation, maintenance, and monitoring plan. You must present data to the applicable permitting authority demonstrating that the period of planned maintenance results in overall emissions reductions. During this pre-approved time period, the emission control device may be taken out of service while maintenance is performed on the control device and/or one of the process units while the remaining process unit(s) continue to operate. During the period the emission control device is unable to operate, the emission limits, operating limits, and monitoring requirements applicable to the unit that is operating and the wet scrubber emission control device do not

apply. The applicable permitting authority may require that you take specified actions to minimize emissions during the period of planned maintenance.

(1) You must submit a written request to the applicable permitting authority at least 6 months before the planned maintenance is scheduled to begin with a copy to the EPA Regional Administrator.

(2) Your written request must contain the information in paragraphs (j)(2)(i) through (v) of this section.

(i) A description of the planned routine maintenance to be performed during the next 6 months and why it is necessary.

(ii) The date the planned maintenance will begin and end.

(iii) A quantified estimate of the HAP and criteria pollutant emissions that will be emitted during the period of planned maintenance.

(iv) An analysis showing the emissions reductions resulting from the planned maintenance as opposed to delaying the maintenance until the next unit turnaround.

(v) Actions you will take to minimize emissions during the period of planned maintenance.

§ 63.1576 What records must I keep, in what form, and for how long?

(a) You must keep the records specified in paragraphs (a)(1) through (3) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or Notification of Compliance Status that you submitted, according to the requirements in § 63.10(b)(2)(xiv).

(2) The records in § 63.6(e)(1)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, performance evaluations, and opacity and visible emission observations as required in § 63.10(b)(2)(viii).

(b) For each continuous emission monitoring system and continuous opacity monitoring system, you must keep the records required in paragraphs (b)(1) through (5) of this section.

(1) Records described in § 63.10(b)(2)(vi) through (xi).

(2) Monitoring data for continuous opacity monitoring systems during a performance evaluation as required in § 63.6(h)(7)(i) and (ii).

(3) Previous (i.e., superceded) versions of the performance evaluation plan as required in § 63.8(d)(3).

(4) Requests for alternatives to the relative accuracy test for continuous emission monitoring systems as required in § 63.8(f)(6)(i).

(5) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records in § 63.6(h) for visible emission observations.

(d) You must keep records required by Tables 6, 7, 13, and 14 of this subpart (for catalytic cracking units); Tables 20, 21, 27 and 28 of this subpart (for catalytic reforming units); Tables 34 and 35 of this subpart (for sulfur recovery units); and Table 39 of this subpart (for bypass lines) to show continuous compliance with each emission limitation that applies to you.

(e) You must keep a current copy of your operation, maintenance, and monitoring plan onsite and available for inspection. You also must keep records to show continuous compliance with the procedures in your operation, maintenance, and monitoring plan.

(f) You also must keep the records of any changes that affect emission control system performance including, but not limited to, the location at which the vent stream is introduced into the flame zone for a boiler or process heater.

(g) Your records must be in a form suitable and readily available for expeditious review according to § 63.10(b)(1).

(h) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(i) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§ 63.1577 What parts of the General Provisions apply to me?

Table 44 of this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you.

§ 63.1578 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that Agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (5) of this section.

(1) Approval of alternatives to the non-opacity emission limitations and work practice standards in §§ 63.1564 through 63.1569 under § 63.6(g).

(2) Approval of alternative opacity emission limitations in §§ 63.1564 through 63.1569 under § 63.6(h)(9).

(3) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.

(4) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.

(5) Approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

§ 63.1579 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA), in 40 CFR 63.2, the General Provisions of this part (§§ 63.1 through 63.15), and in this section as listed.

Boiler means any enclosed combustion device that extracts useful energy in the form of steam and is not an incinerator.

Catalytic cracking unit means a refinery process unit in which petroleum derivatives are continuously charged; hydrocarbon molecules in the presence of a catalyst suspended in a fluidized bed are fractured into smaller molecules, or react with a contact material suspended in a fluidized bed to improve feedstock quality for additional processing; and the catalyst or contact material is continuously regenerated by burning off coke and other deposits. The unit includes, but is not limited to, the riser, reactor, regenerator, air blowers, spent catalyst or contact material stripper, catalyst or contact material recovery equipment, and regenerator equipment for controlling air pollutant emissions and equipment used for heat recovery.

Catalytic cracking unit catalyst regenerator means one or more regenerators (multiple regenerators) which comprise that portion of the catalytic cracking unit in which coke burn-off and catalyst or contact material

regeneration occurs and includes the regenerator combustion air blower(s).

Catalytic reforming unit means a refinery process unit that reforms or changes the chemical structure of naphtha into higher octane aromatics through the use of a metal catalyst and chemical reactions that include dehydrogenation, isomerization, and hydrogenolysis. The catalytic reforming unit includes the reactor, regenerator (if separate), separators, catalyst isolation and transport vessels (e.g., lock and lift hoppers), recirculation equipment, scrubbers, and other ancillary equipment.

Catalytic reforming unit regenerator means one or more regenerators which comprise that portion of the catalytic reforming unit and ancillary equipment in which the following regeneration steps typically are performed: depressurization, purge, coke burn-off, catalyst rejuvenation with a chloride (or other halogenated) compound(s), and a final purge. The catalytic reforming unit catalyst regeneration process can be done either as a semi-regenerative, cyclic, or continuous regeneration process.

Coke burn-off means the coke removed from the surface of the catalytic cracking unit catalyst or the catalytic reforming unit catalyst by combustion in the catalyst regenerator. The rate of coke burn-off is calculated using Equation 2 in § 63.1564.

Combustion device means an individual unit of equipment such as a flare, incinerator, process heater, or boiler used for the destruction of organic HAP or VOC.

Combustion zone means the space in an enclosed combustion device (e.g., vapor incinerator, boiler, furnace, or process heater) occupied by the organic HAP and any supplemental fuel while burning. The combustion zone includes any flame that is visible or luminous as well as that space outside the flame envelope in which the organic HAP continues to be oxidized to form the combustion products.

Contact material means any substance formulated to remove metals, sulfur, nitrogen, or any other contaminants from petroleum derivatives.

Continuous regeneration reforming means a catalytic reforming process characterized by continuous flow of catalyst material through a reactor where it mixes with feedstock, and a portion of the catalyst is continuously removed and sent to a special regenerator where it is regenerated and continuously recycled back to the reactor.

Control device means any equipment used for recovering, removing, or oxidizing HAP in either gaseous or solid form. Such equipment includes, but is not limited to, condensers, scrubbers, electrostatic precipitators, incinerators, flares, boilers, and process heaters.

Cyclic regeneration reforming means a catalytic reforming process characterized by continual batch regeneration of catalyst in situ in any one of several reactors (e.g., 4 or 5 separate reactors) that can be isolated from and returned to the reforming operation while maintaining continuous reforming process operations (i.e., feedstock continues flowing through the remaining reactors without change in feed rate or product octane).

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limit, operating limit, or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Emission limitation means any emission limit, opacity limit, operating limit, or visible emission limit.

Flame zone means the portion of a combustion chamber of a boiler or process heater occupied by the flame envelope created by the primary fuel.

Flow indicator means a device that indicates whether gas is flowing, or whether the valve position would allow gas to flow, in or through a line.

Fuel gas system means the offsite and onsite piping and control system that gathers gaseous streams generated by the source, may blend them with sources of gas, if available, and transports the blended gaseous fuel at suitable pressures for use as fuel in heaters, furnaces, boilers, incinerators, gas turbines, and other combustion devices located within or outside of the refinery. The fuel is piped directly to each individual combustion device, and the system typically operates at pressures over atmospheric. The gaseous streams can contain a mixture of methane, light hydrocarbons, hydrogen, and other miscellaneous species.

HCl means for the purposes of this subpart, gaseous emissions of hydrogen chloride that serve as a surrogate measure for total emissions of hydrogen chloride and chlorine as measured by Method 26 or 26A in appendix A to part 60 of this chapter or an approved alternative method.

Incinerator means an enclosed combustion device that is used for destroying organic compounds, with or without heat recovery. Auxiliary fuel may be used to heat waste gas to combustion temperatures. An incinerator may use a catalytic combustion process where a substance is introduced into an exhaust stream to burn or oxidize contaminants while the substances itself remains intact, or a thermal process which uses elevated temperatures as a primary means to burn or oxidize contaminants.

Ni means, for the purposes of this subpart, particulate emissions of nickel that serve as a surrogate measure for total emissions of metal HAP, including but not limited to: antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, nickel, and selenium as measured by Method 29 in appendix A to part 60 of this chapter or by an approved alternative method.

Oxidation control system means an emission control system which reduces emissions from sulfur recovery units by converting these emissions to sulfur dioxide.

PM means, for the purposes of this subpart, emissions of particulate matter that serve as a surrogate measure of the total emissions of particulate matter and metal HAP contained in the particulate matter, including but not limited to: antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, nickel, and selenium as measured by Methods 5B or 5F in appendix A to part 60 of this chapter or by an approved alternative method.

Process heater means an enclosed combustion device that primarily transfers heat liberated by burning fuel directly to process streams or to heat transfer liquids other than water.

Process vent means, for the purposes of this subpart, a gas stream that is continuously or periodically discharged during normal operation of a catalytic cracking unit, catalytic reforming unit, or sulfur recovery unit, including gas streams that are discharged directly to the atmosphere, gas streams that are routed to a control device prior to discharge to the atmosphere, or gas streams that are diverted through a product recovery device line prior to control or discharge to the atmosphere.

Reduced sulfur compounds means hydrogen sulfide, carbonyl sulfide, and carbon disulfide.

Reduction control system means an emission control system which reduces emissions from sulfur recovery units by converting these emissions to hydrogen sulfide.

Responsible official means responsible official as defined in 40 CFR 70.2.

Semi-regenerative reforming means a catalytic reforming process characterized by shutdown of the entire reforming unit (e.g., which may employ three to four separate reactors) at specified intervals or at the owner's or operator's convenience for in situ catalyst regeneration.

Sulfur recovery unit means a process unit that recovers elemental sulfur from gases that contain reduced sulfur compounds and other pollutants, usually by a vapor-phase catalytic reaction of sulfur dioxide and hydrogen sulfide. This definition does not include a unit where the modified reaction is carried out in a water solution which contains a metal ion capable of oxidizing the sulfide ion to sulfur, e.g., the LO–CAT II process.

TOC means, for the purposes of this subpart, emissions of total organic compounds, excluding methane and ethane, that serve as a surrogate measure of the total emissions of organic HAP compounds, including but not limited to, acetaldehyde, benzene, hexane, phenol, toluene, and xylenes and non-HAP VOC as measured by Method 25 or 25A in appendix A to part 60 of this chapter or an approved alternative method.

TRS means, for the purposes of this subpart, emissions of total reduced sulfur compounds, expressed as an equivalent sulfur dioxide concentration, that serve as a surrogate measure of the total emissions of sulfide HAP carbonyl sulfide and carbon disulfide as measured by Method 15 in appendix A to part 60 of this chapter or by an approved alternative method.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

TABLE 1 TO SUBPART UUU OF PART 63.—METAL HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1564(a)(1), you must meet each emission limitation in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	You must meet the following emission limits for each catalyst regenerator vent * * *
1. Subject to the new source performance standard (NSPS) for PM in 40 CFR 60.102.	PM emissions must not exceed 1.0 kilogram (kg) per 1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or supplemental liquid or solid fossil fuel, you must limit the incremental rate of PM to no more than 43.0 grams per Megajoule (g/MJ) or 0.10 pounds per million British thermal units (lb/million Btu) of heat input attributable to the liquid or solid fossil fuel; and the opacity of emissions must not exceed 30 percent, except for one 6-minute average opacity reading in any 1-hour period.
2. Option 1: NSPS requirements not subject to the NSPS for PM in 40 CFR 60.102.	PM emissions must not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or in supplemental liquid or solid fossil fuel, you must limit the incremental rate of PM to no more than 43.0 g/MJ or lb/million Btu of heat input attributable to the liquid or solid fossil fuel; and the opacity of emissions must not exceed 30 percent, except for one 6-minute average opacity reading in any 1-hour period.
3. Option 2: PM limit not subject to the NSPS for PM in 40 CFR 60.102.	PM emissions must not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lbs) of coke burn-off in the catalyst regenerator.
4. Option 3: Ni lb/hr not subject to the NSPS for PM in 40 CFR 60.102.	Nickel (Ni) emissions must not exceed 13,000 milligrams per hour (mg/hr) (0.029 lb/hr).
5. Option 4: Ni Lb/1,000 lbs of coke burn-off not subject to the NSPS for PM in 40 CFR 60.102.	Ni emissions must not exceed 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator.

TABLE 2 TO SUBPART UUU OF PART 63.—OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(a)(2), you must meet each operating limit in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	For this type of continuous monitoring system * * *	For this type of control device * * *	You must meet this operating limit * * *
1. Subject to the NSPS for PM in 40 CFR 60.102.	Continuous opacity monitoring system.	Not applicable	Not applicable.
2. Option 1: NSPS requirements not subject to the NSPS for PM in 40 CFR 60.102.	Continuous opacity monitoring system.	Not applicable	Not applicable.
3. Option 2: PM limit not subject to the NSPS for PM in 40 CFR 60.102.	a. Continuous opacity monitoring system.	Electrostatic precipitator	Maintain the hourly average opacity of emissions from your catalyst regenerator vent no higher than the site-specific opacity limit established during the performance test.

TABLE 2 TO SUBPART UUU OF PART 63.—OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS—Continued

[As stated in § 63.1564(a)(2), you must meet each operating limit in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	For this type of continuous monitoring system * * *	For this type of control device * * *	You must meet this operating limit * * *
	b. Continuous parameter monitoring systems.	Electrostatic precipitator	Maintain the daily average gas flow rate no higher than the limit established in the performance test; and maintain the daily average voltage and secondary current (or total power input) above the limit established in the performance test.
	c. Continuous parameter monitoring systems.	Wet scrubber	Maintain the daily average pressure drop above the limit established in the performance test (not applicable to a wet scrubber of the non-venturi jet-ejector design); and maintain the daily average liquid-to-gas ratio above the limit established in the performance test.
4. Option 3: Ni lb/hr not subject to the NSPS for PM in 40 CFR 60.102.	a. Continuous opacity monitoring system.	Electrostatic precipitator	Maintain the daily average Ni operating value no higher than the limit established during the performance test.
	b. Continuous parameter monitoring systems.	i. Electrostatic precipitator	Maintain the daily average gas flow rate no higher than the limit established during the performance test; maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; and maintain the daily average voltage and secondary current (or total power input) above the established during the performance test.
		ii. Wet scrubber	Maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; maintain the daily average pressure drop above the limit established during the performance test (not applicable to a non-venturi wet scrubber of the jet-ejector design); and maintain the daily average liquid-to-gas ratio above the limit established during the performance test.
5. Option 4: Ni lb/1,000 lbs of coke burn-off not subject to the NSPS for PM in 40 CFR 60.102.	a. Continuous opacity monitoring system	Electrostatic precipitator	Maintain the daily average Ni operating value no higher than the Ni operating limit established during the performance test.
	b. Continuous parameter monitoring systems.	i. Electrostatic precipitator	Maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; and maintain the daily average voltage and secondary current for total power input) above the limit established during the performance test.

TABLE 2 TO SUBPART UUU OF PART 63.—OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS—Continued

[As stated in § 63.1564(a)(2), you must meet each operating limit in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	For this type of continuous monitoring system * * *	For this type of control device * * *	You must meet this operating limit * * *
		ii. Wet scrubber	Maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; maintain the daily average pressure drop above the limit established during the performance test (not applicable to a non-venturi wet scrubber of the jet-ejector design); and maintain the daily average liquid-to-gas ratio above the limit established during the performance test.

TABLE 3 TO SUBPART UUU OF PART 63.—CONTINOUS MONITORING SYSTEMS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(b)(1), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	If your catalytic cracking unit is * * *	And you use this type of control device for your vent * * *	You must install, operate, and maintain a * * *
1. Subject to the NSPS for PM in 40 CFR 60.102.	Any size	Electrostatic precipitator or wet scrubber or no control device.	Continous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent.
2. Option 1: NSPS limits not subject to the NSPS for PM in 40 CFR 60.102.	Any size	Electrostatic precipitator or wet scrubber or no control device.	Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent.
3. Option 2: PM limit not subject to the NSPS for PM in 40 CFR 60.102.	a. Over 20,000 barrels per day fresh feed capacity.	Electrostatic precipitator	Continous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent.
	b. Up to 20,000 barrels per day fresh feed capacity.	Electrostatic precipitator	Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent; or continuous parameter monitoring systems to measure and record the gas flow rate to the control device and the voltage and secondary current (or total power input) to the control device.
	c. Any size	i. Wet scrubber	(1) Continuous parameter monitoring system to measure and record the pressure drop across the scrubber, gas flow rate to the scrubber, and total liquid (or scrubbing liquor) flow rate to the scrubber. (2) If you use a wet scrubber of the non-venturi jet-ejector design, you're not required to install and operate a continuous parameter monitoring system for pressure drop.
	d. Any size	No electrostatic precipitator or wet scrubber.	Continous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent.

TABLE 3 TO SUBPART UUU OF PART 63.—CONTINOUS MONITORING SYSTEMS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS—Continued

[As stated in § 63.1564(b)(1), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	If your catalytic cracking unit is * * *	And you use this type of control device for your vent * * *	You must install, operate, and maintain a * * *
4. Option 3: Ni lb/hr not subject to the NSPS for PM in 40 CFR 60.102.	a. Over 20,000 barrels per day fresh feed capacity.	Electrostatic precipitator	Continous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate.
	b. Up to 20,000 barrels per day fresh feed capacity.	Electrostatic precipitator	Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate; or continuous parameter monitoring systems to measure and record the gas flow rate and the voltage and secondary current (or total power input) to the control device.
	c. Any size	Wet scrubber	(1) Continuous parameter monitoring system to measure and record the pressure drop across the scrubber, gas flow rate to the scrubber, and total liquid (or scrubbing liquor) flow rate to the scrubber. (2) If you use a wet scrubber of the non-venturi jet-ejector, design, you're not required to install and operate a continuous parameter monitoring system for pressure drop.
	d. Any size	No electrostatic precipitator or wet scrubber.	Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate.
5. Option 4: Ni lb/1,000 lbs of coke burn-off not subject to the NSPS for PM in 40 CFR 60.102.	a. Over 20,000 barrels per day fresh feed capacity.	Electrostatic precipitator	Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate.
	b. Up to 20,000 barrels per day fresh feed capacity.	Electrostatic precipitator	Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate; or continuous parameter monitoring systems to measure and record the gas flow rate and the voltage and secondary current (or total power input) to the control device.
	c. Any size	Wet scrubber	Continuous parameter monitoring system to measure and record the pressure drop across the scrubber, gas flow rate to the scrubber, and total liquid (or scrubbing liquor) flow rate to the scrubber.

TABLE 3 TO SUBPART UUU OF PART 63.—CONTINOUS MONITORING SYSTEMS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS—Continued

[As stated in § 63.1564(b)(1), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	If your catalytic cracking unit is * * *	And you use this type of control device for your vent * * *	You must install, operate, and maintain a * * *
	d. Any size	No electrostatic precipitator or wet scrubber	Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate.

TABLE 4 TO SUBPART UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO THE NEW SOURCE PERFORMANCE STANDARD (NSPS) FOR PARTICULATE MATTER (PM)

[As stated in § 63.1564(b)(2), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit catalyst regenerator vent * * *	You must * * *	Using * * *	According to these requirements * * *
1. If you elect Option 1 in item 2 of Table 1, Option 2 in item 3 of Table 1, Option 3 in item 4 of Table 1, or Option 4 in item 5 of Table 1 of this subpart.	a. Select sampling port's location and the number of traverse ports.	Method 1 or 1A in appendix A to part 60 of this chapter.	Sampling sites must be located at the outlet of the control device or the outlet of the regenerator, as applicable, and prior to any releases to the atmosphere.
	b. Determine velocity and volumetric flow rate.	Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A to part 60 of this chapter, as applicable.	
	c. Conduct gas molecular weight analysis.	Method 3, 3A, or 3B in appendix A to part 60 of this chapter, as applicable.	
	d. Measure moisture content of the stack gas.	Method 4 in appendix A to part 60 of this chapter.	
	e. If you use an electro-static precipitator, record the total number of fields in the control system and how many operated during the applicable performance test.		
	f. If you use a wet scrubber, record the total amount (rate) of water (or scrubbing liquid) and the amount (rate) of make-up liquid to the scrubber during each test run.		
2. Option 1: Elect NSPS	a. Measure PM emissions	Method 5B or 5F (40 CFR part 60, appendix A) to determine PM emissions and associated moisture content for units without wet scrubbers. Method 5B (40 CFR part 60, appendix A) to determine PM emissions and associated moisture content for unit with wet scrubber.	You must maintain a sampling rate of at least 0.15 dry standard cubic meters per minute (dscm/min) (0.53 dry standard cubic feet per minute (dscf/min)).
	b. Compute PM emission rate (lbs/1,000 lbs) of coke burn-off.	Equations 1, 2, and 3 of § 63.1564 (if applicable).	
	c. Measure opacity of emissions.	Continuous opacity monitoring system.	You must collect opacity monitoring data every 10 seconds during the entire period of the initial Method 5 performance test and reduce the data to 6-minute averages.
3. Option 2: PM limit	a. Measure PM emissions	See item 2. of this table	See item 2. of this table.
	b. Compute coke burn-off rate and PM emission rate.	Equations 1 and 2 of § 63.1564	

TABLE 4 TO SUBPART UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO THE NEW SOURCE PERFORMANCE STANDARD (NSPS) FOR PARTICULATE MATTER (PM)—Continued

[As stated in § 63.1564(b)(2), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit catalyst regenerator vent * * *	You must * * *	Using * * *	According to these requirements * * *
	c. Establish your site-specific opacity operating limit if you use a continuous opacity monitoring system.	Data from the continuous opacity monitoring system.	You must collect opacity monitoring data every 10 seconds during the entire period of the initial Method 5 performance test and reduce the data to 6-minute averages; determine and record the hourly average opacity from all the 6-minute averages; and compute the site-specific limit using Equation 4 of § 63.1564.
4. Option 3: Ni lb/hr	a. Measure concentration of Ni and total metal HAP.	Method 29 (40 CFR part 60, appendix A).	You must maintain a sampling rate of at least 0.028 dscm/min (0.74 dscf/min).
	b. Compute Ni emission rate (lb/hr).	Equation 5 of § 63.1564	
	c. Determine the equilibrium catalyst Ni concentration.	EPA Method 6010B or 6020 or EPA Method 7520 or 7521 in SW–846 [1]; or, you can use an alternative method satisfactory to the Administrator.	You must obtain 1 sample for each of the 3 runs; determine and record the average equilibrium catalyst Ni concentration for each of the 3 runs; and you may adjust the results for an individual run to the maximum value using Equation 1 of § 63.1571.
	d. If you use a continuous opacity monitoring system, establish your site-specific Ni operating limit.	i. Equations 6 and 7 of § 63.1564 using data from continuous opacity monitoring system, gas flow rate, results of equilibrium catalyst Ni concentration analysis, and Ni emission rate from Method 29 test.	(1) You must collect opacity monitoring data every 10 seconds during the entire period of the initial Ni performance test; reduce the data to 6-minute averages; and determine and record the hourly average opacity from all the 6-minute averages. (2) You must collect gas flow rate monitoring data every 15 minutes during the entire period of the initial Ni performance test; measure the gas flow as near as practical to the continuous opacity monitoring system; and determine and record the hourly average actual gas flow rate from all the readings.
5. Option 4: Ni lbs/1,000 lbs of coke burn-off.	a. Measure concentration of Ni and total metal HAP.	Method 29 (40 CFR part 60, appendix A).	You must maintain a sampling rate of at least 0.028 dscm/min (0.74 dscf/min).
	b. Compute Ni emission rate (lb/1,000 lbs of coke burn-off).	Equations 1 and 8 of § 63.1564.	
	c. Determine the equilibrium catalyst Ni concentration.	EPA Method 6010B or 6020 or EPA Method 7520 or 7521 (SW–846) [1]; or, you can use an alternative method satisfactory to the Administrator.	You must obtain 1 sample for each of the 3 runs; determine and record the equilibrium catalyst Ni concentration for each of the 3 samples; and you may adjust the laboratory results to the maximum value using Equation 2 of § 63.1571.

TABLE 4 TO SUBPART UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO THE NEW SOURCE PERFORMANCE STANDARD (NSPS) FOR PARTICULATE MATTER (PM)—Continued

[As stated in § 63.1564(b)(2), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit catalyst regenerator vent * * *	You must * * *	Using * * *	According to these requirements * * *
	d. If you use a continuous opacity monitoring system, establish your site-specific Ni operating limit.	i. Equations 9 and 10 of § 63.1564 with data from continuous opacity monitoring system, coke burn-off rate, gas flow rate, results of equilibrium catalyst Ni concentration analysis, and Ni emission rate from Method 29 test.	(1) You must collect opacity monitoring data every 10 seconds during the entire period of the initial Ni performance test; reduce the data to 6-minute averages; and determine and record the hourly average opacity from all the 6-minute averages. (2) You must collect gas flow rate monitoring data every 15 minutes during the entire period of the initial Ni performance test; measure the gas flow rate as near as practical to the continuous opacity monitoring system; and determine and record the hourly average actual gas flow rate from all the readings.
	e. Record the catalyst addition rate for each test and schedule for the 10-day period prior to the test.		
6. If you elect Option 2 in Entry 3 in Table 1, Option 3 in Entry 4 in Table 1, or Option 4 in Entry 5 in Table 1 of this subpart and you use continuous parameter monitoring systems.	a. Establish each operating limit in Table 2 of this subpart that applies to you.	Data from the continuous parameter monitoring systems and applicable performance test methods.	
	b. Electrostatic precipitator or wet scrubber: gas flow rate.	Data from the continuous parameter monitoring systems and applicable performance test methods.	You must collect gas flow rate monitoring data every 15 minutes during the entire period of the initial performance test; and determine and record the maximum hourly average gas flow rate from all the readings.
	c. Electrostatic precipitator: voltage and secondary current (or total power input).	Data from the continuous parameter monitoring systems and applicable performance test methods.	You must collect voltage and secondary current (or total power input) monitoring data every 15 minutes during the entire period of the initial performance test; and determine and record the minimum hourly average voltage and secondary current (or total power input) from all the readings.
	d. Electrostatic precipitator or wet scrubber: equilibrium catalyst Ni concentration.	Results of analysis for equilibrium catalyst Ni concentration.	You must determine and record the average equilibrium catalyst Ni concentration for the 3 runs based on the laboratory results. You may adjust the value using Equation 1 or 2 of § 63.1571 as applicable.
	e. Wet scrubber: pressure drop (not applicable to non-venturi scrubber of jet ejector design).	Data from the continuous parameter monitoring systems and applicable performance test methods.	You must collect pressure drop monitoring data every 15 minutes during the entire period of the initial performance test; and determine and record the minimum hourly average pressure drop from all the readings.

TABLE 4 TO SUBPART UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO THE NEW SOURCE PERFORMANCE STANDARD (NSPS) FOR PARTICULATE MATTER (PM)—Continued

[As stated in § 63.1564(b)(2), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit catalyst regenerator vent * * *	You must * * *	Using * * *	According to these requirements * * *
	f. Wet scrubber: liquid-to-gas ratio	Data from the continuous parameter monitoring systems and applicable performance test methods.	You must collect gas flow rate and total water (or scrubbing liquid) flow rate monitoring data every 15 minutes during the entire period of the initial performance test; determine and record the hourly average gas flow rate and total water (or scrubbing liquid) flow rate from all the readings; and determine and record the minimum liquid-to-gas ratio.
	g. Alternative procedure for gas flow rate.	Data from the continuous parameter monitoring systems and applicable performance test methods.	You must collect air flow rate monitoring data or determine the air flow rate using control room instrumentation every 15 minutes during the entire period of the initial performance test; determine and record the hourly average rate of all the readings; and determine and record the maximum gas flow rate using Equation 1 of § 63.1573.

[1] EPA Method 6010B, Inductively Coupled Plasma-Atomic Emission Spectrometry, EPA Method 6020, Inductively Coupled Plasma-Mass Spectrometry, EPA Method 7520, Nickel Atomic Absorption, Direct Aspiration, and EPA Method 7521, Nickel Atomic Absorption, Direct Aspiration are included in ''Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,'' EPA Publication SW–846, Revision 5 (April 1998). The SW–846 and Updates (document number 955–001–00000–1) are available for purchase from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 512–1800; and from the National Technical Information Services (NTIS), 5285 Port Royal Road, Springfield, VA 22161, (703) 487–4650. Copies may be inspected at the Air and Radiation Docket and Information Center, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC; or at the Office of the Federal Register, 800 North Capitol Street, NW, Suite 700, Washington, DC.

TABLE 5 TO SUBPART UUU OF PART 63.—INITIAL COMPLIANCE WITH METAL HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1564(b)(5), you must meet each requirement in the following table that applies to you]

For each new and existing catalytic cracking unit catalyst regenerator vent * * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
1. Subject to the NSPS for PM in 40 CFR 60.102.	PM emissions must not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or supplemental liquid or solid fossil fuel, you must limit the incremental rate of PM to no more than 43.0 grams per Megajoule (g/MJ) or 0.10 pounds per million British thermal units (lb/million Btu) of heat input attributable to the liquid or solid fossil fuel; and the opacity of emissions 30 percent, except for one 6-minute average opacity reading in any 1-hour period.	You have already conducted a performance test to demonstrate initial compliance with the NSPS and the measured PM emission rate is less than or equal to 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator. As part of the Notification of Compliance Status, you must certify that your vent meets the PM limit. You are not required to do another performance test to demonstrate initial compliance. If applicable, you have already conducted a performance test to demonstrate initial compliance with the NSPS and the measured PM rate is less than or equal to 43.0 g/MJ or 0.010 lb/million Btu of heat input attributable to the liquid or solid fossil fuel. As part of the Notification of Compliance Status, you must certify that your vent meets the PM emission limit. You are not required to do another performance test to demonstrate initial compliance. You have already conducted a performance test to demonstrate initial compliance with the NSPS and the average hourly opacity of emissions is no more than 30 percent. Except: one 6-minute average in any 1-hour period can exceed 30 percent. As part of the Notification of Compliance Status, you must certify that your vent meets the opacity limit. You are not required to do another performance test to demonstrate initial compliance. You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you certify that your continuous opacity monitoring system meets the requirements in § 63.1572. You are not required to do a performance evaluation to demonstrate initial compliance.
2. Option 1: Elect NSPS not subject to the NSPS for PM.	PM emissions must not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or supplemental liquid or solid fossil fuel, you must limit the incremental rate of PM to no more than 43.0 grams per Megajoule (g/MJ) or 0.10 pounds per million British thermal units (lb/million Btu) of heat input attributable to the liquid or solid fossil fuel; and the opacity of emissions must not exceed 30 percent, except for one 6-minute average opacity reading in any 1-hour period.	The average PM emission rate, measured using EPA method 5 over the period of the initial performance test, is no higher than 1.0 kg/1,000 kg (1.0 lb/1,000 lbs) of coke burn-off in the catalyst regenerator. The PM emission rate is calculated using Equations 1 and 2 of the § 63.1564. If applicable, the average PM emission rate, measured using EPA Method 5 over the period of the initial performance test, is no higher than 43.0 g/MJ or 0.010 lb/million Btu of heat input attributable to the liquid or solid fossil fuel. The PM emission rate is calculated using Equation 3 of § 63.1564; no more than one 6-minute average measured by the continuous opacity monitoring system exceeds 30 percent opacity in any 1-hour period over the period of the performance test; and your performance evaluation shows the continuous opacity monitoring system meets the applicable requirements in § 63.1572.

TABLE 5 TO SUBPART UUU OF PART 63.—INITIAL COMPLIANCE WITH METAL HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS—Continued

[As stated in § 63.1564(b)(5), you must meet each requirement in the following table that applies to you]

For each new and existing catalytic cracking unit catalyst regenerator vent * * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
3. Option 2: not subject to the NSPS for PM	PM emissions must not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator.	The average PM emission rate, measured using EPA Method 5 over the period of the initial performance test, is less than or equal to 1.0 kg/1,000 kg (1.0 lb/1,000 lbs) of coke burn-off in the catalyst regenerator. The PM emission rate is calculated using Equations 1 and 2 of § 63.1564; and if you use a continuous opacity monitoring system, your performance evaluation shows the system meets the applicable requirements in § 63.1572.
4. Option 3: not subject to the NSPS for PM	Nickel (Ni) emissions from your catalyst regenerator vent must not exceed 13,000 mg/hr (0.029 lb/hr).	The average Ni emission rate, measured using Method 29 over the period of the initial performance test, is not more than 13,000 mg/hr (0.029 lb/hr). The Ni emission rate is calculated using Equation 5 of § 63.1564; and if you use a continuous opacity monitoring system, your performance evaluation shows the system meets the applicable requirements in § 63.1572.
5. Option 4: Ni lb/1,000 lbs of coke burn-off not subject to the NSPS for PM.	Ni emissions from your catalyst regenerator vent must not exceed 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator.	The average Ni emission rate, measured using Method 29 over the period of the initial performance test, is not more than 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator. The Ni emission rate is calculated using Equation 8 of § 63.1564; and if you use a continuous opacity monitoring system, your performance evaluation shows the system meets the applicable requirements in § 63.1572.

TABLE 6 TO SUBPART UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH METAL HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1564(c)(1), you must meet each requirement in the following table that applies to you]

For each new and existing catalytic cracking unit * * *	Subject to this emission limit for your catalyst regenerator vent * * *	You must demonstrate continuous compliance by * * *
1. Subject to the NSPS for PM in 40 CFR 60.102.	a. PM emissions must not exceed 1.0 lb/1,000 lbs of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or supplemental liquid or solid fossil fuel, incremental rate of PM can't exceed 43.0 g/MJ (0.10 lb/million Btu) of heat input attributable to the liquid or solid fossil fuel; and opacity of emissions can't exceed 30 percent, except for one 6-minute average opacity reading in any 1-hour period.	i. Determining and recording each day the average coke burn-off rate (thousands of kilograms per hour) using Equation 2 in § 63.1564 and the hours of operation for each catalyst regenerator; maintaining PM emission rate below 1.0 kg/1,000 kg (1.0 lb/1,000 lbs) of coke burn-off; if applicable, determining and recording each day the rate of combustion of liquid or solid fossil fuels (liters/hour or kilograms/hour) using Equation 3 of § 63.1564 and the hours of operation during which liquid or solid fossil-fuels are combusted in the incinerator-waste heat boiler; if applicable, maintaining PM rate below 43 g/MJ (0.10 lb/million Btu) of heat input attributable to the solid or liquid fossil fuel; collecting the continuous opacity monitoring data for each catalyst regenerator vent according to § 63.1572; and maintaining each 6-minute average at or below 30 percent except that one 6-minute average during a 1-hour period can exceed 30 percent.
2. Option 1: Elect NSPS not subject to the NSPS for PM in 40 CFR 60.102.	See item 1.a. of this table	See item 1.a.i. of this table.

TABLE 6 TO SUBPART UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH METAL HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS—Continued

[As stated in § 63.1564(c)(1), you must meet each requirement in the following table that applies to you]

For each new and existing catalytic cracking unit * * *	Subject to this emission limit for your catalyst regenerator vent * * *	You must demonstrate continuous compliance by * * *
3. Option 2: PM limit not subject to the NSPS for PM.	PM emissions must not exceed 1.0 lb/1,000 lbs of coke burn-off in the catalyst regenerator.	Determining and recording each day the average coke burn-off rate (thousands of kilograms per hour) and the hours of operation for each catalyst regenerator by Equation 2 of § 63.1564. You can use process data to determine the volumetric flow rate; and maintaining PM emission rate below 1.0 kg/1,000 kg (1.0 lb/1,000 lbs) of coke burn-off.
4. Option 3: Ni lb/hr not subject to the NSPS for PM.	Ni emissions must not exceed 13,000 mg/hr (0.029 lb/hr).	Maintaining Ni emission rate below 13,000 mg/hr (0.029 lb/hr).
5. Option 4: Ni lb/1,000 lbs of coke burn-off not subject to the NSPS for PM.	Ni emissions must not exceed 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator.	Determining and recording each day the average coke burn-off rate (thousands of kilograms per hour) and the hours of operation for each catalyst regenerator by Equation 2 of § 63.1564. You can use process data to determine the volumetric flow rate; and maintaining Ni emission rate below 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator.

TABLE 7 TO SUBPART UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(c)(1), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	If you use * * *	For this operating limit * * *	You must demonstrate continuous compliance by * * *
1. Subject to NSPS for PM in 40 CFR 60.102.	Continuous opacity monitoring system.	Not applicable	Complying with Table 6 of this subpart.
2. Option 1: Elect NSPS not subject to the NSPS for PM in 40 CFR 60.102.	Continuous opacity monitoring system.	Not applicable	Complying with Table 6 of this subpart.
3. Option 2: PM limit not subject to the NSPS for PM in 40 CFR 60.102.	a. Continuous opacity monitoring system.	The opacity of emissions from your catalyst regenerator vent must not exceed the site-specific opacity operating limit established during the performance test	Collecting the hourly average continuous opacity monitoring system data according to § 63.1572; and maintaining each 6-minute average in each 1-hour period at or below the site-specific limit.
	b. Continuous parameter monitoring systems—electrostatic precipitator.	i. The daily average gas flow rate to the control device must not exceed the operating limit established during the performance test.	Collecting the hourly and daily average gas flow rate monitoring data according to § 63.1572 [1]; and maintaining the daily average gas flow rate at limit or below the established during the performance test.
		ii. The daily average voltage and secondary current (or total power input) to the control device must not fall below the operating limit established during the performance test.	Collecting the hourly and daily average voltage and secondary current (or total power input) monitoring data according to § 63.1572; and maintaining the daily average voltage and secondary current (or total power input) at or above the limit established during the performance test.
	c. Continuous parameter monitoring systems—wet scrubber.	i. The daily average pressure drop across the scrubber must not fall below the operating limit established during the performance test.	Collecting the hourly and daily average pressure drop monitoring data according to § 63.1572; and maintaining the daily average press drop above the limit established during the performance test.

TABLE 7 TO SUBPART UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS—Continued

[As stated in § 63.1564(c)(1), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	If you use * * *	For this operating limit * * *	You must demonstrate continuous compliance by * * *
		ii. The daily average liquid-to-gas ratio must not fall below the operating limit established during the performance test.	Collecting the hourly average gas flow rate and water (or scrubbing liquid) flow rate monitoring data according to § 63.1572 [1]; determining and recording the hourly average liquid-to-gas ratio; determining and recording the daily average liquid-to-gas ratio; and maintaining the daily average liquid-to-gas ratio above the limit established during the performance test.
4. Option 3: Ni lb/hr not subject to the NSPS for PM in 40 CFR 60.102.	a. Continuous opacity monitoring system.	The daily average Ni operating value must not exceed the site-specific Ni operating limit established during the performance test.	Collecting the hourly average continuous opacity monitoring system data according § 63.1572; determining and recording equilibrium catalyst Ni concentration at least once a week collecting the hourly average gas flow rate monitoring data according to § 63.1572 [1]; determining and recording the hourly average Ni operating value using Equation 11 of § 63.1564; determining and recording the daily average Ni operating value; and maintaining the daily average Ni operating value below the site-specific Ni operating limit established the performance test.
	b. Continuous parameter monitoring systems—electrostatic precipitator.	i. The daily average gas flow rate to the control device must notice exceed the level established in the performance test.	See item 3.b.i. of this table.
		ii. The daily average voltage and secondary current (or total power input) must not fall below the level established in the performance test.	See item 3.b.ii. of this table.
		iii. The monthly rolling average of equilibrium catalyst Ni concentration must not exceed the level established during the performance test.	Determining the recording the equilibrium catalyst Ni concentration at least once a week; determining and recording the monthly rolling average of the equilibrium catalyst Ni concentration once each week using the weekly or most recent value; and maintaining the monthly rolling average below the limit established in the performance test
	c. Continuous parameter monitoring systems—wet scrubber.	i. The daily average pressure drop must not fall below the operating limit established in the performance test.	See item 3.c.i. of this table.
		ii. The daily average liquid-to-gas ratio must not fall below the operating limit established during the performance test.	See item 3.c.ii. of this table.

TABLE 7 TO SUBPART UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS—Continued

[As stated in § 63.1564(c)(1), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	If you use * * *	For this operating limit * * *	You must demonstrate continuous compliance by * * *
		iii. The monthly rolling average equilibrium catalyst Ni concentration must not exceed the level established during the performance test.	Determining and recording the equilibrium catalyst Ni concentration at least once a week; determining and recording the monthly rolling average of equilibrium catalyst Ni concentration once each week using the weekly or most recent value; and maintaining the monthly rolling average below the limit established in the performance test.
5. Option 4: Ni lb/ton of coke burn-off not subject to the NSPS for PM in 40 CFR 60.102	a. Continuous opacity monitoring system.	The daily average Ni operating value must not exceed the site-specific Ni operating limit established during the performance test.	Collecting the hourly average continuous opacity monitoring system data according to § 63.1572; collecting the hourly average gas flow rate monitoring data according to § 63.1572 [1]; determining and recording equilibrium catalyst Ni concentration at least once a week; determining and recording the hourly average Ni operating value using Equation 12 of § 63.1564; determining and recording the daily average Ni operating value; and maintaining the daily average Ni operating value below the site-specific Ni operating limit established during the performance test.
	b. Continuous parameter monitoring systems—electrostatic precipitator.	i. The daily average gas flow rate to the control device must not exceed the level established in the performance test.	See item 3.b.i. of this table.
		ii. The daily average voltage and secondary current (or total power input) must not fall below the level established in the performance test.	See item 3.b.ii. of this table.
		iii. The monthly rolling average equilibrium catalyst Ni concentration must not exceed the level established during the performance test.	See item 4.b.iii. of this table.
	c. Continuous parameter monitoring systems—wet scrubber.	i. The daily average pressure drop must not fall below the operating limit established in the performance test.	See item 3.c.i. of this table.
		ii. The daily average liquid-to-gas ratio must not fall below the operating limit established during the performance test. See item 3.c.ii. of this table.	
		iii. The monthly rolling average equilibrium catalyst Ni concentration must not exceed the level established during the performance test.	See item 4.c.iii. of this table.

[1] If applicable, you can use the alternative in § 63.1573 for gas flow rate instead of a continuous parameter monitoring system if you used the alternative method in the initial performance test. If so, you must continuously monitor and record the air flow rate to the regenerator and the temperature of the gases entering the control device as described in § 63.1573. You must determine and record the hourly average gas flow rate using Equation 1 of § 63.1573 and the daily average gas flow rate. You must maintain the daily average gas flow rate below the operating limit established during the performance test.

TABLE 8 TO SUBPART UUU OF PART 63.—ORGANIC HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1565(a)(1), you must meet each emission limitation in the following table that applies to you]

For each new and existing catalytic cracking unit * * *	You must meet the following emission limit for each catalyst regenerator vent * * *
1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR 60.103.	CO emissions from the catalyst regenerator vent or CO boiler serving the catalytic cracking unit must not exceed 500 parts per million volume (ppmv) (dry basis).
2. Not subject to the NSPS for CO in 40 CFR 60.103.	a. CO emissions from the catalyst regenerator vent or CO boiler serving the catalytic cracking unit must not exceed 500 ppmv (dry basis). b. If you use a flare to meet the CO limit, the flare must meet the requirements for control devices in § 63.11(b): visible emissions must not exceed a total of 5 minutes during any 2 consecutive hours.

TABLE 9 TO SUBPART UUU OF PART 63.—OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1565(a)(2), you must meet each operating limit in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	For this type of continuous monitoring system * * *	For this type of control device * * *	You must meet this operating limit * * *
1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR 60.103.	Continuous emission monitoring system.	Not applicable	Not applicable.
2. Not subject to the NSPS for CO in 40 CFR 60.103.	a. Continuous emission monitoring system.	Not applicable	Not applicable.
	b. Continuous parameter monitoring systems.	i. Thermal incinerator	Maintain the daily average combustion zone temperature above the limit established during the performance test; and maintain the daily average oxygen concentration in the vent stream (percent, dry basis) above the limit established during the performance test.
		ii. Boiler or process heater with a design heat input capacity under 44 MW or a boiler or process heater in which all vent streams are not introduced into the flame zone.	Maintain the daily average combustion zone temperature above the limit established in the performance test.
		iii. Flare	The flare pilot light must be present at all times and the flare must be operating at all times that emissions may be vented to it.

TABLE 10 TO SUBPART UUU OF PART 63.—CONTINUOUS MONITORING SYSTEMS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1565(b)(1), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	And you use this type of control device for your vent * * *	You must install, operate, and maintain this type of continuous monitoring system * * *
1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR 60.103.	Not applicable	Continuous emission monitoring system to measure and record the concentration by volume (dry basis) of CO emissions from each catalyst regenerator vent.
2. Not subject to the NSPS for CO in 40 CFR 60.103.	a. Thermal incinerator	Continuous emission monitoring system to measure and record the concentration by volume (dry basis) of CO emissions from each catalyst regenerator vent; or continuous parameter monitoring systems to measure and record the combustion zone temperature and oxygen content (percent, dry basis) in the incinerator vent stream.
	b. Process heater or boiler with a design heat input capacity under 44 MW or process heater or boiler in which all vent streams are not introduced into the flame zone.	Continuous emission monitoring system to measure and record the concentration by volume (dry basis) of CO emissions from each catalyst regenerator vent; or continuous parameter monitoring systems to measure and record the combustion zone temperature.

TABLE 10 TO SUBPART UUU OF PART 63.—CONTINUOUS MONITORING SYSTEMS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS—Continued

[As stated in § 63.1565(b)(1), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	And you use this type of control device for your vent * * *	You must install, operate, and maintain this type of continuous monitoring system * * *
	c. Flare	Monitoring device such as a thermocouple, an ultraviolet beam sensor, or infrared sensor to continuously detect the presence of a pilot flame.
	d. No control device	Continuous emission monitoring system to measure and record the concentration by volume (dry basis) of CO emissions from each catalyst regenerator vent.

TABLE 11 TO SUBPART UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO NEW SOURCE PERFORMANCE STANDARD (NSPS) FOR CARBON MONOXIDE (CO)

[As stated in § 63.1565(b)(2) and (3), you must meet each requirement in the following table that applies to you]

For * * *	You must * * *	Using * * *	According to these requirements * * *
1. Each new or existing catalytic cracking unit catalyst regenerator vent.	a. Select sampling port's location and the number of traverse ports.	Method 1 or 1A in appendix A to part 60 of this chapter.	Sampling sites must be located at the outlet of the control device or the outlet of the regenerator, as applicable, and prior to any releases to the atmosphere.
	b. Determine velocity and volumetric flow rate.	Method 2, 2A, 2D, 2F, or 2G in appendix A to part 60 of this chapter, as applicable.	
	c. Conduct gas molecular weight analysis.	Method 3, 3A, or 3B in appendix A to part 60 of this chapter, as applicable.	
	d. Measure moisture content of the stack gas.	Method 4 in appendix A to part 60 of this chapter.	
2. For each new or existing catalytic cracking unit catalyst regenerator vent if you use a continuous emission monitoring system.	Measure CO emissions	Data from your continuous emission monitoring system.	Collect CO monitoring data for each vent for 24 consecutive operating hours; and reduce the continuous emission monitoring data to 1-hour averages computed from four or more data points equally spaced over each 1-hour period.
3. Each catalytic cracking unit catalyst regenerator vent if you use continuous parameter monitoring systems.	a. Measure the CO concentration (dry basis) of emissions exiting the control device.	Method 10, 10A, or 10B in appendix A to part 60 of this chapter, as applicable.	
	b. Establish each operating limit in Table 9 of this subpart that applies to you.	Data from the continuous parameter monitoring systems.	
	c. Thermal incinerator combustion zone temperature.	Data from the continuous parameter monitoring systems.	Collect temperature monitoring data every 15 minutes during the entire period of the CO initial performance test; and determine and record the minimum hourly average combustion zone temperature from all the readings.
	d. Thermal incinerator: oxygen, content (percent, dry basis) in the incinerator vent stream.	Data from the continuous parameter monitoring systems.	Collect oxygen concentration (percent, dry basis) monitoring data every 15 minutes during the entire period of the CO initial performance test; and determine and record the minimum hourly average percent excess oxygen concentration from all the readings.

TABLE 11 TO SUBPART UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO NEW SOURCE PERFORMANCE STANDARD (NSPS) FOR CARBON MONOXIDE (CO)—Continued

[As stated in § 63.1565(b)(2) and (3), you must meet each requirement in the following table that applies to you]

For * * *	You must * * *	Using * * *	According to these requirements * * *
	e. If you use a process heater or boiler with a design heat input capacity under 44 MW or process heater or boiler in which all vent streams are not introduced into the flame zone, establish operating limit for combustion zone temperature.	Data from the continuous parameter monitoring systems.	Collect the temperature monitoring data every 15 minutes during the entire period of the CO initial performance test; and determine and record the minimum hourly average combustion zone temperature from all the readings.
	f. If you use a flare, conduct visible emission observations.	Method 22 (40 CFR part 60, appendix A).	Maintain a 2-hour observation period; and record the presence of a flame at the pilot light over the full period of the test.
	g. If you use a flare, determine that the flare meets the requirements for net heating value of the gas being combusted and exit velocity.	40 CFR 60.11(b)(6)through(8).	

TABLE 12 TO SUBPART UUU OF PART 63.—INITIAL COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1565(b)(4), you must meet each requirement in the following table that applies to you]

For each new and existing catalytic cracking unit * * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR 60.103.	CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit must not exceed 500 ppmv (dry basis).	You have already conducted a performance test to demonstrate initial compliance with the NSPS and the measured CO emissions are less than or equal to 500 ppm (dry basis). As part of the Notification of Compliance Status, you must certify that your vent meets the CO limit. You are not required to conduct another performance test to demonstrate initial compliance. You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you must certify that your continuous emission monitoring system meets the applicable requirements in § 63.1572. You are not required to conduct another performance evaluation to demonstrate initial compliance.
2. Not subject to the NSPS for CO in 40 CFR 60.103.	a. CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit must not exceed 500 ppmv (dry basis).	i. If you use a continuous parameter monitoring system, the average CO emissions measured by Method 10 over the period of the initial performance test are less than or equal to 500 ppmv (dry basis). ii. If you use a continuous emission monitoring system, the hourly average CO emissions over the 24-hour period for the initial performance test are not more than 500 ppmv (dry basis); and your performance evaluation shows your continuous emission monitoring system meets the applicable requirements in § 63.1572.
	b. If you use a flare, visible emissions must not exceed a total of 5 minutes during any 2 operating hours.	Visible emissions, measured by Method 22 during the 2-hour observation period during the initial performance test, are no higher than 5 minutes.

TABLE 13 TO SUBPART UUU OF PART 63—CONTINUOUS COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1565(c)(1), you must meet each requirement in the following table that applies to you]

For each new and existing catalytic cracking unit * * ;*	Subject to this emission limit for your catalyst regenerator vent * * *	If you must * * *	You must demonstrate continuous compliance by * * *
1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR 60.103.	CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit must not exceed 500 ppmv (dry basis).	Continuous emission monitoring system.	Collecting the hourly average CO monitoring data according to § 63.1572; and maintaining the hourly average CO concentration at or below 500 ppmv (dry basis).
2. Not subject to the NSPS for CO in 40 CFR 60.103.	i. CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit must not exceed 500 ppmv (dry basis).	Continuous emission monitoring system.	Same as above.
	ii. CO emissisons from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit must not exceed 500 ppmv (dry basis).	Continuous parameter monitoring system.	Maintaining the hourly average CO concentration below 500 ppmv (dry basis).
	iii. Visible emissions from a flare must not exceed a total of 5 minutes during any 2-hour period.	Control device-flare	Maintaining visible emissions below a total of 5 minutes during any 2-hour operating period.

TABLE 14 TO SUBPART UUU OF PART 63—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1565(c)(1), you must meet each requirement in the following table that applies to you]

For each new existing catalytic cracking unit * * *	If you use * * *	For this operating limit * * *	You must demonstrate continuous compliance by * * *
1. Subject to NSPS for carbon monoxide (CO) in 40 CFR 60.103.	Continuous emission monitoring system.	Not applicable	Complying with Table 13 of this subpart.
2. Not subject to the NSPS for CO in 40 CFR 60.103.	a. Continuous emission monitoring system.	Not applicable	Complying with Table 13 of this subpart.
	b. Continuous parameter monitoring systems—thermal incinerator.	i. The daily average combustion zone temperature must not fall below the level established during the performance test.	Collecting the hourly and daily average temperature monitoring data according to § 63.1572; and maintaining the daily average combustion zone temperature above the limit established during the performance test.
		ii. The daily average oxygen concentration in the vent stream (percent, dry basis) must not fall below the level established during the performance test.	Collecting the hourly and daily average oxygen concentration monitoring data according to § 63.1572; and maintaining the daily average oxygen concentration above the limit established during the performance test.
	c. Continuous parameter monitoring systems—boiler or process heater with a design heat input capacity under 44 MW or boiler or process heater in which all vent streams are not introduced into the flame zone.	The daily combustion zone temperature must not fall below the level established in the performance test.	Collecting the average hourly and daily temperature monitoring data according to § 63.1572; and maintaining the daily average combustion zone temperature above the limit established during the performance test.
	d. Continuous parameter monitoring system—flare.	The flare pilot light must be present at all times and the flare must be operating at all times that emissions may be vented to it.	Collecting the flare monitoring data according to § 63.1572; and recording for each 1-hour period whether the monitor was continuously operating and the pilot light was continuously present during each 1-hour period.

TABLE 15 TO SUBPART UUU OF PART 63.—ORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1566(a)(1), you must meet each emission limitation in the following table that applies to you]

For each new or existing catalytic reforming unit * * *	You must meet this emission limit for each process vent during depressuring and purging operation * * *
1. Option 1	Vent emissions to a flare that meets the requirements for control devices in § 63.11(b). Visible emissions from a flare must not exceed a total of 5 minutes during any 2-hour operating period.
2. Option 2	Using a control device, reduce uncontrolled emissions of total organic compounds (TOC) from your process vent by 98 percent by weight or to a concentration of 20 ppmv (dry basis), corrected to 3 percent oxygen, whichever is less stringent. If you vent emissions to a boiler or process heater to comply with the percent reduction or concentration emission limitation, the vent stream must be introduced into the flame zone, or any other location that will achieve the percent reduction or concentration standard.

TABLE 16 TO SUBPART UUU OF PART 63.—OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1566(a)(2), you must meet each operating limit in the following table that applies to you]

For each new or existing catalytic reforming unit * * *	For this type of control device * * *	You must meet this operating limit during depressuring and purging operations * * *
1. Option 1: vent to flare	Flare that meets the requirements for control devices in § 63.11(b).	The flare pilot light must be present at all times and the flare must be operating at all times that emissions may be vented to it.
2. Option 2: percent reduction or concentration limit.	Thermal incinerator, boiler or process heater with a design heat input capacity under 44 MW, or boiler or process heater in which all vent streams are not introduced into the flame zone.	The daily average combustion zone temperature must not fall below the limit established during the performance test.

TABLE 17 TO SUBPART UUU OF PART 63.—CONTINUOUS MONITORING SYSTEMS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1566(b)(1), you must meet each requirement in the following table that applies to you]

For each new or exiting catalytic reforming unit * * *	If you use this type of control device * * *	You must install and operate this type of continuous monitoring system * * *
1. Option 1: vent to a flare	Flare that meets the requirements for control devices in § 63.11(b).	Monitoring device such as a thermocouple, an ultraviolet beam sensor, or infrared sensor to continuously detect the presence of a pilot flame.
2. Option 2: percent reduction or concentration limit.	Thermal incinerator, process heater or boiler with a design heat input capacity under 44 MW, or process heater or boiler in which all vent streams are not introduced into the flame zone.	Continuous parameter monitoring systems to measure and record the combustion zone temperature.

TABLE 18 TO SUBPART UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1566(b)(2) and (3), you must meet each requirement in the following table that applies to you]

For each new or exiting catalytic reforming unit * * *	You must * * *	Using * * *	According to these requirements * * *
1. Option 1: vent to a flare.	a. Conduct visible emission observations.	Method 22 (40 CFR 60, appendix A).	2-hour observation period. Record the presence of a flame at the pilot light over the full period of the test.
	b. Determine that the flare meets the requirements for net heating value of the gas being combusted and exit velocity.	Not applicable	40 CFR 60.11(b)(6) through (8).
2. Option 2: percent reduction or concentration limit.	a. Select sampling site	Method 1 or 1A (40 CFR part 60, appendix A). No traverse site selection method is needed for vents smaller than 0.10 meter in diameter.	Sampling sites must be located at the inlet (if you elect the emission reduction standard) and outlet of the control device and prior to any releases to the atmosphere.

TABLE 18 TO SUBPART UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS—Continued

[As stated in § 63.1566(b)(2) and (3), you must meet each requirement in the following table that applies to you]

For each new or exiting catalytic reforming unit * * *	You must * * *	Using * * *	According to these requirements * * *
	b. Measure gas volumetric flow rate.	Method 2, 2A, 2C, 2D, 2F, or 2G (40 CFR part 60, appendix A), as applicable.	
	c. Measure TOC concentration (for percent reduction standard).	Method 25 (40 CFR part 60, appendix A) to measure TOC concentration at the inlet and outlet of the control device. If the TOC outlet concentration is expected to be less than 50 ppm, you can use Method 25A to measure TOC concentration at the inlet and the outlet of the control device.	Take either an integrated sample or four grab samples during each run. If you use a grab sampling technique, take the samples at approximately equal intervals in time, such as 15-minute intervals during the run.
	d. Calculate TOC emission rate and mass emission reduction.	Calculate emission rate by Equation 1 of § 63.1566 (if you use Method 25) or Equation 2 of § 63.1566 (if you use Method 25A). Calculate mass emission reduction by Equation 3 of § 63.1566.	
	e. Measure TOC concentration (for concentration standard).	Method 25A (40 CFR part 60, appendix A) to measure TOC concentration at the outlet of the control device.	
	f. Determine oxygen content in the gas stream at the outlet of the control device.	Method 3A or 3B (40 CFR part 60, appendix A), as applicable.	
	g. Correct the measured TOC concentration for oxygen content.	Equation 4 of § 63.1566	
	h. Established each operating limit in Table 16 of this subpart that applies to you for a thermal incinerator, or process heater or boiler with a design heat input capacity under 44 MW, or process heater or boiler in which all vent streams are not introduced into the flame zone.	Data from the continuous parameter monitoring systems.	Collect the temperature monitoring data every 15 minutes during the entire period of the initial TOC performance test. Determine and record the minimum hourly average combustion zone temperature.

TABLE 19 TO SUBPART UUU OF PART 63—INITIAL COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1566(b)(7), you must meet each requirement in the following table that applies to you.]

For . . .	For the following emission limit . . .	You have demonstrated initial compliance if . . .
1. Each new and existing catalytic reforming unit.	a. Visible emissions from a flare must not exceed a total of 5 minutes during any 2 consecutive hours.	Visible emissions, measured using Method 22 over the 2-hour observation period of the performance test do not exceed a total of 5 minutes.
	b. Reduce uncontrolled emissions of TOC from your process vent using a control device, by 98 percent by weight or to a concentration of 20 ppmv, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent.	The mass emission reduction measured using Method 25 over the period of the performance test, is at least 98 percent by weight. The mass emission reduction is calculated using Equations 1 (or 2) and 3 of § 63.1566 or the TOC concentration, measured by Method 25A over the period of the performance test, does not exceed 20 ppmv (dry basis), corrected to 3 percent oxygen using Equation 4 of § 63.1566.

TABLE 20 TO SUBPART UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1566(c)(1), you must meet each requirement in the following table that applies to you]

For * * *	For this emission limit * * *	You must demonstrate continuous compliance during depressuring and purging by * * *
1. Option 1: Each new or existing catalytic reforming unit.	Vent emissions from your process vent to a flare that meets the requirements in § 63.11(b).	Maintaining visible emissions from a flare below a total of 5 minutes during any 2 consecutive hours.
2. Option 2: Each new or existing catalytic reforming unit.	Using a control device, reduce uncontrolled emissions of TOC from your process vent by 98 percent by weight or to a concentration of 20 ppmv, (dry basis), corrected to 3 percent oxygen, whichever is less stringent.	Maintaining a 98 percent by weight TOC emission reduction; or maintaining a TOC concentration of not more than 20 ppmv (dry basis), corrected to 3 percent oxygen, whichever is less stringent.

TABLE 21 TO SUBPART UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1566(c)(1), you must meet each requirement in the following table that applies to you]

For * * *	If you use * * *	For this operating limit * * *	You must demonstrate continuous compliance during depressuring and purging by * * *
1. Each new or existing catalytic reforming unit.	a. Flare that meets the requirements in § 63.11(b).	The flare pilot light must be present at all times and the flare must be operating at all times that emissions may be vented to it.	Collecting flare monitoring data according to § 63.1572; and recording for each 1-hour period whether the monitor was continuously operating and the pilot light was continuously present during each 1-hour period.
	b. Thermal incinerator, boiler or process heater with a design input capacity under 44 MW or boiler or process heater in which all vent streams are not introduced into the flame zone.	Maintain the daily average combustion zone temperature above the limit established during the performance test.	Collecting the hourly and daily temperature monitoring data according to § 63.1572; and maintaining the daily average combustion zone temperature above the limit established during the performance test.

TABLE 22 TO SUBPART UUU OF PART 63—INORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1567(a)(1), you must meet each emission limitation in the following table that applies to you]

For * * *	You must meet this emission limit for your process vent during coke burn-off and catalyst rejuvenation * * *
1. Each existing semi-regenerative catalytic reforming unit.	Reduce uncontrolled emissions of hydrogen chloride (HC1) by 92 percent by weight using a control device or to a concentration of 30 ppmv (dry basis), corrected to 3 percent oxygen.
2. Each existing cyclic or continuous catalytic reforming unit.	Reduce uncontrolled emissions of HC1 by 97 percent by weight using a control device or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen.
3. Each new semi-regenerative, cyclic, or continuous catalytic reforming unit.	Reduce uncontrolled emissions of HC1 by 97 percent by weight using a control device or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen.

TABLE 23 TO SUBPART UUU OF PART 63.—OPERATING LIMITS FOR INORGANIC HAP EMISSION LIMITATIONS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1567(a)(2), you must meet each operating limit in the following table that applies to you]

For * * *	If you use this type of control device * * *	You must meet this operating limit during coke burn-off and catalytst rejuvenation . . .
1. Each new or existing catalytic reforming unit	a. Wet scrubber	The daily average pH of the water (or scrubbing liquid) exiting the scrubber must not fall below the limit established during the performance test; and the daily average liquid-to-gas ratio must not fall below the limit established during the performance test.
	b. Internal scrubbing system (i.e., no add-on control device).	The HCl concentration in the catalyst regenerator exhaust gas must not exceed the limit established during the performance test.

TABLE 24 TO SUBPART UUU OF PART 63.—CONTINUOUS MONITORING SYSTEMS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1567(b)(1), you must meet each requirement in the following table that applies to you]

If you use this type of control device for your vent * * *	You must install and operate this type of continuous monitoring system * * *
1. Wet scrubber	Continuous parameter monitoring system to measure and record the pH of the water (or scrubbing liquid) exiting the scrubber during coke burn-off and catalyst rejuvenation. If applicable, you can use the alternative in § 63.1573 instead of a continuous parameter monitoring system for pH of the water (or scrubbing liquid); and continuous parameter monitoring systems to measure and record the gas flow rate to the scrubber and the total water (or scrubbing liquid) flow rate to the scrubber during coke burn-off and catalyst rejuvenation.
2. Internal scrubbing system (i.e., no add-on control device).	Colormetric tube sampling system to measure the HCl concentration in the catalyst regenerator exhaust gas during coke burn-off and catalyst rejuvenation.

TABLE 25 TO SUBPART UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1567(b)(2) and (3), you must meet each requirement in the following table that applies to you]

If you use this type of control device or system * * *	You must * * *	Using * * *	According to these requirements * * *
1. Wet scrubber	a. Measure the HCl concentration at the outlet of the control device (for the concentration standard) or at the inlet and outlet of the control d4evice (for the percent reduction standard).	i. Method 26A (40 CFR part 60, appendix A).	(1) Sampling rate must be at least 0.014 dscm/min (0.5 dscf/min). You must do the test during the coke burn-off and catalyst rejuvenation cycle, but don't make any test runs during the first hour or the last 6 hours of the cycle. (2) Record the total amount (rate) of scrubbing liquid or solution and the amount (rate) of make-up liquid to the scrubber during each test run.
	b. Establish operating limit for pH level.	.....	(1) Measure and record the pH of the water (or scrubbing liquid) exiting the scrubber every 15 minutes during the entire period of the performance test. Determine and record the hourly average pH level from the recorded values. (2) If you use the alternative method in § 63.1573, measure and record the pH of the water (or scrubbing liquid) exiting the scrubber during coke burn-off and catalyst rejuvenation using pH strips at least three times during each run. Determine and record the average pH level.
	c. Establish operating limit for liquid-to-gas ratio.	Data from the continuous parameter monitoring systems.	Measure and record the gas flow rate to the scrubber and the total water (or scrubbing liquid) flow rate to the scrubber every 15 minutes during the entire period of the performance test. Determine and record the hourly average gas flow rate and total water (or scrubbing liquid) flow rate. Determine and record the minimum liquid-to-gas ratio.
2. Internal scrubbing system (i.e., no add-on control device).	a. Measure the concentration of HCl in the catalyst regenerator exhaust gas.	Method 26 (40 CFR part 60, appendix A).	Sampling rate must be at least 0.014 dscm/min (0.5 dscf/min). You must do the test during the coke burn-off and catalyst rejuvenation cycle, but don't make any test runs during the first hour or the last 6 hours of the cycle.

TABLE 25 TO SUBPART UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS—Continued

[As stated in § 63.1567(b)(2) and (3), you must meet each requirement in the following table that applies to you]

If you use this type of control device or system * * *	You must * * *	Using * * *	According to these requirements * * *
	b. Establish operating limit for HCl concentration.	Measure and record the HCl concentration in the catalyst regenerator exhaust gas using the colorimetric tube sampling system at least three times during each test run. Determine and record the average HCl concentration.	

TABLE 26 TO SUBPART UUU OF PART 63.—INITIAL COMPLIANCE WITH INORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1567(b)(4), you must meet each requirement in the following table that applies to you]

For* * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
1. Each existing semi-regenerative catalytic reforming unit.	Reduce uncontrolled emissions of HCl by 92 percent by weight using a control device or to a concentration of 30 ppmv, (dry basis), corrected to 3 percent oxygen.	Average emissions of HCl measured using Method 26 or 26A, as applicable over the period of the performance test, are reduced by 92 percent or to a concentration less than or equal to 30 ppmv (dry basis) corrected to 3 percent oxygen.
2. Each existing cyclic or continuous catalytic reforming unit and each new semi-regenerative, cyclic, or continuous catalytic reforming unit.	Reduce uncontrolled emissions of HCl by 97 percent by weight using a control device, or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen.	Average emissions of HCl measured using Method 26 or 26A, as applicable over the period of the performance test, are reduced by 97 percent or to a concentration less than or equal to 10 ppmv (dry basis) corrected to 3 percent oxygen.

TABLE 27 TO SUBPART UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH INORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1567(c)(1), you must meet each requirement in the following table that applies to you]

For * * *	For this emission limit * * *	You must demonstrate continuous compliance during coke burn-off and catalyst rejuvenation by * * *
1. Each existing semi-regenerative catalytic reforming unit.	Reduce uncontrolled emissions of HCl by 92 percent by weight using a control device or to a concentration of 30 ppmv (dry basis), corrected to 3 percent oxygen.	Maintaining a 92 percent HCl emission reduction or an HCl concentration no more than 30 ppmv (dry basis), corrected to 3 percent oxygen.
2. Each existing cyclic or continuous catalytic reforming unit.	Reduce uncontrolled emissions of HCl by 97 percent by weight using a control device, or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen.	Maintaining a 97 percent HCl control efficiency or an HCl concentration no more than 10 ppmv (dry basis), corrected to 3 percent oxygen.
3. Each new semi-regenerative, cyclic, or continuous catalytic reforming unit.	Reduce uncontrolled emissions of HCl by 97 percent by weight using a control device, or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen.	Maintaining a 97 percent HCl control efficiency or an HCl concentration no more than 10 ppmv (dry basis), corrected to 3 percent oxygen.

TABLE 28 TO SUBPART UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1567(c)(1), you must meet each requirement in the following table that applies to you]

For * * *	For this operating limit * * *	If you use this type of control device * * *	You must demonstrate continuous compliance during coke burn-off and catalyst rejuvenation by * * *
1. Each new or existing catalytic reforming unit.	a. The daily average pH of the water (or scrubbing and liquid) exiting the scrubber must not fall below the level established during the performance test.	i. Wet scrubber	(1) Collecting the hourly and daily average pH monitoring data according to § 63.1572; and maintaining the daily average the pH above the operating limit established during the performance test. (2) If you use the alternative in § 63.1573, measuring and recording the pH of the water (or scrubbing liquid) exiting the scrubber every hour according to § 63.1572; determining and recording the daily average pH; and maintaining the daily average pH above the operating limit established during the performance test.
	b. The daily average liquid-to-gas ratio must not fall below the level established during the performance test.	Wet scrubber	Collecting the hourly average gas flow rate and total water (or scrubbing liquid) flow rate monitoring data; determining and recording the hourly average liquid-to-gas ratio; determining and recording the daily average liquid-to-gas ratio; and maintaining the daily average liquid-to-gas ratio above the limit established during the performance test.
	c. The HCl concentration in the catalyst regenerator exhaust gas must not exceed the applicable operating limit established during the performance test.	Internal scrubbing system (e.g., no add-on control device).	Measuring and recording the concentration of HCl every 4 hours using a colormetric tube sampling system; and maintaining the HCl concentration below the applicable operating limit.

TABLE 29 TO SUBPART UUU OF PART 63.—HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS

[As stated in § 63.1568(a)(1), you must meet each emission limitation in the following table that applies to you]

For * * *	You must meet this emission limit for each process vent * * *
1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day or more and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	a. 250 ppmv (dry basis) of sulfur dioxide (SO_2) at zero percent excess air if you use an oxidation or reduction control system followed by incineration. b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO_2 (dry basis) at zero percent excess air if you use a reduction control system without incineration.
2. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 1 (Elect NSPS).	a. 250 ppmv (dry basis) of SO_2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration. b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO_2 (dry basis) at zero percent excess air if you use a reduction control system without incineration.
3. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in paragraph (a)(2) of 40 CFR 60.104: Option 2 (TRS limit).	300 ppmv of total reduced sulfur (TRS) compounds, expressed as an equivalent SO_2 concentration (dry basis) at zero percent oxygen.

TABLE 30 TO SUBPART UUU OF PART 63.—OPERATING LIMITS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS

[As stated in § 63.1568(a)(2), you must meet each operating limit in the following table that applies to you]

For * * *	If use this type of control device	You must meet this operating limit* * *
1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day or more and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	Not applicable	Not applicable.
2. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 1 (Elect NSPS).	Not applicable	Not applicable.
3. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 2 (TRS limit).	Thermal incinerator	Maintain the daily average combustion zone temperature above the limit established during the performance test; and maintain the daily average oxygen concentration in the vent stream (percent, dry basis) above the limit established during the performance test.

TABLE 31 TO SUBPART UUU OF PART 63.—CONTINUOUS MONITORING SYSTEMS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS

[As stated in § 63.1568(b)(1), you must meet each requirement in the following table that applies to you]

For * * *	For this limit * * *	You must install and operate this continuous monitoring system * * *
1. Each new or existing Claus sulfur recovery unit part to a sulfur recovery plant of 20 long tons per day and subject to the NSPS for sulfur oxides in 40 CFR 60.104 (1) (2).	a. 250 ppmv (dry basis) of SO_2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration.	Continuous emission monitoring system to measure and record the hourly average concentration of SO_2 (dry basis) at zero percent excess air for each exhaust stack. This system must include an oxygen monitor for correcting the data for excess air.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO_2 (dry basis) at zero percent excess air if you use a reduction control system without incineration.	Continuous emission monitoring system to measure and record the hourly average concentration of reduced sulfur and oxygen (O_2) emissions. Calculate the reduced sulfur emissions as SO_2 (dry basis) at zero percent excess air. *Exception:* You can use an instrument having an air or SO_2 dilution and oxidation system to convert the reduced sulfur to SO_2 for continuously monitoring and recording the concentration (dry basis) at zero percent excess air of the resultant SO_2 instead of the reduced sulfur monitor. The monitor must include an oxygen monitor for correcting the data for excess oxygen.
2. Option 1: Elect NSPS. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in paragraph (a) (2) of 40 CFR 60.104.	a. 250 ppmv (dry basis) of SO_2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration.	Continuous emission monitoring system to measure and record the hourly average concentration of SO_2 (dry basis), at zero percent excess air for each exhaust stack. This system must include an oxygen monitor for correcting the data for excess air.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO_2 (dry basis) at zero percent excess air if you use a reduction control system without incineration.	Continuous emission monitoring system to measure and record the hourly average concentration of reduced sulfur and O_2 emissions for each exhaust stack. Calculate the reduced sulfur emissions as SO_2 (dry basis), at zero percent excess air. *Exception:* You can use an instrument having an air or O_2 dilution and oxidation system to convert the reduced sulfur to SO_2 for continuously monitoring and recording the concentration (dry basis) at zero percent excess air of the resultant SO_2 instead of the reduced sulfur monitor. The monitor must include an oxygen monitor for correcting the data for excess oxygen.

TABLE 31 TO SUBPART UUU OF PART 63.—CONTINUOUS MONITORING SYSTEMS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS—Continued

[As stated in § 63.1568(b)(1), you must meet each requirement in the following table that applies to you]

For * * *	For this limit * * *	You must install and operate this continuous monitoring system * * *
3. Option 2: TRS limit Each new or existing sulfur recovery unit (Claus or Other type, regardless or size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104 (a) (2).	300 ppmv of total reduced sulfur (TRS) compounds, expressed as an equivalent SO_2 concentration (dry basis) at zero percent oxygen.	Continuous emission monitoring system to measure and record the hourly average concentration of TRS for each exhaust stack. This monitor must include an oxygen monitor for correcting the data for excess oxygen; or continuous parameter monitoring systems to measure and record the combustion zone temperature of each thermal incinerator and the oxygen content (percent, dry basis) in the vent stream of the incinerator.

TABLE 32 TO SUBPART UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS NOT SUBJECT TO THE NEW SOURCE PERFORMANCE STANDARDS FOR SULFUR OXIDES

[As stated in § 63.1568(b)(2) and (3), you must meet each requirement in the following table that applies to you]

For * * *	You must * * *	Using * * *	According to these requirements * * *
1. Each new and existing sulfur recovery unit: Option 1 (Elect NSPS).	Measure SO_2 concentration (for an oxidation or reduction system followed by incineration) or the concentration of reduced sulfur (or SO_2 if you use an instrument to convert the reduced sulfur to SO_2) for a reduction control system without incineration.	Data from continuous emission monitoring system.	Collect SO_2 monitoring data every 15 minutes for 24 consecutive operating hours. Reduce the data to 1-hour averages computed from four or more data points equally spaced over each 1-hour period.
2. Each new and existing sulfur recovery unit: Option 2 (TRS limit).	a. Select sampling port's location and the number of traverse ports.	Method 1 or 1A appendix A to part 60 of this chapter.	Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.
	b. Determine velocity and volumetric flow rate.	Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A to part 60 of this chapter, as applicable.	
	c. Conduct gas molecular weight analysis; obtain the oxygen concentration needed to correct the emission rate for excess air.	Method 3, 3A, or 3B in appendix A to part 60 of this chapter, as applicable.	Take the samples simultaneously with reduced sulfur or moisture samples.
	d. Measure moisture content of the stack gas.	Method 4 in appendix A to part 60 of this chapter.	Make your sampling time for each Method 4 sample equal to that for 4 Method 15 samples.
	e. Measure the concentration of TRS.	Method 15 or 15A in appendix A to part 60 of this chapter, as applicable.	If the cross-sectional area of the duct is less than 5 square meters (m^2) or 54 square feet, you must use the centroid of the cross section as the sampling point. If the cross-sectional area is 5 m^2 or more and the centroid is more than 1 meter (m) from the wall, your sampling point may be at a point no closer to the walls than 1 m or 39 inches. Your sampling rate must be at least 3 liters per minute or 0.10 cubic feet per minute to ensure minimum residence time for the sample inside the sample lines.
	f. Calculate the SO_2 equivalent for each run after correcting for moisture and oxygen.	The arithmetic average of the SO_2 equivalent for each sample during the run.	
	g. Correct the reduced sulfur samples to zero percent excess air.sa	Equation 1 of § 63.1568.	

TABLE 32 TO SUBPART UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS NOT SUBJECT TO THE NEW SOURCE PERFORMANCE STANDARDS FOR SULFUR OXIDES—Continued

[As stated in § 63.1568(b)(2) and (3), you must meet each requirement in the following table that applies to you]

For * * *	You must * * *	Using * * *	According to these requirements * * *
	h. Establish each operating limit in Table 30 of this subpart that applies to you.	Data from the continuous parameter monitoring system.	
	i. Measure thermal incinerator: combustion zone temperature.	Data from the continuous parameter monitoring system.	Collect temperature monitoring data every 15 minutes during the entire period of the performance test; and determine and record the minimum hourly average temperature from all the readings.
	j. Measure thermal incinerator: oxygen concentration (percent, dry basis) in the vent stream.	Data from the continuous parameter monitoring system.	Collect oxygen concentration (percent, dry basis) data every 15 minutes during the entire period of the performance test; and determine and record the minimum hourly average percent excess oxygen concentration.
	k. If you use a continuous emission monitoring system, measure TRS concentration.	Data from continuous emission monitoring system.	Collect TRS data every 15 minutes for 24 consecutive operating hours. Reduce the data to 1-hour averages computed from four or more data points equally spaced over each 1-hour period.

TABLE 33 TO SUBPART UUU OF PART 63.—INITIAL COMPLIANCE WITH HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS

[As stated in § 63.1568(b)(5), you must meet each requirement in the following table that applies to you]

For * * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
1. Each new or existing Clause sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	a. 250 ppmv (dry basis) SO_2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration.	You have already conducted a performance test to demonstrate initial compliance with the NSPS and the hourly average SO_2 emissions measured by the continuous emission monitoring system are less than or equal to 250 ppmv (dry basis) at zero percent excess air. As part of the Notification of Compliance Status, you must certify that your vent meets the SO_2 limit. You are not required to do another performance test to demonstrate initial compliance. You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you must certify that your continuous emission monitoring system meets the applicable requirements in § 63.1572. You are not required to do another performance evaluation to demonstrate initial compliance.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO_2 (dry basis) at zero percent excess air if you use a reduction control system without incineration.	You have already conducted a performance test to demonstrate initial compliance with the NSPS and the hourly average SO_2 emissions measured by your continuous emission monitoring system are less than or equal to 250 ppmv (dry basis) at zero percent excess air. As part of the Notification of Compliance Status, you must certify that your vent meets the SO_2 limit. You are not required to do another performance test do demonstrate initial compliance.

TABLE 33 TO SUBPART UUU OF PART 63.—INITIAL COMPLIANCE WITH HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS—Continued

[As stated in § 63.1568(b)(5), you must meet each requirement in the following table that applies to you]

For * * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
		You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you must certify that your continuous emission monitoring system meets the applicable requirements in § 63.1572. You are not required to do another performance evaluation to demonstrate initial compliance.
2. Option 1: Elect NSPS. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	a. 250 ppmv (dry basis) of SO_2 at zero percent excess air if you use an oxidation control system followed by incineration.	The hourly average SO_2 emissions measured by the continuous emission monitoring system over the 24-hour period of the initial performance test are not more than 250 ppvm (dry basis) at zero percent excess air; and your performance evaluation shows the monitoring system meets the applicable requirements in § 63.1572.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO_2 (dry basis) at zero percent excess air if you use a reduction control system without incineration.	The hourly average reduced sulfur emissions measured by the continuous emission monitoring system over the 24-hour period of the performance test no more than 300 ppmv, calculated as ppmv SO_2 (dry basis) at zero percent excess air; and your performance evaluation shows the continuous emission monitoring system meets the applicable requirements in § 63.1572.
3. Option 2: TRS limit. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	300 ppmv of TRS compounds expressed as an equivalent SO_2 concentration (dry basis) at zero percent oxygen.	If you do not use a continuous emission monitoring system, the average TRS emissions measured using Method 15 over the period of the initial performance test are less than or equal to 300 ppmv expressed as equivalent SO_2 concentration (dry basis) at zero percent oxygen. If you use a continuous emission monitoring system the hourly average TRS emissions measured by the continuous emission monitoring system over the 24-hour period of the performance test are no more than 300 ppmv expressed as an equivalent SO_2 concentration (dry basis) at zero percent oxygen; and your performance evaluation shows the continuous emission monitoring system meets the applicable requirements in § 63.1572.

TABLE 34 TO SUBPART UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS

[As stated in § 63.1568(c)(1), you must meet each requirement in the following table that applies to you.]

For * * *	For this emission limit * * *	You must demonstrate continuous compliance by * * *
1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per or more and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	a. 250 ppmv (dry basis) SO_2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration.	Collecting the hourly average SO_2 monitoring data (dry basis, percent excess air) according to § 63.1572; maintaining the hourly average SO_2 concentration at or below the applicable limit; determining and recording each 12-hour average SO_2 day concentration; and reporting any 12-hour average SO_2 concentration greater than the applicable emission limitation in the compliance report required in § 63.1575.

TABLE 34 TO SUBPART UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS—Continued

[As stated in § 63.1568(c)(1), you must meet each requirement in the following table that applies to you.]

For * * *	For this emission limit * * *	You must demonstrate continuous compliance by * * *
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv (dry basis) SO_2 at zero percent excess air if you use a reduction control system without incineration.	Collecting the hourly average reduced sulfur and O_2 data according to § 63.1572; and maintaining the hourly average concentration of reduced sulfur at or below the applicable limit; and determining and recording each 12-hour average concentration of reduced sulfur; and reporting any 12-hour average concentration of reduced sulfur greater than the applicable emission limitation in the compliance report required in § 63.1575.
2. Option 1: Elect NSPS Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	a. 250 ppmv (dry basis) of SO_2 at zero percent excess air (for oxidation or reduction system followed by incineration).	Collecting the hourly average SO_2 monitoring data (dry basis, percent excess air) according to § 63.1572; maintaining the hourly average SO_2 concentration at or below the applicable limit; determining and recording each 12-hour average SO_2 concentration; and reporting any 12-hour average SO_2 concentration greater than the applicable emission limitation in the compliance report required in § 63.1575.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO_2 (dry basis) at zero percent excess air (for reduction control system without incineration).	Collecting the hourly average reduced sulfur (and air or O_2 dilution and oxidation data) according to § 63.1572; maintaining the hourly average SO_2 concentration at or below the applicable limit; reducing the monitoring data to 12-hour averages; and reporting any 12-hour average SO_2 concentration greater than the applicable limit in the compliance report required by § 63.1575.
3. Option 2: TRS limit Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	300 ppmv of TRS compounds, expressed as an SO_2 concentration (dry basis) at zero percent oxygen or reduced sulfur compounds calculated as ppmv SO_2 (dry basis) at zero percent excess air.	Collecting the hourly average TRS monitoring data according to § 63.1572, if you use a continuous emission monitoring system; maintaining the hourly average concentration of TRS at or below the applicable limit; reducing the TRS monitoring data to 12-hour averages; reporting any 12-hour average TRS greater than the applicable limit in the compliance report required by § 63.1575; and maintaining the hourly average concentration of TRS below the applicable limit if you use continuous parameter monitoring systems.

TABLE 35 TO SUBPART UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS

[As stated in § 63.1568(c)(1), you must meet each requirement in the following table that applies to you]

For * * *	For this operating limit * * *	You must demonstrate continuous compliance by * * *
1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day or more and subject to the NSPS for sulfur oxides in paragraph 40 CFR 60.104(a)(2).	Not applicable	Meeting the requirements of Table 34 of this subpart.
2. Option 1: Elect NSPS Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	Not applicable	Meeting the requirements of Table 34 of this subpart.
3. Option 2: TRS limit Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2)	a. Maintain the daily average combustion zone temperature above the level established during the performance test.	Collecting the hourly and daily average temperature monitoring data according to § 63.1572; and maintaining the daily average combustion zone temperature at or above the limit established during the performance test.

TABLE 35 TO SUBPART UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS—Continued

[As stated in § 63.1568(c)(1), you must meet each requirement in the following table that applies to you]

For * * *	For this operating limit * * *	You must demonstrate continuous compliance by * * *
	b. The daily average oxygen concentration in the vent stream (percent, dry basis) must not fall below the level established during the performance test.	Collecting the hourly and daily average O_2 monitoring data according to § 63.1572; and maintaining the average O_2 concentration above the level established during the performance test.

TABLE 36 TO SUBPART UUU OF PART 63.—WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(a)(1), you must meet each work practice standard in the following table that applies to you]

Option	You must meet one of these equipment standards * * *
1. Option 1	Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere.
2. Option 2	Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device.
3. Option 3	Seal the bypass line by installing a solid blind between piping flanges.
4. Option 4	Vent the bypass line to a control device that meets the appropriate requirements in this subpart.

TABLE 37 TO SUBPART UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR BYPASS LINES

[As stated in § 63.1569(b)(1), you must meet each requirement in the following table that applies to you]

For this standard . . .	You must . . .
1. Option 1: Install and operate a flow indicator, level recorder, or electronic valve position monitor.	Record during the performance test for each type of control device whether the flow indicator, level recorder, or electronic valve position monitor was operating and whether flow was detected at any time during each hour of level the three runs comprising the performance test.

TABLE 38 TO SUBPART UUU OF PART 63.—INITIAL COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(b)(2), you must meet each requirement in the following table that applies to you]

For * * *	For this work practice standard * * *	You have demonstrated initial compliance if * * *
1. Each new or existing bypass line associated with a catalytic cracking unit, catalylic reforming unit, or sulfur recovery unit.	a. Option 1: Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere.	The installed equipment operates properly during each run of the performance test and no flow is present in the line during the test.
	b. Option 2: Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device.	As part of the notification of compliance status, you certify that you installed the equipment, the equipment was operational by your compliance date, and you identify what equipment was installed.
	c. Option 3: Seal the bypass line by installing a solid blind between piping flanges.	See item 1.b. of this table.
	d. Option 4: Vent the bypass line to a control device that meets the appropriate requirements in this subpart.	See item 1.b. of this table.

TABLE 39 TO SUBPART UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(c)(1), you must meet each requirement in the following table that applies to you]

If you elect this standard * * *	You must demonstrate continuous compliance by * * *
1. Option 1: Flow indicator, level recorder, or electronic valve position monitor.	Continuously monitoring and recording whether flow is present in the bypass line; visually inspecting the device at least once every hour if the device is not equipped with a recording system that provides a continuous record; and recording whether the device is operating properly and whether flow is present in the bypass line.
2. Option 2: Car-seal or lock-and-key device	Visually inspecting the seal or closure mechanism at least once every month; and recording whether the bypass line valve is maintained in the closed position and whether flow is present in the line.
3. Option 3: Solid blind flange	Visually inspecting the blind at least once a month; and recording whether the blind is maintained in the correct position such that the vent stream cannot be diverted through the bypass line.
4. Option 4: Vent to control device	Monitoring the control device according to appropriate subpart requirements.
5. Option 1, 2, 3, or 4	Recording and reporting the time and duration of any bypass.

TABLE 40 TO SUBPART UUU OF PART 63.—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS OPACITY MONITORING SYSTEMS AND CONTINUOUS EMISSION MONITORING SYSTEMS

[As stated in § 63.1572(a)(1) and (b)(1), you must meet each requirement in the following table that applies to you]

This type of continuous opacity or emission monitoring system * * *	Must meet these requirements * * *
1. Continuous opacity monitoring system	Performance specification 1 (40 CFR part 60, appendix B).
2. CO continuous emission monitoring system	Performance specification 4 (40 CFR part 60, appendix B); span value of 1,000 ppm; and procedure 1 (40 CFR part 60, appendix F) except relative accuracy test audits are required annually instead of quarterly.
3. CO continuous emission monitoring system used to demonstrate emissions average under 50 ppm (dry basis).	Performance specification 4 (40 CFR part 60, appendix B); and span value of 100 ppm.
4. SO_2 continuous emission monitoring for sulfur recovery unit with oxidation control system or reduction control system; this monitor must include an O_2 monitor for correcting the data for excess air.	Performance specification 2 (40 CFR part 60, appendix B); span values of 500 ppm SO_2 and 10 percent O_2; use Methods 6 or 6C and 3A or 3B (40 CFR part 60, appendix A) for certifying O_2 monitor; and procedure 1 (40 CFR part 60, appendix F) except relative accuracy test audits are required annually instead of quarterly.
5. Reduced sulfur and O_2 continuous emission monitoring system for sulfur recovery unit with reduction control system not followed by incineration; this monitor must include an O_2 monitor for correcting the data for excess air unless exempted.	Performance specification 5 (40 CFR part 60, appendix B), except calibration drift specification is 2.5 percent of the span value instead of 5 percent; 450 ppm reduced sulfur and 10 percent O_2; use Methods 15 or 15A and 3A or 3B (40 CFR part 60, appendix A) for certifying O_2 monitor; if Method 3A or 3B yields O_2 concentrations below 0.25 percent during the performance evaluation, the O_2 concentration can be assumed to be zero and the O_2 monitor is not required; and procedure 1 (40 CFR part 60, appendix F), except relative accuracy test audits, are required annually instead of quarterly.
6. Instrument with an air or O2 dilution and oxidation system to convert reduced sulfur to SO_2 for continuously monitoring the concentration of SO_2 instead of reduced sulfur monitor and O_2 monitor.	Performance specification 5 (40 CFR part 60, appendix B); span value of 375 ppm SO_2 and 10 percent O_2; use Methods 15 or 15A and 3A or 3B for certifying O_2 monitor; and procedure 1 (40 CFR part 60, appendix F), except relative accuracy test audits, are required annually instead of quarterly.
7. TRS continuous emission monitoring system for sulfur recovery unit; this monitor must include an O_2 monitor for correcting the data for excess air.	Performance specification 5 (40 CFR part 60, appendix B).
8. O_2 monitor for oxygen concentration	If necessary due to interferences, locate the oxygen sensor prior to the introduction of any outside gas stream; performance specification 3 (40 CFR part 60, appendix B; span value for O_2 sensor is 10 percent; and procedure 1 (40 CFR part 60, appendix F), except relative accuracy test audits, are required annually instead of quarterly.

TABLE 41 TO SUBPART UUU OF PART 63.—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS PARAMETER MONITORING SYSTEMS

[As stated in § 63.1572(c)(1), you must meet each requirement in the following table that applies to you]

If you use a continuous parameter monitoring system to measure and record * * *	You must * * *
1. Voltage and secondary current or total power input.	At least monthly, inspect all components of the continuous parameter monitoring system for integrity and all electrical connections for continuity; and record the results of each inspection.

TABLE 41 TO SUBPART UUU OF PART 63.—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS PARAMETER MONITORING SYSTEMS—Continued

[As stated in § 63.1572(c)(1), you must meet each requirement in the following table that applies to you]

If you use a continuous parameter monitoring system to measure and record * * *	You must * * *
2. Pressure drop [1]	Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure; minimize or eliminate pulsating pressure, vibration, and internal and external corrosion; use a gauge with an accuracy ± 2 percent over the operating range; check pressure tap for plugs at least once a week; using a manometer, check gauge calibration quarterly and transducer calibration monthly; for a semi-regenerative catalytic reforming unit, you can check the calibration quarterly and monthly or prior to regeneration, whichever is longer; record the results of each calibration; conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or install a new pressure sensor; at least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage; and record the results of each inspection.
3. Air flow rate, gas flow rate, or total water (or scrubbing liquid) flow rate.	Locate the flow sensor(s) and other necessary equipment such as straightening vanes in a position that provides representative flow; use a flow rate sensor with an accuracy within ±5 percent; reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances; conduct a flow sensor calibration check at least semiannually; for a semi-regenerative catalytic reforming unit, you can check the calibration at least semiannually or prior to regeneration, whichever is longer; record the results of each calibration; if you elect to comply with Option 3 (Ni lb/hr) or Option 4 (Ni lb/1,000 lbs of coke burn-off) for the HAP metal emission limitations in § 63.1564, install the continuous parameter monitoring system for gas flow rate as close as practical to the continuous opacity monitoring system; and if you don't use a continuous opacity monitoring system, install the continuous parameter monitoring system for gas flow rate as close as practical to the control device.
4. Combustion zone temperature	Install the temperature sensor in the combustion zone or in the ductwork immediately downstream of the combustion zone before any substantial heat exchange occurs; locate the temperature sensor in a position that provides a representative temperature; use a temperature sensor with an accuracy of ±1 percent of the temperature being measured, expressed in degrees Celsius (C) or ±0.5 degrees C, whichever is greater; shield the temperature sensor system from electromagnetic interference and chemical contaminants; if you use a chart recorder, it must have a sensitivity in the minor division of at least 20 degrees Fahrenheit; perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual; following the electronic calibration, conduct a temperature sensor validation check, in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 16.7 degrees C of the process temperature sensor's reading; record the results of each calibration and validation check; conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range, or install a new temperature sensor; and at least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.
5. pH	Locate the pH sensor in a position that provides a representative measurement of pH; ensure the sample is properly mixed and representative of the fluid to be measured; check the pH meter's calibration on at least two points every 8 hours of process operation; at least monthly, inspect all components for integrity and all electrical components for continuity; record the results of each inspection; and if you use pH strips to measure the pH of the water exiting a wet scrubber as an alternative to a continuous parameter monitoring system, you must use pH strips with an accuracy of ±10 percent.
6. HCl concentration	Use a colormetric tube sampling system with a printed numerical scale in ppmv, a standard measurement range of 1 to 10 ppmv (or 1 to 30 ppmv if applicable), and a standard deviation for measured values of no more than ±15 percent. System must include a gas detection pump and hot air probe if needed for the measurement range.

[1] Not applicable to non-venturi wet scrubbers of the jet-ejector design.

TABLE 42 TO SUBPART UUU OF PART 63.—ADDITIONAL INFORMATION FOR INITIAL NOTIFICATION OF COMPLIANCE STATUS

[As stated in § 63.1574(d), you must meet each requirement in the following table that applies to you]

For * * *	You must provide this additional information * * *
1. Identification of affected sources and emission points.	Nature, size, design, method of operation, operating design capacity of each affected source; identify each emission point for each HAP; identify any affected source or vent associated with an affected source not subject to the requirements of subpart UUU.

TABLE 42 TO SUBPART UUU OF PART 63.—ADDITIONAL INFORMATION FOR INITIAL NOTIFICATION OF COMPLIANCE STATUS—Continued

[As stated in § 63.1574(d), you must meet each requirement in the following table that applies to you]

For * * *	You must provide this additional information * * *
2. Initial compliance	Identification of each emission limitation you will meet for each affected source, including any option you select (i.e., NSPS, PM or Ni, flare, percent reduction, concentration, options for bypass lines); if applicable, certification that you have already conducted a performance test to demonstrate initial compliance with the NSPS for an affected source; certification that the vents meet the applicable emission limit and the continuous opacity or that the emission monitoring system meets the applicable performance specification; if applicable, certification that you have installed and verified the operational status of equipment by your compliance date for each bypass line that meets the requirements of Option 2, 3, or 4 in § 63.1569 and what equipment you installed; identification of the operating limit for each affected source, including supporting documentation; if your affected source is subject to the NSPS, certification of compliance with NSPS emission limitations and performance specifications; a brief description of performance test conditions (capacity, feed quality, catalyst, etc.); an engineering assessment (if applicable); and if applicable, the flare design (e.g., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the Method 22 test.
3. Continuous compliance	Each monitoring option you elect; and identification of any unit or vent for which monitoring is not required; and the definition of ''operating day.'' (This definition, subject to approval by the applicable permitting authority, must specify the times at which a 24-hr operating day begins and ends.)

TABLE 43 TO SUBPART UUU OF PART 63.—REQUIREMENTS FOR REPORTS

[As stated in § 63.1575(a), you must meet each requirement in the following table that applies to you]

You must submit a(n) * * *	The report must contain * * *	You must submit the report * * *
1. Compliance report	If there are not deviations from any emission limitation or work practice standard that applies to you, a statement that there were no deviations from the standards during the reporting period and that no continuous opacity monitoring system or continuous emission monitoring system was inoperative, inactive, out-of-control, repaired, or adjusted; and if you have a deviation from any emission limitation or work practice standard during the reporting period, the report must contain the information in § 63.1575(d) or (e)	Semiannually according to the requirements in § 63.1575(b).

TABLE 44 TO SUBPART UUU OF PART 63.—APPLICABILITY OF NESHAP GENERAL PROVISIONS TO SUBPART UUU

[As stated in § 63.1577, you must meet each requirement in the following table that applies to you]

Citation	Subject	Applies to subpart UUU	Explanation
§ 63.1	Applicability	Yes.	Except that subpart UUU specifies calendar or operating day.
§ 63.2	Definitions	Yes.	
§ 63.3	Units and Abbreviations	Yes.	
§ 63.4	Prohibited Activities	Yes.	
§ 63.5(a)–(c)	Construction and Reconstruction	Yes	In § 63.5(b)(4), replace the reference to § 63.9 with § 63.9(b)(4) and (5).
§ 63.5(d)(1)(i)	Application for Approval of Construction or Reconstruction—General Application Requirements.	Yes	Except, subpart UUU specifies the application is submitted as soon as practicable before startup but no later than 90 days (rather than 60) after the promulgation date where construction or reconstruction had commenced and initial startup had not occurred before promulgation.
§ 63.5(d)(1)(ii)		Yes	Except that emission estimates specified in § 63.5(d)(1)(ii)(H) are not required.
§ 63.5(d)(1)(iii)		No	Subpart UUU specifies submission of notification of compliance status.
§ 63.5(d)(2)		No.	
§ 63.5(d)(3)		Yes	Except that § 63.5(d)(3)(ii) does not apply.
§ 63.5(d)(4)		Yes.	
§ 63.5(e)	Approval of Construction or Reconstruction.		

TABLE 44 TO SUBPART UUU OF PART 63.—APPLICABILITY OF NESHAP GENERAL PROVISIONS TO SUBPART UUU—Continued

[As stated in § 63.1577, you must meet each requirement in the following table that applies to you]

Citation	Subject	Applies to subpart UUU	Explanation
§ 63.5(f)(1)	Approval of Construction or Reconstruction Based on State Review.	Yes.	
§ 63.5(f)(2)		Yes	Except that 60 days is changed to 90 days and cross-reference to § 63.9(b)(2) does not apply.
§ 63.6(a)	Compliance with Standards and Maintenance—Applicability.	Yes.	
§ 63.6(b)(1)–(4)	Compliance Dates for New and Reconstructed Sources.	Yes.	
§ 63.6(b)(5)		Yes	Except that subpart UUU specifies different compliance dates for sources.
§ 63.6(b)(6)	[Reserved]	Not applicable.	
§ 63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major.	Yes.	
§ 63.6(c)(1)–(2)	Compliance Dates for Existing Sources.	Yes	Except that for subpart UUU specifies different compliance dates for sources subject to Tier II gasoline sulfur control requirements.
§ 63.6(c)(3)–(4)	[Reserved]	Not applicable.	
§ 63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major.	Yes.	
§ 63.6(d)	[Reserved]	Not applicable.	
§ 63.6(e)(1)–(2)	Operation and Maintenance Requirements.	Yes.	
§ 63.6(e)(3)(i)–(iii)	Startup, Shutdown, and Malfunction Plan.	Yes.	
§ 63.6(e)(3)(iv)		Yes	Except that reports of actions not consistent with plan are not required within 2 and 7 days of action but rather must be included in next periodic report.
§ 63.6(e)(3)(v)–(viii)		Yes	The owner or operator is only required to keep the latest version of the plan.
§ 63.6(f)(1)–(2)(iii)(C)	Compliance with Emission Standards	Yes.	
§ 63.6(f)(2)–(iii)(D)		No.	
§ 63.6(f)(2)(iv)–(v)		Yes.	
§ 63.6(f)(3)		Yes.	
§ 63.6(g)	Alternative Standard	Yes.	
§ 63.6(h)	Opacity/VE Standards	Yes.	
§ 63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards.	No	Subpart UUU specifies methods.
§ 63.6(h)(2)(ii)	[Reserved]	Not applicable.	
§ 63.6(h)(2)(iii)		Yes.	
§ 63.6(h)(3)	[Reserved]	Not applicable.	
§ 63.6(h)(4)	Notification of Opacity/VE Observation Date.	Yes	Applies to Method 22 tests.
§ 63.6(h)(5)	Conducting Opacity/VE Observations	No.	
§ 63.6(h)(6)	Records of Conditions During Opacity/VE Observations.	Yes	Applies to Method 22 observations.
§ 63.6(h)(7)(i)	Report COM Monitoring Data from Performance Test.	Yes.	
§ 63.6(h)(7)(ii)	Using COM Instead of Method 9	No.	
§ 63.6(h)(7)(iii)	Averaging Time for COM during Performance Test.	Yes.	
§ 63.6(h)(7)(iv)	COM Requirements	Yes.	
§ 63.6(h)(8)	Determining Compliance with Opacity/VE Standards.	Yes.	

TABLE 44 TO SUBPART UUU OF PART 63.—APPLICABILITY OF NESHAP GENERAL PROVISIONS TO SUBPART UUU—Continued

[As stated in § 63.1577, you must meet each requirement in the following table that applies to you]

Citation	Subject	Applies to subpart UUU	Explanation
§ 63.6(h)(9)	Adjusted Opacity Standard	Yes.	
§ 63.6(i)(1)–(14)	Extension of Compliance	Yes	Not applicable to an affected source with Tier II compliance date. May be applicable to an affected source exempt from Tier II rule.
§ 63.6(i)(15)	[Reserved]	Not applicable.	
§ 63.6(i)(16)		Yes.	

[FR Doc. 02–7222 Filed 4–10–02; 8:45 am]

BILLING CODE 6560–50–P

II. Final Action

EPA is approving revisions to the Commonwealth of Pennsylvania SIP, which were submitted on March 6, 2000 by PADEP. These revisions will revise 25 PA Code section 129.82, Control of VOCs from gasoline dispensing facilities (Stage II) for Southwest Pennsylvania.

III. What Are the Administrative Requirements?

A. General Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action'' and therefore is not subject to review by the Office of Management and Budget. This action merely approves state law as meeting federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104–4). This rule also does not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes, as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), nor will it have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it merely approves a state rule implementing a federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant.

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

B. Submission to Congress and the Comptroller General

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

C. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by July 20, 2001. Filing a petition for reconsideration by the Administrator of this final rule approving revisions to the Commonwealth's Stage II regulations for Southwest Pennsylvania 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.

Dated: May 1, 2001.

William C. Early,

Acting Regional Administrator, Region III.

40 CFR part 52 is amended as follows:

PART 52—[AMENDED]

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

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

Subpart NN—Pennsylvania

2. Section 52.2020 is amended by adding paragraphs (c)(153) to read as follows:

§ 52.2020 Identification of plan.

* * * * *

(c) * * *

(153) Revisions to the Commonwealth of Pennsylvania Regulations pertaining to Stage II VOC control requirements for Southwest Pennsylvania submitted on March 6, 2000 by the Pennsylvania Department of Environmental Protection:

(i) Incorporation by reference.

(A) Letter of March 6, 2000 from the Pennsylvania Department of Environmental Protection transmitting the revisions to the Stage II VOC control requirements for Southwest Pennsylvania.

(B) Revisions to 25 PA Code, Chapter 129, Standards for Sources at section 129.82, Control of VOCs from gasoline dispensing facilities (Stage II). These revisions became effective on April 10, 1999.

(ii) Additional Material—Remainder of March 6, 2000 submittal.

[FR Doc. 01–12574 Filed 5–18–01; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[FRL–6978–5]

RIN 2060–AF30

National Emission Standards for Hazardous Air Pollutants: Manufacturing of Nutritional Yeast

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action finalizes national emission standards for hazardous air pollutants (NESHAP) for the nutritional yeast manufacturing source category. The EPA has identified the nutritional yeast manufacturing source category as a major source of hazardous air pollutants (HAP) emissions of acetaldehyde. These standards implement section 112(d) of the Clean Air Act (CAA) by requiring all major sources to meet HAP emission standards reflecting the application of the maximum achievable control technology (MACT). These final standards will eliminate approximately 13 percent of nationwide acetaldehyde emissions from these sources. Acute (short term) and chronic (long term) inhalation exposure to acetaldehyde is associated with adverse health effects including irritation of the eyes, skin, and respiratory tract. Acetaldehyde is a potential developmental toxin and a probable human carcinogen.

EFFECTIVE DATE: May 21, 2001.

ADDRESSES: Docket No. A–97–13 contains supporting information used in developing the standards for the nutritional yeast manufacturing source category. The docket is located at the U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460 in Room M–1500, Waterside Mall (ground floor), and may be inspected from 8:30 a.m. to 5:30 p.m., Monday through Friday, excluding legal holidays.

FOR FURTHER INFORMATION CONTACT: Mr. David W. Markwordt, Policy, Planning, and Standards Group, Emission Standards Division (MD–13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541–0837, facsimile (919) 541–0942, electronic mail address: *markwordt.david@epa.gov.*

SUPPLEMENTARY INFORMATION:

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 process. 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 CAA.) The regulatory text and other materials related to this rulemaking are available for review in the docket or copies may be mailed on request from the Air Docket by calling (202) 260–7548. A reasonable fee may be charged for copying docket materials.

World Wide Web (WWW). In addition to being available in the docket, an electronic copy of today's final rule will also be available on the WWW through the EPA's Technology Transfer Network (TTN). Following signature, 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.* 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.

Regulated entities. Categories and entities potentially affected by this action include:

Category	SIC[a]	NAICS[b]	Regulated entities
Industry	2099	311999	Manufacturers of varieties of *Saccharomyces cerevisiae* nutritional yeast made for the purpose of becoming an ingredient in dough for bread or other yeast-raised baked product, and for becoming a nutritional food additive.

[a] Standard Industrial Classification
[b] North American Industry Classification System

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 § 63.2131 of the final rule.

Judicial Review. Under section 307(b) of the CAA, judicial review of this final rule is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by July 20, 2001. Under section 307(d)(7)(B) of the CAA, only an objection to this rule which was raised with reasonable specificity during the period for public comment can be raised during judicial review. Moreover, under section 307(b)(2) of the CAA, the requirements established by today's final action may not be challenged separately in any civil or criminal proceeding we bring to enforce these requirements.

Outline. The information presented in this preamble is organized as follows:

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G. Paperwork Reduction Act
H. National Technology Transfer and Advancement Act
I. Congressional Review Act

I. Background

A. What Is the Source of Authority for Development of NESHAP?

Section 112 of the CAA requires us to list categories and subcategories of major sources and area sources of HAP and to establish NESHAP for the listed source categories and subcategories. Major sources of HAP are those that have the potential to emit greater than

9 Megagrams per year (Mg/yr) (10 tons per year (tpy)) of any one HAP or 23 Mg/yr (25 tpy) of any combination of HAP. The ''baker's yeast manufacturing'' source category was listed as a major source of HAP on the initial source category list published in the **Federal Register** on July 16, 1992 (57 FR 31576). We changed the name of the source category to ''manufacturing of nutritional yeast'' in order to clarify the scope of the rule and distinguish it as not including the regulation of bakeries.

B. What Criteria Do We Use in the Development of NESHAP?

Section 112 of the CAA requires that we establish NESHAP for the control of HAP from both new and existing major sources. The CAA requires the NESHAP to reflect the maximum degree of reduction in emissions of HAP that is achievable. This level of control is commonly referred to as the MACT.

The MACT floor is the minimum control level allowed for NESHAP and is defined under section 112(d)(3) of the CAA. In essence, the MACT floor ensures that the standard is set at a level that assures that all major sources achieve the level of control at least as stringent as that already achieved by the better-controlled and lower-emitting sources in each source category or subcategory. For new sources, the MACT floor cannot be less stringent than the emission control that is achieved in practice by the best-controlled similar source.

In developing MACT, we also consider control options that are more stringent than the floor. We may establish standards more stringent than the floor based on the consideration of cost of achieving the emissions reductions, any non-air quality health and environmental impacts, and energy impacts.

II. What Are the HAP Emissions and Health Effects Associated With the HAP Emitted?

The HAP emitted from the nutritional yeast manufacturing process is acetaldehyde. We have estimated the annual acetaldehyde emissions from the manufacture of nutritional yeast to be approximately 220 Mg/yr (240 tpy).

Acetaldehyde acute (short term) exposure is associated with irritation of the eyes, skin, and respiratory tract. Acute inhalation of high concentrations of acetaldehyde can cause respiratory paralysis and death. Animal acetaldehyde exposure studies indicate that acetaldehyde may also be a developmental toxin. Rats and hamsters with chronic (long-term) exposure to acetaldehyde have an increased incidence of nasal and laryngeal tumors. Based on animal studies, we have classified acetaldehyde as a probable human carcinogen of low carcinogenic hazard.

III. What Are the Final Standards?

A. What Is the Source Category?

We have defined the nutritional yeast manufacturing source category to include facilities that manufacture varieties of *Saccharomyces cerevisiae* (also referred to as nutritional yeast, or baker's yeast) that are made for the purpose of becoming an ingredient in dough for bread or other yeast-raised baked products, or for becoming a nutritional food additive intended for consumption by humans. The nutritional yeast manufacturing source category does not include the production of yeast intended for consumption by animals (for example, as an additive for livestock feed).

B. What Is the Affected Source?

We have defined the nutritional yeast manufacturing affected source as including the collection of equipment used in the manufacture of nutritional yeast species *Saccharomyces cerevisiae.* This collection of equipment includes, but is not limited to, fermentation vessels (fermenters). We have not included the collection of equipment used in the manufacture of nutritional yeast species *Candida utilis* (torula yeast) as part of the affected source.

C. What Are the Emission Limits?

For existing and new sources, we are requiring that you meet volatile organic compound (VOC) emission limits as a surrogate for acetaldehyde, which makes up a portion of the total VOC emitted. The emission limitations include both VOC concentration limits and a percent-of-batches requirement. The concentration limits apply to each batch; they are expressed as the VOC concentration averaged over the duration of a batch. The fermentation stage of each batch determines which one of three VOC concentration limits is applicable to that batch. To meet the percent-of-batches requirement, you must ensure that at least 98 percent of batches on a rolling 12-month average are within-concentration batches. (We define a ''within-concentration batch'' as a batch for which the average VOC concentration is not higher than the maximum concentration that is allowed as the 98 percent emission limitation.)

D. What Are the Testing and Initial and Continuous Compliance Requirements?

To demonstrate compliance with the VOC emission limits specified in the rule, we require that you monitor either the VOC concentration in the fermenter exhaust or the brew ethanol concentration in the fermenter. (We define ''brew ethanol'' as the ethanol in the fermenter liquid.)

If you monitor brew ethanol, you must conduct performance tests simultaneously with brew ethanol monitoring to establish a brew-to-exhaust correlation. (The ''brew-to-exhaust correlation'' is the correlation between the concentration of ethanol in the brew and the concentration of VOC in the fermenter exhaust.)

If you monitor fermenter exhaust, you must ensure that at least 98 percent of batches over the initial compliance period are within-concentration batches to demonstrate initial compliance with the emission limitations.

If you monitor brew ethanol, you must ensure that the VOC fermenter exhaust concentration over the period of your performance test does not exceed the applicable maximum concentration. You must also have a record of the brew-to-exhaust correlation during the performance test while the VOC fermenter exhaust concentration is at or below the applicable maximum concentration.

To demonstrate continuous compliance with the emission limitations, you must report the percentage of batches that are within-concentration batches, based on a 12-month rolling time period. Your continuous emission monitoring system (CEMS) must be operated at all times during a fermentation batch monitoring period. If you monitor brew ethanol, you must correlate the brew ethanol concentration measured by the CEMS, by testing, to the VOC concentration in the fermenter exhaust. The brew-to-exhaust correlation will determine the brew ethanol concentration CEMS compliance monitoring limit. You are required to determine this correlation at least once a year.

E. What Are the Notification, Recordkeeping, and Reporting Requirements?

We require owners or operators of nutritional yeast manufacturing affected sources to which the final rule applies to submit the following: (1) Application for Approval of Construction or Reconstruction, (2) Notification of Compliance Status, (3) Compliance Reports, and (4) Immediate Malfunction Reports. Additionally, if an owner or

operator intends to conduct a performance evaluation or performance test, we require notification of such intent. Records of reported information and other information necessary to document compliance (*e.g.,* records related to malfunction, records that show continuous compliance with emission limits) must be maintained for 5 years.

As soon as practicable before construction begins, you must submit an application for approval of construction of a new major affected source, reconstruction of a major affected source, or reconstruction of a major source such that the source becomes a major affected source subject to the rule. You must submit a separate application for each construction or reconstruction. You must submit at least your name and address, the details regarding your intent to construct or reconstruct, the address of the proposed construction or reconstruction, identification of the standard(s) that are the basis for the application, the expected commencement and completion of the construction or reconstruction, the anticipated date of startup of the source, and the type and quantity of HAP that are anticipated by the source.

You must provide us with a one-time notification of compliance with the final rule. It must describe how you are compliant with the rule, including results of initial compliance determination, identification of the method to be used to determine continuing compliance, and description of the air pollution control method employed.

You must report on your continued compliance status semiannually. This report must include your calculated percentage of within-concentration batches for 12-month calculation periods ending on each calendar month that falls within the reporting period. If you had a malfunction during the reporting period and you took actions as specified in your malfunction plan, you must include that information in the Compliance Report (CR).

If you have a malfunction during the reporting period that is not specified in your malfunction plan, you must submit an Immediate Malfunction Report. This report consists of a telephone call (or facsimile (FAX) transmission) to the Administrator within 2 working days after starting actions that are not included with your plan and shall describe the actions taken during the malfunction event, followed by a letter within 7 working days after the end of the event. If you intend to conduct a performance evaluation or performance test, you are required to submit a notification of such intent at least 60 days prior to the evaluation or test.

IV. What Major Changes Have We Made to the Rule Since Proposal?

In response to comments received on the proposed standards, we made several changes to the final rule. While some of the changes we made were clarifications designed to make our intentions clearer, some of the changes are changes to the proposed standard requirements. The substantive comments and/or changes and responses made since the proposal are summarized in the following sections. Our complete responses to public comments are contained in a memorandum that can be obtained from the docket (see **ADDRESSES** section).

A. Regulation Format

We have changed the regulatory format of the rule from what was proposed on October 19, 1998 (63 FR 55812) to improve implementation, permitting, and enforcement of the rule. The new format also improves the interface with the 40 CFR part 63 General Provisions which are cross-referenced in the proposed and final rule. Although the overall format of the final rule differs from the format of the proposal, unless noted in another paragraph of this section, the requirements are the same. We believe that the new format increases the clarity of the requirements and eases the implementation burden of the rule for both the regulated entity and enforcing agency.

B. Emission Limit Standard

We proposed two sets of emission limits and associated requirements for the nutritional yeast manufacturing source category. Both sets of emission limits potentially represented MACT. One set, which we referred to in the proposal preamble as the ''Reasonably Available Control Technology (RACT) standard,'' relies on the concentration-based limits used in Wisconsin's and Maryland's RACT rules. The second set, which we referred to in the proposal preamble as the ''Presumptive MACT (PMACT) standard,'' relies on a production-based format, which is the same format we considered in the 1994 PMACT.

Two commenters supported the use of the PMACT standard option, and two commenters supported the retention of both options in the final rule. Two of the commenters supported the PMACT standard option because they objected to the proposed RACT option's air flow measurement requirement and air flow cap. One of the commenters added that they would only support the PMACT option if the production-linked emission factor compliance requirement was to be kept confidential.

One of the commenters that recommended retaining both options in the final rule stated that they would prefer the RACT option over the PMACT option if the concentration limits were expressed in terms of propane and the air flow limitation was removed.

Based on comments received and further evaluation of these two options, we decided to adopt the RACT standard option, without the air flow cap, in the final rule because it offers a direct measure of compliance, does not require calculations based on confidential production data, and is simpler as well as easier to use and enforce than the PMACT standard option. Additionally, as noted at proposal, we have more data to support the RACT option. We have selected the RACT standard option because we also believe it better reflects existing control technology performance, operation, and batch emissions variability.

C. No Wastewater Requirements

At proposal, we solicited comment on regulating wastewater and what would constitute MACT for nutritional yeast manufacturing facilities. We received three comment letters that argued against the regulation of wastewater emissions of acetaldehyde at nutritional yeast manufacturing facilities. Reasons given for not regulating wastewater emissions include that the cost of monitoring and control of emissions of acetaldehyde would be high, that emissions from wastewater of acetaldehyde are insignificant, and that treatment might increase emissions of other air pollutants.

Based on comments received and further analysis of wastewater acetaldehyde emissions from nutritional yeast manufacturing facilities, we concluded that the MACT floor for wastewater emissions is no control. We then considered going beyond the floor and determined that non-air quality health and environmental impacts, energy impacts, and costs to go beyond the floor are unreasonably high (Docket No. A–97–13).

The amount of acetaldehyde in the wastewater is a function of the acetaldehyde generated during the yeast fermentation process. Acetaldehyde is a by-product of the fermentation process. Emission limits on the fermentation process result in lower air emissions from the fermentation tanks. To achieve the emission limits, facilities must regulate the yeast growth by process

control of sugar and oxygen to the yeast. This process control also results in lower concentrations of acetaldehyde in the wastewater and subsequently lower air emissions from wastewater. Thus, levels of acetaldehyde in wastewater are already reduced by process changes upstream of wastewater management operations (which process controls constitute MACT for those operations). Put another way, achieving the upstream standards also controls acetaldehyde in wastewater. The standard of ''no control'' in the final rule for wastewater operations thus means no additional control beyond that already afforded through the upstream standards.

Further control of wastewater emissions is achievable through use of add-on emission control technologies. No such controls are currently utilized, so that any such control would be a beyond-the-floor standard. Given the small concentrations of acetaldehyde remaining in wastewater, EPA believes any such controls would not be cost effective. In addition, there are no non-air quality impact or energy considerations that would suggest adopting such beyond-the-floor controls (which would require additional energy to operate and generate a waste stream for disposal). Therefore, we do not require control of emissions of acetaldehyde from wastewater in the final rule.

D. Brew Ethanol Monitoring

One commenter requested that the measurement of ethanol in fermenter liquid be allowed as an alternative to measurement of VOC in fermenter offgas. The commenter supplied information to us that indicated a strong correlation between the brew ethanol concentration in the fermenter liquid and the VOC concentration in the fermenter exhaust. Upon evaluation of the commenter's documentation and our own analysis, we agreed that the correlation between brew ethanol and VOC concentration from the fermenter exhaust is sufficiently strong to allow monitoring of brew ethanol as an alternative to monitoring VOC concentration. Therefore, the final rule explicitly allows for the measurement of brew ethanol as an alternative monitoring method.

E. MACT Requirements

Some commenters expressed that surrogate VOC concentration limits should be established based on what is achievable in practice. Nutritional yeast manufacturing facilities currently subject to RACT standards or RACT-like standards represent the best-controlled sources for the nutritional yeast manufacturing source category (Docket No. A–97–13). Some States with RACT or RACT-like standards apply discretion as to whether a concentration limit that is exceeded results in a violation of the standard (a VOC concentration limit is exceeded if the batch-average concentration exceeds the specified limit). For example, Maryland's continuous emissions monitoring policy allows for one VOC concentration limit exceedance, or occurrence, per facility per quarter.

We did not receive any comments that supported lowering MACT concentration limits from RACT concentration limits. One commenter stated that although most batches display batch-average VOC concentrations below the RACT limits due to the natural variability of the biological process of yeast-growing, batch-average VOC concentrations display a bell-curve distribution. The commenter added that because of the bell-curve distribution of VOC concentrations, a source needs to target VOC concentrations well below the RACT limit in order for the distribution of actual concentrations to remain below the RACT limit.

We analyzed available information for five yeast manufacturing facilities that are subject to Wisconsin or Maryland RACT standards or California Bay Area Air Quality Management District (BAAQMD) RACT-like concentration limits. Based on our analysis, we found that these facilities had concentration limits that were exceeded for 0 to 2.5 percent of their runs, with an average of 1.3 percent of the concentration limits being exceeded for the total number of runs in 1998. Only one facility had no concentration limits that were exceeded (Docket No. A–97–13).

There is no evidence that failure to meet the limit for every batch is a result of poor operation. We do not have sufficient data to indicate that the RACT limits can be achieved on every batch, so we have concluded that the MACT floor for the nutritional yeast manufacturing source category, for existing and new sources, is less stringent than meeting the RACT limits for every batch (Docket No. A–97–13). Therefore, we have concluded that MACT is the control of 98 percent of the batches to either at or below the VOC concentration limits specified in the rule.

F. Compliance Requirements

Many comments were received regarding compliance requirements. Some commenters requested that the final rule clarify the compliance period over which the concentration limits are to be met. Other commenters stated that the proposed concentration limit for VOC (as ethanol) under the RACT standard option was based on an incorrect conversion of VOC to an ethanol basis from the propane basis that is used in the RACT rules.

We agree that the final rule should clarify the compliance period for which the concentration limits must be met. As explained above, the MACT level of control is that 98 percent of the nutritional yeast manufacturing batches be lower than or equal to concentration limits established in the rule. This level of control was determined to be achievable on a rolling 12-month average basis. Therefore, the final rule clarifies that the concentration limits are to be met on the basis of an average of concentrations measured over the duration of a batch, and not on an instantaneous basis. Ninety-eight percent of the nutritional yeast manufacturing batches are to be within concentration limits on a rolling 12-month average basis.

We proposed limits in terms of VOC as ethanol. From information and comments received after proposal, we learned that the use of propane-calibrated analyzers is widespread in the nutritional yeast manufacturing industry, and that their use is consistent with the RACT requirements which represent MACT. Therefore, the final rule expresses concentration limits based on VOC as propane rather than as ethanol.

V. What Are the Environmental, Energy, Cost, and Economic Impacts?

A. What Are the Air Quality Impacts?

We estimate that the 1998 nationwide emissions from nutritional yeast manufacturing facilities were approximately 820 Mg/yr (900 tpy) of VOC and 220 Mg/yr (240 tpy) of acetaldehyde. The final rule will reduce VOC emissions by an estimated 85 Mg/yr (93 tpy) and acetaldehyde emissions by an estimated 28 Mg/yr (31 tpy) from nutritional yeast manufacturing facilities.

B. What Are the Non-Air Health, Environmental, and Energy Impacts?

We do not expect that there will be any significant adverse non-air health, environmental or energy impacts associated with the final standards for the nutritional yeast manufacturing source category. We determine impacts relative to the baseline that is set at the level of control in absence of the rule. The predominant control measure that will be adopted by nutritional yeast

manufacturing facilities as a result of the final rule is process control, which will not result in any water pollution or solid waste impacts.

C. What Are the Cost and Economic Impacts?

The total estimated capital cost of the final rule for the nutritional yeast manufacturing source category is approximately $270,000. The total estimated annual cost of the final rule is approximately $700,000 (Docket No. A–97–13). We do not expect any adverse economic impacts to result from the final rule.

VI. Administrative Requirements

A. Executive Order 12866, Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), we 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 this Executive Order.

Pursuant to the terms of Executive Order 12866, it has been determined that this rule is not a ''significant regulatory action'' under the terms of Executive Order 12866. Consequently, this action was not submitted to OMB for review under Executive Order 12866.

B. Executive Order 13132, Federalism

Executive Order 13132, entitled ''Federalism'' (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' Policies that have federalism implications is defined in the Executive Order to include regulations that have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.'' Under Executive Order 13132, the EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or the EPA consults with State and local officials early in the process of developing the regulation. The EPA also may not issue a regulation that has federalism implications and that preempts State law unless the Agency consults with State and local officials early in the process of developing the regulation.

If the EPA complies by consulting, Executive Order 13132 requires the EPA to provide to OMB, in a separately identified section of the preamble to the rule, a federalism summary impact statement (FSIS). The FSIS must include a description of the extent of the EPA's prior consultation with State and local officials, a summary of the nature of their concerns and the Agency's position supporting the need to issue the regulation, and a statement of the extent to which the concerns of State and local officials have been met. Also, when the EPA transmits a draft final rule with federalism implications to OMB for review pursuant to Executive Order 12866, the EPA must include a certification from the Agency's Federalism Official stating that the EPA has met the requirements of Executive Order 13132 in a meaningful and timely manner.

This final rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This final rule is mandated by statute and does not impose requirements on States; however, States will be required to implement the rule by incorporating the rule into permits and enforcing the rule upon delegation. States will collect permit fees that will be used to offset the resource burden of implementing the rule. Thus, the requirements of section 6 of the Executive Order do not apply to this rule. Although section 6 of Executive Order 13132 does not apply to this rule, the EPA did consult with State and local officials in developing this rule.

C. Executive Order 13175, Consultation and Coordination With Indian Tribal Governments

On November 6, 2000, the President issued Executive Order 13175 (65 FR 67249) entitled, ''Consultation and Coordination with Indian Tribal Governments.'' Executive Order 13175 took effect on January 6, 2001, and revokes Executive Order 13084 (Tribal Consultation) as of that date. The EPA developed this final rule, however, during the period when Executive Order 13084 was in effect; thus, EPA addressed tribal considerations under Executive Order 13084.

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 we consult with those governments. If the EPA complies by consulting, Executive Order 13084 requires the EPA to provide to 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.''

These final standards do not significantly or uniquely affect the communities of Indian tribal governments. No tribal governments own or operate nutritional yeast manufacturing facilities. Accordingly, the requirements of Executive Order 13084 do not apply to this action.

D. 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 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 rule is preferable to other potentially effective and reasonable 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 Executive Order has the potential to influence the regulation. These final standards are not subject to Executive Order 13045 because they are based on technology performance and not on health or safety risks. No children's risk analysis was performed because no alternative technologies exist that would provide greater stringency at a reasonable cost. Furthermore, this rule has been determined not to be ''economically significant'' as defined under Executive Order 12866.

E. Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, the 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 aggregate, or by 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 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 as to 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.

Today's final rule contains no 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 1 year. The maximum total annual cost of this rule for any year has been estimated to be less than $700,000. Thus, today's final rule is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, the EPA has determined that this final rule contains no regulatory requirements that might significantly or uniquely affect small governments because it contains no regulatory requirements that apply to such governments or impose obligations upon them. Therefore, today's final rule is not subject to the requirements of section 203 of the UMRA.

Because this final rule does not include a Federal mandate and is estimated to result in expenditures less than $100 million in any 1 year by State, local, and tribal governments, 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 EPA is not required to develop a plan with regard to small governments. Therefore, the requirements of the UMRA do not apply to this action.

F. Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 et seq.

The 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. For purposes of assessing the impacts of today's rule on small entities, a small entity is defined as: (1) A small business that has fewer than 500 employees; (2) a small governmental jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field. The small business size standards are based on industries as they are defined in NAICS and were published in a final rule by the Small Business Administration on September 5, 2000 (65 FR 53533).

After considering the economic impacts of today's final rule on small entities, EPA has concluded that this action will not have a significant impact on a substantial number of small entities. Although there appears to be one small business in the nutritional yeast manufacturing industry, the complex ownership issues involved with this firm makes the absolute determination uncertain. The EPA thus concludes that there is at the most one small business which may be affected by these standards. Individual company cost-to-sales ratio data is considered confidential business information (CBI) and may not be disclosed. The industry average cost-to-sales ratio for all affected companies is less than 0.3 percent. No individual company is anticipated to incur a cost-to-sales ratio exceeding 3 percent. Based on the foregoing, the EPA concludes that this rule will not have a significant impact on a substantial number of small businesses.

Although this final rule will not have a significant impact on a substantial number of small entities, EPA nonetheless has tried to reduce the impact of this rule on small entities by providing alternatives to compliance and monitoring requirements.

G. Paperwork Reduction Act

The information collection requirements for these final standards will be submitted for approval to the Office of Management and Budget under the requirements of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1886.02) for the nutritional yeast manufacturing source category and copies may be obtained from Ms. Sandy Farmer by mail at the U.S. Environmental Protection Agency, Office of Environmental Information, Collection Strategies Division (2822), 1200 Pennsylvania Avenue, NW., 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.

The information requirements are based on notification, recordkeeping, and reporting requirements in the NESHAP General Provisions (40 CFR part 63, subpart A), which are

mandatory for all operators subject to national emission standards. These recordkeeping and reporting requirements are specifically authorized by section 114 of the CAA (42 U.S.C. 7414).

The final standards require owners or operators of affected sources to retain records for a period of 5 years. The 5-year retention period is consistent with the General Provisions of 40 CFR part 63 and with the 5-year record retention requirement in the operating permit program under title V of the CAA.

Total estimated annualized capital monitoring, inspection, reporting and recordkeeping (MIRR) costs for new and existing sources is $886,307 for the first years after promulgation of the NESHAP for this source category. Of the total estimated MIRR cost, $440,917 is labor dollars and $445,390 is capital and operation and maintenance.

The annual public reporting and recordkeeping burden for this collection of information (averaged over the first 3 years after the effective date of the promulgated rule) is estimated to total 3,459 labor hours per year at a total annual cost of $146,972. This estimate includes notifications, performance evaluations and tests, compliance reports, and records of CEMS measurements.

The total estimated annualized capital monitoring, inspection, reporting and recordkeeping (MIRR) costs for existing and new major sources to comply with the promulgated standards when an affected source opts to comply by using process add-on control equipment are determined based on the estimated capital costs of VOC monitoring equipment required for MIRR activities. For the yeast manufacturing industry, the total estimated installed capital costs of this equipment is $2,453,174 for existing major sources, and $0 for new major sources because we do not anticipate construction of any new major sources in the near future. Annualized capital MIRR costs for existing and new major sources to comply with the promulgated standard using process control were estimated to be $89,782 and $0, respectively, when averaged over the first 3 years after the effective date of the promulgated rule.

The total annual estimated operating and maintenance costs (O&M) were calculated based on (1) the estimated postage costs for the estimated total annual responses associated with the provisions of the yeast manufacturing NESHAP and (2) the estimated annual cost of contracting for performance testing required for compliance with this standard. Annual O&M costs for existing and new major sources were estimated to be $58,682 and $0, respectively, when averaged over the first 3 years after the effective date of the promulgated 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 (1) review instructions; (2) 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; (3) adjust the existing ways to comply with any previously applicable instructions and requirements; (4) train personnel to be able to respond to a collection of information; (5) search data sources; (6) complete and review the collection of information; and (7) 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 our regulations are listed in 40 CFR part 9 and 48 CFR chapter 15. The OMB control number(s) for the information collection requirements in this rule will be listed in an amendment to 40 CFR part 9 or 48 CFR Chapter 15 in a subsequent **Federal Register** document after OMB approves the ICR.

H. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995 (Public Law 104–113; 15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in their 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) developed or adopted by one or more voluntary consensus bodies. The NTTAA directs EPA to provide Congress, through annual reports to OMB, with explanations when an agency does not use available and applicable voluntary consensus standards.

This rulemaking involves the following technical standards: EPA Methods 25A, PS 8, PS 9, and a method for determining ethanol in liquids. Consistent with the NTTAA, the EPA conducted searches to identify voluntary consensus standards in addition to these EPA methods.

The search for emissions monitoring procedures identified two voluntary consensus standards, both for EPA Method 25A. The EPA determined that one of these two standards, (EN 12619:1999), identified for measuring emissions of HAP or surrogates subject to emission standards in this rule, would not be practical due to lack of equivalency, detail, and/or quality assurance and/or quality control requirements. Therefore, we did not use this voluntary consensus standard in this rulemaking.

The other consensus standard (ISO/FDIS 14965) identified for EPA Method 25A is under development. Therefore, we did not use this voluntary consensus standard in this rulemaking. No voluntary consensus standards were identified for PS 8, PS 9, or a procedure to determine ethanol in liquids. The search and review results have been documented and are placed in the Docket No. A–97–13 (see **ADDRESSES** section) for this rule.

Sections 63.2161 and 63.2163 of the standards list the EPA test methods and performance standards included in this rulemaking. Most of the standards have been used by States and industry for more than 10 years.

I. 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. 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). This rule will be effective May 21, 2001.

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedures, Air emissions control, Hazardous air pollutants, Intergovernmental relations, Recordkeeping and reporting requirements.

Dated: May 8, 2001.

Christine Todd Whitman,

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. Part 63 is amended by adding subpart CCCC to read as follows:

Subpart CCCC—National Emission Standards for Hazardous Air Pollutants: Manufacturing of Nutritional Yeast

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What This Subpart Covers

§ 63.2130 What is the purpose of this subpart?

This subpart establishes national emission limitations for hazardous air pollutants emitted from manufacturers of nutritional yeast. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

§ 63.2131 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a nutritional yeast manufacturing facility that is, is located at, or is part of a major source of hazardous air pollutants (HAP) emissions.

(1) A manufacturer of nutritional yeast is a facility that makes yeast for the purpose of becoming an ingredient in dough for bread or any other yeast-raised baked product, or for becoming a nutritional food additive intended for consumption by humans. A manufacturer of nutritional yeast does not include production of yeast intended for consumption by animals, such as an additive for livestock feed.

(2) A major source of HAP emissions is 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, considering controls, any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year.

(b) [Reserved]

§ 63.2132 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, or existing ''affected source'' that produces *Saccharomyces cerevisiae* at a nutritional yeast manufacturing facility.

(b) The affected source is the collection of equipment used in the manufacture of the nutritional yeast species *Saccharomyces cerevisiae.* This collection of equipment includes, but is not limited to, fermentation vessels (fermenters). The collection of equipment used in the manufacture of the nutritional yeast species *Candida utilis* (torula yeast) is not part of the affected source.

(c) The emission limitations in this subpart apply to fermenters in the affected source that meet all of the criteria listed in paragraphs (c)(1) through (2) of this section.

(1) The fermenters are ''fed-batch'' as defined in § 63.2192.

(2) The fermenters are used to support one of the last three fermentation stages in a production run, which may be referred to as ''stock, first generation, and trade,'' ''seed, semi-seed, and commercial,'' or ''CB4, CB5, and CB6'' stages.

(d) The emission limitations in this subpart do not apply to flask, pure-culture, yeasting-tank, or any other set-batch fermentation, and they do not apply to any operations after the last dewatering operation, such as filtration.

(e) The emission limitations in this subpart do not apply to the affected source during the production of specialty yeast (defined in § 63.2192).

(f) An affected source is a ''new affected source'' if you commenced construction of the affected source after October 19, 1998, and you met the applicability criteria in § 63.2131 at the time you commenced construction.

(g) An affected source is ''reconstructed'' if you meet the criteria as defined in § 63.2.

(h) An affected source is ''existing'' if it is not new or reconstructed.

§ 63.2133 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with paragraphs (a)(1) through (2) of this section.

(1) If you start up your affected source before May 21, 2001, then you must comply with the emission limitations in this subpart no later than May 21, 2001.

(2) If you start up your affected source after May 21, 2001, then you must comply with the emission limitations in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the emission limitations for existing sources no later than May 21, 2004.

(c) If you have an area source that increases its emissions, or its potential to emit, so that it becomes a major source of HAP, paragraphs (c)(1) through (2) of this section apply.

(1) Any portion of the existing facility that is a new affected source or a new reconstructed source must be in compliance with this subpart upon startup.

(2) All other parts of the source must be in compliance with this subpart by not later than 3 years after it becomes a major source.

(d) You must meet the notification requirements in § 63.2180 according to the schedule in § 63.2180 and in subpart A of this part.

Emission Limitations

§ 63.2140 What emission limitations must I meet?

You must meet all of the emission limitations in Table 1 to this subpart.

General Compliance Requirements

§ 63.2150 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations in Table 1 to this subpart at all times, except during periods of malfunction.

(b) You must always operate and maintain your affected source, including monitoring equipment, according to the provisions in § 63.6(e)(1)(i). If the date upon which you must demonstrate initial compliance as specified in § 63.2160 falls after the compliance date specified for your affected source in § 63.2133, then you must maintain a log detailing the operation and maintenance of the continuous monitoring systems and the process and emissions control equipment during the period between those dates.

(c) You must develop and implement a written malfunction plan. It will be as specified in § 63.6(e)(3), except that the requirements for startup, shutdown, and maintenance plans, records and reports apply only to malfunctions. Under this subpart, a period of malfunction is expressed in whole batches and not in portions of batches.

Testing and Initial Compliance Requirements

§ 63.2160 By what date must I conduct an initial compliance demonstration?

(a) For each emission limitation in Table 1 to this subpart for which compliance is demonstrated by monitoring fermenter exhaust, you must demonstrate initial compliance for the period ending on the last day of the month that is 12 calendar months (or 11 calendar months, if the compliance date for your source is the first day of the month) after the compliance date that is specified for your source in § 63.2133. (For example, if the compliance date is October 15, 2003, the first 12-month period for which you must demonstrate compliance would be October 15, 2003 through October 31, 2004.)

(b) For each emission limitation in Table 1 to this subpart for which initial compliance is demonstrated by monitoring brew ethanol concentration and calculating volatile organic compound (VOC) concentration in the fermenter exhaust according to the procedures in § 63.2161, you must demonstrate initial compliance within 180 calendar days before the compliance date that is specified for your source in § 63.2133.

§ 63.2161 What performance tests and other procedures must I use if I monitor brew ethanol?

(a) You must conduct each performance test in Table 2 to this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements in § 63.7(e)(1) and under the specific conditions that this subpart specifies in Table 2 to this subpart and in paragraphs (b)(1) through (4) of this section.

(1) Conduct each performance test simultaneously with brew ethanol monitoring to establish a brew-to-exhaust correlation equation as specified in paragraph (f) of this section.

(2) For each fermentation stage, conduct one run of the EPA Test Method 25A of 40 CFR part 60, appendix A, over the entire length of a batch. The three fermentation stages do not have to be from the same production run.

(3) Do the test at a point in the exhaust-gas stream before you inject any dilution air, which is any air not needed to control fermentation.

(4) Record the results of the test for each fermentation stage.

(c) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 63.7(e)(1).

(d) You must collect data to correlate the brew ethanol concentration measured by the continuous emission monitoring system (CEMS) to the VOC concentration in the fermenter exhaust according to paragraphs (d)(1) through (3) of this section.

(1) You must collect a separate set of brew ethanol concentration data for each fed-batch fermentation stage while manufacturing the product that comprises the largest percentage (by mass) of average annual production.

(2) Measure brew ethanol as specified in § 63.2164 simultaneously with conducting a performance test for VOC in fermenter exhaust as specified in paragraph (b) of this section. You must measure brew ethanol at least once during each successive 30-minute period over the entire period of the performance test for VOC in fermenter exhaust.

(3) Keep a record of the brew ethanol concentration data for each fermentation stage over the period of EPA Test Method 25A of 40 CFR part 60, appendix A, performance test when the VOC concentration in the fermenter exhaust does not exceed the applicable emission limitation in Table 1 to this subpart.

(e) For each set of data that you collected under paragraph (d) of this section, perform a linear regression of brew ethanol concentration (percent) on VOC fermenter exhaust concentration (parts per million by volume (ppmv) measured as propane). The correlation between the brew ethanol concentration as measured by the CEMS and the VOC fermenter exhaust concentration as measured by EPA Test Method 25A of 40 CFR part 60, appendix A, must be linear with a correlation coefficient of at least 0.90.

(f) Calculate the VOC concentration in the fermenter exhaust using the brew ethanol concentration data collected under paragraph (d) of this section and according to Equation 1 of this section.

$$BAVOC = BAE * CF + y \qquad \text{(Eq. 1)}$$

Where:

BAVOC = batch-average concentration of VOC in fermenter exhaust (ppmv measured as propane), calculated for compliance demonstration

BAE = batch-average concentration of brew ethanol in fermenter liquid (percent), measured by CEMS

CF = constant established at performance test and representing the slope of the regression line

y = constant established at performance test and representing the y-intercept of the regression line

§ 63.2162 When must I conduct subsequent performance tests?

(a) For each emission limitation in Table 1 to this subpart for which compliance is demonstrated by monitoring brew ethanol concentration and calculating VOC concentration in the fermenter exhaust according to the procedures in § 63.2161, you must

conduct an EPA Test Method 25A of 40 CFR part 60, appendix A, performance test and establish a brew-to-exhaust correlation according to the procedures in Table 2 to this subpart and in § 63.2161, at least once every year.

(b) The first subsequent performance test must be conducted no later than 365 calendar days after the initial performance test conducted according to § 63.2160. Each subsequent performance test must be conducted no later than 365 calendar days after the previous performance test. You must conduct a performance test for each 365 calendar day period for the lifetime of the affected source.

§ 63.2163 If I monitor fermenter exhaust, what are my monitoring installation, operation, and maintenance requirements?

(a) Each CEMS must be installed, operated, and maintained according to the applicable Performance Specification (PS) of 40 CFR part 60, appendix B.

(b) You must conduct a performance evaluation of each CEMS according to the requirements in § 63.8, according to the applicable Performance Specification of 40 CFR part 60, appendix B, and according to paragraphs (b)(1) through (4) of this section.

(1) If your CEMS monitor generates a single combined response value for VOC (examples of such detection principles are flame ionization, photoionization, and non-dispersive infrared absorption), but it is not a flame ionization analyzer, you must use PS 8 to show that your CEMS is operating properly.

(i) Use EPA Test Method 25A of 40 CFR part 60, appendix A, to do the relative-accuracy test PS 8 requires.

(ii) Calibrate the reference method with propane.

(iii) Collect a 1-hour sample for each reference-method test.

(2) If you continuously monitor VOC emissions using a flame ionization analyzer, then you must conduct the calibration drift test PS 8 requires, but you are not required to conduct the relative-accuracy test PS 8 requires.

(3) If you continuously monitor VOC emissions using gas chromatography, you must use PS 9 of CFR part 60, appendix B, to show that your CEMS is operating properly.

(4) You must complete the performance evaluation and submit the performance evaluation report before the compliance date that is specified for your source in § 63.2133.

(c) Calibrate the CEMS with propane.

(d) Set the CEMS span at not greater than 5 times the relevant emission limit, with 1.5 to 2.5 times the relevant emission limit being the range considered by us to be generally optimum.

(e) You must monitor VOC concentration in fermenter exhaust at any point prior to dilution of the exhaust stream.

(f) Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 30-minute period within each batch monitoring period. Except as specified in paragraph (g) of this section, you must have a minimum of two cycles of operation in a 1-hour period to have a valid hour of data.

(g) The CEMS data must be reduced to arithmetic batch averages computed from two or more data points over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities pursuant to provisions of this part are being performed. During these periods, a valid hour of data shall consist of at least one data point representing a 30-minute period.

(h) You must have valid CEMS data from at least 75 percent of the full hours over the entire batch monitoring period.

(i) For each CEMS, record the results of each inspection, calibration, and validation check.

(j) You must check the zero (low-level) and high-level calibration drifts for each CEMS in accordance with the applicable PS of 40 CFR part 60, appendix B. The zero (low-level) and high-level calibration drifts shall be adjusted, at a minimum, whenever the zero (low-level) drift exceeds 2 times the limits of the applicable PS. The calibration drift checks must be performed at least once daily except that they may be performed less frequently under the conditions of paragraphs (j)(1) through (3) of this section.

(1) If a 24-hour calibration drift check for your CEMS is performed immediately prior to, or at the start of, a batch monitoring period of a duration exceeding 24 hours, you are not required to perform 24-hour-interval calibration drift checks during that batch monitoring period.

(2) If the 24-hour calibration drift exceeds 2.5 percent of the span value (or more than 10 percent of the calibration gas value if your CEMS is a gas chromatograph (GC)) in fewer than 5 percent of the checks over a 1-month period, and the 24-hour calibration drift never exceeds 7.5 percent of the span value, then the frequency of calibration drift checks may be reduced to at least weekly (once every 7 days).

(3) If, during two consecutive weekly checks, the weekly calibration drift exceeds 5 percent of the span value (or more than 20 percent of the calibration gas value, if your CEMS is a GC), then a frequency of at least 24-hour interval calibration checks must be resumed until the 24-hour calibration checks meet the test of paragraph (j)(2) of this section.

(k) If your CEMS is out of control, you must take corrective action according to paragraphs (k)(1) through (3) of this section.

(1) Your CEMS is out of control if the zero (low-level) or high-level calibration drift exceeds 2 times the limits of the applicable PS.

(2) When the CEMS is out of control, take the necessary corrective action and repeat all necessary tests that indicate that the system is out of control. You must take corrective action and conduct retesting until the performance requirements are below the applicable limits.

(3) During the batch monitoring periods in which the CEMS is out of control, recorded data shall not be used in data averages and calculations, or to meet any data availability requirement established under this subpart. The beginning of the out-of-control period is the beginning of the first batch monitoring period that follows the most recent calibration drift check during which the system was within allowable performance limits. The end of the out-of-control period is the end of the last batch monitoring period before you have completed corrective action and successfully demonstrated that the system is within the allowable limits. If your successful demonstration that the system is within the allowable limits occurs during a batch monitoring period, then the out-of-control period ends at the end of that batch monitoring period. If the CEMS is out of control for any part of a particular batch monitoring period, it is out of control for the whole batch monitoring period.

§ 63.2164 If I monitor brew ethanol, what are my monitoring installation, operation, and maintenance requirements?

(a) Each CEMS must be installed, operated, and maintained according to manufacturer's specifications and the plan for malfunctions that you must develop and use according to § 63.6(e).

(b) Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 30-minute period within each batch monitoring period. Except as specified in paragraph (c) of this section, you must have a minimum of two cycles of operation in a 1-hour period to have a valid hour of data.

(c) The CEMS data must be reduced to arithmetic batch averages computed from two or more data points over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities pursuant to provisions of this part are being performed. During these periods, a valid hour of data shall consist of at least one data point representing a 30-minute period.

(d) You must have valid CEMS data from at least 75 percent of the full hours over the entire batch monitoring period.

(e) Set the CEMS span to correspond to not greater than 5 times the relevant emission limit, with 1.5 to 2.5 times the relevant emission limit being the range considered by us to be generally optimum. Use the brew-to-exhaust correlation equation established under § 63.2161(f) to determine the span value for your CEMS that corresponds to the relevant emission limit.

(f) For each CEMS, record the results of each inspection, calibration, and validation check.

(g) The GC that you use to calibrate your CEMS must meet the requirements of paragraphs (g)(1) through (3) of this section.

(1) Calibrate the GC at least daily, by analyzing standard solutions of ethanol in water (0.05 percent, 0.15 percent, and 0.3 percent).

(2) For use in calibrating the GC, prepare the standard solutions of ethanol using the procedures listed in paragraphs (g)(2)(i) through (vi) of this section.

(i) Starting with 100 percent ethanol, dry the ethanol by adding a small amount of anhydrous magnesium sulfate (granular) to 15–20 milliliters (ml) of ethanol.

(ii) Place approximately 50 ml of water into a 100-ml volumetric flask and place the flask on a balance. Tare the balance. Weigh 2.3670 grams of the dry (anhydrous) ethanol into the volumetric flask.

(iii) Add the 100-ml volumetric flask contents to a 1000-ml volumetric flask. Rinse the 100-ml volumetric flask with water into the 1000-ml flask. Bring the volume to 1000 ml with water.

(iv) Place an aliquot into a sample bottle labeled ''0.3% Ethanol.''

(v) Fill a 50-ml volumetric flask from the contents of the 1000-ml flask. Add the contents of the 50-ml volumetric flask to a 100-ml volumetric flask and rinse the 50-ml flask into the 100-ml flask with water. Bring the volume to 100 ml with water. Place the contents into a sample bottle labeled ''0.15% Ethanol.''

(vi) With a 10-ml volumetric pipette, add two 10.0-ml volumes of water to a sample bottle labeled ''0.05% Ethanol.'' With a 10.0-ml volumetric pipette, pipette 10.0 ml of the 0.15 percent ethanol solution into the sample bottle labeled ''0.05% Ethanol.''

(3) For use in calibrating the GC, dispense samples of the standard solutions of ethanol in water in aliquots to appropriately labeled and dated glass sample bottles fitted with caps having a Teflon® seal. Refrigerated samples may be kept unopened for 1 month. Prepare new calibration standards of ethanol in water at least monthly.

(h) Calibrate the CEMS according to paragraphs (h)(1) through (3) of this section.

(1) To calibrate the CEMS, inject a brew sample into a calibrated GC and compare the simultaneous ethanol value given by the CEMS to that given by the GC. Use either the Porapak® Q, 80–100 mesh, 6′ × ⅛″, stainless steel packed column or the DB Wax, 0.53 mm × 30 m capillary column.

(2) If a CEMS ethanol value differs by 20 percent or more from the corresponding GC ethanol value, determine the brew ethanol values throughout the rest of the batch monitoring period by injecting brew samples into the GC not less frequently than every 30 minutes. From the time at which the difference of 20 percent or more is detected until the batch monitoring period ends, the GC data will serve as the CEMS data.

(3) Perform a calibration of the CEMS at least four times per batch.

§ 63.2165 How do I demonstrate initial compliance with the emission limitations if I monitor fermenter exhaust?

(a) You must demonstrate initial compliance with each emission limitation that applies to you according to Table 3 to this subpart.

(b) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.2180(e).

§ 63.2166 How do I demonstrate initial compliance with the emission limitations if I monitor brew ethanol?

(a) You must demonstrate initial compliance with each emission limitation that applies to you according to Table 3 to this subpart.

(b) You must establish the brew-to-exhaust correlation for each fermentation stage according to § 63.2161(e).

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.2180(e).

Continuous Compliance Requirements

§ 63.2170 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously during each batch monitoring period.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or quality control activities in data averages and calculations used to report emission or operating levels, or to fulfill a minimum data availability requirement. You must use all the data collected during all other periods in assessing the operation of the control system.

§ 63.2171 How do I demonstrate continuous compliance with the emission limitations?

(a) You must demonstrate continuous compliance with each emission limitation in Table 1 to this subpart that applies to you according to methods specified in Table 4 to this subpart.

(b) You must calculate the percentage of within-concentration batches (defined in § 63.2192) for each 12-month period according to paragraphs (b)(1) through (4) of this section.

(1) Determine the percentage of batches over a 12-month calculation period that were in compliance with the applicable maximum concentration. The total number of batches in the calculation period is the sum of the numbers of batches of each fermentation stage for which emission limits apply. To calculate the 12-month percentage, do not include batches in production during periods of malfunction. In counting the number of batches in the 12-month calculation period, include those batches for which the batch monitoring period ended on or after 12 a.m. on the first day of the period and exclude those batches for which the batch monitoring period did not end on or before 11:59 p.m. on the last day of the period.

(2) You must determine the 12-month percentage at the end of each calendar month.

(3) The first 12-month calculation period begins on the compliance date that is specified for your source in § 63.2133 and ends on the last day of the month that includes the date 365 days after your compliance date, unless the

compliance date for your source is the first day of the month, in which case the first 12-month calculation period ends on the last day of the month that is 11 calendar months after the compliance date. (For example, if the compliance date for your source is October 15, 2003, the first 12-month calculation period would begin on October 15, 2003, and end on October 31, 2004. If the compliance date for your source is October 1, 2003, the first 12-month calculation period would begin on October 1, 2003, and end on September 30, 2004.)

(4) The second 12-month calculation period and each subsequent 12-month calculation period begin on the first day of the month following the first full month of the previous 12-month averaging period and end on the last day of the month 11 calendar months later. (For example, if the compliance date for your source is October 15, 2003, the second calculation period would begin on December 1, 2003 and end on November 30, 2004.)

(c) You must report each instance (that is, each 12-month calculation period) in which you did not meet each emission requirement in Table 4 to this subpart that applies to you. (Failure of a single batch to meet a concentration limit does not in and of itself constitute a failure to meet the emission limitation.) Each instance in which you failed to meet each applicable emission limitation is reported as part of the requirements in § 63.2181.

(d) During periods of malfunction, you must operate in accordance with the malfunction plan.

Notification, Reports, and Records

§ 63.2180 What notifications must I submit and when?

(a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.

(b) If you start up your affected source before May 21, 2001, you are not subject to the initial notification requirements of § 63.9(b)(2).

(c) If you are required to conduct a performance test as specified in Table 2 to this subpart, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in § 63.7(b)(1).

(d) If you are required to conduct a performance evaluation as specified in § 63.2163(b), you must submit a notification of the date of the performance evaluation at least 60 days prior to the date the performance evaluation is scheduled to begin as required in § 63.8(e)(2).

(e) If you are required to conduct a performance test or other initial compliance demonstration as specified in Table 2 or 3 to this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii) and according to paragraphs (e)(1) through (2) of this section.

(1) For each initial compliance demonstration required in Table 3 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status no later than July 31 or January 31, whichever date follows the end of the first 12 calendar months after the compliance date that is specified for your source in § 63.2133. If your initial compliance demonstration does not include a performance test, the first compliance report, described in § 63.2181(b)(1), serves as the Notice of Compliance Status.

(2) For each initial compliance demonstration required in Table 2 or 3 to this subpart that includes a performance test conducted according to the requirements in Table 2, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to § 63.10(d)(2).

§ 63.2181 What reports must I submit and when?

(a) You must submit each report in Table 5 to this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report by the date in Table 5 to this subpart and according to paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.2133 and ending on either June 30 or December 31 (use whichever date is the first date following the end of the first 12 calendar months after the compliance date that is specified for your source in § 63.2133). The first compliance report must include the percentage of within-concentration batches, as described in § 63.2171(b), for the first 12-month calculation period described in § 63.2171(b)(3). It must also include a percentage for each subsequent 12-month calculation period, as described in § 63.2171(b)(4), ending on a calendar month that falls within the first compliance period. (For example, if the compliance date for your source is October 15, 2003, the first compliance report would cover the period from October 15, 2003 to December 31, 2004. It would contain percentages for the 12-month periods ending October 31, 2004; November 30, 2004; and December 31, 2004.)

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first 12 calendar months after the compliance date that is specified for your affected source in § 63.2133.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each subsequent compliance report must include the percentage of within-concentration batches for each 12-month calculation period ending on a calendar month that falls within the reporting period. (For example, if the compliance date for your source is October 15, 2003, the second compliance report would cover the period from January 1, 2005 through June 30, 2005. It would contain percentages for the 12-month periods ending January 31, 2005; February 28, 2005; March 31, 2005; April 30, 2005; May 31, 2005; and June 30, 2005.)

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(a)(iii)(A) or 40 CFR 71.6(a)(3)(a)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information listed in paragraphs (c)(1) through (5) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) Percentage of batches that are within-concentration batches for each 12-month period ending on a calendar

month that falls within the reporting period.

(5) If you had a malfunction during the reporting period and you took actions consistent with your malfunction plan, the compliance report must include the information in § 63.10(d)(5)(i) for each malfunction.

§ 63.2182 What records must I keep?

(a) You must keep the records listed in paragraphs (a)(1) through (4) of this section. These include:

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Notification of Compliance Status and compliance report that you submitted, according to the requirements in § 63.10(b)(2)(xiv).

(2) The records in § 63.6(e)(3)(iii) through (v) related to malfunction;

(3) Records of performance tests and performance evaluations as required in § 63.10(b)(2)(viii); and

(4) Records of results of brew-to-exhaust correlation tests specified in § 63.2161.

(b) For each CEMS, you must keep the records listed in paragraphs (b)(1) through (9) of this section. These include:

(1) Records described in § 63.10(b)(2)(vi);

(2) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 30-minute averages of CEMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);

(3) Records described in § 63.10(b)(2)(viii) through (xi). The CEMS system must allow the amount of excess zero (low-level) and high-level calibration drift measured at the interval checks to be quantified and recorded;

(4) All required CEMS measurements (including monitoring data recorded during unavoidable CEMS breakdowns and out-of-control periods);

(5) Identification of each batch during which the CEMS was inoperative, except for zero (low-level) and high-level checks;

(6) Identification of each batch during which the CEMS was out of control, as defined in § 63.2163(k);

(7) Previous (i.e., superseded) versions of the performance evaluation plan as required in § 63.8(d)(3);

(8) Request for alternatives to relative accuracy test for CEMS as required in § 63.8(f)(6)(i); and

(9) Records of each batch for which the batch-average VOC concentration exceeded the applicable maximum VOC concentration in Table 1 to this subpart and whether the batch was in production during a period of malfunction or during another period.

(c) You must keep the records required in Table 4 to this subpart to show continuous compliance with each emission limitation that applies to you.

(d) You must also keep the records listed in paragraphs (d)(1) through (3) of this section for each batch in your affected source.

(1) Unique batch identification number.

(2) Fermentation stage for which you are using the fermenter.

(3) Unique CEMS equipment identification number.

§ 63.2183 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1).

(b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§ 63.2190 What parts of the General Provisions apply to me?

Table 6 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.13 apply to you.

§ 63.2191 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are as listed in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the non-opacity emission limitations in § 63.2140 under § 63.6(g).

(2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.

(3) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.

(4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

§ 63.2192 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in 40 CFR 63.2, the General Provisions of this part, and in this section as follows:

Batch means a single fermentation cycle in a single fermentation vessel (fermenter).

Batch monitoring period means the period that begins at the later of either the start of aeration or the addition of yeast to the fermenter; the period ends at the earlier of either the end of aeration or the point at which the yeast has begun being emptied from the fermenter.

Brew means the mixture of yeast and additives in the fermenter.

Brew ethanol means the ethanol in fermenter liquid.

Brew ethanol monitor means the monitoring system that you use to measure brew ethanol to demonstrate compliance with this subpart. The monitoring system includes a resistance element used as an ethanol sensor, with the measured resistance proportional to the concentration of ethanol in the brew.

Brew-to-exhaust correlation means the correlation between the concentration of ethanol in the brew and the concentration of VOC in the fermenter exhaust. This correlation is specific to each fed-batch fermentation stage and is established while manufacturing the product that comprises the largest percentage (by mass) of average annual production.

Emission limitation means any emission limit or operating limit.

Fed-batch means the yeast is fed carbohydrates and additives during fermentation in the vessel. In contrast, carbohydrates and additives are added to ''set-batch'' fermenters only at the start of the batch.

1-hour period means any 60-minute period commencing on the minute at which the batch monitoring period begins.

Product means the yeast resulting from the final stage in a production run. Products are distinguished by yeast species, strain, and variety.

Responsible official means responsible official as defined in 40 CFR 70.2.

Specialty yeast includes but is not limited to yeast produced for use in wine, champagne, whiskey, and beer.

Within-concentration batch means a batch for which the average VOC concentration is not higher than the maximum concentration that is allowed as part of the applicable emission limitation.

Tables

As stated in § 63.2140, you must comply with the emission limitations in the following table:

TABLE 1 TO SUBPART CCCC.—EMISSION LIMITATIONS

For each fed-batch fermenter producing yeast in the following fermentation stage . . .	You must meet the following emission limitation . . .
Last stage (Trade); or Second-to-last stage (First Generation); or Third-to-last stage (Stock).	a. For at least 98 percent of all batches (sum of batches from last, second-to-last, and third-to-last stages) in each 12-month calculation period described in § 63.2171(b), the VOC concentration in the fermenter exhaust does not exceed the applicable maximum concentration (100 ppmv for last stage, 200 ppmv for second-to-last stage, or 300 ppmv for third-to-last stage), measured as propane, and averaged over the duration of a batch. b. The emission limitation does not apply during the production of specialty yeast.

As stated in § 63.2161, if you demonstrate compliance by monitoring brew ethanol, you must comply with the requirements for performance tests in the following table:

TABLE 2 TO SUBPART CCCC.—REQUIREMENTS FOR PERFORMANCE TESTS

[Brew Ethanol Monitoring Only]

For each fed-batch fermenter for which compliance is determined by monitoring brew ethanol concentration and calculating VOC concentration in the fermenter exhaust according to the procedures in § 63.2161, you must . . .	Using . . .	According to the following requirements . . .
1. Measure VOC as propane	Method 25A*, or an alternative validated by EPA Method in the 301* and approved by the Administrator.	You must measure the VOC concentration in the fermenter exhaust at any point prior to dilution of the exhaust stream.
2. Select the sampling port's location and the number of traverse points.	Method 1*	
3. Measure volumetric flow rate.	Method 2*	
4. Perform gas analysis to determine the dry molecular weight of the stack gas.	Method 3*	
5. Determine moisture content of the stack gas	Method 4*	

*EPA Test Methods found in appendix A of 40 CFR part 60.

As stated in § 63.2165 (if you monitor fermenter exhaust) and § 63.2166 (if you monitor brew ethanol), you must comply with the requirements to demonstrate initial compliance with the applicable emission limitations in the following table:

TABLE 3 TO SUBPART CCCC.—INITIAL COMPLIANCE WITH EMISSION LIMITATIONS

For . . .	For the following emission limitation . . .	You have demonstrated initial compliance if . . .
1. Each fed-batch fermenter producing yeast in a fermentation stage (last Trade), second-to-last (First Generation), or third-to-last (Stock)) for which compliance is determined by monitoring VOC concentration in the fermenter exhaust.	The VOC concentration in the fermenter exhaust, averaged over the duration of the batch, does not exceed the applicable maximum concentration (100 ppmv for last stage, 200 ppmv for second-to-last stage, or 300 ppmv for third-to-last stage), measured as propane..	a. You reduce the CEMS data batch averages according to § 63.2163(g). b. The average VOC concentration in the fermenter exhaust for at least 98 percent of the batches (sum of batches from last, second-to-last, and third-to-last stages) during the initial compliance period described in § 63.2160(a) does not exceed the applicable maximum concentration.
2. Each fed-batch fermenter producing yeast in a fermentation stage (last (Trade), second-to-last (First Generation), or third-to-last (Stock)) for which compliance is determined by monitoring brew ethanol concentration and calculating VOC concentration in the fermenter exhaust according to the procedures in § 63.2161.	The VOC concentration in the fermenter exhaust, averaged over the duration of the batch, does not exceed the applicable maximum concentration (100 ppmv for last stage, 2000 ppmv for second-to-last stage, or 300 ppmv for third-to-last stage), measured as propane.	a. The VOC fermenter exhaust concentration over the period of the Method 25A* performance test does not exceed the applicable maximum concentration. b. You have a record of the brew-to-exhaust correlation during the Method 25A* performance test during which the VOC fermenter exhaust concentration did not exceed the applicable maximum concentration.

* EPA Test Method in appendix A of 40 CFR part 60.

As stated in § 63.2171, you must comply with the requirements to demonstrate continuous compliance with the applicable emission limitations in the following table:

TABLE 4 TO SUBPART CCCC.—CONTINUOUS COMPLIANCE WITH EMISSION LIMITATIONS

For . . .	For the following emission limitation . . .	You must demonstrate continuous compliance by . . .
1. Each fed-batch fermenter producing yeast in a fermentation stage (last (Trade), second-to-last (First Generation), or third-to-last (Stock)) for which compliance is determined by monitoring VOC concentration in the fermenter exhaust.	For at least 98 percent of all batches (sum of batches from last, second-to-last, and third-to-last stages) in each 12-month calculation period described in § 63.2171(b), the VOC concentration in the fermenter exhaust, averaged over the duration of the batch, does not exceed the applicable maximum concentration (100 ppmv for last stage, 200 ppmv for second-to-last stage, or 300 ppmv for third-to-last stage), measured as propane.	a. Collecting the monitoring data according to § 63.2163(f). b. Reducing the data according to § 63.2163(g). c. For at least 98 percent of the batches (sum of batches from last, second-to-last, and third-to-last stages) for each 12-month period ending within a semiannual reporting period described in § 63.2181(b)(3), the batch average VOC concentration in the fermenter exhaust does not exceed the applicable maximum concentration.
2. Each fed-batch fermenter producing yeast in a fermentation stage (last (Trade), second-to-last (First Generation), or third-to-last (Stock)) for which compliance is determined by monitoring brew ethanol concentration and calculating VOC concentration in the fermenter exhaust according to the procedures in § 63.2161.	.For at least 98 percent of all batches (sum of batches from last, second-to-last, and third-to-last stages) in each 12-month calculation period described in § 63.2171(b), the VOC concentration in the fermenter exhaust, averaged over the duration of the batch, does not exceed the applicable maximum concentration (100 ppmvc for last stage, 200 ppmv for second-to-last stage, or 300 ppmv for third-to-last stage), measured as propane.	a. Collecting the monitoring data according to § 63.2164(b). b. Reducing the data according to § 63.2164(c). c. For at least 98 percent of the batches (sum of batches from last, second-to-last, and third-to-last stages) for each 12-month period ending within a semiannual reporting period described in § 63.2181(b)(3), the batch average VOC concentration in the fermenter exhaust does not exceed the applicable maximum concentration.

As stated in § 63.2181, you must submit a compliance report that contains the information in § 63.2181(c) as well as the information in the following table; you must also submit malfunction reports according to the requirements in the following table:

TABLE 5 TO SUBPART CCCC.—REQUIREMENTS FOR REPORTS

You must submit a(n)	The report must contain . . .	You must submit the report . . .
1. Compliance report	a. Your calculated percentage of within-concentration batches, as described in § 63.2171(b), for 12-month calculation periods ending on each calendar month that falls within the reporting period.	Semiannually according to the requirements in § 63.2181(b).
	b. If you had a malfunction during the reporting period and you took actions consistent with your malfunction plan, the compliance report must include the information in § 63.10(d)(5)(i).	Semiannually according to the requirements in § 63.2181(b).
2. Immediate malfunction report if you had a malfunction during the reporting period that is not consistent with your malfunction plan.	a. Actions taken for the event	By fax or telephone within 2 working days after starting actions inconsistent with the plan.
	b. The information in § 63.10(d)(5)(ii)	By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority (§ 63.10(d)(5)(ii)).

As stated in § 63.2190, you must comply with the applicable General Provisions requirements according to the following table:

TABLE 6 TO SUBPART CCCC.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART CCCC

Citation	Subject	Applicable to subpart CCCC?
§ 63.1	Applicability	Yes.
§ 63.2	Definitions	Yes.
§ 63.3	Units and Abbreviations	Yes.
§ 63.4	Prohibited Activities and Circumvention	Yes.
§ 63.5	Construction and Reconstruction	Yes.
§ 63.6	Compliance With Standards and Maintenance Requirements.	1. For § 63.6(e) and (f), requirements for startup, shutdown, and malfunctions apply only to malfunctions. 2. § 63.6(h) does not apply. 3. Otherwise, all apply.

TABLE 6 TO SUBPART CCCC.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART CCCC—Continued

Citation	Subject	Applicable to subpart CCCC?
§ 63.7	Performance Testing Requirements	1. § 63.7(a)(1)–(2) and (e)(3) do not apply, instead specified in this subpart. 2. Otherwise, all apply.
§ 63.8	Monitoring Requirements	1. § 63.8(a)(2) is modified by § 63.2163. 2. § 63.8(a)(4) does not apply. 3. For § 63.8(c)(1), requirements for startup, shutdown, and malfunctions apply only to malfunctions, and no report pursuant to § 63.10(d)(5)(i) is required. 4. For § 63.8(d), requirements for startup, shutdown, and malfunctions apply only to malfunctions. 5. § 63.8(c)(4)(i), (c)(5), (e)(5)(ii), and (g)(5), do not apply. 6. § 63.8(c)(4)(ii), (c)(6)–(8), (e)(4), and (g)(1)–(4) do not apply, instead specified in this subpart. 7. Otherwise, all apply.
§ 63.9	Notification Requirements	1. § 63.9(b)(2) does not apply because rule omits requirements for initial notification for sources that start up prior to May 21, 2001 2. § 63.9(f) does not apply. 3. Otherwise, all apply.
§ 63.10	Recordkeeping and Reporting Requirements	1. For § 63.10(b)(2)(i)–(v), (c)(9)–(15), and (d)(5), requirements for startup, shutdown, and malfunctions apply only to malfunctions. 2. § 63.10(b)(2)(vii) and (c)(1)–(6) do not apply, instead specified in this subpart. 3. § 63.10(c)(7)–(8), (d)(3), (e)(2)(ii)–(4), (e)(3)–(4) do not apply. 4. Otherwise, all apply.
§ 63.11	Flares	No.
§ 63.12	Delegation	Yes.
§ 63.13	Addresses	Yes.
§ 63.14	Incorporation by Reference	Yes.
§ 63.15	Availability of Information	Yes.

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FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 61

[CC Docket No. 96–262; FCC 01–146]

Access Charge Reform; Reform of Access Charges Imposed by Competitive Local Exchange Carriers

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this document, we limit the application of our tariff rules to CLEC access services in order to prevent use of the regulatory process to impose excessive access charges on IXCs and their customers. Under the detariffing regime we adopt, CLEC access rates that are at or below the benchmark that we set will be presumed to be just and reasonable and CLECs may impose them by tariff. Above the benchmark, CLEC access services will be mandatorily detariffed, so CLECs must negotiate higher rates with the IXCs. We also adopt a rural exemption to our benchmark scheme, recognizing that a higher level of access charges is justified for certain CLECs serving truly rural areas. To avoid too great a disruption for competitive carriers, we implement the benchmark in a way that will cause CLEC rates to decrease over time until they reach the rate charged by the incumbent LEC. We also make clear that an IXC's refusal to serve the customers of a CLEC that tariffs access rates within our safe harbor, when the IXC serves ILEC end users in the same area, generally constitutes a violation of the duty of all common carriers to provide service upon reasonable request.

DATES: Effective June 20, 2001.

FOR FURTHER INFORMATION CONTACT: Jeffrey H. Dygert, Common Carrier Bureau, (202) 418–1500.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Seventh Report and Order in CC Docket No. 96–262, released on April 27, 2001. The full text of this document is available for public inspection during regular business hours in the FCC Reference Center, Room CY–A257, 445 Twelfth Street, SW., Washington, D.C., 20554.

I. Introduction

1. By this order, we seek to ensure, by the least intrusive means possible, that CLEC access charges are just and reasonable. Specifically, we limit the application of our tariff rules to CLEC access services in order to prevent use of the regulatory process to impose excessive access charges on IXCs and their customers. Previously, certain CLECs have used the tariff system to set access rates that were subject neither to negotiation nor to regulation designed to ensure their reasonableness. These CLECs have then relied on their tariff to demand payment from IXCs for access services that the long distance carriers likely would have declined to purchase at the tariffed rate.

2. Under the detariffing regime we adopt, CLEC access rates that are at or below the benchmark that we set will be presumed to be just and reasonable and CLECs may impose them by tariff. Above the benchmark, CLEC access services will be mandatorily detariffed, so CLECs must negotiate higher rates with the IXCs. During the pendency of negotiations, or if the parties cannot agree, the CLEC must charge the IXC the appropriate benchmark rate. We also adopt a rural exemption to our

Federal Register

Thursday,
April 11, 2002

Part III

Environmental Protection Agency

40 CFR Part 63

National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[FRL–7163–3]

RIN 2060–AH89

National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule and notice of revisions to list of categories of major and area sources and to the promulgation schedule for standards.

SUMMARY: This action adds wet-formed fiberglass mat production to the list of categories of major sources of hazardous air pollutants (HAP) published under section 112(c) of the Clean Air Act (CAA) and to the source category schedule for national emission standards for hazardous air pollutants (NESHAP).

This action promulgates the NESHAP for new and existing sources at wet-formed fiberglass mat production facilities. The primary organic HAP emitted by these facilities are formaldehyde, methanol, and vinyl acetate. Exposure to these HAP can cause reversible or irreversible adverse health effects including carcinogenic, respiratory, nervous system, developmental, reproductive, and/or dermal health effects. These NESHAP will reduce nationwide emissions of HAP from the drying and curing ovens at these facilities by 199 megagrams per year (Mg/yr) (219 tons per year or tons/yr), an approximate 74 percent reduction from the current level of emissions.

These NESHAP are based on the Administrator's determination that wet-formed fiberglass mat production facilities emit several of the 188 HAP listed in the CAA from the various process operations found within the industry, and that these facilities can be major sources of HAP. These NESHAP will protect the public by requiring all wet-formed fiberglass mat production facilities that are major sources to meet HAP emission standards reflecting the application of the maximum achievable control technology (MACT).

EFFECTIVE DATE: April 11, 2002. The incorporation by reference of certain publications listed in the subpart is approved by the Director of the Federal Register as of April 11, 2002.

ADDRESSES: *Docket.* Docket No. A–97–54 contains the information considered by EPA in developing this rule. This docket is located at the U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center, 401 M Street, SW., Room M–1500, Waterside Mall, Washington, DC 20460 and may be inspected from 8 a.m. to 5:30 p.m., Monday through Friday, excluding legal holidays.

FOR FURTHER INFORMATION CONTACT: For information concerning the final rule, contact Mr. Juan Santiago, Minerals and Inorganic Chemicals Group, Emission Standards Division (MD–13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541–1084, e-mail address: *santiago.juan@epa.gov.* For information regarding Method 316 or Method 318, contact Ms. Rima N. Howell; Emissions, Monitoring, and Analysis Division (MD–19); U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541–0443, e-mail address: *howell.rima@epa.gov.*

SUPPLEMENTARY INFORMATION: *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 process. 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 CAA.) The regulatory text and other materials related to this rulemaking are available for review in the docket or copies may be mailed on request from the Air and Radiation Docket and Information Center by calling (202) 260–7548. A reasonable fee may be charged for copying docket materials.

Worldwide Web (WWW). In addition to being available in the docket, an electronic copy of this notice will be available on the WWW through the Technology Transfer Network (TTN). Following signature, a copy of the notice will be posted on the TTN's policy and guidance page at *http://www.epa.gov/ttn/oarpg.* 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.

Regulated Entities. Entities potentially regulated by this action are those industrial facilities that manufacture wet-formed fiberglass mat. Wet-formed fiberglass mat production is classified under Standard Industrial Classification (SIC) code 3229325; the NAICS code is 327212, Non-woven Fabric Mills. Regulated categories and entities are shown in table 1. This table is not intended to be exhaustive, but provides a guide for readers regarding entities likely to be regulated by the final rule. This table lists the types of entities that EPA is now aware could potentially be regulated by the final rule. To determine whether your facility would be regulated by the final rule, carefully examine the applicability criteria in § 63.2981 of the final rule. If there are any questions regarding the applicability of this action to a particular entity, consult Mr. Juan Santiago (See **FOR FURTHER INFORMATION CONTACT**).

TABLE 1.—REGULATED CATEGORIES AND ENTITIES

Category	SIC/NAICS	Description
Industrial	3229325/327212	Wet-formed fiberglass mat production facilities.

Judicial Review. These NESHAP for wet-formed fiberglass mat production facilities were proposed on May 26, 2000 (65 FR 34278). This action announces EPA's final decisions on the rule. Under section 307(b)(1) of the CAA, 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 April 11, 2002. Under section 307(b)(2) of the CAA, the requirements that are the subject of today's final action may not be challenged later in civil or criminal proceedings brought by EPA to enforce these requirements.

Organization of this Document. The information in this preamble is organized as follows:

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I. Background

A. Regulatory Background and Addition to Source Category List

Section 112(c) of the CAA directs us to list each category of major and area sources, as appropriate, that emits one or more of the 188 HAP listed in section 112(b) of the CAA. The term ''major source'' is defined in section 112(a)(1) to mean:

* * * any stationary source or group of stationary sources located within a contiguous area under common control that emits or has the potential to emit, considering controls, in the aggregate 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants * * *.

We published an initial list of source categories on July 16, 1992 (57 FR 31576). Included on the initial source category list were major sources of HAP emissions from the asphalt roofing and processing industry.

As stated in the preamble to the proposed rule (65 FR 34279; May 26, 2000), during development of the asphalt roofing and processing NESHAP, industry representatives informed us of the existence of the wet-formed fiberglass mat production industry and its relationship to the asphalt roofing production industry. We proposed separate NESHAP for wet-formed fiberglass mat production because the production processes and pollutant emissions differ from those in the asphalt roofing industry. In addition, wet-formed fiberglass mat is produced at both stand-alone facilities and those collocated with asphalt roofing and processing facilities. The CAA provides that we may amend the source category list anytime. Consequently, we proposed adding wet-formed fiberglass mat production to the source category list under section 112(c) of the CAA.

Wet-formed fiberglass mat is the substrate for several asphalt roofing products. In wet-formed fiberglass mat production, glass fibers are bonded with an organic resin. The mat is formed as the resin is dried and cured in heated ovens. The majority of HAP emissions associated with wet-formed fiberglass mat production are emitted from the drying and curing oven exhaust. Based on HAP emission data obtained during the development of the rule, we have determined that all wet-formed fiberglass mat production facilities are major sources of HAP. Nine of the 14 facilities (10 of the 15 production lines) control the drying and curing oven exhaust emissions. Several of the five remaining facilities that do not control the drying and curing oven exhaust are also major sources of HAP.

We received no public comments that were opposed to adding wet-formed fiberglass mat facilities to the source category list. Therefore, today's action adds wet-formed fiberglass mat production to the list of source categories under section 112(c) of the CAA for which MACT standards are to be developed. Section 112(c)(5) requires that final standards for this source category be promulgated no later than May 26, 2002 (2 years after adding the source category to the list). Today's action satisfies that requirement.

B. What Is the Source of Authority for Development of NESHAP?

Section 112 of the CAA requires us to promulgate standards for the control of HAP emissions from each source category listed under section 112(c). The statute requires the standards to reflect the maximum degree of reduction in emissions of HAP that is achievable taking into consideration the cost of achieving the emission reduction, any non-air quality health and environmental impacts, and energy requirements. This level of control is commonly referred to as MACT. The MACT standards can be based on the emission reductions achievable through application of measures, processes, methods, systems, or techniques including, but not limited to: (1) Reducing the volume of, or eliminating emissions of, such pollutants through process changes, substitution of materials, or other modifications; (2) enclosing systems or processes to eliminate emissions; (3) collecting, capturing, or treating such pollutants when released from a process, stack, storage, or fugitive emissions point; (4) design, equipment, work practice, or operational standards (including requirements for operator training or certification) as provided in section 112(h) of the CAA; or (5) a combination of the above (see section 112(d)(2) of the CAA).

For new sources, MACT standards cannot be less stringent than the emission control achieved in practice by the best-controlled similar source (see section 112(d)(3) of the CAA). The MACT standards for existing sources can be less stringent than standards for new sources. However, they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources for categories and subcategories with 30 or more sources, or the best-performing five sources for categories or subcategories with fewer than 30 sources.

The MACT floor is the minimum control level allowed for NESHAP and is defined under section 112(d)(3) of the CAA. In essence, MACT standards are designed to 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 or subcategory. This approach provides assurance to the public that each major source of toxic air pollution will be required to effectively control its emissions. At the same time, this

approach provides a level economic playing field, ensuring that facilities that employ cleaner processes and good emission controls are not disadvantaged relative to competitors with poorer controls.

In developing MACT, we also consider control options that are more stringent than the floor. We may establish standards more stringent than the floor based on consideration of the cost of achieving the emission reductions, any non-air quality health and environmental impacts, and energy requirements.

C. What Are the Health Effects of Pollutants Emitted From This Source Category?

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'' (see section 101(b) of the CAA). These NESHAP will protect public health by reducing emissions of HAP from wet-formed fiberglass mat production facilities.

Emission data collected during development of the NESHAP show that formaldehyde, vinyl acetate, and methanol are emitted from wet-formed fiberglass mat production facilities. The emission limits in these NESHAP will reduce emissions of these pollutants emitted from drying and curing ovens. As a result of controlling these HAP, the final NESHAP will also reduce emissions of volatile organic compounds (VOC). A summary of the potential health effects caused by exposure to these pollutants is presented in the preamble to the proposed rule (65 FR 34280; May 26, 2000).

D. Stakeholder and Public Participation

Various stakeholders were involved in the development of these standards. Individual wet-formed fiberglass mat production facilities and the Technical Association of the Pulp and Paper Industry (TAPPI) were consulted throughout the development of these standards. Representatives from State and Regional enforcement agencies, as well as representatives from other offices within EPA, participated in the regulatory development process by reviewing and commenting on the standards during development.

The NESHAP for wet-formed fiberglass mat production (40 CFR part 63, subpart HHHH) was proposed in the **Federal Register** on May 26, 2000 (65 FR 34278). The public comment period ended on July 25, 2000. Industry representatives, regulatory authorities, and environmental groups had the opportunity to comment on the proposed NESHAP and to provide additional information during the public comment period. Although the Agency offered the opportunity at proposal for oral presentation of data, views, or arguments concerning the proposed rule, no one requested a hearing and, therefore, a hearing was not held. The EPA received five letters containing comments on the proposed NESHAP from various groups including a State university and two trade associations representing industry. These final NESHAP reflect EPA's full consideration of the comments. The major public comments, along with EPA's responses to these comments on the proposed rule, are summarized in this preamble. A discussion of all public comments and EPA's responses is contained in the docket.

II. What Are the Requirements of These NESHAP?

A. Do These NESHAP Apply to Me?

These NESHAP apply to you if you own or operate an existing or newly constructed or reconstructed drying and curing oven located at a wet-formed fiberglass mat production facility that is a major source of HAP or that is collocated with a major source of HAP emissions. A major source means any source that has the potential to emit 10 tons/yr or more of any one HAP or 25 tons/yr or more of any combination of HAP.

You would not be subject to the NESHAP if your facility is determined to be an area source. An area source of HAP is any facility that is not a major source as defined in 40 CFR part 63, subpart A.

B. What Emission Limits Must I Meet?

These NESHAP regulate emissions of formaldehyde as a surrogate for total HAP emissions. Control of formaldehyde by thermal oxidation will also result in control of vinyl acetate and methanol. You must meet either a mass HAP emission limit or percentage reduction requirement for each drying and curing oven. The HAP emission limits are the same for new and existing drying and curing ovens. The HAP emission limits for the exhaust from new and existing drying and curing ovens are a maximum formaldehyde emission rate of 0.03 kilograms per megagram (kg/Mg) of wet-formed fiberglass mat produced (0.05 pounds per ton (lb/ton) of wet-formed fiberglass mat produced) or a minimum of 96 percent destruction efficiency of formaldehyde (as shown in Table 2). You can choose to comply with either the emission rate limit or the percent reduction requirement. If you use a thermal oxidizer or other control device to achieve the mass emission limit or percentage reduction requirement, you must collect and convey the emissions from each drying and curing oven to the control device according to the procedures specified in chapters 3 and 5 of ''Industrial Ventilation: A Manual of Recommended Practice.'' Section 63.3003 of the rule explains how to obtain a copy of this reference.

TABLE 2.—SUMMARY OF EMISSION LIMITS FOR NEW AND EXISTING DRYING AND CURING OVENS AT WET-FORMED FIBERGLASS MAT MANUFACTURING PLANTS

Process	Emission limit
Each existing and new drying and curing oven.	0.03 kg of formaldehyde per Mg of fiberglass mat (0.05 lb of formaldehyde per ton of fiberglass mat) or 96 percent reduction of formaldehyde.

C. What Operating Limits Must I Meet?

In addition to the emission limits, the final NESHAP contain specific operating limits, summarized in Table 3. The operating limits require you to maintain certain process or control device parameters within the levels established during the initial performance test. All operating limits must reflect operation of the process and control device during a performance test that demonstrates achievement of the emission limit during operating conditions that would achieve the highest potential emission rate.

TABLE 3.—SUMMARY OF OPERATING LIMITS FOR NEW AND EXISTING AFFECTED SOURCES

Affected source	Parameter, operation, or process to monitor	Operating limits
Each affected drying and curing oven (regardless of control technology).	Resin free-formaldehyde content, and	Use a resin with a free-formaldehyde content no greater than that of the resin used during the performance test, as determined by the resin purchase specification or test method.
	Application rate of urea-formaldehyde resin solids, and	Do not exceed the urea-formaldehyde resin solids application rate achieved during the performance test.
	Corrective action	Initiate corrective action within 1 hour of an established operating parameter deviation and complete and document action per operation, maintenance and monitoring plan.
Each affected drying and curing oven controlled by a thermal oxidizer.	Thermal oxidizer operating temperature, and	Maintain the average temperature for each 3-hour period at or above the average operating temperature achieved during the performance test.
	Thermal oxidizer operation	Operate the thermal oxidizer in accordance with the operation, maintenance, and monitoring plan; annually inspect the thermal oxidizer for structural and design integrity.
Each affected drying and curing oven controlled by process modifications or a control device other than a thermal oxidizer.	Process or control device parameters.	Maintain the process or control device parameter within the ranges established during the performance test.

You must also prepare an operation, maintenance, and monitoring (OMM) plan. The OMM plan must specify the parameters that must be monitored, how they will be monitored, the operating limits, and the corrective actions that must be followed whenever a monitored parameter deviates from the operating limits. The OMM plan shall be incorporated by reference into your title V permit.

Following the performance test, whenever you detect that a monitored parameter deviates from the established operating limits, you must initiate the corrective actions specified in the OMM plan within 1 hour. You must complete the corrective actions in an expeditious manner and implement them as specified in your OMM plan.

If you use a thermal oxidizer to achieve compliance with the emission limits, you must operate the thermal oxidizer so that the average operating temperature in any 3-hour block period does not fall below the average temperature established during the performance test. Additionally, an annual inspection of the thermal oxidizer is required to ensure that the structural and design integrity of the combustion chamber is maintained in the same condition as during the performance test. If you use process modifications or an add-on control device other than a thermal oxidizer to achieve compliance with the emission standards, you must maintain the process or control device parameter(s) within the operating limits that you established during the performance test. In addition, you must receive EPA Administrator approval for the alternative monitoring. You must also include the alternative monitoring and alternative operating limits in your OMM plan, which is incorporated by reference into your title V permit.

The operating limits also require you to maintain the free-formaldehyde content of the resin and the urea-formaldehyde resin solids application rate within the levels you established during a compliance test and as specified in your OMM plan. These operating limits apply regardless of which type of control you use to comply with the HAP emission limits.

D. What Are the Performance Test and Initial Compliance Provisions of These NESHAP?

You must conduct a performance test to demonstrate initial compliance with the emission limits. The performance test must be performed initially and every 5 years following the initial performance test. A performance test is also required to change the value or range of an operating limit. Under the final NESHAP, you must conduct the performance test while operating at the maximum urea-formaldehyde resin solids application rate and using the resin with the highest free-formaldehyde content. You must measure formaldehyde emissions as the average of three test runs using EPA Method 316 in appendix A of 40 CFR part 63, ''Sampling and Analysis for Formaldehyde from Stationary Sources in the Mineral Wool and Wool Fiberglass Industries'' or EPA Method 318 in appendix A of 40 CFR part 63, ''Extractive FTIR Method for the Measurement of Emissions from the Mineral Wool and Wool Fiberglass Industries.'' You must demonstrate compliance with either the mass emission limit or the percentage reduction requirement using the instructions and equations contained in the performance test requirements section of these final NESHAP.

If you use a thermal oxidizer to comply with these NESHAP, you must conduct a performance evaluation for the thermal oxidizer temperature monitoring device prior to the initial performance test to determine compliance. The evaluation must be conducted according to the procedures in 40 CFR 63.8(e) of the NESHAP general provisions. The temperature monitoring device must meet the following performance and equipment specifications: (1) The temperature monitoring device must be installed either at the exit of the combustion zone of each thermal oxidizer or at the location specified by the manufacturer, and the device must be installed in a location before any heat recovery or heat exchange equipment; (2) the recorder response range must include zero and 1.5 times the average temperature; and (3) the reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or an alternate reference, subject to the approval of the Administrator.

During the performance tests, you must continuously monitor the thermal oxidizer operating temperature and record the average temperature in 15-minute blocks during each 1-hour test run. After completion of the three required test runs, you must determine the 3-hour average operating temperature of the thermal oxidizer. If you use process modifications or an add-on control device other than a thermal oxidizer to comply with the emission limits, you must determine the

appropriate control device or process parameters to monitor to indicate whether compliance is being achieved. You must include the process or control device parameters, monitoring frequency, and the averaging periods in your site-specific test plan required by the 40 CFR part 63 general provisions prior to conducting your initial performance test. You may perform multiple tests to establish the least restrictive value or operating range for the selected parameters that still demonstrate compliance.

During the performance tests, you must also determine and record the average hourly urea-formaldehyde resin solids application rate during each of the three test runs and the free-formaldehyde content of the resin used to produce the mat.

The final NESHAP allow facilities subject to the NESHAP to conduct short-term experimental production runs, where the resin free-formaldehyde content or urea-formaldehyde resin solids application rate deviate from the levels established during previous performance tests, without conducting additional performance tests. You must apply for approval from the Administrator or delegated State agency to conduct such experimental production runs. The application must be made at least 30 days prior to conducting the run. The application would include information on the nature and duration of the test runs including plans to perform emissions testing. If you conduct such experimental production runs without first receiving approval from the Administrator or delegated State agency, then you must conduct a performance test under those same experimental run conditions to show that you were in compliance with the formaldehyde emission limit or percent reduction.

E. What Monitoring Requirements Must I Meet?

Continuous compliance is demonstrated after the initial performance test and between subsequent performance tests by monitoring operating parameters of emission control devices and processes. The allowable monitoring parameter values or ranges are determined during your initial performance test and must be included in your OMM plan.

If you use a thermal oxidizer to achieve compliance with the emission limits, you must: (1) Install, operate, calibrate, and maintain a device that continuously measures the operating temperature of each thermal oxidizer; and (2) determine and record the temperature in 15-minute and 3-hour block averages. This is typically done using a thermocouple (a standard feature on most thermal oxidizers) and a data logger.

If process modifications or a control device other than a thermal oxidizer is used to achieve compliance with the emission limits, you must monitor the parameters that were established during the performance test and included in your OMM plan.

You are also required to record the urea-formaldehyde-to-latex ratio in the binder, measure the loss-on-ignition value using the method in Appendix B to 40 CFR part 63, subpart HHHH, measure the weight per square of the wet-formed fiberglass mat produced and the hourly mat production rate, and calculate the urea-formaldehyde resin solids content of the product manufactured. The values of these parameters are determined in order to calculate the hourly average urea-formaldehyde resin solids application rate. You must also determine the free-formaldehyde content of the urea-formaldehyde resins using either the method in Appendix A to 40 CFR part 63, subpart HHHH, or the material supplier's documentation. Because these process parameters affect the amount of HAP emitted from the drying and curing oven, you must monitor them to ensure that operation of the production process is consistent with the conditions of the performance test, and that the production process does not vary in such a way as to increase HAP emissions from the drying and curing oven exhaust.

The final NESHAP contain provisions that allow you to change the thermal oxidizer operating temperature, operating parameters for add-on control devices other than thermal oxidizers, and process operating parameter values from those established using the initial and 5-year performance tests. These provisions allow you to make process changes or to demonstrate that different monitoring parameter values would more appropriately demonstrate compliance with the final emission limits. You may revise the monitoring or process parameter values by conducting additional performance tests to verify compliance at the revised operating levels. For example, if you intend to use a urea-formaldehyde resin with a higher free-formaldehyde content or operate at a higher urea-formaldehyde resin solids application rate, you must perform additional performance tests to verify compliance under conditions of the increased operating or process parameters. You must notify the Administrator in writing of your intention to conduct these additional performance tests and follow the procedures in 40 CFR 63.7.

F. What Are the Notification, Recordkeeping, and Reporting Requirements of These NESHAP?

All notification, recordkeeping, and reporting requirements in the 40 CFR part 63 general provisions, as well as additional requirements, apply to wet-formed fiberglass mat manufacturing facilities. The notification and reporting requirements include, but are not limited to: (1) Initial notification of applicability of the rule, notification of the dates for conducting the performance test, and notification of compliance status including the measured range of each monitored parameter and the operating limits established during the performance test; (2) a report of performance test results; (3) periodic reports of any startup, shutdown, and malfunction events that occur; and (4) semiannual reports of deviations and continuous monitoring system performance. A deviation is any instance when any requirement or obligation established by the rule including, but not limited to, the emission limits and operating limits, is not met. If no deviations occur during a semiannual reporting period, you must submit a semiannual report stating that the affected source has been in continuous compliance during that period. If deviations from established monitoring parameters occur, the frequency of submitting the semiannual reports becomes quarterly until a request to return to semiannual reporting is approved by the Administrator. You cannot submit the request to reduce the frequency of the reporting period until the affected source's reports of deviations and continuous monitoring system performance remain continually within the established parameter ranges for 1 full year.

When using a thermal oxidizer or other control device to reduce HAP emissions, you will have to make your startup, shutdown, and malfunction plan available for inspection if the Administrator requests to see it, but you do not have to submit it to the Administrator for approval. You must keep the plan for the life of the affected source or until the source is no longer subject to the rule. If you revise the plan, you must keep the previous superseded versions on record for 5 years following the revision.

You must maintain records of the following, as applicable: (1) All results of performance tests; (2) thermal oxidizer operating temperature; (3) process parameters for drying and

curing ovens that comply with the emission limits using process modifications or an add-on control device other than a thermal oxidizer; (4) free-formaldehyde content of the resin; (5) urea-formaldehyde-to-latex ratio; (6) loss-on-ignition value of the wet-formed fiberglass mat produced; (7) urea-formaldehyde resin solids content per ton of the wet-formed fiberglass mat produced; (8) weight of the mat per roofing square; (9) average hourly wet-formed fiberglass mat production rate; (10) for operating parameter deviations, the date, time, and duration of each deviation, the date and time corrective actions were initiated and completed, a brief description of the cause of the deviation, and a description of the corrective actions taken to return the parameter to the limit or within the range established in the OMM plan and during the most recent performance test; (11) the OMM plan; (12) the occurrence and duration of each startup, shutdown, or malfunction of the control device; (13) actions taken during startup, shutdown, and malfunction that are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan; (14) maintenance and inspections performed on control devices; and (15) any other information required to be recorded by the general provisions.

The NESHAP general provisions require that records be maintained for at least 5 years from the date of each record. You must retain the records onsite for at least 2 years but you may retain the records offsite for the remaining 3 years. The records must be readily available and in a form suitable for efficient inspection and review. The files may be retained on paper, microfilm, microfiche, a computer, computer disks, or magnetic tape. Reports may be made on paper or on a labeled computer disk using commonly available and compatible computer software.

III. What Are the Impacts of These NESHAP?

A. What Are the Air Emission Impacts?

At the current level of control, nationwide emissions of HAP from the 14 facilities in the industry are estimated to be approximately 268 Mg/yr (295 tons/yr). Under the final NESHAP, it is expected that thermal oxidizers will be added to the five uncontrolled drying and curing ovens, and that existing thermal oxidizers will be replaced with new units for three out of the ten controlled drying and curing ovens. This would result in an estimated reduction in nationwide HAP emissions of 199 Mg/yr (219 tons/yr).

Formaldehyde emissions from wet-formed fiberglass mat manufacturing lines account for about 65 percent of the baseline HAP emissions. Methanol emissions account for approximately 30 percent, with vinyl acetate comprising the remaining 5 percent of the baseline HAP emissions. (These percentages are national averages. The actual emission profiles from individual lines will vary with the type of resin and binder used.) Estimated nationwide emissions of formaldehyde from existing wet-formed fiberglass mat production lines are 174 Mg/yr (192 tons/yr) at the current level of control. Implementing the NESHAP will reduce nationwide formaldehyde emissions from existing sources by about 130 Mg/yr (143 tons/yr), and combined emissions of vinyl acetate and methanol will be reduced by 70 Mg/yr (77 tons/yr).

Secondary emissions of nitrogen oxides (NO_X) from thermal oxidizer controls are formed as a result of natural gas combustion. Total emissions of NO_X from all affected sources are estimated to increase by about 15 Mg/yr (16 tons/yr).

B. What Are the Water and Solid Waste Impacts?

Because compliance with the NESHAP is based on the use of thermal oxidizers, no water pollution or solid waste impacts would result from the NESHAP.

C. Are There Any Additional Environmental and Health Impacts?

Reducing HAP emissions will lower occupational HAP and VOC exposure levels. The operation of thermal oxidizers may increase occupational noise levels in the five facilities that currently do not control HAP emissions.

D. What Are the Energy Impacts?

Thermal oxidizers require electrical energy to operate fans. Additional electrical energy requirements are estimated to be 4,260 megawatt hours per year (MW-hr/yr). An additional 275,000 million British thermal units per year (Btu/yr) of natural gas are estimated to be required for eight additional thermal oxidizers that would be added to existing sources. The total additional energy (electricity and natural gas) required as a result of the NESHAP is 290 billion Btu/yr in the fifth year following promulgation of the NESHAP.

We do not have sufficient information to predict the number of new glass mat production lines that will be built and come on line in the 5 years after promulgation or to predict the energy needs for control devices on those new lines. However, the average energy need for the control device on a new line would be about the same as the average energy need for a control device on an existing line, or about 530 MW-hr/yr of electricity and 34,400 million Btu of natural gas.

E. What Are the Cost Impacts?

Cost impacts of the final NESHAP for drying and curing ovens were analyzed using site-specific information included in the TAPPI survey responses coupled with procedures from the ''OAQPS Cost Manual.'' For some facilities where site-specific data necessary for estimating costs (e.g., a vent flow rate) were not available, average factors developed from industry survey data were used to estimate the missing data.

The total capital costs to achieve the final NESHAP are estimated to be $5,272,000. These capital cost impacts arise from the purchase and installation of eight thermal oxidizers—five thermal oxidizers for the five facilities without existing controls and three thermal oxidizers for three facilities that must replace existing thermal oxidizers that cannot meet the final NESHAP. The average capital cost of installing a new thermal oxidizer is estimated at $716,000 per oxidizer. The capital cost estimate to install a new thermal oxidizer to achieve compliance includes the cost of auxiliary burners, combustion chambers, primary heat exchangers, weather-tight housing and insulation, a fan, flow and temperature controls, a stack, and structural supports.

The monitoring requirements for the thermal oxidizer operating temperature are not current industry practice and are expected to impose additional costs on facilities with existing thermal oxidizers. To estimate the impact of the additional monitoring equipment (i.e., a data logging system), a cost of $7,000 ($1,000 for each of the seven facilities with an existing thermal oxidizer that is achieving the NESHAP) was included in the capital cost estimate. No additional capital costs were estimated for monitoring equipment for the new thermal oxidizers since temperature monitors and recording devices are standard equipment and are included in the cost estimates for new thermal oxidizers.

The total annualized cost of the final NESHAP for eight new thermal oxidizers is about $2,414,000. The average annual cost for a typical facility that installs a new thermal oxidizer is $302,000. The annualized cost estimate includes the cost of operation,

maintenance, supervisory labor, maintenance materials, utilities, administrative charges, taxes, insurance, and capital recovery.

F. What Are the Economic Impacts?

Fourteen facilities owned by nine different companies produce wet-formed fiberglass mat domestically. All of these facilities may potentially be affected by the NESHAP because they are major sources or are collocated with other sources (e.g., asphalt roofing plants) that together may be major sources.

The estimated nationwide annualized cost of the NESHAP is $1.595 million. This cost estimate represents approximately 0.069 percent of the 1995 sales revenues for domestically produced wet-formed fiberglass mat. Based upon this estimate, it is reasonable to assume that market price increases and production decreases resulting from the final NESHAP are likely to be very small. Thus, we conclude that the final NESHAP are not likely to have a significant economic impact on the wet-formed fiberglass mat industry as a whole or on secondary markets such as the labor market and foreign trade.

We performed a streamlined economic analysis to determine facility-specific impacts. The facility-specific impacts are examined by calculating the ratio of the estimated annualized costs of emission controls for each facility to the estimated revenues per facility (i.e., a cost-to-sales ratio) to assess the likelihood of facility closures and employment impacts. Cost-to-sales ratios refer to the change in the cost of emission controls divided by the sales revenue of wet-formed fiberglass mat, the goods produced in the process for which additional pollution control is required. This ratio can be estimated for either individual firms or as an average for some set of firms such as affected small business firms. While it has different significance for different market situations, it is a good rough gauge of potential impact. If costs for the individual (or group of) firms are completely passed onto the purchasers of the good(s) being produced, the ratio is an estimate of the price change (in percentage form after multiplying the ratio by 100). If costs are completely absorbed by the producer, this ratio is an estimate of changes in pretax profits (in percentage form after multiplying the ratio by 100). The distribution of cost-to-sales ratios across the whole market, the competitiveness of the market, and profit-to-sales ratios are among the obvious factors that may influence the significance of any particular cost-to-sales ratio for an individual facility.

For these NESHAP, a cost-to-sales ratio exceeding 1 percent was determined to be an initial indicator of the potential for a significant facility impact. Each of the 14 facilities affected by the final NESHAP has cost-to-sales ratios of less than 1 percent of sales. Therefore, the facility-specific impacts are not considered to be significant for any facility affected by the NESHAP. No facility is likely to close as a result of the final NESHAP. Facilities in the wet-formed fiberglass mat production industry are likely to increase the price charged for the product in response to market price changes, to absorb the costs with no price increase, or to respond with a combination of these alternatives. The economic impacts to consumers and producers of wet-formed fiberglass mat are anticipated to be minimal. The generally small scale of the impacts suggests that there will also be no significant impacts on markets for the products made using wet-formed fiberglass mat. For more information, consult the economic impact report entitled ''Economic Impact Analysis for the Proposed National Emission Standard for Hazardous Air Pollutants from the Production of Wet-Formed Fiberglass Mat,'' January 1999 (Docket A–97–54).

IV. Summary of Changes Since Proposal

We have made changes in the final NESHAP for wet-formed fiberglass mat production facilities in response to comments on the proposed rule. The principal changes made since proposal are summarized below. Additional discussion of changes and the rationale for these changes is presented in section V of this preamble.

A. Operating Limits

In § 63.2984, we have removed the operating limits for binder urea-formaldehyde (UF) content, UF resin solids content, UF resin solids per ton of product, product loss-on-ignition, and production rate. They have been replaced with an operating limit for maximum hourly urea-formaldehyde resin solids application rate, measured as the urea-formaldehyde resin solids left in the product after curing.

B. Performance Test and Initial Compliance Provisions

We revised § 63.2993 of the final rule to allow the use of either EPA Method 318, ''Extractive FTIR Method for the Measurement of Emissions from the Mineral Wool and Wool Fiberglass Industries'' for measuring formaldehyde concentrations, or EPA Method 316,''Sampling and Analysis for Formaldehyde Emissions from Stationary Sources in the Mineral Wool and Wool Fiberglass Industries.''

C. Monitoring Requirements

In § 63.2984(a), we revised the rule to clarify that a deviation of a process or control device parameter from a level established during a performance test is a deviation from an operating limit and is separately enforceable from the emission limit in § 63.2983. We also added a definition of *Deviation* in § 63.3004 of the final rule.

In response to comments, we revised § 63.2984(d) of the final rule to delete the requirement to reference the operating limits in the 40 CFR part 70 operating permit application. Instead, you will include the operating limits in the OMM plan and reference the OMM plan in the 40 CFR part 70 operating permit application. You must also include the operating limits or ranges in the notification of compliance status and the performance test report required under § 63.3000(b) and (d), respectively.

In the final rule, we have deleted § 63.2988 and the requirement that you have your OMM plan approved by the Administrator. You must include in your 40 CFR part 70 operating permit a requirement that you develop an OMM plan and operate according to it at all times. To revise the operating limits specified in your OMM plan, you must conduct a new performance test and include the revised operating limits in the notification of compliance status and performance test results submitted to the Administrator after the test. You must also include the revised operating limits in the revised OMM plan. You may begin operating according to the revised operating limits as soon as you have completed the performance test demonstrating compliance.

We revised § 63.2994(b)(1) of the final rule to allow the gas temperature monitoring device to be installed either at the exit of the combustion zone or at the location specified by the manufacturer. However, the temperature monitoring device must be installed in a location before any heat recovery or heat exchange equipment, and it must remain in the same location for both the performance test and the continuous monitoring of the temperature.

In response to comments, we have revised the monitoring requirements in § 63.2996 so that you must monitor and record the data needed to calculate the hourly urea-formaldehyde resin solids application rate.

D. Definitions

In response to comments, we replaced the definition of *Binder formulation urea formaldehyde content* with a definition of *Urea formaldehyde content in binder formulation* for clarification purposes.

V. Summary of Responses to Major Comments

We received five comment letters on the proposed NESHAP for wet-formed fiberglass mat production. A copy of each comment letter is available for public inspection in the docket for the rulemaking.

We reviewed and carefully considered all of the comments received and made changes to the rule where appropriate. A summary of responses to major comments received on the proposed rule is presented below. Additional discussion of our responses to public comments is presented in the document ''National Emission Standards for Wet-Formed Fiberglass Mat Production—Background for Promulgated Standards, Comment and Response Document'' which is in the docket.

Comment: One commenter stated that basing the operating limits and monitoring requirements on resin free-formaldehyde content, binder UF content, resin UF solids content, resin UF solids content per ton of product, and product loss-on-ignition (LOI) is not practical because most manufacturers do not have a single product that has the maximum value for all these parameters. Therefore, the facility operators would need to perform several performance tests using different products with the maximum for each of these variables.

The commenter recommended that EPA specify an operating standard and monitoring requirement only for urea-formaldehyde (dry) weight per roofing square (100 square feet) of product. According to the commenter, formaldehyde is emitted as the UF binder cures and bonds the glass fibers together into a mat. The greater the amount of UF binder solids per square of mat, the greater the formaldehyde emissions per square of mat, according to the commenter.

The commenter suggested using the following equation for calculating the pounds of UF solids per square of mat:

$$\frac{\text{UF Solids}}{\text{Square of Mat}} = \text{LOI} \times \text{UFL} \times \text{MWs}$$

Where:

LOI = loss on ignition (percent);
UFL = UF-to-latex ratio in the binder (percent of UF solids in total combined solids for UF and latex);
MW = weight of the mat per square (pounds per roofing square).

Response: We agree with the commenter that the suggested monitoring parameters better predict potential emissions than those in the proposed standards and offer greater operating flexibility. We have revised the testing, monitoring, and operating limit requirements in the final rule to reflect the approach recommended by the commenter.

The final rule establishes an operating limit for UF solids hourly application rate. This operating limit is based on the equation suggested by the commenter, with the addition of a term for the glass mat production rate (squares per hour) so the hourly UF solids application rate is calculated.

You must conduct the performance test while producing a product with the greatest hourly UF solids application rate. The hourly UF solids application rate is the product of UF solids per square of mat times the hourly production rate in squares. The hourly UF solids application rate achieved during the initial performance test will become an operating limit that you cannot exceed after the test. After the compliance test, you must monitor the parameters used to calculate the hourly UF solids application rate and use Equation 3 of § 63.2995 of the final rule to ensure compliance with the operating limit for hourly UF solids application rate.

We continue to believe that the resin free-formaldehyde content is an important variable affecting emissions. Therefore, the final rule still requires an operating limit for the resin free-formaldehyde content. The operating limit established for the resin free-formaldehyde content during the initial performance test must not be exceeded after the initial performance test. Continuous compliance with the operating limit will be determined through resin purchase specifications and records. These records are the minimum data requirements necessary to verify continuous compliance with the operating limit.

Comment: One commenter asked EPA to revise the provisions of § 63.2989(a)(4) and (b) for changing an approved OMM plan. As currently written, a facility that has proposed changes to its approved plan must continue to operate according to the approved plan pending the Administrator's approval of the proposed changes. The commenter advocates that a facility be allowed to operate according to the proposed changes, pending the Administrator's approval of the revised plan, after they have demonstrated compliance with the formaldehyde emission limits. The commenter stated that the suggested change is consistent with the title V permit application shield.

Response: The EPA believes the commenter is incorrect that there is a corresponding provision for permit revisions in title V of the CAA or the permit regulations in 40 CFR part 70. The permit application shield applies only to the original permit application and renewals. The shield protects the facility from enforcement actions for operating without a permit in cases where the facility submits an application on time, but there are delays in issuing the permit. However, the permit application shield does not apply to permit revisions. A facility owner or operator submitting an application to revise their operating permit must operate under the approved permit until the revised permit is approved.

However, we have revised the provisions of § 63.2988 to delete the provisions requiring the Administrator's approval of a facility's OMM plan. We have also modified the provisions of § 63.2989(a)(1) through (4) to allow a facility to make changes to the OMM plan without the requirement for obtaining the Administrator's approval. Changes in operating limits still require another performance test to verify compliance. In addition, we have revised § 63.2984(d) of the final rule to delete the requirement to reference the operating standards and their allowable ranges or limits in the 40 CFR part 70 permit. Instead, your OMM plan must be incorporated by reference in your title V permit. These changes allow you to revise the allowable ranges or limits of the operating standards without reopening your permit or going through an approval process. We have also added paragraph (c) to § 63.2989 which provides that if you can anticipate potential changes to operating conditions or multiple operating conditions while demonstrating compliance during an initial or most recent performance test, then those anticipated operating conditions could be accounted for in the OMM plan, and the plan would not need to be revised later. The purpose of the OMM plan is to ensure compliance while at the same time allowing the owner or operator of the affected source flexibility to operate under representative conditions for the affected source.

Comment: One commenter asked EPA to revise § 63.2993 to allow the use of EPA Method 318, ''Extractive Fourier Transfer Infrared Spectrometry (FTIR)

for Measurement of Emissions from the Mineral Wool and Wool Fiberglass Industries,'' for measuring formaldehyde concentrations.

Response: We agree with the commenter that facilities should be able to use FTIR, as specified in EPA Method 318, to measure formaldehyde concentrations. Therefore, § 63.2993 of the final rule has been revised to allow the use of either EPA Method 316, ''Sampling and Analysis for Formaldehyde Emissions from Stationary Sources in the Mineral Wool and Wool Fiberglass Industries,'' or EPA Method 318 (FTIR) to measure formaldehyde concentrations.

Comment: The proposal preamble stated that EPA estimates that only one of the two small business companies in the glass mat industry will have to install an add-on control device at its plant (65 FR 34289). As stated in the preamble, EPA estimates that the annual control cost for this one small business would not exceed 1 percent of total sales of the company. A representative of the facility in question disagreed with EPA's estimate and stated that if this facility is required to install a thermal oxidizer, the cost-to-sales ratio would be greater than 1 percent of sales. The comment letter and included test report for this glass mat facility indicated that total HAP emissions from the wet-formed fiberglass mat production line at the plant are less than 10 tons per year.

Response: We estimated the annualized cost of a thermal oxidizer for the facility in question based on the volumetric flow rate from the drying and curing oven submitted by the facility in response to the EPA survey. We had no other site-specific information that would have resulted in a more accurate cost estimate. The survey response from the facility reported a volumetric flow rate from the glass mat line stack of 747 standard cubic feet per minute (scfm). Based on this flow rate, we estimated that the total annual cost would be 0.344 percent of annual sales for the company. However, the flow rate reported in the test report submitted with the comment letter was 2,520 scfm. We revised the estimated annual add-on control costs using this higher flow rate, but the revised annual cost is still less than the threshold (1.0 percent of sales) used as an indicator in considering whether the rule has a significant economic impact on small businesses.

Since the estimated cost as a percentage of sales is relatively minimal, it is anticipated that the final rule will not have a significant impact on this company's profitability. Nonetheless, EPA has tried to reduce the impact of this rule on small entities by providing flexibility by offering a choice of compliance and monitoring options. Compliance options include mass emission limits or percent reduction standards. Compliance with the standards can be achieved through the use of a thermal oxidizer, other control devices, or process modifications that meet the standards. Finally, if the facility in question, after considering all operations present at the source, is not a major source of HAP emissions, it would not be subject to the NESHAP and would have no compliance costs as a result of the standards.

VI. Administrative Requirements

A. 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 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.

Pursuant to the terms of Executive Order 12866, 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.

B. Executive Order 13132—Federalism

Executive Order 13132, entitled ''Federalism'' (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' is defined in the Executive Order to include regulations that have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.'' Under Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the rule. The EPA also may not issue a regulation that has federalism implications and that preempts State law unless the EPA consults with State and local officials early in the process of developing the rule.

If EPA complies by consulting, Executive Order 13132 requires EPA to provide to OMB, in a separately identified section of the preamble to the rule, a federalism summary impact statement (FSIS). The FSIS must include a description of the extent of EPA's prior consultation with State and local officials, a summary of the nature of their concerns and the EPA's position supporting the need to issue the regulation, and a statement of the extent to which the concerns of State and local officials have been met. Also, when EPA transmits a final rule with federalism implications to OMB for review pursuant to Executive Order 12866, EPA must include a certification from its federalism official stating that EPA has met the requirements of Executive Order 13132 in a meaningful and timely manner.

Today's rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This is because today's rule applies to affected sources in the wet-formed fiberglass mat industry, not to State or local governments. Nor will State law be preempted, or any mandates be imposed on State or local government. Thus, the requirements of section 6 of the Executive Order do not apply to today's final rule. The EPA notes, however, that although not required to do so by this Executive Order (or otherwise), EPA did consult with State and local officials during development of today's final rule.

C. Executive Order 13175—Consultation and Coordination with Indian Tribal Governments

Executive Order 13175, entitled ''Consultation and Coordination with Indian Tribal Governments'' (65 FR 67249, November 6, 2000), requires EPA to develop an accountable process to ensure ''meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.'' ''Policies that have tribal implications'' is defined in the Executive Order to include regulations that have ''substantial direct effects on one or more Indian tribes, on the relationship between the Federal government and the Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes.''

This final rule does not have tribal implications. It will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175. No known wet-formed fiberglass mat production facility is located within the jurisdiction of any tribal government. Thus, Executive Order 13175 does not apply to this rule.

D. 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 EPA has reason to believe may have 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.

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 Executive Order has the potential to influence the regulation. This rule is not subject to Executive Order 13045 because it establishes an environmental standard based on available technology rather than reduction of health risk. No children's risk analysis was performed because no alternative technologies exist that would provide greater stringency at a reasonable cost. Furthermore, today's final rule has been determined not to be a economically significant regulatory action as defined by Executive Order 12866.

E. 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 by State, local, and tribal governments, in the aggregate, or by 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, 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 the 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 final 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 1 year. The EPA has also determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments since it contains no requirements that apply to such governments or that impose obligations upon them. The total nationwide capital cost for the standard is estimated at $5.3 million; the annualized nationwide cost is estimated at $2.4 million. Thus, today's final rule is not subject to the requirements of the UMRA.

F. Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601, et seq.

The RFA generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's rule on small entities, small entity is defined as: (1) A small business that has less than 750 employees; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of the final rule on small entities, we have determined that only two of the nine companies producing wet-formed fiberglass mat are small businesses. One of these small businesses is not anticipated to incur emission control costs because it already has controls in place which should achieve the MACT emission levels. Therefore, only one small firm in the wet-formed fiberglass mat production industry is likely to incur emission control costs as a result of the rule. After the proposed rule was published, the company submitted information indicating that HAP emissions from the facility's glass mat line are less than 10 tons per year and, thus, it is not a major source. However, this particular glass mat line is collocated with an asphalt roofing manufacturing facility and emissions from all collocated sources, in aggregate, must be considered in determining whether a source is a major source. The company also stated in their letter that if this facility is required to install a thermal oxidizer as a result of the rule, their cost-to-sales ratio would be greater than 1 percent. As a result, EPA revised the estimated annual add-on control costs for this facility using the higher flow rate of 2,520 scfm as reported in the comment from this facility. However, the revised annual cost-to-

sales ratio is still less than the threshold (1.0 percent of sales) used as an indicator in considering whether the rule has a significant economic impact on small businesses. As a result of the increased costs of emission controls, this small entity in the affected industry will likely either increase the price of its product in response to a market change in price, will absorb the cost increase with no price increase, or will respond with a combination of these responses. Since the estimated costs as a percentage of sales are relatively minimal, it is anticipated that the rule will not have a significant impact on this company's profitability if, indeed, it is a major source and subject to the NESHAP.

Although this rule will not have a significant economic impact on a substantial number of small entities, EPA nonetheless has tried to reduce the impact of the rule on small entities by providing flexibility by offering a choice of compliance and monitoring options. Compliance options include mass emission limits or percent reduction standards. Compliance with the final standards can be achieved through the use of a thermal oxidizer or other control device. Pollution prevention practices, such as process modifications, are also included in the rule.

G. Paperwork Reduction Act

The information collection requirements in this final rule have been submitted for approval to OMB under the requirements of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1964.01), and a copy may be obtained from Sandy Farmer, U.S. Environmental Protection Agency, Office of Environmental Information, Collection Strategies Division (2822), 1200 Pennsylvania Avenue, NW., Washington, DC 20460, 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 requirements contained in the NESHAP are necessary to determine initial and continuous compliance with the emission standards. The information requirements include the notification, recordkeeping, and reporting requirements of the NESHAP general provisions, authorized under section 114 of the CAA (42 U.S.C. 7414), which are mandatory for all owners or operators subject to national emission standards. All information submitted to EPA for which a claim of confidentiality is made is safeguarded according to Agency policies in 40 CFR part 2, subpart B. The rule does not require any notifications or reports beyond the minimum required by the general provisions. Subpart HHHH requires additional records of information specific to the wet-formed fiberglass mat production industry which are needed to determine compliance with the rule.

The annual public reporting and recordkeeping burden for this collection is estimated at 2,983 labor hours per year at an annual cost of $98,183. This estimate includes an initial 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 in the plan were not followed; semiannual deviation reports; notifications; the OMM plan; and recordkeeping. The annualized capital cost associated with monitoring requirements is estimated at $2,300.

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 purpose of collecting, validating, verifying, processing, maintaining, disclosing, and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to respond to a collection of information; search existing data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

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.

H. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA), Public Law 104–113, 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 impractical. Voluntary consensus standards (VCS) are technical standards (such as materials specifications, test methods, sampling procedures, and business practices) developed or adopted by voluntary consensus standard 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.

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 product loss-on-ignition and 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 that these VCS were impractical for the wet-formed fiberglass mat production NESHAP. The EPA, in consultation with TAPPI, has formulated industry-specific materials analysis consensus standards which were proposed along with the proposed rule and are published with the final rule as appendix A and appendix B.

The EPA search to identify VCS for the EPA's emissions sampling and analysis reference methods cited in this rule identified six candidate standards that appeared to have possible use in lieu of EPA standard reference methods. However, after reviewing available standards, EPA determined that four of the candidate consensus standards identified for measuring emissions of the HAP or surrogates subject to emission limits in the rule would not be practical due to lack of equivalency, documentation, and validation data. Two of the remaining candidate consensus standards are new standards under development that EPA plans to follow, review and consider adopting at a later date.

Section 63.2993 of subpart HHHH lists the EPA testing methods. These testing methods have been used by States and industry for more than 10 years.

I. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801, *et seq.*, as added by the SBREFA, 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. Therefore, we will submit a report containing this 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 the rule in the **Federal**

Register. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This final rule is not a ''major rule'' as defined by 5 U.S.C. 804(2), and therefore will be effective April 11, 2002.

J. Executive Order 13211—Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This rule is not a ''significant energy action'' as defined in Executive Order 13211 (66 FR 28355, May 22, 2001) because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The EPA has determined that this rule will not affect in a material way productivity, competition, or prices in the energy sector. The rule will not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency regarding energy. In addition, it will not raise novel legal or policy issues related to energy arising out of legal mandates, the President's priorities, or the principles set forth in Executive Orders 12866 and 13211.

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedure, Air pollution control, Hazardous substances, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: March 19, 2002.

Christine Todd Whitman,

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. Part 63 is amended by adding subpart HHHH to read as follows:

Subpart HHHH—National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production

Sec.

What This Subpart Covers

63.2980 What is the purpose of this subpart?
63.2981 Does this subpart apply to me?
63.2982 What parts of my plant does this subpart cover?

Emission Limitations

63.2983 What emission limits must I meet?
63.2984 What operating limits must I meet?
63.2985 When do I have to comply with these standards?
63.2986 How do I comply with the standards?

Operation, Maintenance, and Monitoring Plan

63.2987 What must my operation, maintenance, and monitoring (OMM) plan include?
63.2988 [Reserved]
63.2989 How do I change my (OMM) plan?
63.2990 Can I conduct short-term experimental production runs that cause parameters to deviate from operating limits?

Testing and Initial Compliance Requirements

63.2991 When must I conduct performance tests?
63.2992 How do I conduct a performance test?
63.2993 What test methods must I use in conducting performance tests?
63.2994 How do I verify the performance of monitoring equipment?
63.2995 What equations must I use to determine compliance?

Monitoring Requirements

63.2996 What must I monitor?
63.2997 What are the requirements for monitoring devices?

Notifications, Reports, and Records

63.2998 What records must I maintain?
63.2999 In what form and for how long must I maintain records?
63.3000 What notifications and reports must I submit?

Other Requirements and Information

63.3001 What sections of the general provisions apply to me?
63.3002 Who implements and enforces this subpart?
63.3003 Incorporation by reference.
63.3004 What definitions apply to this subpart?
63.3005—63.3079 [Reserved].

Tables to Subpart HHHH of Part 63

Table 1 to Subpart HHHH—Minimum Requirements for Monitoring and Recordkeeping
Table 2 to Subpart HHHH—Applicability of General Provisions (40 CFR part 63, subpart A) to Subpart HHHH

Appendices to Subpart HHHH of Part 63

Appendix A to Subpart HHHH—Method for Determining Free-Formaldehyde in Urea-Formaldehyde Resins by Sodium Sulfite (Iced & Cooled)
Appendix B to Subpart HHHH—Method for the Determination of Loss-on-Ignition

Subpart HHHH—National Emissions Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production

What This Subpart Covers

§ 63.2980 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for emissions from facilities that produce wet-formed fiberglass mat. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

§ 63.2981 Does this subpart apply to me?

You must comply with this subpart if you meet the criteria in paragraphs (a) and (b) of this section:

(a) You own or operate a drying and curing oven at a wet-formed fiberglass mat production facility.

(b) Your drying and curing oven or the facility at which your drying and curing oven is located is a major source of hazardous air pollutants (HAP). A major source is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or can potentially emit, considering controls, in the aggregate, 9.07 megagrams (10 tons) or more per year of a single HAP or 22.68 megagrams (25 tons) or more per year of any combination of HAP.

§ 63.2982 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, or existing affected source. The affected source (the portion of your plant covered by this subpart) is each wet-formed fiberglass mat drying and curing oven.

(b) An affected source is a new affected source if you commenced construction of the affected source after May 26, 2000, and you meet the applicability criteria in § 63.2981 at start-up.

(c) An affected source is reconstructed if you meet the criteria as defined in § 63.2.

(d) An affected source is existing if it is not new or reconstructed.

Emission Limitations

§ 63.2983 What emission limits must I meet?

(a) You must limit the formaldehyde emissions from each drying and curing oven by either:

(1) Limiting emissions of formaldehyde to 0.03 kilograms or less per megagram (0.05 pounds per ton) of fiberglass mat produced; or

(2) Reducing uncontrolled formaldehyde emissions by 96 percent or more.

(b) [Reserved]

§ 63.2984 What operating limits must I meet?

(a) You must maintain operating parameters within established limits or ranges specified in your operation, maintenance, and monitoring (OMM) plan described in § 63.2987. If there is a deviation of any of the specified parameters from the limit or range specified in the OMM plan, you must address the deviation according to paragraph (b) of this section. You must comply with the operating limits specified in paragraphs (a)(1) through (4) of this section:

(1) You must operate the thermal oxidizer so that the average operating temperature in any 3-hour block period does not fall below the temperature established during your performance test and specified in your OMM plan.

(2) You must not use a resin with a free-formaldehyde content greater than that of the resin used during your performance test and specified in your OMM plan.

(3) You must operate the wet-formed fiberglass mat production process so that the average urea formaldehyde resin solids application rate in any 3-hour block period does not exceed the average application rate achieved during your performance test and specified in your OMM plan.

(4) If you use an add-on control device other than a thermal oxidizer or wish to monitor an alternative parameter and comply with a different operating limit, you must obtain approval for the alternative monitoring under § 63.8(f). You must include the approved alternative monitoring and operating limits in the OMM plan specified in § 63.2987.

(b) When during a period of normal operations you detect that an operating parameter deviates from the limit or range established in paragraph (a) of this section, you must initiate corrective actions within 1 hour according to the provisions of your OMM plan. During periods of start up, shut down, or malfunction you must follow your start up, shut down and malfunction plan (SSMP). The corrective action actions must be completed in an expeditious manner as specified in the OMM plan or SSMP.

(c) You must maintain and inspect control devices according to the procedures specified in the OMM plan.

(d) You must include the operating limits specified in paragraphs (a)(1) through (4) of this section and their allowable ranges or levels in your OMM plan. Your 40 CFR part 70 operating permit for the drying and curing oven must contain a requirement that you develop and operate according to an OMM plan at all times.

(e) If you use a thermal oxidizer or other control device to achieve the emission limits in § 63.2983, you must capture and convey the formaldehyde emissions from each drying and curing oven according to the procedures in chapters 3 and 5 of ''Industrial Ventilation: A Manual of Recommended Practice'' (23rd Edition). This publication is incorporated by reference in § 63.3003.

§ 63.2985 When do I have to comply with these standards?

(a) Existing drying and curing ovens must be in compliance with this subpart no later than April 11, 2005.

(b) New or reconstructed drying and curing ovens must be in compliance with this subpart at startup or by April 11, 2002, whichever is later.

(c) If your facility is an area source that increases its emissions or its potential to emit such that it becomes a major source of hazardous air pollutants, the following apply:

(1) Any portion of the existing facility that is a new affected source or a new reconstructed affected source must be in compliance upon startup.

(2) All other parts of the source must be in compliance with this subpart 1 year after becoming a major source or by April 11, 2005, whichever is later.

§ 63.2986 How do I comply with the standards?

(a) You must install, maintain, and operate a thermal oxidizer or other control device or implement a process modification that reduces formaldehyde emissions from each drying and curing oven to the emission limits specified in § 63.2983.

(b) You must comply with the operating limits specified in § 63.2984. The operating limits prescribe the requirements for demonstrating continuous compliance based on the OMM plan. You must begin complying with the operating limits on the date by which you must complete the initial performance test.

(c) You must conduct a performance test according to §§ 63.2991, 63.2992, and 63.2993 to demonstrate compliance for each drying and curing oven subject to the emission limits in § 63.2983, and to establish or modify the operating limits or ranges for process or control device parameters that will be monitored to demonstrate continuous compliance.

(d) You must install, calibrate, maintain, and operate devices that monitor the parameters specified in your OMM plan at the frequency specified in the plan. All continuous parameter monitoring systems must be installed and operating no later than the applicable compliance date specified in § 63.2985.

(e) You must prepare and follow a written OMM plan as specified in § 63.2987.

(f) You must comply with the monitoring, recordkeeping, notification, and reporting requirements of this subpart as required by §§ 63.2996 through 63.3000.

(g) You must comply with the requirements in paragraphs (g)(1) through (3) of this section.

(1) You must be in compliance with the emission limits in § 63.2983 and the operating limits in § 63.2984 at all times, except during periods of startup, shutdown, or malfunction.

(2) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in § 63.6(e)(1).

(3) You must develop and implement a written SSMP according to the provisions in § 63.6(e)(3). The SSMP must address the startup, shutdown, and corrective actions taken for malfunctioning process and air pollution control equipment.

Operation, Maintenance, and Monitoring Plan

§ 63.2987 What must my operation, maintenance, and monitoring (OMM) plan include?

(a) You must prescribe the monitoring that will be performed to ensure compliance with these emission limitations. Minimum monitoring requirements are listed in table 1 of this subpart. Your plan must specify the items listed in paragraphs (a)(1) through (3) of this section:

(1) Each process and control device to be monitored, the type of monitoring device that will be used, and the operating parameters that will be monitored.

(2) A monitoring schedule that specifies the frequency that the parameter values will be determined and recorded.

(3) The operating limits or ranges for each parameter that represent continuous compliance with the emission limits in § 63.2983. Operating limits and ranges must be based on values of the monitored parameters recorded during performance tests.

(b) You must establish routine and long-term maintenance and inspection

schedules for each control device. You must incorporate in the schedules the control device manufacturer's recommendations for maintenance and inspections or equivalent procedures. If you use a thermal oxidizer, the maintenance schedule must include procedures for annual or more frequent inspection of the thermal oxidizer to ensure that the structural and design integrity of the combustion chamber is maintained. At a minimum, you must meet the requirements of paragraphs (b)(1) through (10) of this section:

(1) Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation. Clean pilot sensor if necessary.

(2) Ensure proper adjustment of combustion air and adjust if necessary.

(3) Inspect, when possible, all internal structures (such as baffles) to ensure structural integrity per the design specifications.

(4) Inspect dampers, fans, and blowers for proper operation.

(5) Inspect motors for proper operation.

(6) Inspect, when possible, combustion chamber refractory lining. Clean and repair or replace lining if necessary.

(7) Inspect the thermal oxidizer shell for proper sealing, corrosion, and hot spots.

(8) For the burn cycle that follows the inspection, document that the thermal oxidizer is operating properly and make any necessary adjustments.

(9) Generally observe whether the equipment is maintained in good operating condition.

(10) Complete all necessary repairs as soon as practicable.

(c) You must establish procedures for responding to operating parameter deviations. At a minimum, the procedures must include the information in paragraphs (c)(1) through (3) of this section.

(1) Procedures for determining the cause of the operating parameter deviation.

(2) Actions for correcting the deviation and returning the operating parameters to the allowable ranges or limits.

(3) Procedures for recording the date and time that the deviation began and ended, and the times corrective actions were initiated and completed.

(d) Your plan must specify the recordkeeping procedures to document compliance with the emissions and operating limits. Table 1 of this subpart establishes the minimum recordkeeping requirements.

§ 63.2988 [Reserved]

§ 63.2989 How do I change my OMM plan?

Changes to the operating limits or ranges in your OMM plan require a new performance test.

(a) In order to revise the ranges or levels established for your operating limits in § 63.2984, you must meet the requirements in paragraphs (a)(1) and (2) of this section:

(1) Submit a notification of performance test to the Administrator as specified in § 63.7(b) to revise your operating ranges or limits.

(2) After completing the performance test to demonstrate that compliance with the emissions limits can be achieved at the revised levels of the operating limits, you must submit the performance test results and the revised operating limits as part of the notification of compliance status required under § 63.9(h).

(b) If you are revising the inspection and maintenance procedures in your plan that are specified in § 63.2987(b), you do not need to conduct a new performance test.

(c) If you plan to operate your process or control device under alternative operating conditions and do not wish to revise your OMM plan when you change operating conditions, you can perform a separate compliance test to establish operating limits for each condition. You can then include the operating limits for each condition in your OMM plan. After completing the performance tests, you must record the date and time when you change operations from one condition to another, the condition under which you are operating, and the operating limits that apply under that condition. If you can perform a single performance test that establishes the most stringent operating limits that cover all alternative operating conditions, then you do not need to comply with the provisions of this paragraph.

§ 63.2990 Can I conduct short-term experimental production runs that cause parameters to deviate from operating limits?

With the approval of the Administrator, you may conduct short-term experimental production runs during which your operating parameters deviate from the operating limits. Experimental runs may include, but are not limited to, runs using resin with a higher free-formaldehyde content than specified in the OMM plan, or using experimental pollution prevention techniques. To conduct a short-term experimental production run, you must complete the requirements in paragraphs (a) and (b) of this section.

(a) Prepare an application to the Administrator for approval to conduct the experimental production runs. Your application must include the items listed in paragraphs (a)(1) through (6) of this section.

(1) The purpose of the experimental production run.

(2) Identification of the affected line.

(3) An explanation of how the operating parameters will deviate from the previously approved ranges and limits.

(4) The duration of the experimental production run.

(5) The date and time of the experimental production run.

(6) A description of any emission testing to be performed during the experimental production run.

(b) Submit the application to the Administrator for approval at least 30 days before you conduct the experimental production run.

(c) If you conduct such experimental production runs without first receiving approval from the Administrator, then you must conduct a performance test under those same experimental production run conditions to show that you were in compliance with the formaldehyde emission limits in § 63.2983.

Testing and Initial Compliance Requirements

§ 63.2991 When must I conduct performance tests?

You must conduct a performance test for each drying and curing oven subject to this subpart according to the provisions in paragraphs (a) through (c) of this section:

(a) *Initially.* You must conduct an initial performance test no later than 180 days after the applicable compliance date specified in § 63.2985. The initial performance test is used to demonstrate initial compliance and establish operating parameter limits and ranges to be used to demonstrate continuous compliance with the emission standards.

(b) *Every 5 years.* You must conduct a performance test every 5 years as part of renewing your 40 CFR part 70 operating permit.

(c) *To change your OMM plan.* You must conduct a performance test according to the requirements specified in § 63.2992 to change the limit or range for any operating limit specified in your OMM plan established during a previous compliance test.

§ 63.2992 How do I conduct a performance test?

(a) You must verify the performance of monitoring equipment as specified in § 63.2994 before performing the test.

(b) You must conduct the performance test according to the procedures in § 63.7.

(c) You must conduct the performance test under the conditions specified in paragraphs (c)(1) and (2) of this section.

(1) The resin must have the highest specified free-formaldehyde content that will be used.

(2) You must operate at the maximum feasible urea-formaldehyde resin solids application rate (pounds urea-formaldehyde resin solids applied per hour) that will be used.

(d) During the performance test, you must monitor and record the operating parameters that you will use to demonstrate continuous compliance after the test. These parameters are listed in table 1 of this subpart.

(e) You may not conduct performance tests during periods of startup, shutdown, or malfunction as specified in § 63.7(e)(1).

(f) You must conduct three separate test runs for each performance test as specified in § 63.7(e)(3), and each test run must last at least 1 hour.

§ 63.2993 What test methods must I use in conducting performance tests?

(a) Use EPA Method 1 (40 CFR part 60, appendix A) for selecting the sampling port location and the number of sampling ports.

(b) Use EPA Method 2 (40 CFR part 60, appendix A) for measuring the volumetric flow rate.

(c) Use EPA Method 316 or 318 (40 CFR part 63, appendix A) for measuring the concentration of formaldehyde.

(d) Use the method contained in appendix A of this subpart or the resin purchase specification and the vendor specification sheet for each resin lot for determining the free-formaldehyde content in the urea-formaldehyde resin.

(e) Use the method in appendix B of this subpart for determining product loss-on-ignition.

§ 63.2994 How do I verify the performance of monitoring equipment?

(a) Before conducting the performance test, you must take the steps listed in paragraphs (a)(1) and (2) of this section:

(1) Install and calibrate all process equipment, control devices, and monitoring equipment.

(2) Conduct a performance evaluation of the continuous monitoring system (CMS) according to § 63.8(e) which specifies the general requirements and requirements for notifications, the site-specific performance evaluation plan, conduct of the performance evaluation, and reporting of performance evaluation results.

(b) If you use a thermal oxidizer, the temperature monitoring device must meet the performance and equipment specifications listed in paragraphs (b)(1) through (3) of this section:

(1) The temperature monitoring device must be installed either at the exit of the combustion zone of each thermal oxidizer, or at the location specified by the manufacturer. The temperature monitoring device must also be installed in a location before any heat recovery or heat exchange equipment, and it must remain in the same location for both the performance test and the continuous monitoring of temperature.

(2) The recorder response range must include zero and 1.5 times the average temperature required in § 63.2984(a)(1).

(3) The measurement method or reference method for calibration must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or an alternate reference subject to the approval of the Administrator.

§ 63.2995 What equations must I use to determine compliance?

(a) *Percent reduction for formaldehyde.* To determine compliance with the percent reduction formaldehyde emission standard, use equation 1 of this section as follows:

$$E_f = \frac{M_i - M_o}{M_i} \times 100 \qquad \text{(Eq. 1)}$$

Where:

E_f = Formaldehyde control efficiency, percent.

M_i = Mass flow rate of formaldehyde entering the control device, kilograms (pounds) per hour.

M_o = Mass flow rate of formaldehyde exiting the control device, kilograms (pounds) per hour.

(b) *Formaldehyde mass emissions rate.* To determine compliance with the kilogram per megagram (pound per ton) formaldehyde emission standard, use equation 2 of this section as follows:

$$E = \frac{M}{P} \qquad \text{(Eq. 2)}$$

Where:

E = Formaldehyde mass emissions rate, kilograms (pounds) of formaldehyde per megagram (ton) of fiberglass mat produced.

M = Formaldehyde mass emissions rate, kilograms (pounds) per hour.

P = The wet-formed fiberglass mat production rate during the emissions sampling period, including any material trimmed from the final product, megagrams (tons) per hour.

(c) *Urea-formaldehyde (UF) resin solids application rate.* To determine the UF resin solids application rate, use equation 3 of this section as follows:

$$\frac{\text{UF Solids}}{\text{Hour}} = \text{LOI} \times \text{UFL} \times \text{MW} \times \text{SQ} \qquad \text{(Eq. 3)}$$

Where:

UF solids/hour = UF resin solids application rate (pounds per hour).

LOI = loss on ignition (weight faction), or pound of organic binder per pound of mat.

UFL = UF-to-latex ratio in the binder (mass fraction of UF resin solids in total combined resin solids for UF and latex), or pound of UF solids per pound of total resin solids (UF and latex).

MW = weight of the final mat per square (pounds per roofing square).

SQ = roofing squares produced per hour.

Monitoring Requirements

§ 63.2996 What must I monitor?

You must monitor the parameters listed in table 1 of this subpart and any other parameters specified in your OMM plan. The parameters must be monitored, at a minimum, at the corresponding frequencies listed in table 1 of this subpart.

§ 63.2997 What are the requirements for monitoring devices?

(a) If formaldehyde emissions are controlled using a thermal oxidizer, you must meet the requirements in paragraphs (a)(1) and (2) of this section:

(1) Install, calibrate, maintain, and operate a device to monitor and record continuously the thermal oxidizer temperature at the exit of the combustion zone before any substantial

heat exchange occurs or at the location consistent with the manufacturer's recommendations.

(2) Continuously monitor the thermal oxidizer temperature and determine and record the average temperature in 15-minute and 3-hour block averages. You may determine the average temperature more frequently than every 15 minutes and every 3 hours, but not less frequently.

(b) If formaldehyde emissions are controlled by process modifications or a control device other than a thermal oxidizer, you must install, calibrate, maintain, and operate devices to monitor the parameters established in your OMM plan at the frequency established in the plan.

Notifications, Reports, and Records

§ 63.2998 What records must I maintain?

You must maintain records according to the procedures of § 63.10. You must maintain the records listed in paragraphs (a) through (g) of this section.

(a) All records required by § 63.10. Table 2 of this subpart presents the applicable requirements of the general provisions.

(b) The OMM plan.

(c) Records of values of monitored parameters listed in table 1 of this subpart to show continuous compliance with each operating limit specified in table 1 of this subpart.

(d) Records of maintenance and inspections performed on the control devices.

(e) If an operating parameter deviation occurs, you must record:

(1) The date, time, and duration of the operating parameter deviation;

(2) A brief description of the cause of the operating parameter deviation;

(3) The dates and times at which corrective actions were initiated and completed;

(4) A brief description of the corrective actions taken to return the parameter to the limit or to within the range specified in the OMM plan; and

(5) A record of whether the deviation occurred during a period of startup, shutdown, or malfunction.

(f) Keep all records specified in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(g) If you operate your process or control device under alternative operating condition and have established operating limits for each condition as specified in § 63.2989(c), then you must keep records of the date and time you changed operations from one condition to another, the condition under which you are operating, and the applicable operating limits for that condition.

§ 63.2999 In what form and for how long must I maintain records?

(a) You must maintain each record required by this subpart for 5 years. You must maintain the most recent 2 years of records at the facility. The remaining 3 years of records may be retained offsite.

(b) Your records must be readily available and in a form so they can be easily inspected and reviewed. You can keep the records on paper or an alternative media, such as microfilm, computer, computer disks, magnetic tape, or on microfiche.

§ 63.3000 What notifications and reports must I submit?

(a) You must submit all notifications and reports required by the applicable general provisions and this section. Table 2 of this subpart presents the applicable requirements of the general provisions.

(b) *Notification of compliance status.* You must submit the notification of compliance status, including the performance test results, the operating limits or ranges as determined during the performance test, and other information specified in § 63.9(h), before the close of business on the 60th calendar day after you complete the performance test according to § 63.10(d)(2).

(c) *Semiannual compliance reports.* You must submit semiannual compliance reports according to the requirements of paragraphs (c)(1) through (5) of this section.

(1) *Dates for submitting reports.* Unless the Administrator has agreed to a different schedule for submitting reports under § 63.10(a), you must deliver or postmark each semiannual compliance report no later than 30 days following the end of each semiannual reporting period. The first semiannual reporting period begins on the compliance date for your affected source and ends on June 30 or December 31, whichever date immediately follows your compliance date. Each subsequent semiannual reporting period for which you must submit a semiannual compliance report begins on July 1 or January 1 and ends 6 calendar months later. As required by § 63.10(e)(3), you must begin submitting quarterly compliance reports if you deviate from the emission limits in § 63.2983 or the operating limits in § 63.2984.

(2) *Inclusion with title V report.* For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and for which the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 71.6 (a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraph (c)(1) of this section.

(3) *Contents of reports.* The semiannual compliance report must contain the information in paragraphs (c)(3)(i) through (vi) of this section:

(i) Company name and address.

(ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(iii) Date of report and beginning and ending dates of the reporting period.

(iv) A summary of the total duration of continuous parameter monitoring system downtime during the semiannual reporting period and the total duration of continuous parameter monitoring system downtime as a percent of the total source operating time during that semiannual reporting period.

(v) The date of the latest continuous parameter monitoring system certification or audit.

(vi) A description of any changes in the wet-formed fiberglass mat manufacturing process, continuous parameter monitoring system, or add-on control device since the last semiannual reporting period.

(4) *No deviations.* If there were no deviations from the emission limit in § 63.2983 or the operating limits in § 63.2984, the semiannual compliance report must include a statement to that effect. If there were no periods during which the continuous parameter monitoring systems were out-of-control as specified in § 63.8(c)(7), the semiannual compliance report must include a statement to that effect.

(5) *Deviations.* If there was a deviation from the emission limit in § 63.2983 or an operating limit in § 63.2984, the semiannual compliance report must contain the information in paragraphs (c)(5)(i) through (ix) of this section:

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous parameter monitoring system was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous parameter monitoring system was out-of-control, including the information in § 63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during

a period of startup, shutdown, or malfunction or during another period.

(v) The date and time that corrective actions were taken, a description of the cause of the deviation, and a description of the corrective actions taken.

(vi) A summary of the total duration of each deviation during the semiannual reporting period and the total duration as a percent of the total source operating time during that semiannual reporting period.

(vii) A breakdown of the total duration of the deviations during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(viii) A brief description of the process units.

(ix) A brief description of the continuous parameter monitoring system.

(d) *Performance test reports.* You must submit reports of performance test results for add-on control devices no later than 60 days after completing the tests as specified in § 63.10(d)(2). You must include in the performance test reports the values measured during the performance test for the parameters listed in table 1 of this subpart and the operating limits or ranges to be included in your OMM plan. For the thermal oxidizer temperature, you must include 15-minute averages and the average for the three 1-hour test runs.

(e) *Startup, shutdown, malfunction reports.* If you have a startup, shutdown, or malfunction during the semiannual reporting period, you must submit the reports specified § 63.10(d)(5).

Other Requirements and Information

§ 63.3001 What sections of the general provisions apply to me?

You must comply with the requirements of the general provisions of 40 CFR part 63, subpart A, as specified in table 2 of this subpart.

§ 63.3002 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority, such as your State, local, or tribal agency. If the Administrator has delegated authority to your State, local, or tribal agency, then that agency is the primary enforcement authority. If the Administrator has not delegated authority to your State, only EPA enforces this subpart. You should contact your U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under section 40 CFR part 63, subpart E, the authorities contained in paragraphs (b)(1) through (4) of this section are retained by the Administrator of U.S. EPA and are not transferred to the State, local, or tribal agency.

(1) The authority under § 63.6(g) to approve alternatives to the emission limits in § 63.2983 and operating limits in § 63.2984 is not delegated.

(2) The authority under § 63.7(e)(2)(ii) and (f) to approve of major alternatives (as defined in § 63.90) to the test methods in § 63.2993 is not delegated.

(3) The authority under § 63.8(f) to approve major alternatives (as defined in § 63.90) to the monitoring requirements in §§ 63.2996 and 63.2997 is not delegated.

(4) The authority under § 63.10(f) to approve major alternatives (as defined in § 63.90) to recordkeeping, notification, and reporting requirements in §§ 63.2998 through 63.3000 is not delegated.

§ 63.3003 Incorporation by reference.

(a) The following material is incorporated by reference and referred to at § 63.2984: chapters 3 and 5 of ''Industrial Ventilation: A Manual of Recommended Practice,'' American Conference of Governmental Industrial Hygienists, (23rd edition, 1998). The incorporation by reference of this material is approved by the Director of the Office of the Federal Register as of the date of publication of the final rule according to 5 U.S.C. 552(a) and 1 CFR part 51. This material is incorporated as it exists on the date of approval and notice of any change in the material will be published in the **Federal Register**.

(b) The materials referenced in this section are incorporated by reference and are available for inspection at the Office of the Federal Register, 800 North Capitol Street NW, Suite 700, 7th Floor, Washington, DC; and at the Air and Radiation Docket and Information Center, U.S. EPA, 401 M Street SW, Washington, DC. The material is also available for purchase from the following address: Customer Service Department, American Conference of Governmental Industrial Hygienists (ACGIH), 1330 Kemper Meadow Drive, Cincinnati, OH 45240, telephone number (513) 742–2020.

§ 63.3004 What definitions apply to this subpart?

Terms used in this subpart are defined the Clean Air Act, in § 63.2, and in this section as follows:

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., a State that has been delegated the authority to implement the provisions of this part).

Binder application vacuum exhaust means the exhaust from the vacuum system used to remove excess resin solution from the wet-formed fiberglass mat before it enters the drying and curing oven.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limit, or operating limit, or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Drying and curing oven means the process section that evaporates excess moisture from a fiberglass mat and cures the resin that binds the fibers.

Emission limitation means an emission limit, operating limit, or work practice standard.

Fiberglass mat production rate means the weight of finished fiberglass mat produced per hour of production including any trim removed after the binder is applied and before final packaging.

Loss-on-ignition means the percentage decrease in weight of fiberglass mat measured before and after it has been ignited to burn off the applied binder. The loss-on-ignition is used to monitor the weight percent of binder in fiberglass mat.

Nonwoven wet-formed fiberglass mat manufacturing means the production of a fiberglass mat by bonding glass fibers to each other using a resin solution. Nonwoven wet-formed fiberglass mat manufacturing is also referred to as wet-formed fiberglass mat manufacturing.

Roofing square means the amount of finished product needed to cover an area 10 feet by 10 feet (100 square feet) of finished roof.

Thermal oxidizer means an air pollution control device that uses controlled flame combustion inside a combustion chamber to convert

combustible materials to noncombustible gases.

Urea-formaldehyde content in binder formulation means the mass-based percent of urea-formaldehyde resin in the total binder mix as it is applied to the glass fibers to form the mat.

§§ 63.3005–63.3079 [Reserved].

Tables to Subpart HHHH of Part 63

TABLE 1 TO SUBPART HHHH.—MINIMUM REQUIREMENTS FOR MONITORING AND RECORDKEEPING

[As stated in § 63.2998(c), you must comply with the minimum requirements for monitoring and recordkeeping in the following table]

You must monitor these parameters:	At this frequency:	And record for the monitored perameter:
1. Thermal oxidizer temperature [a]	Continuously	15-minute and 3-hour block averages.
2. Other process or control device parameters specified in your OMM [b] plan.	As specified in your OMM plan	As specified in your OMM plan.
3. Urea-formaldehyde resin solids application rate.	On each operating day, calculate the average lb/hr application rate for each product manufactured during that day.	The average lb/hr value for each product manufactured during the day.
4. Resin free-formaldehyde content	For each lot of resin purchased	The value for each lot used during the operating day.
5. Loss-on-ignition [c]	Measured at least once per day, for each product manufactured during that day.	The value for each product manufactured during the operating day.
6. UF-to-latex ratio in the binder [c]	For each batch of binder prepared the operating day.	The value for each batch of binder prepared during the operating day.
7. Weight of the final mat product per square (lb/roofing square)[c].	Each product manufactured during the operating day.	The value for each product manufactured during the operating day.
8. Average nonwoven wet-formed fiberglass mat production rate (roofing squares per the hour) [c].	For each product manufactured during the operating day.	The average value for each product manufactured during operating day.

[a] Required if a thermal oxidizer is used to control formaldehyde emissions.
[b] Required if process modifications or a control device other than a thermal oxidizer is used to control emissions.
[c] These parameters must be monitored and values recorded, but no operating limits apply.

TABLE 2 TO SUBPART HHHH.—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART HHHH

[As stated in § 63.3001, you must comply with the applicable General Provisions requirements according to the following table]

Citation	Requirement	Applies to subpart HHHH	Explanation
§ 63.1(a)(1)–(4)	General Applicability	Yes	
§ 63.1(a)(5)		No	[Reserved].
§ 63.1(a)(6)–(8)		Yes	
§ 63.1(a)(9)		No	[Reserved].
§ 63.1(a)(10)–(14)		Yes	
§ 63.1(b)	Initial Applicability Determination	Yes	
§ 63.1(c)(1)	Applicability After Standard Established	Yes	
§ 63.1(c)(2)		Yes	Some plants may be area sources.
§ 63.1(c)(3)		No	[Reserved].
§ 63.1(c)(4)–(5)		Yes	
§ 63.1(d)		No	[Reserved].
§ 63.1(e)	Applicability of Permit Program	Yes	
§ 63.2	Definitions	Yes	Additional definitions in § 63.3004.
§ 63.3	Units and Abbreviations	Yes	
§ 63.4(a)(1)–(3)	Prohibited Activities	Yes	
§ 63.4(a)(4)		No	[Reserved].
§ 63.4(a)(5)		Yes	
§ 63.4(b)–(c)	Circumvention/Severability	Yes	
§ 63.5(a)	Construction/Reconstruction	Yes	
§ 63.5(b)(1)	Existing/Constructed/Reconstruction	Yes	
§ 63.5(b)(2)		No	[Reserved].
§ 63.5(b)(3)–(6)		Yes	
§ 63.5(c)		No	[Reserved].
§ 63.5(d)	Application for Approval of Construction/Reconstruction.	Yes	
§ 63.5(e)	Approval of Construction/Reconstruction	Yes	
§ 63.5(f)	Approval of Construction/Reconstruction Based on State Review.	Yes	
§ 63.6(a)	Compliance with Standards and Maintenance—Applicability.	Yes	
§ 63.6(b)(1)–(5)	New and Reconstructed Sources-Dates	Yes	
§ 63.6(b)(6)		No	[Reserved].
§ 63.6(b)(7)		Yes	
§ 63.6(c)(1)–(2)	Existing Sources Dates	Yes	§ 63.2985 specifies dates.
§ 63.6(c)(3)–(4)		No	[Reserved].
§ 63.6(c)(5)		Yes	

TABLE 2 TO SUBPART HHHH.—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART HHHH—Continued

[As stated in § 63.3001, you must comply with the applicable General Provisions requirements according to the following table]

Citation	Requirement	Applies to subpart HHHH	Explanation
§ 63.6(d)		No	[Reserved].
§ 63.6(e)	Operation and Maintenance Requirements.	Yes	§§ 63.2984 and 63.2987 specify additional requirements.
§ 63.6(f)	Compliance with Emission Standards	Yes	
§ 63.6(g)	Alternative Standard	Yes	EPA retains approval authority.
§ 63.6(h)	Compliance with Opacity/Visible Emissions Standards.	No	Subpart HHHH does not specify opacity or visible emission standards.
§ 63.6(i)(1)–(14)	Extension of Compliance	Yes	
§ 63.6(i)(15)		No	[Reserved].
§ 63.6(i)(16)		Yes	
§ 63.6(j)	Exemption from Compliance	Yes	
§ 63.7(a)	Performance Test Requirements—Applicability and Dates.	Yes	
§ 63.7(b)	Notification of Performance Test	Yes	
§ 63.7(c)	Quality Assurance Program/Test Plan	Yes	
§ 63.7(d)	Testing Facilities	Yes	
§ 63.7(e)	Conduct of Tests	Yes	§ 63.2991–63.2994 specify additional requirements.
§ 63.7(f)	Alternative Test Method	Yes	EPA retains approval authority
§ 63.7(g)	Data Analysis	Yes	
§ 63.7(h)	Waiver of Tests	Yes	
§ 63.8(a)(1)–(2)	Monitoring Requirements—Applicability	Yes	
§ 63.8(a)(3)		No	[Reserved].
§ 63.8(a)(4)		Yes	
§ 63.8(b)	Conduct of Monitoring	Yes	
§ 63.8(c)(1)–(3)	Continuous Monitoring System (CMS) Operation and Maintenance.	Yes	
§ 63.8(c)(4)		Yes	
§ 63.8(c)(5)		No	Subpart HHHH does not specify opacity or visible emission standards
§ 63.8(c)(6)–(8)		Yes	
§ 63.8(d)	Quality Control	Yes	
§ 63.8(e)	CMS Performance Evaluation	Yes	
§ 63.8(f)(1)–(5)	Alternative Monitoring Method	Yes	EPA retains approval authority
§ 63.8(f)(6)	Alternative to Relative Accuracy Test	No	Subpart HHHH does not require the use of continuous emissions monitoring systems (CEMS)
§ 63.8(g)(1)	Data Reduction	Yes	
§ 63.8(g)(2)	Data Reduction	No	Subpart HHHH does not require the use of CEMS or continuous opacity monitoring systems (COMS).
§ 63.8(g)(3)–(5)	Data Reduction	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 Visible Emissions/Opacity Test.	No	Subpart HHHH does not specify opacity or visible emission standards.
§ 63.9(g)(1)	Additional CMS Notifications	Yes	
§ 63.9(g)(2)–(3)		No	Subpart HHHH does not require the use of COMS or CEMS.
§ 63.9(h)(1)–(3)	Notification of Compliance Status	Yes	§ 63.3000(b) specifies additional requirements.
§ 63.9(h)(4)		No	[Reserved].
§ 63.9(h)(5)–(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	§ 63.2998 includes additional requirements.
§ 63.10(c)(1)	Additional CMS Recordkeeping	Yes	
§ 63.10(c)(2)–(4)		No	[Reserved].
§ 63.10(c)(5)–(8)		Yes	
§ 63.10(c)(9)		No	[Reserved].
§ 63.10(c)(10)–(15)		Yes	
§ 63.10(d)(1)	General Reporting Requirements	Yes	§ 63.3000 includes additional requirements.

TABLE 2 TO SUBPART HHHH.—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART HHHH—Continued

[As stated in § 63.3001, you must comply with the applicable General Provisions requirements according to the following table]

Citation	Requirement	Applies to subpart HHHH	Explanation
§ 63.10(d)(2)	Performance Test Results	Yes	§ 63.3000 includes additional requirements
§ 63.10(d)(3)	Opacity or Visible Emissions Observations.	No	Subpart HHHH does not specify opacity or visible emission standards.
§ 63.10(d)(4)–(5)	Progress Reports/Startup, Shutdown, and Malfunction Reports.	Yes	
§ 63.10(e)(1)	Additional CMS Reports—General	No	Subpart HHHH does not require CEMS.
§ 63.10(e)(2)	Reporting results of CMS performance evaluations.	Yes	
§ 63.10(e)(3)	Excess Emission/CMS Performance Reports.	Yes	
§ 63.10(e)(4)	COMS Data Reports	No	Subpart HHHH does not specify opacity or visible emission standards.
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes	EPA retains approval authority
§ 63.11	Control Device Requirments—Applicability.	No	Facilities subject to subpart HHHH do not use flares as control devices.
§ 63.12	State Authority and Delegations	Yes	
§ 63.13	Addresses	Yes	
§ 63.14	Incorporation by Reference	No	
§ 63.15	Availability of Information/Confidentiality	Yes	

Appendices to Subpart HHHH of Part 63

Appendix A to Subpart HHHH—Method for Determining Free-Formaldehyde in Urea-Formaldehyde Resins by Sodium Sulfite (Iced & Cooled)

1.0 Scope

This procedure corresponds to the Housing and Urban Development method of determining free-formaldehyde in urea-formaldehyde resins. This method applies to samples that decompose to yield formaldehyde under the conditions of other free-formaldehyde methods. The primary use is for urea-formaldehyde resins.

2.0 Part A—Testing Resins

Formaldehyde will react with sodium sulfite to form the sulfite addition products and liberate sodium hydroxide (NaOH); however, at room temperature, the methanol groups present will also react to liberate NaOH. Titrate at 0 degrees Celsius (°C) to minimize the reaction of the methanol groups.

2.1 Apparatus Required.

2.1.1 Ice crusher.

2.1.2 One 100-milliliter (mL) graduated cylinder.

2.1.3 Three 400-mL beakers.

2.1.4 One 50-mL burette.

2.1.5 Analytical balance accurate to 0.1 milligrams (mg).

2.1.6 Magnetic stirrer.

2.1.7 Magnetic stirring bars.

2.1.8 Disposable pipettes.

2.1.9 Several 5-ounce (oz.) plastic cups.

2.1.10 Ice cube trays (small cubes).

2.2 Materials Required.

2.2.1 Ice cubes (made with distilled water).

2.2.2 A solution of 1 molar (M) sodium sulfite (Na_2SO_3) (63 grams (g) Na_2SO_3/500 mL water (H_2O) neutralized to thymolphthalein endpoint).

2.2.3 Standardized 0.1 normal (N) hydrochloric acid (HCl).

2.2.4 Thymolphthalein indicator (1.0 g thymolphthalein/199 g methanol).

2.2.5 Sodium chloride (NaCl) (reagent grade).

2.2.6 Sodium hydroxide (NaOH).

2.3 Procedure.

2.3.1 Prepare sufficient quantity of crushed ice for three determinations (two trays of cubes).

2.3.2 Put 70 cubic centimeters (cc) of 1 M Na_2SO_3 solution into a 400-mL beaker. Begin stirring and add approximately 100 g of crushed ice and 2 g of NaCl. Maintain 0 °C during test, adding ice as necessary.

2.3.3 Add 10–15 drops of thymolphthalein indicator to the chilled solution. If the solution remains clear, add 0.1 N NaOH until the solution turns blue; then add 0.1 N HCl back to the colorless endpoint. If the solution turns blue upon adding the indicator, add 0.1 N HCl to the colorless endpoint.

2.3.4 On the analytical balance, accurately weigh the amount of resin indicated under the ''*Resin Sample Size*'' chart (see below) as follows.

RESIN SAMPLE SIZE

Approximate free HCHO (percent)	Sample weight (gram(s))
<0.5	10
0.5–1.0	5
1.0–3.0	2
3.0	1

2.3.4.1 Pour about 1 inch of resin into a 5 oz. plastic cup.

2.3.4.2 Determine the gross weight of the cup, resin, and disposable pipette (with the narrow tip broken off) fitted with a small rubber bulb.

2.3.4.3 Pipette out the desired amount of resin into the stirring, chilled solution (approximately 1.5 to 2 g per pipette-full).

2.3.4.4 Quickly reweigh the cup, resin, and pipette with the bulb.

2.3.4.5 The resultant weight loss equals the grams of resin being tested.

2.3.5 Rapidly titrate the solution with 0.1 N HCl to the colorless endpoint described in Step 3 (2.3.3).

2.3.6 Repeat the test in triplicate.

2.4 Calculation.

2.4.1 The percent free-formaldehyde (%HCHO) is calculated as follows:

$$\%\text{HCHO} = \frac{(\text{mL 0.1 N HCl})\ (\text{N of Acid})\ (3.003)}{\text{Weight of Sample}}$$

2.4.2 Compute the average percent free-formaldehyde of the three tests.

(**Note:** If the results of the three tests are not within a range of ±0.5 percent or if the average of the three tests does not meet expected limits, carry out Part B and then repeat Part A.)

3.0 Part B—Standard Check

Part B ensures that test reagents used in determining percent free-formaldehyde in urea-formaldehyde resins are of proper concentration and that operator technique is correct. Should any doubts arise in either of these areas, the formaldehyde standard solution test should be carried out.

3.1 Preparation and Standardization of a 1 Percent Formalin Solution.

Prepare a solution containing approximately 1 percent formaldehyde from a stock 37 percent formalin solution. Standardize the prepared solution by titrating the hydroxyl ions resulting from the formation of the formaldehyde bisulfite complex.

3.2 Apparatus Required.

Note: All reagents must be American Chemical Society analytical reagent grade or better.

3.2.1 One 1-liter (L) volumetric flask (class A).

3.2.2 One 250-mL volumetric flask (class A).

3.2.3 One 250-mL beaker.

3.2.4 One 100-mL pipette (class A).

3.2.5 One 10-mL pipette (class A).

3.2.6 One 50-mL graduated cylinder (class A).

3.2.7 A pH meter, standardized using pH 7 and pH 10 buffers.

3.2.8 Magnetic stirrer.

3.2.9 Magnetic stirring bars.

3.2.10 Several 5-oz. plastic cups.

3.2.11 Disposal pipettes.

3.2.12 Ice cube trays (small cubes).

3.3 Materials Required.

3.3.1 A solution of 37 percent formalin.

3.3.2 Anhydrous Na_2SO_3.

3.3.3 Distilled water.

3.3.4 Standardized 0.100 N HCl.

3.3.5 Thymolphthalein indicator (1.0 g thymolphthalein/199 g methanol).

3.4 Preparation of Solutions and Reagents.

3.4.1 Formaldehyde Standard Solution (approximately 1 percent). Measure, using a graduated cylinder, 27.0 mL of analytical reagent 37 percent formalin solution into a 1-L volumetric flask. Fill the flask to volume with distilled water.

(**Note:** You must standardize this solution as described in section 3.5. This solution is stable for 3 months.)

3.4.2 Sodium Sulfite Solution 1.0 M (used for standardization of Formaldehyde Standard Solution). Quantitatively transfer, using distilled water as the transfer solvent, 31.50 g of anhydrous Na_2SO_3 into a 250-mL volumetric flask. Dissolve in approximately 100 mL of distilled water and fill to volume.

(**Note:** You must prepare this solution daily, but the calibration of the Formaldehyde Standard Solution needs to be done only once.)

3.4.3 Hydrochloric Acid Standard Solution 0.100 M. This reagent should be readily available as a primary standard that only needs to be diluted.

3.5 Standardization.

3.5.1 Standardization of Formaldehyde Standard Solution.

3.5.1.1 Pipette 100.0 mL of 1 M sodium sulfite into a stirred 250-mL beaker.

3.5.1.2 Using a standardized pH meter, measure and record the pH. The pH should be around 10. It is not essential the pH be 10; however, it is essential that the value be accurately recorded.

3.5.1.3 To the stirring Na_2SO_3 solution, pipette in 10.0 mL of Formaldehyde Standard Solution. The pH should rise sharply to about 12.

3.5.1.4 Using the pH meter as a continuous monitor, titrate the solution back to the original exact pH using 0.100 N HCl. Record the milliliters of HCl used as titrant. (**Note:** Approximately 30 to 35 mL of HCl will be required.)

3.5.1.5 Calculate the concentration of the Formaldehyde Standard Solution using the equation as follows:

$$\%HCHO = \frac{(\text{mL HCl})\ (\text{N HCl})\ (3.003)}{\text{mL sample}}$$

3.6 Procedure.

3.6.1 Prepare a sufficient quantity of crushed ice for three determinations (two trays of cubes).

3.6.2 Put 70 cc of 1 M Na_2SO_3 solution into a 400-mL beaker. Begin stirring and add approximately 100 g of crushed ice and 2 g NaCl. Maintain 0 °C during the test, adding ice as necessary.

3.6.3 Add 10–15 drops of thymolphthalein indicator to the chilled solution. If the solution remains clear, add 0.1 N NaOH until the solution turns blue; then add 0.1 N HCl back to the colorless endpoint. If the solution turns blue upon adding the indicator, add 0.1 N HCl to the colorless endpoint.

3.6.4 On the analytical balance, accurately weigh a sample of Formaldehyde Standard Solution as follows.

3.6.4.1 Pour about 0.5 inches of Formaldehyde Standard Solution into a 5-oz. plastic cup.

3.6.4.2 Determine the gross weight of the cup, Formaldehyde Standard Solution, and a disposable pipette fitted with a small rubber bulb.

3.6.4.3 Pipette approximately 5 g of the Formaldehyde Standard Solution into the stirring, chilled Na_2SO_3 solution.

3.6.4.4 Quickly reweigh the cup, Formaldehyde Standard Solution, and pipette with the bulb.

3.6.4.5 The resultant weight loss equals the grams of Formaldehyde Standard Solution being tested.

3.6.5 Rapidly titrate the solution with 0.1 N HCl to the colorless endpoint in Step 3 (3.6.3).

3.6.6 Repeat the test in triplicate.

3.7 Calculation for Formaldehyde Standard Solution.

3.7.1 The percent free-formaldehyde (% HCHO) is calculated as follows:

$$\%HCHO = \frac{(\text{mL 0.1 N HCl})(\text{N Acid})(3.003)}{\text{Weight of Formaldehyde Standard Solution}}$$

3.7.2 The range of the results of three tests should be no more than ±5 percent of the actual Formaldehyde Standard Solution concentration. Report results to two decimal places.

3.8 Reference.

West Coast Adhesive Manufacturers Trade Association Test 10.1.

Appendix B to Subpart HHHH—Method for the Determination of Loss-on-Ignition

1.0 Purpose

The purpose of this test is to determine the loss-on-ignition (LOI) of wet-formed fiberglass mat.

2.0 Equipment

2.1 Scale sensitive to 0.001 gram (g).

2.2 Drying oven equipped with a means of constant temperature regulation and mechanical air convection.

2.3 Furnace designed to heat to at least 625 °C (1,157 °F) and controllable to ±25 °C (±45 °F).

2.4 Crucible, high form, 250 milliliter (mL).

2.5 Desiccator.

2.6 Pan balance (see Note 2 in 4.9)

3.0 Sample Collection Procedure

3.1 Obtain a sample of mat in accordance with Technical Association of the Pulp and Paper Industry (TAPPI) method 1007 ''Sample Location.''

3.2 Use a 5- to 10-g sample cut into pieces small enough to fit into the crucible.

3.3 Place the sample in the crucible. (**Note 1:** To test without the use of a crucible, see Note 2 after Section 4.8.)

3.4 Condition the sample in the furnace set at 105 ± 3 °C (221 ± 9 °F) for 5 minutes ± 30 seconds.

4.0 Procedure

4.1 Condition each sample by drying for 5 minutes ± 30 seconds at 105 ± 3 °C (22 ± 5 °F).

4.2 Remove the test sample from the furnace and cool in the desiccator for 30 minutes in the standard atmosphere for testing glass textiles.

4.3 Place the empty crucible in the furnace at 625 ± 25 °C (1,157 ± 45 °F). After 30 minutes, remove and cool the crucible in the standard atmosphere (TAPPI method 1008) for 30 minutes.

4.4 Identify each crucible with respect to each test sample of mat.

4.5 Weigh the empty crucible to the nearest 0.001 g. Record this weight as the tare mass, T.

4.6 Place the test sample in the crucible and weigh to the nearest 0.001 g. Record this weight as the initial mass, A.

4.7 Place the test sample and crucible in the furnace and ignite at 625 ± 25 °C (1,157 ± 45 °F).

4.8 After ignition for at least 30 minutes, remove the test sample and crucible from the furnace and cool in the desiccator for 30 minutes in the standard atmosphere (TAPPI method 1008).

4.9 Remove each crucible, and test each sample separately from the desiccator, and immediately weigh each sample to the nearest 0.001 g. Record this weight as the ignited mass, B. (**Note 2:** When it is known that no ash residue separates from the test sample during the weighing and igniting processes, you may weigh the sample separately without the crucible. When this occurs, the tare mass (T) equals zero. With appropriate care, you can dry and weigh a single piece of mat and place with tongs into the ignition oven on appropriate refractory supports. When the ignition time is over, remove the sample as an intact fragile web and weigh it directly on a pan balance.)

5.0 Calculation

5.1 Calculate the LOI for each sample as follows:

$$\% \text{ LOI} = 100 \times (A - B)/(A - T)$$

Where:

A = initial mass of crucible and sample before ignition (g);

B = mass of crucible and glass residue after ignition (g); and

T = tare mass of crucible, (g) (see Note 2).

5.2 Report the percent LOI of the glass mat to the nearest 0.1 percent.

6.0 Precision

The repeatability of this test method for measurements on adjacent specimens from the same sample of mat is better than 1 percent.

[FR Doc. 02–7096 Filed 4–10–02; 8:45 am]

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Part VII

Environmental Protection Agency

40 CFR Part 63

National Emission Standards for Hazardous Air Pollutants for Leather Finishing Operations; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[FRL–7147–8]

RIN 2060–AH17

National Emission Standards for Hazardous Air Pollutants for Leather Finishing Operations

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action promulgates national emission standards for hazardous air pollutants (NESHAP) for leather finishing operations. The EPA has identified these facilities as major sources of emissions of hazardous air pollutants (HAP), such as glycol ethers, toluene, and xylene. These NESHAP will implement section 112(d) of the Clean Air Act (CAA) by requiring all leather finishing operations that are major sources to meet HAP emission standards reflecting the application of the maximum achievable control technology (MACT). We estimate the final NESHAP will reduce nationwide emissions of HAP from leather finishing operations by 375 tons per year (tpy). In addition, the final NESHAP will reduce non-HAP emissions of volatile organic compounds (VOC) by 750 tpy. The emissions reductions achieved by these final NESHAP, when combined with the emissions reductions achieved by other similar standards, will provide protection to the public and achieve a primary goal of the CAA.

EFFECTIVE DATE: The effective date is February 27, 2002. The incorporation by reference of certain publications listed in the regulation is approved by the Director of the Federal Register as of February 27, 2002.

ADDRESSES: *Docket.* Docket No. A–99–38 contains the information considered by EPA in developing the NESHAP. This docket is located at the U.S. EPA, Air and Radiation Docket and Information Center (Mail Code 6102), 401 M Street, SW, Room M–1500, Waterside Mall, Washington, DC 20460. The docket may be inspected from 8:30 a.m. to 5:30 p.m., Monday through Friday, excluding legal holidays.

FOR FURTHER INFORMATION CONTACT: For 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 § 63.13. For information concerning the analyses performed in developing these NESHAP, contact Mr. William Schrock, Organic Chemicals Group, Emission Standards Division, (MD–13), U.S. EPA, Research Triangle Park, North Carolina 27711; telephone number (919) 541–5032; facsimile number (919) 541–3470; electronic mail address: *schrock.bill@epa.gov.*

SUPPLEMENTARY INFORMATION: *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 process. 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 CAA.) The regulatory text and other materials related to this rulemaking are available for review in the docket or copies may be mailed on request from the Air Docket by calling (202) 260–7548. A reasonable fee may be charged for copying docket materials.

Public Comments. The NESHAP for leather finishing operations were proposed on October 2, 2000 (65 FR 58702) and seven comment letters were received on the proposal. The comment letters are available in Docket A–99–38, along with a summary of the comment letters and EPA's responses to the comments. In response to the public comments, EPA adjusted the final NESHAP where appropriate.

World Wide Web (WWW). In addition to being available in the docket, an electronic copy of today's final NESHAP will also be available on the WWW through the Technology Transfer Network (TTN). Following the Administrator's signature, a copy of the NESHAP will be posted on the TTN's policy and guidance page for newly proposed or final rules at *http://www.epa.gov/ttn/oarpg.* 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.

Regulated Entities. Categories and entities potentially regulated by this action include:

Category	SIC Code	NAICS Code	Examples of regulated entities
Industry	3111	3161	Leather finishing operations.
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. Not all facilities classified under the NAICS or SIC codes are affected. Other types of entities not listed could be affected. To determine whether your facility is regulated by this action, you should examine the applicability criteria in § 63.5285 of the final NESHAP. If you have any 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. The NESHAP for leather finishing operations were proposed on October 2, 2000 (65 FR 58702). This action announces the EPA's final decision on the NESHAP. Under section 307(b)(1) of the CAA, judicial review of these NESHAP is available by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by April 29, 2002. Only those objections to this rule which were raised with reasonable specificity during the period for public comment may be raised during judicial review. Under section 307(b)(2) of the CAA, the requirements that are the subject of today's final NESHAP may not be challenged later in civil or criminal proceedings brought by the EPA to enforce these requirements.

Outline. The information presented in this preamble is organized as follows:

I. What are the environmental, energy and economic impacts?
II. What changes and clarifications did we make since proposal?
A. Product Process Operations
B. MACT Floor Determination
C. Definitions
D. Clarifications

III. How did we respond to significant comments?
A. Rule Applicability
B. MACT Floor Determination
C. Product Process Operations
D. Definitions
IV. What are the Administrative Requirements for this rule?
A. Executive Order 12866, Regulatory Planning and Review
B. Executive Order 13132, Federalism
C. Executive Order 13175, Consultation and Coordination with Indian Tribal Governments
D. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks
E. Unfunded Mandates Reform Act
F. Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 *et seq.*
G. Paperwork Reduction Act
H. National Technology Transfer and Advancement Act of 1995
I. Congressional Review Act
J. Executive Order 13211, Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution or Use

I. What Are the Environmental, Energy, and Economic Impacts?

The nationwide environmental and cost impacts for today's final rule are the same as for the proposed rule. For all affected sources, we determined the total capital cost associated with the MACT level of control is approximately $5.6 million, and a total annualized cost of approximately $440,000 per year. The total annualized costs include the annualized capital costs and the costs associated with compliance monitoring, recordkeeping, and reporting.

We determined the overall cost associated with the MACT level of control to be about $1,300 per ton of HAP emissions reduced. The MACT level of control will reduce HAP emissions from existing sources by approximately 375 tpy, a reduction of approximately 51 percent. We do not expect any significant secondary air emissions, wastewater, solid waste, or energy impacts resulting from the final rule.

Additional information on the costs and environmental impacts of control options are discussed in the following four documents, which can be found in docket A–99–38:

(1) National Emission Standards for Hazardous Air Pollutants: Leather Finishing Operations, proposed rule (65 FR 58702, October 2, 2000).

(2) ''Public Comments and EPA Responses to the Proposed NESHAP for Leather Finishing Operations,'' memorandum dated July 17, 2001.

(3) ''Environmental and Energy Impacts for Leather Tanning and Finishing MACT Floor Regulatory Option,'' memorandum dated September 30, 1999.

(4) ''Cost Impacts Associated with HAP Emissions Reductions for Leather Tanning and Finishing Operations,'' September 2, 1999.

The economic impacts of the MACT floor are discussed in the proposed rule and in the document, ''Economic Impact Analysis of Leather Tanning and Finishing Operations NESHAP.'' The major findings regarding the economic impacts of the rule have not changed as a result of public comments on the proposed rule. The total annualized costs associated with these final NESHAP are approximately $440,000 in 1997 dollars. This cost represents only 0.014 percent of total industry revenues based on 1996 value of shipments. Because the total annualized costs associated with complying with the final NESHAP are such a small percentage of total market revenues (value of shipments), it is unlikely that market prices or production will change as a result of these final NESHAP. As an alternative to performing a market analysis, we evaluated the cost impacts on facility and firm revenues. The calculation of cost-to-sales ratios projects that only one firm (owning one facility) will have an impact that is greater than 1 percent of revenues (1.52 percent). All other firms have impacts well below 1/10th of 1 percent and range from 0.00 percent to 0.09 percent of firm revenues. Given that overall costs represent a small fraction of industry revenues, and individual firm revenues experience minimal impacts, we conclude that economic impacts associated with this final rule will be negligible.

II. What Changes and Clarifications Did We Make Since Proposal?

This section describes the major changes made in response to public comments and several clarifications that did not change any of the proposed regulatory requirements.

A. Product Process Operations

In the final rule, we have assigned the same HAP emission limit to the water-resistant leather product process operations and specialty leather finishing product process operations. Thus, the product process operation is now referred to as ''water-resistant/specialty.'' In the final rule, we have also added a definition for ''specialty leather.'' Under the proposed rule, specialty leather finishing had been categorized as a nonwater-resistant leather product process operation with a corresponding lower HAP emission limit.

B. MACT Floor Determination

In the final rule, we revised the MACT emission limits as follows:

(1) The MACT emission limit for existing sources with upholstery leather (less than 4 grams finish add-on per square foot) product process operations was decreased from 7.1 to 6.8 pounds of HAP per 1,000 square feet of leather processed.

(2) The MACT emission limit for new sources with upholstery leather (less than 4 grams finish add-on per square foot) product process operations was decreased from 2.9 to 2.5 pounds of HAP per 1,000 square feet of leather processed.

(3) The MACT emission limit for existing sources with water-resistant/specialty leather product process operations was decreased from 5.9 to 5.6 pounds of HAP per 1,000 square feet of leather processed. The revised definition of water-resistant product process operations to include specialty leather increases the emission limit for specialty leather product process operations from 3.4 to 5.6 pounds of HAP per 1,000 square feet of leather processed.

(4) The MACT emission limit for existing sources with nonwater-resistant leather product process operations was increased from 3.4 to 3.7 pounds of HAP per 1,000 square feet of leather processed.

C. Definitions

We have revised the definition of ''leather finishing'' to include dyes or other non film-forming coatings. We have also included a definition to describe a new term, ''specialty leather.''

D. Clarifications

In the final rule, we have clarified the following points:

(1) Facilities that finish leather solely for research and development purposes are not subject to this rule.

(2) The quantity of leather shipped can be used as a surrogate for the quantity of leather processed in a particular month.

(3) The quantity of leather processed cannot be recounted when the leather needs additional finishing or reworking, unless the piece of leather is completely stripped of all applied finishes and reprocessed through the entire finishing operation as if it were a new piece of leather.

(4) Paper or cardstock may be used as a substrate material for determining the mass of finish add-on.

(5) We updated the Maeser Flexes standard testing method to ASTM Standard D2099–00.

(6) A total of 36 samples (i.e., three sections of leather substrate from at least 12 sides of leather) must be tested to determine the water-resistant characteristics of the leather.

III. How Did We Respond to Significant Comments?

This section presents a summary of our responses to significant public comments received on the proposed rule. A comprehensive summary of public comments and responses can be found in the document entitled ''Public Comments and EPA Responses to the Proposed NESHAP for Leather Finishing Operations'' (Docket No. A–99–38).

A. Rule Applicability

Comment: One commenter requested that provisions in the rule should clarify that the ''once in, always in'' policy for MACT standards will not apply in certain cases. Primarily, this provision would apply to sources that have subsequently implemented pollution-prevention techniques to reduce HAP emissions from the source. If the source is able to reduce its emission level such that the source is no longer considered a major source, the source can then be excluded from the MACT requirements.

Response: EPA has been working to develop regulatory options that would allow qualifying sources to satisfy the MACT requirements through innovative, streamlined approaches, if, after a source achieves compliance with an applicable MACT rule, it achieves HAP emissions reductions equivalent to or better than MACT levels of control through pollution-prevention measures. The regulatory options under consideration will include components that meet the legal requirements of the CAA and still resolve the issues regarding pollution prevention. We plan to develop rule language to propose to amend either the NESHAP General Provisions or existing MACT rules. We project proposing these amendments later in 2002.

B. MACT Floor Determination

Comment: One commenter stated that the original HAP emission data submitted by the source for 1997 operations did not include ethylene glycol monobutyl ether acetate (EGBE) (CAS No. 112–07–2). The total HAP emissions including EGBE is nearly twice the value of their original HAP emissions submission. The commenter is concerned that other leather finishing operations may have excluded EGBE from their respective total HAP emissions estimated. The commenter also requested that the MACT floor be determined only from sources that have included EGBE in their total HAP emissions estimate.

Response: In 1999, we distributed a second industry survey to ensure that all leather finishing operations had reported all 1997 HAP emissions, including glycol ethers and specifically, EGBE. Initially, we decided not to use the glycol ethers data gathered from the second industry survey in the MACT floor determinations for the proposed rule because of some observed inconsistencies with the reported data. Upon further evaluation of the glycol ether data, we have been able to resolve the inconsistencies. As a result, the total HAP emissions reported from six sources have been adjusted. Four sources resulted in higher total HAP emissions and two sources resulted in lower HAP emissions. The total HAP emissions adjustments affected the MACT determination for existing sources with any of the following three product process operations: (1) Upholstery leather (less than 4 grams finish add-on per square foot), (2) water-resistant/specialty leather, and (3) nonwater-resistant leather. In addition, the total HAP emissions adjustments affected the MACT determination for new sources with upholstery leather (less than 4 grams finish add-on per square foot) product process operations.

We revised the MACT determinations for existing and new sources with upholstery leather (less than 4 grams finish add-on per square foot) product process operations as a sole result of adjustments to reported total HAP emissions. The MACT emission limit for existing sources in the upholstery leather (less than 4 grams finish add-on per square foot) product process operations decreased from 7.1 to 6.8 pounds of HAP per 1,000 square feet of leather processed. The MACT emission limit for new sources in the upholstery leather (less than 4 grams finish add-on per square foot) product process operations decreased from 2.9 to 2.5 pounds of HAP per 1,000 square feet of leather processed.

We revised the MACT determinations for existing sources with water-resistant/specialty leather and nonwater-resistant leather product process operations as a result of adjustments to the reported total HAP emissions and modifications to the definitions of these two product process operations. We reassigned specialty leather processes from the nonwater-resistant product process operation to the water-resistant product process operation based on greater similarities in applied coatings. Both specialty and water-resistant leather require the application of resins to produce the special color, texture, and water-resistant qualities.

Comment: Two commenters requested a recalculation of the MACT floor to exclude leather finishing operations that have closed since the initial survey of industry data in 1998. The commenters noted that four leather finishing operations have closed since 1998. One commenter also noted that one operation was recently sold to another company.

Response: The commenters are correct that four leather finishing operations have closed. The determination of a MACT floor is based on a single period in time. For the leather finishing operations NESHAP, the MACT floor performance levels are based on industry performance data for calendar year 1997. Emissions and production rates are dynamic and may change since the selected performance period. Since the data obtained from the industry were considered representative for calendar year 1997, we have decided to make no changes to the MACT floor HAP emission limits to account for recent facility closings. In this regard, we note that no commenter suggested that the emission information from these now-closed facilities was inaccurate or unrepresentative. We are not aware of any such deficiencies. Our view is the data are both accurate and representative, thus we do not see any technical reason for not including this information in a calculation of emissions reductions reflecting MACT.

C. Product Process Operations

Comment: Two commenters requested that we establish an additional leather product process operation and corresponding MACT floor performance level for ''specialty'' leather finishing. The commenters stated that no suitable method has been developed to replace the solvents necessary for the finishing of specialty leathers. At the sources' current HAP emission rates, the sources will be unable to achieve the MACT performance levels. In addition, one commenter requested that the additional product process operation be assigned a HAP emission limit of no less than 6.0 pounds of HAP per 1,000 square feet of leather processed.

Response: Based on a review of additional information provided by one of the commenters on specialty leather processing operations, we have decided to modify and expand the definition of the water-resistant leather product process operations to specifically include specialty leather finishing.

Under the proposed rule, we categorized specialty leather finishing as a nonwater-resistant leather product process operation. The two sources identified with specialty leather finishing operations have now shifted from the nonwater-resistant product process operation to the water-resistant/specialty product process operation. Thus, we have revised the MACT determination for these two product process operations to reflect the updated set of affected sources with each product process operation. However, we cannot arbitrarily assign a MACT performance level to a product process operation such as the 6.0 pounds of HAP per 1,000 square feet of leather processed, as suggested by commenters, especially without providing any supporting information. The MACT floor for existing sources in each leather product process operation must be determined as the average emission limitation achieved by the best performing 12 percent. In cases where 30 or fewer sources exist in a source category, or subcategory (the situation here for nonwater-resistant leather product process operations), the MACT floor is defined as the average emission limitation achieved by the best performing five sources.

The MACT emission limits for the water-resistant/specialty and nonwater-resistant leather product process operations are based on the top five sources included in the revised definition of these two product process operations. The revised emission limits include all appropriate adjustments for variability and glycol ethers data from the second industry survey, as discussed in a previous comment concerning EGBE. As a result of the revised process definitions and adjustments for glycol ethers, the MACT emission limit for existing sources in the modified water-resistant/specialty leather product process operations has decreased from 5.9 to 5.6 pounds of HAP per 1,000 square feet of leather processed. The MACT emission limit for existing sources in the nonwater-resistant leather product process operations increased from 3.4 to 3.7 pounds of HAP per 1,000 square feet of leather processed. Under the proposed rule, specialty leather operations were established with an emission limit of 3.4 pounds of HAP per 1,000 square feet of leather processed as a nonwater-resistant product process operation. Under the final rule, specialty leather operations are now established with an increased emission limit of 5.6 pounds of HAP per 1,000 square feet of leather processed as a water-resistant/specialty product process operation.

D. Definitions

Comment: One commenter requested that the definition of leather ''finishing'' be expanded to include coatings, such as dyes and pigments, that are not film-forming materials.

Response: The EPA agrees with the commenter and the final rule reflects a revised definition of leather finishing. The definition now states ''Leather finishing adjusts and improves the physical and aesthetic characteristics of the leather surface through the multistage application of a coating comprising dyes, pigments, film-forming materials, and performance modifiers dissolved or suspended in liquid carriers.''

IV. What Are the Administrative Requirements for This Rule?

A. Executive Order 12866, Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), we 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 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 obligation of recipients thereof; or

(4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, it has been determined that today's final rule is not a ''significant regulatory action'' because it will not have an annual effect on the economy of $100 million and is therefore not subject to OMB review.

B. Executive Order 13132, Federalism

Executive Order 13132, entitled ''Federalism'' (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' is defined in the Executive Order to include rules that have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.'' Under Executive Order 13132, EPA may not issue a rule that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the rule. The EPA also may not issue a rule that has federalism implications and that preempts State law unless the Agency consults with State and local officials early in the process of developing the rule.

If EPA complies by consulting, Executive Order 13132 requires EPA to provide to OMB, in a separately identified section of the preamble to the rule, a federalism summary impact statement (FSIS). The FSIS must include a description of the extent of EPA's prior consultation with State and local officials, a summary of the nature of their concerns and the Agency's position supporting the need to issue the rule, and a statement of the extent to which the concerns of State and local officials have been met. Also, when EPA transmits a final rule with federalism implications to OMB for review pursuant to Executive Order 12866, EPA must include a certification from the Agency's Federalism Official stating that EPA has met the requirements of Executive Order 13132 in a meaningful and timely manner.

Today's final rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This is because today's final rule applies to affected sources in the leather finishing industry, not to States or local governments. Nor will State law be preempted, or any mandates be imposed on States or local governments. Thus, the requirements of section 6 of the Executive Order do not apply to this final rule. The EPA notes, however, that although not required to do so by this Executive Order (or otherwise), it did consult with State

governments during development of today's final rule.

C. Executive Order 13175, Consultation and Coordination With Indian Tribal Governments

Executive Order 13175, entitled ''Consultation and Coordination with Indian Tribal Governments'' (65 FR 67249, November 6, 2000), requires EPA to develop an accountable process to ensure ''meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.'' ''Policies that have tribal implications'' is defined in the Executive Order to include rules that have ''substantial direct effects on one or more Indian tribes, on the relationship between the Federal government and the Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes.''

This final rule does not have tribal implications. It will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this rule.

D. 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, EPA must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned rule is preferable to other potentially effective and reasonably feasible alternatives considered by 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 Executive Order has the potential to influence the rule. Today's final rule is not subject to Executive Order 13045 because it establishes environmental standards based on technology, not health or safety risks. No children's risk analysis was performed because no alternative technologies exist that would provide greater stringency at a reasonable cost. Furthermore, today's final rule has been determined not to be ''economically significant'' as defined under Executive Order 12866.

E. 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 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 our 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 final 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 1 year. The total annual cost of this final rule for any 1 year has been estimated at $440,000 per year. Thus, today's final rule is not subject to the requirements of sections 202 and 205 of the UMRA.

We have determined that today's final rule contains no regulatory requirements that might significantly or uniquely affect small governments because it contains no requirements that apply to such governments or impose obligations upon them. Therefore, today's final rule is not subject to the requirements of section 203 of the UMRA.

F. Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 et seq.

The RFA generally requires us to give special consideration to the effect of Federal regulations on small entities and to consider regulatory options that might mitigate any such impacts. We must prepare a regulatory flexibility analysis unless we determine that the rule will not have a ''significant economic impact on a substantial number of small entities.'' Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's final rule on small entities, small entity is defined as: (1) A small business whose parent company has fewer than 500 employees; (2) a small governmental jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's final rule on small entities, we have determined that this action will not have a significant economic impact on a substantial number of small entities. There are currently a total of 16 facilities that are major sources of HAP emissions and affected by this final rule. The industry is characterized as having some finishing operations that are relatively small, often specializing in the manufacture of leather with unique attributes, while others employ several hundred people and produce a wide variety of leathers. However, many of the smaller leather finishing operations are owned by ultimate parent firms that are classified as large corporations. Also, this industry typically operates with more than 300 establishments, so only a small fraction of the firms in the industry are impacted by the final rule. We determined that the 16 affected facilities are owned by 14 parent firms, and only three of these firms are classified as small by the previously mentioned definition. Nearly all of the firms (small and large) have very minimal impacts which range from 0.00

percent to 0.09 percent of firm revenues. Only one firm of the 14 will experience compliance costs that exceed 1 percent of firm revenues (1.52 percent), and this firm is a small business. This impact, however, is not considered significant for this industry. Typical profit margins for the leather industry average 3.5 percent.

Although this final rule will not have a significant economic impact on a substantial number of small entities, we nonetheless have tried to reduce the impact of this final rule on small entities. We have worked closely with the Leather Industry of America in determining the form of the standard and establishing methods for minimizing the compliance burden. This outreach included a series of meetings over a 2-year period and our attendance at the industry's annual regulatory meeting of the Leather Industry of America. These meetings and outreach provided updates to the industry on the progress of the final rule and also forecasting the timeline for compliance with the final rule. In addition, these meetings provided us with useful information that we used in developing the final rule. For instance, currently no facilities use add-on control devices, and we anticipate that no facilities will need to install a device to achieve compliance with the final rule. This will minimize costs to achieve compliance as well as simplify demonstrating compliance since already maintained purchase and usage records are all that will be needed to demonstrate compliance. We are also requiring that compliance demonstrations be conducted monthly, rather than on a daily basis, which we believe will reduce the amount of records necessary to demonstrate compliance with the final rule. Furthermore, we require the minimum monitoring, recordkeeping, and reporting requirements specified in the NESHAP General Provisions (40 CFR part 63, subpart A).

G. Paperwork Reduction Act

The information collection requirements in today's final rule will be submitted for approval to the OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* The EPA has prepared an Information Collection Request (ICR) document (ICR No. 1985–02), and you may obtain a copy from Sandy Farmer by mail at the U.S. EPA, Office of Environmental Information, Collection Strategies Division (2822), 1200 Pennsylvania Avenue, NW, 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.

The information requirements are based on notification, recordkeeping, and reporting requirements in the NESHAP General Provisions (40 CFR part 63, subpart A), which are mandatory for all operators subject to national emission standards. These recordkeeping and reporting requirements are specifically authorized by section 114 of the CAA (42 U.S.C. 7414). All information submitted to the EPA pursuant to the recordkeeping and reporting requirements for which a claim of confidentiality is made is safeguarded according to EPA policies set forth in 40 CFR part 2, subpart B.

The annual monitoring, reporting, and recordkeeping burden for this collection for all affected facilities, as averaged over the first 3 years after the effective date of the rule, is estimated to be 485 labor hours per year at a total annual cost of $21,600. The total 3-year burden of monitoring, recordkeeping, and reporting for this collection for all affected facilities is estimated at 1,455 labor hours at a total annual cost of $64,700. There are no required capital and operations and maintenance costs for the leather finishing operations NESHAP. This estimate includes a one-time plan for demonstrating compliance, annual compliance certificate reports, notifications, and recordkeeping.

Burden means the total time, effort, or financial resources people spend to generate, maintain, keep, or disclose to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and use technology and systems to collect, validate, and verify information; process, maintain, disclose, and provide information; adjust ways to comply with any previously applicable instructions and requirements; train people to respond to a collection of information; search data sources; collect and review 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 rules are in 40 CFR part 9 and 48 CFR chapter 15.

H. National Technology Transfer and Advancement Act of 1995

Under section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995 (Pub. L. No. 104–113), all Federal agencies are required to use voluntary consensus standards (VCS) in their 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) developed or adopted by one or more voluntary consensus bodies. The NTTAA requires Federal agencies to provide Congress, through annual reports to the OMB, with explanations when an agency does not use available and applicable VCS.

Consistent with the NTTAA, the EPA conducted a search for EPA Method 311 (Analysis of Hazardous Air Pollutant Compounds in Paints and Coatings by Direct Injection into a Gas Chromatograph) and found no candidate VCS for use in identifying glycol ethers, toluene, and xylene. This final rule references the National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices, and Routing to a Fuel Gas System or a Process (40 CFR part 63, subpart SS). Since there are no new technical standard requirements resulting from specifying subpart SS in this final rule, and no candidate consensus standards were identified for EPA Method 311 (glycol ethers, toluene, and xylene), EPA is not adopting any VCS in today's final rule.

Section 63.5290(a) of today's final rule lists EPA Method 311. The EPA Method 311 has been used by States and industry for approximately 5 years. Nevertheless, under § 63.7(f) of 40 CFR part 63, subpart A, today's final rule allows any State or source to apply to EPA for permission to use an alternative method in lieu of EPA Method 311 listed in § 63.5290(a).

I. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801, *et seq.*, as added by the SBREFA, 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 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 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), and therefore will be effective February 27, 2002.

J. Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This rule is not subject to Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedure, Air pollution control, Hazardous substances, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: February 13, 2002.

Christine Todd Whitman,

Administrator.

For the reasons stated in the preamble, title 40, chapter I, part 63 of the Code of the 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 A—[Amended]

2. Section 63.14 is amended by adding and reserving paragraphs (b)(19) and (b)(20), and adding paragraph (b)(21) to read as follows:

§ 63.14 Incorporation by reference.

* * * * *

(b) * * *

(19) [Reserved]

(20) [Reserved]

(21) ASTM D2099–00, Standard Test Method for Dynamic Water Resistance of Shoe Upper Leather by the Maeser Water Penetration Tester, IBR approved for § 63.5350.

* * * * *

3. Part 63 is amended by adding subpart TTTT to read as follows:

Subpart TTTT—National Emission Standards for Hazardous Air Pollutants for Leather Finishing Operations

Sec.

What This Subpart Covers

63.5280 What is the purpose of this subpart?
63.5285 Am I subject to this subpart?
63.5290 What parts of my facility does this subpart cover?
63.5295 When do I have to comply with this subpart?

Standards

63.5305 What emission standards must I meet?

Compliance Requirements

63.5320 How does my affected major source comply with the HAP emission standards?
63.5325 What is a plan for demonstrating compliance and when must I have one in place?
63.5330 How do I determine the compliance ratio?
63.5335 How do I determine the actual HAP loss?
63.5340 How do I determine the allowable HAP loss?
63.5345 How do I distinguish between the two upholstery product process operations?
63.5350 How do I distinguish between the water-resistant/specialty and nonwater-resistant leather product process operations?
63.5355 How do I monitor and collect data to demonstrate continuous compliance?
63.5360 How do I demonstrate continuous compliance with the emission standards?

Testing and Initial Compliance Requirements

63.5375 When must I conduct a performance test or initial compliance demonstration?
63.5380 How do I conduct performance tests?
63.5385 How do I measure the quantity of finish applied to the leather?
63.5390 How do I measure the HAP content of a finish?
63.5395 How do I measure the density of a finish?
63.5400 How do I measure the quantity of leather processed?

Notifications, Reports, and Records

63.5415 What notifications must I submit and when?
63.5420 What reports must I submit and when?
63.5425 When must I start recordkeeping to determine my compliance ratio?
63.5430 What records must I keep?
63.5435 In what form and how long must I keep my records?

Other Requirements and Information

63.5450 What parts of the General Provisions apply to me?
63.5455 Who administers this subpart?
63.5460 What definitions apply to this subpart?

Figure to Subpart TTTT of Part 63

Figure 1 to Subpart TTTT of Part 63—Example Logs for Recording Leather Finish Use and HAP Content

Tables to Subpart TTTT of Part 63

Table 1 to Subpart TTTT of Part 63—Leather Finishing HAP Emission Limits for Determining the Allowable HAP Loss
Table 2 to Subpart TTTT of Part 63—Applicability of General Provisions to Subpart TTTT

What This Subpart Covers

§ 63.5280 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for leather finishing operations. These standards limit HAP emissions from specified leather finishing operations. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission standards.

§ 63.5285 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a leather finishing operation that is a major source of hazardous air pollutants (HAP) emissions or that is located at, or is part of, a major source of HAP emissions. A leather finishing operation is defined in § 63.5460. In general, a leather finishing operation is a single process or group of processes used to adjust and improve the physical and aesthetic characteristics of the leather surface through multistage application of a coating comprised of dyes, pigments, film-forming materials, and performance modifiers dissolved or suspended in liquid carriers.

(b) You are a major source of HAP emissions if you own or operate a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year.

(c) You are not subject to this subpart if your source finishes leather solely for the purpose of research and development.

§ 63.5290 What parts of my facility does this subpart cover?

(a) This subpart applies to each new, reconstructed, or existing affected source at leather finishing operations.

(b) The affected source subject to this subpart is the collection of all equipment and activities used for the multistage application of finishing materials to adjust and improve the physical and aesthetic characteristics of the leather surface. This subpart applies to the leather finishing operations listed in paragraphs (b)(1) through (4) of this section and as defined in § 63.5460, whether or not the operations are collocated with leather tanning operations:

(1) Upholstery leather with greater than or equal to 4 grams finish add-on per square foot of leather;

(2) Upholstery leather with less than 4 grams finish add-on per square foot of leather;

(3) Water-resistant/specialty leather; and

(4) Nonwater-resistant leather.

(c) An affected source does not include portions of your leather finishing operation that are listed in paragraphs (c)(1) and (2) of this section:

(1) Equipment used solely with leather tanning operations; and

(2) That portion of your leather finishing operation using a solvent degreasing process, such as in the manufacture of leather chamois, that is already subject to the Halogenated Solvent Cleaning NESHAP (40 CFR part 63, subpart T).

(d) An affected source is a new affected source if you commenced construction of the affected source on or after October 2, 2000, and you meet the applicability criteria at the time you commenced construction.

(e) An affected source is reconstructed if you meet the criteria as defined in § 63.2.

(f) An affected source is existing if it is not new or reconstructed.

§ 63.5295 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section:

(1) If you startup your affected source before February 27, 2002, then you must comply with the emission standards for new and reconstructed sources in this subpart no later than February 27, 2002.

(2) If you startup your affected source after February 27, 2002, then you must comply with the emission standards for new and reconstructed sources in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the emission standards for existing sources no later than February 28, 2005.

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP and an affected source subject to this subpart, paragraphs (c)(1) and (2) of this section apply.

(1) An area source that meets the criteria of a new affected source, as specified at § 63.5290(d), or a reconstructed affected source, as specified at § 63.5290(e), must be in compliance with this subpart upon becoming a major source.

(2) An area source that meets the criteria of an existing affected source, as specified at § 63.5290(f), must be in compliance with this subpart no later than 3 years after it becomes a major source.

(d) You must meet the notification requirements in § 63.5415 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission standards in this subpart.

Standards

§ 63.5305 What emission standards must I meet?

The emission standards limit the number of pounds of HAP lost per square foot of leather processed. You must meet each emission limit in Table 1 of this subpart that applies to you.

Compliance Requirements

§ 63.5320 How does my affected major source comply with the HAP emission standards?

(a) All affected sources must be in compliance with the requirements of this subpart at all times, including periods of startup, shutdown, and malfunction.

(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in § 63.6(e)(1)(i).

(c) You must perform all of the items listed in paragraphs (c)(1) through (10) of this section:

(1) Submit the necessary notifications in accordance with § 63.5415.

(2) Develop and implement a plan for demonstrating compliance in accordance with § 63.5325.

(3) Submit the necessary reports in accordance with § 63.5420.

(4) Keep a finish inventory log, as specified at § 63.5335(b), to record monthly the pounds of each type of finish applied for each leather product process operation and the mass fraction of HAP in each applied finish. You may be required to start recordkeeping prior to the compliance dates specified at § 63.5295.

(5) Keep an inventory log, as specified at § 63.5430(f), to record monthly the surface area of leather processed in 1,000's of square feet for each product process operation. You may be required to start recordkeeping prior to the compliance dates specified at § 63.5295.

(6) Determine the actual HAP loss from your affected source in accordance with § 63.5335.

(7) Determine the allowable HAP loss for your affected source in accordance with § 63.5340.

(8) Determine the compliance ratio for your affected source each month as specified at § 63.5330. The compliance ratio compares your actual HAP loss to your allowable HAP loss for the previous 12 months.

(9) Maintain the compliance ratio for your affected source at or below 1.00 in accordance with § 63.5330.

(10) Maintain all the necessary records you have used to demonstrate compliance with this subpart in accordance with § 63.5430.

§ 63.5325 What is a plan for demonstrating compliance and when must I have one in place?

(a) You must develop and implement a written plan for demonstrating compliance that provides the detailed procedures you will follow to monitor and record data necessary for demonstrating compliance with this subpart. Procedures followed for quantifying HAP loss from the source and amount of leather processed vary from source to source because of site-specific factors such as equipment design characteristics and operating conditions. Typical procedures include one or more accurate measurement methods such as weigh scales and volumetric displacement. Because the industry does not have a uniform set of procedures, you must develop and implement your own site-specific plan for demonstrating compliance not later than the compliance date for your source. You must also incorporate the plan for demonstrating compliance by reference in the source's title V permit. The plan for demonstrating compliance must include the items listed in paragraphs (a)(1) through (7) of this section:

(1) The name and address of the owner or operator.

(2) The physical address of the leather finishing operation.

(3) Provide a detailed description of all methods of measurement your source will use to determine your finish usage, HAP content of each finish, quantity of leather processed, and leather product process operation type.

(4) Specify when each measurement will be made.

(5) Provide examples of each calculation you will use to determine your compliance status. Include examples of how you will convert data measured with one parameter to other terms for use in compliance determination.

(6) Provide example logs of how data will be recorded.

(7) Provide a quality assurance/quality control plan to ensure that the data continue to meet compliance demonstration needs.

(b) You may be required to revise your plan for demonstrating compliance. We may require reasonable revisions if the procedures lack detail, are inconsistent, or do not accurately determine finish usage, HAP content of each finish, quantity of leather processed, or leather product process operation type.

§ 63.5330 How do I determine the compliance ratio?

(a) When your source has processed leather for 12 months, you must determine the compliance ratio for your affected source by the fifteenth of each month for the previous 12 months.

(b) You must determine the compliance ratio using Equation 1 of this section as follows:

$$\text{Compliance Ratio} = \frac{\text{Actual HAP Loss}}{\text{Allowable HAP Loss}} \qquad \text{(Eq. 1)}$$

Where:

Actual HAP Loss = Pounds of actual HAP loss for the previous 12 months, as determined in § 63.5335.

Allowable HAP Loss = Pounds of allowable HAP loss for the previous 12 months, as determined in § 63.5340.

(1) If the value of the compliance ratio is less than or equal to 1.00, your affected source was in compliance with the applicable HAP emission limits of this subpart for the previous month.

(2) If the value of the compliance ratio is greater than 1.00, your affected source was deviating from compliance with the applicable HAP emission limits of this subpart for the previous month.

§ 63.5335 How do I determine the actual HAP loss?

(a) This section describes the information and procedures you must use to determine the actual HAP loss from your leather finishing operation. By the fifteenth of each month, you must determine the actual HAP loss in pounds from your leather finishing operation for the previous month.

(b) Use a finish inventory log to record the pounds of each type of finish applied for each leather product process operation and the mass fraction of HAP in each applied finish. Figure 1 of this subpart shows an example log for recording the minimum information necessary to determine your finish usage and HAP loss. The finish inventory log must contain, at a minimum, the information for each type of finish applied listed in paragraphs (b)(1) through (7) of this section:

(1) Finish type.

(2) Pounds (or density and volume) of each finish applied to the leather.

(3) Mass fraction of HAP in each applied finish.

(4) Date of the recorded entry.

(5) Time of the recorded entry.

(6) Name of the person recording the entry.

(7) Product process operation type.

(c) To determine the pounds of HAP loss for the previous month, you must first determine the pounds of HAP loss from each finish application according to paragraph (c)(1) or (2) of this section.

(1) For facilities not using add-on emission control devices, the entire HAP content of the finishes are assumed to be released to the environment. Using the finish inventory log, multiply the pounds of each recorded finish usage by the corresponding mass fraction of HAP in the finish. The result is the HAP loss in pounds from each finish application. Sum the pounds of HAP loss from all finish applications recorded during the previous month to determine the total monthly HAP loss in pounds from your finishing operation.

(2) For facilities using add-on emission control devices, the finish inventory log and the emission reduction efficiency of the add-on capture and control devices can be used to determine the net HAP loss in pounds. The emission reduction efficiency for a control device must be determined from a performance test conducted in accordance with §§ 63.5375 and 63.5380. Using the finish inventory log, multiply the pounds of each recorded finish usage by the corresponding mass fraction of HAP in the finish. The result is the gross HAP loss in pounds from each finish application prior to the add-on control device. Multiply the gross HAP loss by the percent emission reduction achieved by the add-on control device and then subtract this amount from the gross HAP loss. The result is the net HAP loss in pounds from each finish application. Sum the pounds of net HAP loss from all finish applications recorded during the previous month to determine the total monthly net HAP loss in pounds from your finishing operation.

(d) After collecting HAP loss data for 12 months, you must also determine by the fifteenth of each month the annual HAP loss in pounds by summing the monthly HAP losses for the previous 12 months. The annual HAP loss is the ''actual HAP loss,'' which is used in Equation 1 of § 63.5330 to calculate your compliance ratio, as described in § 63.5330.

§ 63.5340 How do I determine the allowable HAP loss?

(a) By the fifteenth of each month, you must determine the allowable HAP loss in pounds from your leather finishing operation for the previous month.

(b) To determine the allowable HAP loss for your leather finishing operation, you must select the appropriate HAP emission limit, expressed in pounds of HAP loss per 1,000 square feet of leather processed, from Table 1 of this subpart, for each type of leather product process operation performed during the previous 12 months. Under the appropriate existing or new source column, select the HAP emission limit that corresponds to each type of product process operation performed during the previous 12 months. Next, determine the annual total of leather processed in 1,000's of square feet for each product process operation in accordance with § 63.5400. Then, multiply the annual total of leather processed in each product process operation by the corresponding HAP emission limit to determine the allowable HAP loss in pounds for the corresponding leather product process operation. Finally, sum the pounds of HAP loss from all leather product process operations performed in the previous 12 months. Equation 1 of this section illustrates the calculation of allowable HAP loss as follows:

$$\text{Allowable HAP Loss} = \sum_{i=1}^{n} \left(\begin{array}{c} \text{Annual Total} \\ \text{of Leather} \\ \text{Processed}_i \end{array} * \begin{array}{c} \text{HAP} \\ \text{Emission} \\ \text{Limit}_i \end{array} \right) \qquad \text{(Eq. 1)}$$

Where:

Annual Total of Leather Processed = 1,000's of square feet of leather processed in the previous 12 months in product process operation ''i''.

HAP Emission Limit = From Table 1 of this subpart, the HAP emission limit in pounds of HAP loss per 1,000 square feet of leather processed for product process operation ''i''.

n = Number of leather product process operation types performed during the previous 12 months.

(c) The resulting ''allowable HAP loss'' is used in Equation 1 of § 63.5330 to calculate your compliance ratio, as described in § 63.5330.

§ 63.5345 How do I distinguish between the two upholstery product process operations?

(a) Product process operations that finish leather for use in automobile and furniture seat coverings are categorized as an upholstery product process operation. There are two upholstery product process operations subject to the requirements of this subpart—operations with less than 4 grams of finish add-on per square foot, and operations with 4 grams or more of finish add-on per square foot. You must distinguish between the two upholstery product process operations so that you can determine which HAP emission limit in Table 1 of this subpart applies to your affected source.

(b) You must determine finish add-on by calculating the difference in mass before and after the finishing process. You may use an empirical method to determine the amount of finish add-on applied during the finishing process, as described in paragraphs (b)(1) through (4) of this section:

(1) Weigh a one square foot representative section of polyester film, paper, cardstock, or equivalent material substrate to be finished. This will provide an initial mass and surface area prior to starting the finishing process.

(2) Use a scale with an accuracy of at least 5 percent of the mass in grams of the representative section of substrate.

(3) Upon completion of these measurements, process the representative section of substrate on the finishing line as you would for a typical section of leather.

(4) After the finishing and drying process, weigh the representative section of substrate to determine the final mass. Divide the net mass in grams gained on the representative section by its surface area in square feet to determine grams per square foot of finish add-on. Equation 1 of this section illustrates this calculation, as follows:

$$\text{Finish Add-On} = \frac{\left(\text{Final Mass} - \text{Initial Mass}\right)}{\left(\text{Surface Area}\right)} \qquad \text{(Eq. 1)}$$

Where:

Finish Add-On = Grams per square foot of finish add-on applied to a representative section of polyester film or equivalent material substrate.

Final Mass = Final mass in grams of representative section of polyester film or equivalent material substrate, after finishing and drying.

Initial Mass = Initial mass in grams of representative section of polyester film or equivalent material substrate, prior to finishing.

Surface Area = Surface area in square feet of a representative section of polyester film or equivalent material substrate.

(c) Any appropriate engineering units may be used for determining the finish add-on. However, finish add-on results must be converted to the units of grams of finish add-on per square foot of leather processed. If multiple representative leather sections are analyzed, then use the average of these measurements for selecting the appropriate product process operation.

§ 63.5350 How do I distinguish between the water-resistant/specialty and nonwater-resistant leather product process operations?

(a) Product process operations that finish leather for nonupholstery use are categorized as either water-resistant/specialty or nonwater-resistant product process operations. You must distinguish between the water-resistant/specialty and nonwater-resistant product process operations so that you can determine which HAP emission limit in Table 1 of this subpart applies to your affected source. Water-resistant and nonwater-resistant product process operations for nonupholstery use can be distinguished using the methods described in paragraph (b) of this section. Specialty leather product process operations for nonupholstery use can be distinguished using the criteria described in paragraph (c) of this section.

(b) To determine whether your product process operation produces water-resistant or nonwater-resistant leather, you must conduct the Maeser Flexes test method according to American Society for Testing and Materials (ASTM) Designation D2099–00 (incorporated by reference-see § 63.14) or a method approved by the Administrator.

(1) Statistical analysis of initial water penetration data performed to support ASTM Designation D2099–00 indicates that poor quantitative precision is associated with this testing method. Therefore, at a minimum, 36 leather substrate samples (*i.e.,* three sections of leather substrate from at least 12 sides of leather), must be tested to determine the water-resistant characteristics of the leather. You must average the results of these tests to determine the final number of Maeser Flexes prior to initial water penetration.

(2) Results from leather samples indicating an average of 5,000 Maeser Flexes or more is considered a water-resistant product process operation, and results indicating less than 5,000 Maeser Flexes is considered a nonwater-resistant product process operation. However, leather samples resulting in less than 5,000 Maeser Flexes may be categorized as specialty leather in paragraph (c) of this section.

(c) To determine whether your product process operation produces specialty leather, you must meet the criteria in paragraphs (c)(1) and (2) of this section:

(1) The leather must be a select grade of chrome tanned, bark retanned, or fat liquored leather.

(2) The leather must be retanned through the application of greases, waxes, and oils in quantities greater than 25 percent of the dry leather weight. Specialty leather is also finished with higher solvent-based finishes that provide rich color, luster, or an oily/tacky feel. Specialty leather products may include, but not limited to, specialty shoe leather and top grade football leathers.

§ 63.5355 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section.

(b) You must collect data at all required intervals as specified in your plan for demonstrating compliance as specified at § 63.5325.

(c) For emission control devices, except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating.

(d) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing the compliance ratio, and, if an emission control device is used, in assessing the operation of the control device.

§ 63.5360 How do I demonstrate continuous compliance with the emission standards?

(a) You must demonstrate continuous compliance with the emission standards in § 63.5305 by following the requirements in paragraphs (a)(1) and (2) of this section:

(1) You must collect and monitor data according to the procedures in your plan for demonstrating compliance as specified in § 63.5325.

(2) If you use an emission control device, you must collect the monitoring data according to 40 CFR part 63, subpart SS.

(3) You must maintain your compliance ratio less than or equal to 1.00, as specified at § 63.5330.

(b) You must report each instance in which you did not meet the emission standards in § 63.5305. This includes periods of startup, shutdown, and malfunction. These deviations must be reported according to the requirements in § 63.5420(b).

(c) You must conduct the initial compliance demonstration before the compliance date that is specified for your source in § 63.5295.

Testing and Initial Compliance Requirements

§ 63.5375 When must I conduct a performance test or initial compliance demonstration?

You must conduct performance tests after the installation of any emission control device that reduces HAP emissions and can be used to comply with the HAP emission requirements of this subpart. You must complete your performance tests not later than 60 calendar days before the end of the 12-month period used in the initial compliance determination.

§ 63.5380 How do I conduct performance tests?

(a) Each performance test must be conducted according to the requirements in § 63.7(e) and the procedures of § 63.997(e)(1) and (2).

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 63.7(e)(1).

(c) You must conduct three separate test runs for each performance test required in this section, as specified in § 63.7(e)(3). Each test run must last at least 1 hour.

§ 63.5385 How do I measure the quantity of finish applied to the leather?

(a) To determine the amount of finish applied to the leather, you must measure the mass, or density, and volume of each applied finish.

(b) Determine the mass of each applied finish with a scale calibrated to an accuracy of at least 5 percent of the amount measured. The quantity of all finishes used for finishing operations must be weighed or have a predetermined weight.

(c) Determine the density and volume of each applied finish according to the criteria listed in paragraphs (c)(1) through (3) of this section:

(1) Determine the density of each applied finish in pounds per gallon in accordance with § 63.5395. The finish density will be used to convert applied finish volumes from gallons into mass units of pounds.

(2) Volume measurements of each applied finish can be obtained with a flow measurement device. For each flow measurement device, you must perform the items listed in paragraphs (c)(2)(i) through (v) of this section:

(i) Locate the flow sensor and other necessary equipment such as straightening vanes in or as close to a position that provides a representative flow.

(ii) Use a flow sensor with a minimum tolerance of 2 percent of the flow rate.

(iii) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(iv) Conduct a flow sensor calibration check at least semiannually.

(v) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(3) Volume measurements of each applied finish can be obtained with a calibrated volumetric container with an accuracy of at least 5 percent of the amount measured.

§ 63.5390 How do I measure the HAP content of a finish?

(a) To determine the HAP content of a finish, the reference method is EPA Method 311 of appendix A of 40 CFR part 63. You may use EPA Method 311, an alternative method approved by the Administrator, or any other reasonable means for determining the HAP content. Other reasonable means of determining HAP content include, but are not limited to, a material safety data sheet (MSDS) or a manufacturer's hazardous air pollutant data sheet. If the HAP content is provided on a MSDS or a manufacturer's data sheet as a range of values, then the highest HAP value of the range must be used for the determination of compliance to this standard. This value must be entered on the finish log for each type of finish applied. You are not required to test the materials that you use, but the Administrator may require a test using EPA Method 311 (or another approved method) to confirm the reported HAP content. However, if the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations.

(b) You may use the weighted average of the HAP content analysis as determined in paragraph (a) of this section for each finish when you perform one of the actions listed in paragraphs (b)(1) and (2) of this section:

(1) Mix your own finishes on site.

(2) Mix new quantities of finish with previous quantities of finish that may have a different HAP content.

§ 63.5395 How do I measure the density of a finish?

(a) To determine the density of a finish, the reference method is EPA Method 24 of appendix A of 40 CFR part 60. You may use EPA Method 24, an alternative method approved by the Administrator, or any other reasonable means for determining the density of a finish. Other reasonable means of determining density include, but are not

limited to, an MSDS or a manufacturer's hazardous air pollutant data sheet. If the density is provided on a MSDS or a manufacturer's data sheet as a range of values, then the highest density value of the range must be used for the determination of compliance to this standard. This value must be entered on the finish log for each type of finish applied. You are not required to test the materials that you use, but the Administrator may require a test using EPA Method 24 (or another approved method) to confirm the reported density. However, if the results of an analysis by EPA Method 24 are different from the density determined by another means, the EPA Method 24 results will govern compliance determinations.

(b) You may use the weighted average of finish densities as determined in paragraph (a) of this section for each finish when you perform one of the actions listed in paragraphs (b)(1) and (2) of this section:

(1) Mix your own finishes on site.

(2) Mix new quantities of finish with previous quantities of finish that may have different densities.

(c) Equation 1 of this section may be used to determine the weighted average of finish densities, as follows:

$$\text{Average Weighted Density} = \frac{\sum_{i=1}^{n} \text{Mass}_i * \text{Density}_i}{\sum_{i=1}^{n} \text{Mass}_i} \qquad \text{(Eq. 1)}$$

Where:

Average Weighted Density = The average weighted density of applied finishes in pounds per gallon.

Mass = Pounds of finish ''i'' applied.

Density = The density of finish ''i'' in pounds per gallon.

n = Number of finish types applied.

§ 63.5400 How do I measure the quantity of leather processed?

(a) This section describes the information and procedures you must use to determine the quantity of leather processed at your affected source.

(1) To determine the surface area (i.e., quantity) of leather substrate processed each month at your source for each product process operation, follow the procedures in your plan for demonstrating compliance. You must consistently measure the surface area of processed leather substrate at one of the manufacturing locations listed in paragraph (a)(1)(i) or (ii) of this section:

(i) Measure the surface area of processed leather upon exiting the leather finishing operation.

(ii) Measure the surface area of processed leather upon shipment from the source.

(2) By the fifteenth of each month, you must determine the quantity of leather processed in 1,000's of square feet for each product process operation during the previous month. After collecting data on the amount of leather processed for 12 months, you must also determine by the fifteenth of each month the annual total of leather processed in 1,000's of square feet for each product process operation by summing the monthly quantities of leather processed in each product process operation for the previous 12 months. The ''annual total of leather processed'' in each product process operation is used in Equation 1 of § 63.5340 to calculate your allowable HAP loss as described in § 63.5340. Your allowable HAP loss is then subsequently used to calculate your compliance ratio as described in § 63.5330.

(b) To determine the surface area of leather processed at your source for each product process operation, you must use one of the methods listed in paragraphs (b)(1) and (2) of this section:

(1) Premeasured leather substrate sections being supplied by another manufacturer as an input to your finishing process.

(2) Measure the surface area of each piece of processed or shipped leather with a computer scanning system accurate to 0.1 square feet. The computer scanning system must be initially calibrated for minimum accuracy to the manufacturer's specifications. For similar leather production runs, use an average based on a minimum of 500 pieces of leather in lieu of individual measurements.

(c) Except as provided in paragraph (d) of this section, you must include the surface area of each piece of processed leather only once when determining the monthly quantity of leather processed, regardless of the number of times a piece of leather is reprocessed through a portion of the finishing operations.

(d) If a piece of leather is completely stripped of all applied finishes and reprocessed through the entire finishing operation as if it were a new piece of leather, you may recount the surface area of leather reprocessed when determining the monthly quantity of leather processed.

Notifications, Reports, and Records

§ 63.5415 What notifications must I submit and when?

(a) In accordance with §§ 63.7(b) and (c) and 63.9(b) and (h) of the General Provisions, you must submit the one-time notifications listed in paragraphs (b) through (g) of this section.

(b) As specified in § 63.9(b)(2), if you start up your affected source before February 27, 2002, you must submit an Initial Notification not later than June 27, 2002.

(c) In the Initial Notification, include the items in paragraphs (c)(1) through (4) of this section:

(1) The name and address of the owner or operator.

(2) The physical address of the leather finishing operation.

(3) Identification of the relevant standard, such as the Leather Finishing Operations NESHAP, and compliance date.

(4) A brief description of the source including the types of leather product process operations and nominal operating capacity.

(d) As specified in § 63.9(b)(1) and (2), if you startup your new or reconstructed affected source on or after February 27, 2002, you must submit an Initial Notification not later than 120 calendar days after you become subject to this subpart.

(e) If you are required to conduct a performance test, you must submit a Notification of Intent to Conduct a Performance Test at least 60 calendar days before the performance test is scheduled to begin as required in § 63.7(b)(1).

(f) You must submit a Notification of Compliance Status report not later than 60 calendar days after determining your initial 12-month compliance ratio. The notification of compliance status must contain the items in paragraphs (f)(1) through (5) of this section:

(1) The name and address of the owner or operator.

(2) The physical address of the leather finishing operation.

(3) Each type of leather product process operation performed during the previous 12 months.

(4) Each HAP identified under § 63.5390 in finishes applied during the 12-month period used for the initial compliance determination.

(5) A compliance status certification indicating whether the source complied with all of the requirements of this subpart throughout the 12-month period used for the initial source compliance determination. This certification must include the items in paragraphs (f)(5)(i) through (iii) of this section:

(i) The plan for demonstrating compliance, as described in § 63.5325, is complete and available on site for inspection.

(ii) You are following the procedures described in the plan for demonstrating compliance.

(iii) The compliance ratio value was determined to be less than or equal to 1.00, or the value was determined to be greater than 1.00.

(g) If your source becomes a major source on or after February 27, 2002, you must submit an initial notification not later than 120 days after you become subject to this subpart.

§ 63.5420 What reports must I submit and when?

(a) You must submit the first annual compliance status certification 12 months after you submit the Notification of Compliance Status. Each subsequent annual compliance status certification is due 12 months after the previous annual compliance status certification. The annual compliance status certification provides the compliance status for each month during the 12-month period ending 60 days prior to the date on which the report is due. Include the information in paragraphs (a)(1) through (5) of this section in the annual certification:

(1) The name and address of the owner or operator.

(2) The physical address of the leather finishing operation.

(3) Each type of leather product process operation performed during the 12-month period covered by the report.

(4) Each HAP identified under § 63.5390, in finishes applied during the 12-month period covered by the report.

(5) A compliance status certification indicating whether the source complied with all of the requirements of this subpart throughout the 12-month period covered by the report. This certification must include the items in paragraphs (a)(5)(i) and (ii) of this section:

(i) You are following the procedures described in the plan for demonstrating compliance.

(ii) The compliance ratio value was determined to be less than or equal to 1.00, or the value was determined to be greater than 1.00.

(b) You must submit a Deviation Notification Report for each compliance determination you make in which the compliance ratio exceeds 1.00, as determined under § 63.5330. Submit the deviation report by the fifteenth of the following month in which you determined the deviation from the compliance ratio. The Deviation Notification Report must include the items in paragraphs (b)(1) through (4) of this section:

(1) The name and address of the owner or operator.

(2) The physical address of the leather finishing operation.

(3) Each type of leather product process operation performed during the 12-month period covered by the report.

(4) The compliance ratio comprising the deviation. You may reduce the frequency of submittal of the Deviation Notification Report if the responsible agency of these NESHAP does not object.

§ 63.5425 When must I start recordkeeping to determine my compliance ratio?

(a) If you have a new or reconstructed affected source, you must start recordkeeping to determine your compliance ratio according to one of the schedules listed in paragraphs (a)(1) and (2) of this section:

(1) If the startup of your new or reconstructed affected source is before February 27, 2002, then you must start recordkeeping to determine your compliance ratio no later than February 27, 2002.

(2) If the startup of your new or reconstructed affected source is after February 27, 2002, then you must start recordkeeping to determine your compliance ratio upon startup of your affected source.

(b) If you have an existing affected source, you must start recordkeeping to determine your compliance ratio no later than February 27, 2004.

(c) If you have a source that becomes a major source of HAP emissions after February 27, 2002, then you must start recordkeeping to determine your compliance ratio immediately upon submitting your Initial Notification, as required at § 63.5415(g).

§ 63.5430 What records must I keep?

You must satisfy the recordkeeping requirements in paragraphs (a) through (g) of this section by the compliance date specified in § 63.5295.

(a) You must keep the plan for demonstrating compliance as required at § 63.5325 onsite and readily available as long as the source is operational. If you make any changes to the plan for demonstrating compliance, then you must keep all previous versions of the plan and make them readily available for inspection for at least 5 years after each revision.

(b) You must keep a copy of each notification and report that you are required to submit in accordance with this subpart.

(c) You must keep records of performance tests in accordance with this subpart.

(d) You must record and maintain a continuous log of finish usage as specified at § 63.5335(b).

(e) You must maintain all necessary records to document the methods you used and the results of all HAP content measurements of each applied finish.

(f) For each leather product process operation, you must maintain a monthly log of the items listed in paragraphs (f)(1) and (2) of this section:

(1) Dates for each leather product process operation.

(2) Total surface area of leather processed for each leather product process operation.

(g) If you use an emission control device, you must keep records of monitoring data as specified at subpart SS of this part.

§ 63.5435 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to § 63.10(b)(1).

(b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to § 63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§ 63.5450 What parts of the General Provisions apply to me?

Table 2 of this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you.

§ 63.5455 Who administers this subpart?

(a) This subpart can be administered by us, the United States Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to

your State, local, or tribal agency, then that agency has the primary authority to administer and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if the authority to implement and enforce this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (4) of this section:

(1) Approval of alternatives to the emission standards in § 63.5305 under § 63.6(g).

(2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.

(3) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.

(4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

§ 63.5460 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, § 63.2, and in this section as follows:

Area source means any stationary source of hazardous air pollutants that is not a major source as defined in this part.

Compliance ratio means the ratio of the actual HAP loss from the previous 12 months to the allowable HAP loss from the previous 12 months. Equation 1 in § 63.5330 is used to calculate this value. If the value is less than or equal to 1.00, the source is in compliance. If the value is greater than 1.00, the source is deviating from compliance.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limits or work practice standards.

(2) Fails to meet any emission limits, operating limits, or work practice standards in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Drying means the process of removing all but equilibrium moisture from the leather. Drying methods currently in use include: toggling, hanging, pasting, and vacuum drying.

Finish add-on means the amount of solid material deposited on the leather substrate due to finishing operations. Typically, the solid deposition is a dye or other chemical used to enhance the color and performance of the leather. Finish add-on is quantified as mass per surface area of substrate, such as grams of finish add-on per square foot of leather substrate.

Hazardous air pollutants (HAP) means any substance or mixture of substances listed as a hazardous air pollutant under section 112(b) of the Clean Air Act.

Leather means the pelt or hide of an animal which has been transformed by a tanning process into a nonputrescible and useful material.

Leather finishing means a single process or group of processes used to adjust and improve the physical and aesthetic characteristics of the leather surface through the multistage application of a coating comprised of dyes, pigments, film-forming materials, and performance modifiers dissolved or suspended in liquid carriers.

Leather substrate means a nonputrescible leather surface intended for the application of finishing chemicals and materials. The leather substrate may be a continuous piece of material such as side leather or may be a combination of smaller leather pieces and leather fibers, which when joined together, form a integral composite leather material.

Leather tanning means the processes, commonly referred to as wet operations, used to purify and stabilize the collagen content of the hide. Wet operations are divided into three phases, the beamhouse (includes soaking and unhairing); the tanyard (includes bating, pickling, tanning, trimming/siding, and splitting); and the coloring department (includes retanning, coloring, and atliquoring operations).

Month means that all references to a month in this subpart refer to a calendar month.

Nonwater-resistant leather means nonupholstery leather that is not treated with any type of waterproof finish and, thus, cannot withstand 5,000 Maeser Flexes with a Maeser Flex Testing Machine or a method approved by the Administrator prior to initial water penetration. This leather is typically used for dress shoes, handbags, and garments.

Product process operation means any one of the four leather production classifications developed for ease of compliance with this subpart. The four leather product process operations are as follows: upholstery leather with greater than or equal to 4 grams finish add-on per square foot, upholstery leather with less than 4 grams finish add-on per square foot, water-resistant/specialty leather, and nonwater-resistant leather.

Specialty leather means a select grade of chrome tanned, bark retanned, or fat liquored leather that is retanned through the application of greases, waxes, and oils in quantities greater than 25 percent of the dry leather weight. Specialty leather is also finished with higher solvent-based finishes that provide rich color, luster, or an oily/tacky feel. Specialty leather products are generally low volume, high-quality leather, such as specialty shoe leather and top grade football leathers.

Upholstery leather (greater than or equal to 4 grams finish add-on per square foot) means an upholstery leather with a final finish add-on to leather ratio of 4 or more grams of finish per square foot of leather. These types of finishes are used primarily for automobile seating covers. These finishes tend to be aqueous-based.

Upholstery leather (less than 4 grams finish add-on per square foot) means an upholstery leather with a final finish add-on to leather ratio of less than 4 grams of finish per square foot of leather. These types of finishes are typically used for furniture seating covers. The finishes tend to be solvent-based and leave a thinner, softer, and more natural leather texture.

Water-resistant leather means nonupholstery leather that has been treated with one or more waterproof finishes such that the leather can withstand 5,000 or more Maeser Flexes with a Maeser Flex Testing Machine or a method approved by the Administrator prior to initial water penetration. This leather is used for outerwear, boots and outdoor applications.

Figure to Subpart TTTT of Part 63

Figure 1 to Subpart TTTT of Part 63—Example Logs for Recording Leather Finish Use and HAP Content

Month:_____
Year:_____

FINISH INVENTORY LOG

Finish type	Finish usage (pounds)	HAP Content (mass fraction)	Date and time	Operator's name	Product process operation

MONTHLY SUMMARY OF FINISH USAGE

	Upholstery leather (≥4 grams)	Upholstery leather (<4 grams)	Water-resistant/ specialty leather	Nonwater-resistant leather
Number of Entries				
Total Finish Usage (pounds)				
Total HAP Usage (pounds)				

Tables to Subpart TTTT of Part 63

As required in §§ 63.5305 and 63.5340(b), you must meet the appropriate emission limits in the following table:

TABLE 1 TO SUBPART TTTT OF PART 63—LEATHER FINISHING HAP EMISSION LIMITS FOR DETERMINING THE ALLOWABLE HAP LOSS

Type of Leather Product Process Operation	HAP Emission Limit (pounds of HAP loss per 1,000 square feet of leather processed)	
	Existing sources	New sources
1. Upholstery Leather (≥4 grams add-on/square feet)	2.6	0.5
2. Upholstery Leather (<4 grams add-on/square feet)	6.8	2.5
3. Water-resistant (≥5,000 Maeser Flexes)/Specialty Leather	5.6	4.9
4. Nonwater-resistant Leather (<5,000 Maeser Flexes)	3.7	2.1

As required in § 63.5450, you must meet the appropriate NESHAP General Provision requirements in the following table:

TABLE 2 TO SUBPART TTTT OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART TTTT OF PART 63

General provisions citation	Subject of citation	Brief description of requirement	Applies to subpart	Explanation
§ 63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications.	Yes	
§ 63.2	Definitions	Definitions for Part 63 standards	Yes	Except as specifically provided in this subpart.
§ 63.3	Units and abbreviations	Units and abbreviations for Part 63 standards.	Yes	
§ 63.4	Prohibited activities and circumvention.	Prohibited activities; compliance date; circumvention, severability.	Yes	
§ 63.5	Construction/reconstruction.	Applicability; applications; approvals.	Yes	Except for paragraphs of § 63.5 as listed below.
§ 63.5(c)	[Reserved]			
§ 63.5(d)(1)(ii)(H)	Application for approval	Type and quantity of HAP, operating parameters.	No	All sources emit HAP. Subpart TTTT does not require control from specific emission points.
§ 63.5(d)(1)(i)	[Reserved]			

TABLE 2 TO SUBPART TTTT OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART TTTT OF PART 63—Continued

General provisions citation	Subject of citation	Brief description of requirement	Applies to subpart	Explanation
§ 63.5(d)(1)(iii), (d)(2), (d)(3)(ii)		Application for approval	No	The requirements of the application for approval for new and reconstructed sources are described in § 63.5320(b). General provision requirements for identification of HAP emission points or estimates of actual emissions are not required. Descriptions of control and methods, and the estimated and actual control efficiency of such do not apply. Requirements for describing control equipment and the estimated and actual control efficiency of such equipment apply only to control equipment to which the subpart TTTT requirements for quantifying solvent destroyed by an add-on control device would be applicable.
§ 63.6	Applicability of general provisions.	Applicability of general provisions	Yes	Except for paragraphs of § 63.6 as listed below.
§ 63.6(b)(1)–(3)	Compliance dates, new and reconstructed sources.		No	Section § 63.5283 specifies the compliance dates for new and reconstructed sources.
§ 63.6(b)(6)	[Reserved]			
§ 63.6(c)(3)–(4)	[Reserved]			
§ 63.6(d)	[Reserved]			
§ 63.6(e)	Operation and maintenance requirements.		Yes	Except for subordinate paragraphs of § 63.6(e) as listed below.
§ 63.6(e)(3)	Operation and maintenance requirements.	Startup, shutdown, and malfunction plan requirements.	No	Subpart TTTT does not have any startup, shutdown, and malfunction plan requirements.
§ 63.6(f)–(g)	Compliance with nonopacity emission standards except during SSM.	Comply with emission standards at all times except during SSM.	No	Subpart TTTT does not have nonopacity requirements.
§ 63.6(h)	Opacity/visible emission (VE) standards.		No	Subpart TTTT has no opacity or visual emission standards.
§ 63.6(i)	Compliance extension	Procedures and criteria for responsible agency to grant compliance extension.	Yes	
§ 63.6(j)	Presidential compliance exemption.	President may exempt source category from requirement to comply with subpart.	Yes	
§ 63.7	Performance testing requirements.	Schedule, conditions, notifications and procedures.	Yes	Except for paragraphs of § 63.7 as listed below. Subpart TTTT requires performance testing only if the source applies additional control that destroys solvent. § 63.5311 requires sources to follow the performance testing guidelines of the General Provisions if a control is added.
§ 63.7(a)(2) (i) and (iii)	Performance testing requirements.	Applicability and performance dates.	No	§ 63.5310(a) of subpart TTTT specifies the requirements of performance testing dates for new and existing sources.
§ 63.8	Monitoring requirements		No	Subpart TTTT does not require monitoring other than as specified therein.
§ 63.9	Notification requirements	Applicability and State delegation	Yes	Except for paragraphs of § 63.9 as listed below.
§ 63.9(e)	Notification of performance test.	Notify responsible agency 60 days ahead.	Yes	Applies only if performance testing is performed.

TABLE 2 TO SUBPART TTTT OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART TTTT OF PART 63—Continued

General provisions citation	Subject of citation	Brief description of requirement	Applies to subpart	Explanation
§ 63.9(f)	Notification of VE/opacity observations.	Notify responsible agency 30 days ahead.	No	Subpart TTTT has no opacity or visual emission standards.
§ 63.9(g)	Additional notifications when using a continuous monitoring system (CMS).	Notification of performance evaluation; notification using COMS data; notification that exceeded criterion for relative accuracy.	No	Subpart TTTT has no CMS requirements.
§ 63.9(h)	Notification of compliance status.	Contents	No	§ 63.5320(d) specifies requirements for the notification of compliance status.
§ 63.10	Recordkeeping/reporting	Schedule for reporting, record storage.	Yes	Except for paragraphs of § 63.10 as listed below.
§ 63.10(b)(2)	Recordkeeping	Record startup, shutdown, and malfunction events.	No	Subpart TTTT has no recordkeeping requirements for startup, shutdown, and malfunction events.
§ 63.10(c)	Recordkeeping	Additional CMS recordkeeping	No	Subpart TTTT does not require CMS.
§ 63.10(d)(2)	Reporting	Reporting performance test results.	Yes	Applies only if performance testing is performed.
§ 63.10(d)(3)	Reporting	Reporting opacity or VE observations.	No	Subpart TTTT has no opacity or visible emission standards.
§ 63.10(d)(4)	Reporting	Progress reports	Yes	Applies if a condition of compliance extension.
§ 63.10(d)(5)	Reporting	Startup, shutdown, and malfunction reporting.	No	Subpart TTTT has no startup, shutdown, and malfunction reporting requirements.
§ 63.10(e)	Reporting	Additional CMS reports	No	Subpart TTTT does not require CMS.
§ 63.11	Control device requirements.	Requirements for flares	Yes	Applies only if your source uses a flare to control solvent emissions. Subpart TTTT does not require flares.
§ 63.12	State authority and delegations.	State authority to enforce standards.	Yes	
§ 63.13	State/regional addresses	Addresses where reports, notifications, and requests are sent.	Yes	
§ 63.14	Incorporation by reference.	Test methods incorporated by reference.	Yes	
§ 63.15	Availability of information and confidentiality.	Public and confidential information.	Yes	

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June 11, 2002

Part II

Environmental Protection Agency

40 CFR Part 63

National Emission Standards for Hazardous Air Pollutants: Cellulose Products Manufacturing; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[FRL–7214–8]

RIN 2060–AH11

National Emission Standards for Hazardous Air Pollutants: Cellulose Products Manufacturing

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action promulgates national emission standards for hazardous air pollutants (NESHAP) for cellulose products manufacturing. Cellulose products manufacturing includes both the Miscellaneous Viscose Processes source category and the Cellulose Ethers Production source category. The Miscellaneous Viscose Processes source category comprises the cellulose food casing, rayon, cellulosic sponge, and cellophane manufacturing industries. The Cellulose Ethers Production source category comprises the methyl cellulose, hydroxypropyl methyl cellulose, hydroxypropyl cellulose, hydroxyethyl cellulose, and carboxymethyl cellulose manufacturing industries. The EPA has identified the Miscellaneous Viscose Processes source category and the Cellulose Ethers Production source category as including major sources of emissions of hazardous air pollutants (HAP), such as carbon disulfide (CS_2), carbonyl sulfide, ethylene oxide, methanol, methyl chloride, propylene oxide, and toluene. The final rule will implement section 112(d) of the Clean Air Act (CAA) by requiring all major sources to meet HAP emission standards reflecting the application of the maximum achievable control technology (MACT). The final rule will reduce HAP emissions by approximately 1,600 megagrams per year (Mg/yr) (1,700 tons per year (tpy)). In addition, the final rule will reduce hydrogen sulfide (H_2S) emissions by approximately 410 Mg/yr (450 tpy).

EFFECTIVE DATE: June 11, 2002.

ADDRESSES: Docket No. A–99–39 contains supporting information used in developing the promulgated standards. The docket is available for public inspection between 8:30 a.m. and 5:30 p.m., Monday through Friday, excluding Federal holidays, at the following address: U.S. EPA, 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: 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 40 CFR 63.13. For information concerning the analyses performed in developing this rule, contact Mr. William Schrock, U.S. EPA, Office of Air Quality Planning and Standards, Organic Chemicals Group (Mail Code C504–04), Research Triangle Park, North Carolina 27711, telephone number (919) 541–5032, facsimile number (919) 541–3470, electronic mail address schrock.bill@epa.gov.

SUPPLEMENTARY INFORMATION: *Regulated Entities.* Categories and entities potentially regulated by this action include those listed in the following table.

Category	NAICS code	Examples of regulated entities . . .
Industry	326121	cellulose food casing operations.
	325221	rayon operations.
	326199, 325211	cellulosic sponge operations.
	326199	cellophane operations.
	325199	cellulose ether operations.

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 operation is regulated by this action, you should examine the applicability criteria in § 63.5481 of the final rule. If you have any 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. The NESHAP for cellulose products manufacturing was proposed on August 28, 2000 (65 FR 52166). Today's action announces EPA's final decisions on the rule. Under section 307(b)(1) of the 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 by August 12, 2002. Only those objections to the rule which were raised with reasonable specificity during the period for public comment may be raised during judicial review. Under section 307(b)(2) of the CAA, the requirements that are the subject of today's final rule may not be challenged later in civil or criminal proceedings brought by EPA to enforce these requirements. *World Wide Web (WWW).* In addition to being available in the docket, an electronic copy of today's final rule will also be available on the WWW through the Technology Transfer Network (TTN). Following the Administrator's signature, a copy of the rule will be posted on the TTN's policy and guidance page for newly proposed or final rules at 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. Background and Public Participation
II. Summary of Major Changes Since Proposal
A. All Affected Sources
B. Viscose Process Affected Sources
C. Cellulose Ether Affected Sources
III. Summary of Responses to Major Comments
A. Emission Limits, Operating Limits, and Work Practice Standards
B. Testing and Initial Compliance Requirements
C. Continuous Compliance Requirements
D. Notifications and Reports
IV. Summary of Impacts
A. Air Quality Impacts
B. Cost Impacts
C. Economic Impacts
D. Non-Air Environmental Impacts
E. Energy Impacts
V. Administrative Requirements
A. Executive Order 12866, Regulatory Planning and Review
B. Executive Order 13132, Federalism
C. Executive Order 13175, Consultation and Coordination with Indian Tribal Governments
D. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks
E. Executive Order 13211, Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use
F. Unfunded Mandates Reform Act of 1995

G. Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 *et seq.*
H. Paperwork Reduction Act
I. National Technology Transfer and Advancement Act of 1995
J. Congressional Review Act

I. Background and Public Participation

Section 112 of the CAA requires us to list categories and subcategories of major sources and area sources of HAP and to establish NESHAP for the listed source categories and subcategories. A major source of HAP is 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 any single HAP at a rate of 9.1 Mg/yr (10 tpy) or more or any combination of HAP at a rate of 23 Mg/yr (25 tpy) or more.

Section 112 of the CAA requires that we establish NESHAP for the control of HAP from both new and existing major sources. The CAA requires the NESHAP to reflect the maximum degree of reduction in emissions of HAP that is achievable. This level of control is commonly referred to as MACT.

The MACT floor is the minimum control level allowed for NESHAP and is defined under section 112(d)(3) of the CAA. In essence, the MACT floor ensures that the standard is set at a level that assures that all major sources achieve the level of control at least as stringent as that already achieved by the better-controlled and lower-emitting sources in each source category or subcategory. For new sources, the MACT floor cannot be less stringent than the emission control that is achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than standards for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing five sources for categories or subcategories with fewer than 30 sources).

In developing MACT, we also consider control options that are more stringent than the floor. We may establish standards more stringent than the floor based on the consideration of cost of achieving the emissions reductions, any non-air quality health and environmental impacts, and energy requirements.

On July 16, 1992 (57 FR 31576), we published an initial list of source categories slated for regulation under section 112(c) of the CAA. That initial list included the Cellulose Food Casings, Rayon, Cellophane, Methyl Cellulose, Carboxymethyl Cellulose, and Cellulose Ethers Production source categories. The Cellulose Ethers Production source category on the initial list included the hydroxyethyl cellulose, hydroxypropyl cellulose, and hydroxypropyl methyl cellulose manufacturing industries.

In developing the proposed rule for cellulose products manufacturing, we identified another cellulose products manufacturing industry, cellulosic sponge manufacturing, that was not on the initial source category list. We added Cellulosic Sponges to the source category list on November 18, 1999 (64 FR 63026) in accordance with section 112(c) of the CAA.

We proposed the standards for cellulose products manufacturing on August 28, 2000 (65 FR 52166). In the proposal, we combined the various cellulose products manufacturing source categories on the initial source category list with the Cellulosic Sponge source category to create two new source categories. Specifically, we combined the existing Cellulose Food Casing, Rayon, Cellulosic Sponge, and Cellophane source categories to create a new source category which is called ''Miscellaneous Viscose Processes.'' We combined the existing Methyl Cellulose, Carboxymethyl Cellulose, and Cellulose Ethers Production source categories to create a newly expanded ''Cellulose Ethers Production'' source category. On February 12, 2002 (67 FR 6521), we published an updated source category list that includes the Miscellaneous Viscose Processes and Cellulose Ethers Production source categories.

As in the proposal, the final standards for cellulose products manufacturing give most existing sources 3 years from the date of promulgation to comply. The final standards also give existing rayon operations 8 years from the date of promulgation to comply with the 40 percent reduction emission limit for their viscose process vents. Sources that begin construction or reconstruction after August 28, 2000 must comply with the standards for new sources by June 11, 2002 or upon startup, whichever is later.

Emission limits, operating limits, and work practice standards, as well as initial and continuous compliance requirements, and notification, reporting, and recordkeeping requirements are included in the final rule. All of these components are necessary to ensure that sources comply with the standards both initially and over time. However, we have made every effort to simplify the requirements in the rule.

The preamble for the proposed standards described the rationale for the proposed standards. Public comments were solicited at the time of proposal. The public comment period lasted from August 28, 2000 to October 27, 2000. Industry representatives, regulatory agencies, environmental groups, and the general public were given the opportunity to comment on the proposed rule and to provide additional information during and after the public comment period. Although we offered at proposal the opportunity for oral presentation of data, views, or arguments concerning the proposed rule, no one requested a hearing, and a hearing was not held.

We received a total of 23 letters containing comments on the proposed rule during and after the public comment period. Commenters included individual cellulose products manufacturing companies, industry trade associations, and an association of State and local regulatory agencies. Today's final rule reflects our full consideration of all of the comments received. Major public comments on the proposed rule, along with our responses to those comments, are summarized in this preamble. See the Summary of Public Comments and Responses memorandum for a more detailed discussion of public comments and our responses (Docket No. A–99–39).

II. Summary of Major Changes Since Proposal

The major changes made to the proposed rule based on public comments are described in the sections below. A more comprehensive summary of changes can be found in Docket No. A–99–39.

A. All Affected Sources

In today's final rule, we have added an exemption for research and development facilities. We have revised the definition for ''process vent'' to include exemptions for small vents with very low concentrations and flow rates. We have added a section that discusses the overlap between the requirements of the final rule and the requirements of other rules.

We have added definitions for ''process unit'' and revised definitions for ''operation'' for the various viscose process and cellulose ether industries to provide greater clarification of what is covered under the final rule. Each process unit includes all equipment used to manufacture the respective products and any associated storage vessels, liquid streams in open systems, and equipment components. Each operation includes the collection of the

respective process units and other equipment, including heat exchanger systems, wastewater and waste management units, and cooling towers.

Consistent with the revised definitions for ''operation'' for the various viscose process and cellulose ether industries, we have adopted work practice standards for heat exchanger systems from 40 CFR 63.104. For all affected sources with a closed-vent system containing a bypass line that could divert a vent stream away from a control device, we have adopted work practice standards for bypass lines from 40 CFR 63.148. In order to provide this exemption, we have adopted the related work practice standards for closed-vent systems from 40 CFR 63.148. We have also adopted the applicable initial and continuous compliance provisions, reporting and recordkeeping provisions, and definitions associated with heat exchanger systems, bypass lines, and closed-vent systems from 40 CFR part 63, subparts F and G of the Hazardous Organic NESHAP (HON).

We have reduced the number of biofilter operating limits to three (pressure drop, inlet gas temperature, and effluent pH), which would be less burdensome and more easily measurable than the eight operating limits at proposal. We have also added alternative parameters for condensers (outlet liquid temperature) and scrubbers (conductivity and alkalinity).

We have clarified the proposed performance test requirements to require that all affected sources conducting a performance test only test the inlet and outlet of their control device. We are not requiring sources to test their uncontrolled stacks. We have revised the batch process vent testing provisions, replacing the worst-case testing provisions adopted from 40 CFR 63.1257 with alternative testing provisions adopted from 40 CFR 63.490. We have added two voluntary consensus standards as alternatives to EPA Methods 3B and 18. We have added performance test exemptions for boilers, process heaters, and hazardous waste incinerators that meet certain conditions specified in the final rule. We have clarified the initial compliance requirements to state that sources are not required to conduct a performance test to determine the flare control efficiency, based on the assumption that a properly operated flare will achieve an emission reduction of 98 percent.

We have changed the deadline for conducting the initial compliance demonstration from 180 days before to 180 days after the compliance date. To enable affected sources to demonstrate compliance between the compliance date and the date of the initial compliance demonstration, we have added a provision requiring sources to maintain an operation and maintenance (O&M) log of the process and emissions control equipment during this period.

We have adopted the methods in 40 CFR 63.505 for determining operating limits to allow sources to establish operating limits for batch process vents based on the average of all values obtained during the compliance demonstration and to establish operating limits for continuous process vents (and combined batch and continuous process vents) based on the average of the maximum (or minimum) values of the parameter.

For those sources that decide to use continuous emissions monitoring systems (CEMS) to demonstrate compliance, we have added CEMS performance specifications, recordkeeping and reporting provisions, and monitoring installation, operation, and maintenance provisions. We have replaced the proposed requirement for 3-hour averages of recorded readings with daily averages. We have changed the proposed data availability requirement for valid hourly data from 66 percent of every averaging period (e.g., two valid hourly values for a 3-hour averaging period) to 75 percent of the hours during an operating day. A valid hour of data means that sources must have data for all 15-minute periods that were not excluded for no flow.

We have revised the submittal date for the notification of compliance status (NOCS) report to require that it be submitted 240 days after the compliance date, rather than 60 days after completion of the initial performance test or 30 days after completion of the initial compliance demonstration. In this way, if sources conduct more than one test or other compliance demonstration, they would not have to submit multiple NOCS reports at different times.

We have also replaced the requirement that sources submit immediate startup, shutdown, and malfunction (SSM) reports if they take actions inconsistent with this SSM plan. Now, sources must submit those reports with the next semiannual compliance report.

We have extended the report filing deadline for semiannual compliance reports from 30 to 60 days after the end of the compliance period, consistent with 40 CFR part 63, subpart G HON, because some sources are subject to several NESHAP.

B. Viscose Process Affected Sources

We have revised the proposed 55 percent reduction emission limit for viscose process vents at existing rayon operations. In today's final rule, we are requiring existing rayon operations to meet a two-stage emission reduction requirement—35 percent reduction within 3 years after the effective date and 40 percent reduction within 8 years after the effective date. We have revised the compliance dates for existing rayon operations accordingly. We have also revised the proposed 85 percent reduction emission limit for viscose process vents at cellophane operations. In today's final rule, we are requiring cellophane operations to meet a 75 percent reduction emission limit.

We have added a fourth alternative standard for CS_2 unloading and storage operations that allows affected sources to comply by installing a nitrogen unloading system and obtaining a 0.045 percent reduction from viscose process vents. We have also added initial and continuous compliance provisions and recordkeeping provisions that correspond to this alternative. We have clarified that the 83 percent reduction emission limit, and the corresponding initial and continuous compliance provisions, for CS_2 unloading and storage operations apply to affected sources using an alternative control technique not listed in the final rule.

We have revised the initial compliance demonstration requirements to require viscose process affected sources to conduct a month-long compliance demonstration to demonstrate initial compliance, as opposed to the 3-hour performance test specified at proposal. The sources would report the results of the initial compliance demonstration in the NOCS report and keep records of the initial compliance demonstration. The sources would also establish their operating limits over the period of the month-long compliance demonstration.

Affected sources that use recovery devices and/or process changes to meet the applicable emission limit would demonstrate initial compliance during the month-long compliance demonstration using information on raw material receipts, measured CS_2 recovered, etc., in their material balance calculations to determine their overall percent reduction in emissions. No recovery device testing would be necessary.

Affected sources that must use non-recovery control devices to meet the applicable emission limit would be required to conduct a performance test to determine the control efficiency of

their non-recovery control device. The sources would incorporate this control efficiency information into their material balance calculations, which they would use during the month-long compliance demonstration to determine their overall percent reduction in emissions.

C. Cellulose Ether Affected Sources

In today's final rule, we have revised the definition for ''cellulose ether process'' to specifically exclude solids handling steps downstream of the drying process. We have replaced 40 CFR part 65, subpart F (Consolidated Air Rule), with 40 CFR part 63, subpart UU (Generic MACT NESHAP), as an alternative to 40 CFR part 63, subpart H (HON), for equipment leak provisions. We have added work practice standards for maintenance wastewater from 40 CFR 63.105 and liquid streams in open systems from 40 CFR 63.149. We have also adopted the applicability provisions, initial and continuous compliance provisions, reporting and recordkeeping provisions, and definitions associated with equipment leaks, wastewater, and liquid streams in open systems from 40 CFR part 63, subparts F, G, and H of the HON.

We have eliminated the proposed requirement for cellulose ether affected sources to demonstrate continuous compliance by complying with an ongoing 99 percent reduction determination. However, these sources must still comply with the applicable operating limits to demonstrate continuous compliance. We have added initial and continuous compliance requirements and recordkeeping requirements for sources using extended cookout to comply with the 99 percent reduction emission limit. We have added a voluntary consensus standard as an alternative to EPA Method 624.

III. Summary of Responses to Major Comments

This section summarizes major comments we received on the proposed rule and our responses to those comments. Only those major comments that resulted in an appreciable change to the proposed rule are included. A more comprehensive summary of comments and responses can be found in Docket No. A–99–39.

A. Emission Limits, Operating Limits, and Work Practice Standards

Comment: One commenter did not support the process vent MACT floor for rayon operations (55 percent reduction). The commenter stated that selecting the highest CS_2 recovery operation as the MACT floor is not appropriate because both rayon operations have control equipment in place. The commenter stated that the fairest, most equitable approach would be to average the 25 and 55 percent control levels of the two rayon operations, resulting in an average 40 percent MACT floor control level which the commenter felt their rayon operation could meet with available technology. The commenter estimated that, because of their fragile business environment, a 35 percent reduction is the maximum that their rayon operation could achieve in the next 3 years, and they requested an additional 5 years (8 years total) to make the additional investment to meet a 40 percent MACT floor control level.

Response: Due to the shutdown of the MACT floor rayon operation, the commenter's lesser-controlled rayon operation is the only remaining rayon operation in the United States. Because the shutdown occurred after proposal, we have the option of keeping the current 55 percent reduction as the MACT floor or establishing a less stringent MACT floor. In light of the shutdown of the only other rayon operation providing information regarding available control technology, we have decided to establish a less stringent MACT floor (40 percent), which the commenter stated would be achievable with available technology. This less stringent MACT floor is higher than the 25 percent control level achieved by the commenter's rayon operation at proposal. Based on the information provided by the commenter, we have decided to implement a staged reduction strategy to facilitate the remaining rayon operation's achieving the 40 percent MACT floor control level. In today's final rule, we are requiring the remaining rayon operation to achieve a 35 percent reduction by 3 years after the effective date and achieve a 40 percent reduction 5 years later (8 years after the effective date).

Comment: One commenter stated that the 85 percent MACT floor control rate for viscose process vents at cellophane operations is overstated. The commenter stated that because theirs is the only cellophane operation in the United States, the MACT floors for the cellophane industry should be based on the information that they submitted and should reflect their source's current operational status. The commenter noted that the 85 percent control rate was based on information that they submitted in their response to EPA's section 114 information collection request (ICR), and their company had been operating the cellophane operation for only a few months when the ICR was issued. The commenter stated that they did not have long-term data on sulfide control rates or operational parameters at the time, so they determined the sulfide control rate for their section 114 ICR response using annualized engineering estimates based on their best estimate of actual operating conditions at the source. Based on new data, which they provided to EPA, the commenter calculated that their cellophane operation actually controls approximately 75 to 80 percent of total uncontrolled sulfide emissions. The commenter recommended that the MACT floor control rate be reduced to 75 percent to accurately reflect their source's current operational status, taking into account variability in the emission control rate.

Response: We agree with the commenter that the proposed MACT floor control rate is overstated. We have examined the corroborating data provided by the commenter, agree with the findings, and have revised the process vent MACT floor and emission limit for the cellophane industry to require 75 percent control of sulfide emissions.

Comment: Two commenters noted that, in establishing MACT standards for CS_2 unloading and storage operations, EPA failed to address the situation in which a nitrogen control system includes CS_2 unloading but not CS_2 storage. One of the commenters requested that EPA add a fourth compliance option to account for this situation and allow the reduction of emissions from the process vents by the appropriate amount. The commenter noted that their source has installed a nitrogen system for CS_2 unloading but is keeping the existing water system for CS_2 storage. The commenter stated that EPA should provide appropriate credit for this nitrogen unloading system. Analyses by the commenter on the amount of CS_2 emitted from their storage tanks during tank car unloading suggested that the additional reduction of emissions from the process vents should be 0.045 percent.

Response: We agree with the request from the commenter for a fourth alternative for sources with nitrogen unloading but no nitrogen padding for CS_2 storage. The fourth alternative requires affected sources to install a nitrogen unloading system and reduce emissions from process vents by 0.045 percent, which, based on the commenter's data, is equivalent to the emission reduction achieved by converting from water padding to nitrogen padding for CS_2 storage.

B. Testing and Initial Compliance Requirements

Comment: Several commenters from the viscose process industry objected to the initial performance testing requirements in the proposed rule. Pointing out that their operations have multiple stacks, process vents, and control devices, the commenters stated that performing tests on all of these simultaneously would be impractical and expensive. Commenters noted that the low flow and high humidity typical of viscose process vents would make it difficult to obtain a flow sufficient for testing. Commenters also pointed out that EPA's testing approach would yield a highly concentrated CS_2 emission stream, but EPA's test method (EPA Method 15 in Appendix A of 40 CFR part 60) is designed for relatively low pollutant concentrations. One commenter stated that the inlet/outlet testing approach is irrelevant where the entire operation serves as the control device, and CS_2 is being removed throughout the process. Commenters also stated that the initial performance testing requirements in the proposed rule would be dangerous to implement. They pointed out that EPA Method 15 would require drilling holes and inserting a heated probe into the lines before and after the control device; these procedures would allow leakage of air into the system and invite the risk of fire and explosion because of CS_2's wide flammable range, very low autoignition temperature, and very low autoignition energy.

Three commenters indicated that the initial performance testing requirements are also inconsistent with the material balance approach which is the method EPA used to establish the cellulose MACT standards and the required method for viscose process affected sources to demonstrate ongoing compliance with the cellulose MACT standards. The commenter stated that it would make sense to require the demonstration of initial compliance to be on the same basis as the demonstration of ongoing compliance.

Two commenters stated that it would also be difficult to get a meaningful range of monitoring parameter values from three short tests. One of the commenters stated that monitoring parameter values should be established based on data from performance tests conducted over a longer period, such as 1 month. The two commenters stated that a longer test period is necessary, particularly since continuous compliance with the various percent emission reduction requirements in the rule is based on a 6-month rolling average.

Response: We acknowledge that the initial compliance requirements should be revised for greater clarity. For today's final rule, we are requiring viscose process affected sources to demonstrate their initial compliance with the applicable percent reduction emission limit by conducting a month-long compliance demonstration using a material balance for their sources. This approach is consistent with the material balance approach presented by the commenters. This material balance requirement would not apply to cellulose ether affected sources. For those viscose process affected sources that use recovery devices (e.g., carbon adsorbers, condensers, or oil absorbers) and/or process changes to meet the applicable emission limit, initial compliance would be demonstrated during the month-long compliance demonstration with material balance calculations using raw material receipts, measured CS_2 recovered, etc. No recovery device testing would be necessary. For those viscose process affected sources that must use non-recovery control devices (e.g., biofilters, flares, scrubbers, or thermal oxidizers) to meet the applicable emission limit, testing would be required at the inlet and outlet of the non-recovery control devices to determine the control efficiency of the non-recovery control devices. Testing would not be required at uncontrolled stacks. The viscose process affected sources would incorporate the control efficiency information from the performance test into their material balance calculations, which they would then use during the month-long compliance demonstration to determine their overall percent reduction in emissions.

We disagree with the commenters' assumption that they would need to test everything at their operations simultaneously. We also disagree with the commenters' assertions that EPA Method 15 cannot be used on viscose process streams because of the high concentration of CS_2 in the streams. Sources should be able to simply dilute the emission stream sample prior to the analysis. Regarding the commenters' other concerns about using EPA Method 15, viscose process affected sources are not limited to using EPA Method 15 to measure the emissions at the inlet and outlet of the control device. Sources are being given the option to use an EPA-approved alternative test method or emissions monitoring devices such as CEMS to measure the inlet and outlet emissions and determine the control efficiency.

Comment: Three commenters questioned EPA's use of provisions from 40 CFR part 63, subpart GGG (Pharmaceuticals NESHAP) regarding worst-case testing conditions for batch process vents. Noting that this requirement applies only to vents with control devices, two of the commenters argued that the concept of a worst-case scenario is not appropriate for the viscose process industries, where the vents are uncontrolled. One of these two commenters also noted that, because CS_2 is emitted during only certain portions of the production cycle, the worst-case emission scenario lasts only for a matter of minutes, so extrapolating from this scenario would result in a very elevated, artificial emission level. The two commenters stated that measuring the total amount of HAP emitted over a cycle is the only appropriate way to measure CS_2 emissions from viscose process vents, rather than some artificial worst-case scenario. According to one of the commenters, variations inherent in the viscose process make it impossible to identify a representative cycle in advance, but these variations could be accounted for more effectively over a longer period, such as a month-long compliance determination.

A third commenter stated that in order to generate the absolute worst-case conditions required under 40 CFR part 63, subpart GGG, they would have to change the way their processes run, which could include running at maximum production rates, making the highest-HAP recipe, or changing process variables to generate the highest-HAP emission stream. According to the commenter, these situations could result in substantial amounts of unordered or off-spec product, causing severe financial hardship as well as environmental impacts from the disposal of the unwanted product and the artificially increased HAP emissions from performing the test. Finally, putting their equipment under unusual stress could result in expensive breakdowns or even hazards to safety or the environment. As one alternative, the commenter suggested that EPA defer entirely to 40 CFR part 63, subpart U (Group I Polymers and Resins (P&R I) NESHAP) or subpart JJJ (Group IV Polymers and Resins (P&R IV) NESHAP) for all batch process vent testing requirements. The commenter stated that these provisions would still require them to conduct the test during the most rigorous conditions but would not damage their equipment or make unwanted products.

Response: In response to the various comments, we have decided to replace the worst-case testing provisions in 40

CFR part 63, subpart GGG (Pharmaceuticals NESHAP), with alternative batch process vent testing provisions in 40 CFR part 63, subpart U (P&R I NESHAP). Similar to the approach in subpart GGG, this approach would still require industry to conduct the performance test during the most rigorous conditions. This change should address the concerns voiced by all of the commenters.

As we have already noted in another response, viscose process affected sources that use recovery devices and/or process changes to meet the applicable emission limit would demonstrate initial compliance during the month-long compliance demonstration with material balance calculations, using information about raw material receipts, measured CS_2 recovered, etc. No recovery device testing would be necessary.

Comment: Several commenters stated that the testing requirements during the initial compliance demonstration create problems with establishing operating limits. Two of the commenters (viscose process operations) stated that it would not be possible to determine suitable ranges for the operating limits during only 3 hours of testing in the initial performance test. One commenter stated that operating limits should be determined over a variety of operating scenarios in order to define the boundaries of monitoring parameter values upon which to demonstrate compliance. The other commenter stated that a test conducted over a longer period, such as 1 month, using their operation's proposed material balance method, would identify the full acceptable range of parameter values to monitor.

A third commenter (a cellulose ether operation) recommended that a minimum or maximum operating limit be established based on the monitoring parameter values measured during the performance test and extended beyond those values if it can be demonstrated by engineering assessments and/or manufacturer's recommendations that the unit will still meet the proposed standard. The commenter stated that performance testing should not be required to be conducted over the source's entire operational range. The commenter also stated that affected sources would have a very narrow window of compliance if monitored parameter data are collected during ''normal'' operating conditions and further ''normalized'' by averaging all the data points. The commenter stated that it must be clear that all data points measured during the performance test are acceptable. The commenter also stated that the source should not be required to retest every time there is some normal variation in production relative to the conditions of the initial performance test.

Response: In response to the first two commenters (viscose process operations), we have decided to revise the cellulose rule to allow viscose process affected sources to establish their operating limits over the month-long initial compliance demonstration, which should provide the sources sufficient time to establish their operating limits.

In response to one comment by the third commenter (a cellulose ether operation), we have decided to revise the procedures for determining operating limits consistent with the approach taken in 40 CFR part 63, subpart U (P&R I NESHAP). For batch process vents, we are requiring that sources establish the operating limit based on the average of all monitoring values obtained during the performance test (or month-long compliance demonstration for viscose process affected sources), consistent with the approach in 40 CFR 63.505(b)(3). For continuous process vents, we are requiring that the sources establish the operating limit based on the average of the maximum (or minimum) values of the monitoring parameter for the three test runs (or daily averages during the compliance demonstration for viscose process affected sources), consistent with the approach in 40 CFR 63.505(b)(2). If sources combine their batch and continuous process vents, we are requiring that they establish their operating limit using the continuous process vent approach.

In response to another comment by the third commenter, testing would not be required over their source's entire operational range. We disagree with the third commenter's suggestion to supplement or extend the values from the test as in the HON. The HON was written that way because we were trying to have the owner/operator justify a range, not establish a limit. We have also clarified that affected sources would establish what are considered ''normal'' operating conditions for continuous operation during the initial performance test. The sources would then be required to meet the operating limits established during the initial performance test.

Comment: Several commenters objected to the proposed requirement for sources to conduct the initial performance test at least 180 days before the compliance date. Commenters argued that EPA had provided no justification, as required, for this deviation from EPA's past practice. With the notification of performance test due at least 60 days before the performance test, commenters stated that this would require sources to start preparing for the performance test 240 to 360 days prior to the compliance date in order to be confident that the test can be passed. Two commenters noted that requests for an alternative monitoring method may have to occur even earlier, making it unrealistic for an affected source to apply for EPA approval to use the alternative method because of insufficient time to obtain EPA approval and purchase and install the alternative equipment. One commenter stated that it makes more technical sense to conduct a performance test after the unit is required to be in compliance rather than before. Therefore, the commenters recommended that EPA revise the deadline for performance testing consistent with 40 CFR 63.7(a), which requires an initial performance test be conducted within 180 days after the compliance date.

Response: Based on these comments, we have decided to revise the proposed requirement and allow sources to complete their performance test or other initial compliance demonstration no later than 180 days after the compliance date. Our intention for requiring the earlier date was to ensure that sources would be in compliance by the compliance date and allow sources to avoid severe penalties for noncompliance if they found themselves out of compliance based on a test conducted 180 days after the compliance date. To ensure that a record of compliance is kept between the compliance date and the date that operating limits are set (i.e., date of the performance test or other initial compliance demonstration), today's final rule also requires sources to maintain an O&M log of the process and emissions control equipment during this period.

C. Continuous Compliance Requirements

Comment: One commenter suggested that EPA allow outlet liquid temperature as an alternative operating limit to outlet gas temperature for condensers, stating that this variable is directly related to outlet gas temperature and is the control point for changing air temperature. Noting that the pH of caustic liquids used in a wet scrubber may be on the extreme end of the pH scale, a second commenter suggested that EPA allow either a pH or conductivity measuring device for determining compliance with the operating limit for wet scrubbers. A

third commenter stated that their operation measures the available alkalinity, not the pH, in the circulating system for their wet scrubbers, and stated that pH meters would not be as reliable as the current system. A fourth commenter stated that liquid flow rate and pressure drop measurements do not always indicate the required wet scrubber performance. The commenter stated that it is possible for a scrubber to meet required control efficiencies and still sustain a pressure or liquid flow reduction. The commenter noted that other parameters, such as adequate pack height and liquid distribution, are technically more accurate indicators of scrubber performance.

Response: In response to these comments, we have revised the proposed requirements to include some of the additional parameters requested by commenters (i.e., condenser liquid outlet temperature for condensers and conductivity and alkalinity for wet scrubbers). However, we have not added adequate pack height and liquid distribution as additional wet scrubber parameters because we are not convinced that they are good parameters. Adequate pack height is a characteristic of the control device, not the kind of parameter that could be monitored continuously, and liquid distribution is a difficult type of parameter to monitor. Nonetheless, sources have the option under the rule to apply to the Administrator for approval to use alternative parameters.

Comment: One commenter stated that the proposed rule lacks the following essential provisions, developed for other MACT standards, regarding the proper use of parameter monitoring data for purposes of enforcement: (1) Specify that excursions violate an operating limit, not an emission limit; (2) base excursions on a 24-hour daily average to account for short-term fluctuations, which typically self-correct so that the daily average reading is normal; (3) allow a number of excused excursions in each semiannual reporting period to account for periods when something goes wrong despite how carefully an emission control device is designed, operated, and maintained (according to the commenter, without excused excursions, sources would be unable to ensure compliance); (4) exclude data from certain periods (e.g., startups, shutdowns, malfunctions, calibrations, periods of nonoperation of all or part of the process) from daily averages because those data are of questionable validity; (5) require no monitoring when the process is shut down and there are no emissions, and, if sources do monitor, specify that the data do not constitute an excursion; (6) specify that only one excursion will be assigned if two or more parameters go beyond their limits at the same time for the same control device; (7) clearly define what constitutes an excursion; and (8) specify that some limited percentage of data points can be missing or fail to meet applicable criteria without that being an excursion.

The commenter requested that EPA revise the data availability requirement to match 40 CFR part 63, subpart G (HON), for continuous vents and wastewater vents and 40 CFR part 63, subpart U (P&R I NESHAP) or subpart JJJ (P&R IV NESHAP), for batch vents and storage vessel vents. The commenter noted that because the daily average in 40 CFR part 63, subpart G, is based on having valid data points for 75 percent of the operating day, the actual operating day for a batch process could be adjusted for periods when the unit was not operating or not sending vents to the control device. The commenter contrasted this with the 3-hour averages required in the proposed rule, which may or may not coincide accurately with the operational time of a batch process.

In separate comments, two other commenters recommended that EPA insert data availability language similar to 40 CFR 60.48b(f) (Performance Standard for Industrial-Commercial-Institutional Steam Generating Units). According to the commenters, this subpart requires that data must be available for a minimum of 75 percent of the operating hours for each control device operating day in at least 22 out of 30 successive control device operating days. The commenters stated that this change would allow EPA to account for the realities of operating computerized systems, which require periodic backup and occasionally break down and cannot be repaired in 1 hour in order to comply with the proposed 66 percent data availability requirement (e.g., two valid hourly values for a 3-hour averaging period).

Response: Regarding the first requested provision, the proposed rule does not link deviations in operating limits with violations of emission limits.

Regarding the second provision, the concept of a 24-hour average would be consistent with other rules and seems reasonable. Therefore, we have made the requested change to today's final rule.

Regarding the third provision, we are not allowing excused excursions (deviations) in today's final rule. Excused excursions were allowed in the HON to give sources time to become familiar with the new monitoring provisions in the HON. The excursions were not meant to be precedent-setting for all future rules. We believe that industry in general has had sufficient time to develop strategies for complying with monitoring requirements, and that excused excursions are no longer necessary. Other recent rules also have been issued without excused excursions.

Regarding the fourth and fifth provisions, there is no problem with including the requested exemption for periods of nonoperation for all or part of a source, and we have made the requested change to today's final rule. However, we are not adding exemptions to today's final rule for startups, shutdowns, and malfunctions. According to 40 CFR 63.6(e)(1)(i) of the NESHAP General Provisions, sources are required to minimize emissions during periods of startup, shutdown, or malfunction. If the daily average parameter value (including data from the startup, shutdown, or malfunction period) does not exceed the specified limit, then there is no deviation to report. However, deviations on days when you have startup, shutdown, or malfunction events would not be violations if you follow the procedures in your SSM plan.

Regarding the sixth provision, we have not included the requested exemption to allow sources only one excursion when two or more parameters go beyond their limits at the same time for the same control device. We do not want to specify in each rule exactly how we are going to assess penalties.

Regarding the eighth provision, we agree with the requests from the three commenters that the data availability requirements be revised. Consistent with the approach taken in 40 CFR part 63, subpart GGG (Pharmaceuticals NESHAP) and subpart MMM (Pesticide Active Ingredients NESHAP), we are requiring that at least 75 percent of the hours during an operating day be valid. We are including a 100 percent data availability requirement for a valid hour of data. A valid hour of data means that sources must have data for all 15-minute periods that were not excluded for no flow. For batch vents, if there is no flow at the time when a monitoring reading is taken, then that reading does not count in the average. In this way, we are able to take into account both batch and continuous vents, with a clear definition of what constitutes an excursion in each case, which was requested in the seventh provision. However, we do not agree with the request by two of the commenters for data to be available in at least 22 out of 30 successive operating days. We believe that such a

requirement could create a problem under some situations, such as if a source were to shut down for maintenance for an extended period of time.

D. Notifications and Reports

Comment: One commenter recommended that EPA revise the proposed cellulose rule to require that all NOCS reports be due on the same date following the compliance date, rather than after a certain number of days following the initial performance test or the initial compliance demonstration. According to the commenter, multiple performance tests for a process unit would make the original requirement to submit based on the performance test date very confusing, possibly requiring sources to submit multiple NOCS reports at various times, making it very easy to miscalculate a date and create inadvertent noncompliance. The commenter stated that there should also be no difference in the timeframe to submit the NOCS reports based on whether or not a performance test is required. According to the commenter, it would be more efficient for sources to send, and for EPA to receive, one set of NOCS reports. The commenter recommended that EPA take a standardized approach to NOCS reports by adding text similar to 40 CFR 63.152(b) and deleting references to 40 CFR 63.9(h) and 63.10(d)(2), which address the submittal dates for NOCS reports.

Response: We agree with the commenter that requiring sources to submit NOCS reports at various times could be confusing. To eliminate this source of confusion, we have decided to tie the date to submit all initial NOCS reports to the compliance date rather than the test date. Sources would be required to submit the NOCS reports no later than 240 days after the compliance date. This submittal date is based on the requirements in 40 CFR part 63, subpart A (NESHAP General Provisions), to conduct the initial performance test no later than 180 days after the compliance date and submit the NOCS report no later than 60 days after the performance test (180 days plus 60 days equals 240 days). To accomplish this standardized schedule, we have, as suggested, adapted text from 40 CFR 63.152(b) for today's final rule and excluded the provisions of 40 CFR 63.9(h) and 63.10(d)(2) regarding the submittal date for NOCS reports.

IV. Summary of Impacts

A. Air Quality Impacts

We have determined nationwide baseline HAP emissions from existing sources in the Miscellaneous Viscose Processes source category and Cellulose Ethers Production source category to be approximately 12,800 Mg/yr (14,100 tpy) at the current level of control. We have determined that the promulgated standards will reduce total HAP emissions from these sources by approximately 1,600 Mg/yr (1,700 tpy).

In addition to reducing emissions of HAP, the promulgated standards will also reduce emissions of non-HAP, such as H_2S. We have determined that the promulgated standards will reduce H_2S emissions from existing sources by approximately 410 Mg/yr (450 tpy) from a baseline level of approximately 2,800 Mg/yr (3,100 tpy).

We have determined that the promulgated standards will increase secondary emissions of criteria pollutants (particulate matter, sulfur dioxide, carbon monoxide, and nitrogen oxides) by approximately 190 Mg/yr (210 tpy). Secondary emissions were assumed to be generated from the utility boilers that produce the electricity and the industrial boilers that produce the steam for the control devices.

B. Cost Impacts

We have determined that the capital costs of the promulgated standards for existing sources will be approximately $30.8 million for emission control and $0.6 million for monitoring, which results in a total capital cost of approximately $31.4 million. The capital costs include the costs to purchase and install the emission control and monitoring equipment.

We have determined that the total annual costs for the rule will be approximately $9.7 million. Specifically, we have determined that the incremental annual costs of the promulgated standards for existing sources will be approximately $9.2 million for emission control and $0.4 million for monitoring. The annual costs include the direct annual costs (comprised of labor, materials, and utilities) plus the indirect annual costs (comprised of overhead, taxes, insurance, administrative charges, and capital recovery).

In addition, we expect that the total annual costs for recordkeeping and reporting required by the promulgated standards for existing sources will average approximately $67,900 over the first 3 years after implementation of the standards. We project no new sources over the first 3 years after implementation of the standards.

C. Economic Impacts

Because of the variability in end products in cellulose products manufacturing, we assessed impacts on five separate market segments. We treated the Cellulose Ethers Production source category as one segment, and divided the Miscellaneous Viscose Processes source category into four segments: cellulose food casing, rayon, cellulosic sponge, and cellophane. The total annualized social cost (in 1998 dollars) of the final rule on the industry is $6.0 million, with costs to the firms affected by the final rule ranging from 0.01 to 1 percent of sales.

For individual facilities, the cost-to-sales ratios ranged from less than 0.01 to 8.2 percent of sales. Since the higher facility cost-to-sales ratios were found among the cellulose food casing, rayon, and cellulosic sponge segments, we performed a market analysis, using 1998 as the baseline. The results indicated less than 1.5 percent change in both the market prices and in the quantity produced for the cellulose food casing and cellulosic sponge segments.

One of the two rayon firms has left the market since the proposal of this rule. For this reason, the remaining firm was modeled assuming full absorption of the control costs. This firm was already operating with a negative profit. It is possible that the closure of the other rayon firm may increase sales and profitability for the remaining firm. However, this is uncertain given the decline in the rayon industry since 1998. Available economic data suggest that an additional facility in this source category has experienced negative profits since 1998, so two facilities could reasonably close if current trends in the industry continue, even if they did not incur compliance costs from the final rule. The impact of the promulgated standards may be that the closures may occur sooner than they would otherwise.

D. Non-Air Environmental Impacts

We have determined that wastewater generation for existing sources will increase by approximately 8.1 million liters per year (L/yr) (2.1 million gallons per year (gal/yr)) relative to a baseline level of approximately 23 billion L/yr (6.2 billion gal/yr), and solid waste generation will increase by approximately 420 Mg/yr (460 tpy). We determined these impacts based on the additional wastewater and solid waste generated by control devices (e.g., Lo-Cat® scrubbers and carbon adsorbers) installed to meet the promulgated

standards for existing sources. We do not expect these increased impacts to adversely affect the ability of sources to comply with the promulgated standards.

E. Energy Impacts

We have determined that the overall energy demand (electricity plus steam) for existing sources in the Miscellaneous Viscose Processes source category and Cellulose Ethers Production source category will increase by approximately 300 million megajoules per year (284 billion British thermal units per year) under the promulgated standards. We determined this net increase based on the additional energy demand for control devices (e.g., scrubbers, carbon adsorbers, condensers, and oil absorbers) installed or upgraded to meet the promulgated standards for existing sources. We do not expect this increased energy demand to adversely affect the ability of sources to comply with the promulgated standards.

V. Administrative Requirements

A. 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 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 obligation of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, it has been determined that this rule is not a ''significant regulatory action'' because none of the listed criteria apply to this action. Consequently, this action was not submitted to OMB for review under Executive Order 12866.

B. Executive Order 13132, Federalism

Executive Order 13132, entitled ''Federalism'' (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' are defined in the Executive Order to include regulations that have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.'' Under Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the regulation. The EPA also may not issue a regulation that has federalism implications and that preempts State law unless EPA consults with State and local officials early in the process of developing the regulation.

If EPA complies by consulting, Executive Order 13132 requires EPA to provide to OMB, in a separately identified section of the preamble to the rule, a federalism summary impact statement (FSIS). The FSIS must include a description of the extent of EPA's prior consultation with State and local officials, a summary of the nature of their concerns and EPA's position supporting the need to issue the regulation, and a statement of the extent to which the concerns of State and local officials have been met. Also, when EPA transmits a draft final rule with federalism implications to OMB for review pursuant to Executive Order 12866, it must include a certification from EPA's Federalism Official stating that EPA has met the requirements of Executive Order 13132 in a meaningful and timely manner.

The final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. Thus, the requirements of section 6 of the Executive Order do not apply to the rule.

C. Executive Order 13175, Consultation and Coordination With Indian Tribal Governments

Executive Order 13175, entitled ''Consultation and Coordination with Indian Tribal Governments'' (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure ''meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.''

The final rule does not have tribal implications, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to the rule.

D. 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 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, EPA must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned rule is preferable to other potentially effective and reasonably feasible alternatives that EPA considered.

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 Executive Order has the potential to influence the rule. Today's rule is not subject to Executive Order 13045 because it is based solely on technology performance. No children's risk analysis was performed because no alternative technologies exist that would provide greater stringency at a reasonable cost. Furthermore, the rule has been determined not to be ''economically significant'' as defined under Executive Order 12866.

E. Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

Today's final rule is not subject to Executive Order 13211 (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

F. Unfunded Mandates Reform Act of 1995

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 by State, local, and tribal governments, in aggregate, or by 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 this 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's 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 today's final 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 1 year. The capital cost of the rule has been determined to be approximately 31.4 million. The maximum total annual cost of the final rule for any year has been determined to be approximately $9.7 million. Thus, today's final rule is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, EPA has determined that the final rule contains no regulatory requirements that might significantly or uniquely affect small governments because it contains no requirements that apply to such governments or impose obligations upon them. Therefore, today's final rule is not subject to the requirements of section 203 of the UMRA.

G. Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 et seq.

The RFA generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's final rule on small entities, a small entity is defined as: (1) A small business that has fewer than 1,000 employees for NAICS codes 325221, 325188, and 325199; fewer than 750 employees for NAICS code 325211; or fewer than 500 employees for NAICS codes 326121 and 326199; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's final rule on small entities, it has been determined that this action will not have a significant economic impact on a substantial number of small entities. We have determined that only one firm meets one of the definitions of small entity—a small business that has fewer than 500 employees for NAICS code 326199. This firm owns only 1 of the 13 operations subject to today's final rule. There are several firms subject to today's final rule whose costs will be a greater percentage of sales than this small business. Furthermore, the market impacts on this firm are minimal and are in line with impacts experienced by other firms subject to today's final rule.

H. Paperwork Reduction Act

The information collection requirements in the final rule will be submitted for approval to OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* The EPA has prepared an Information Collection Request (ICR) document (ICR No. 1974.02), and you may obtain a copy from Sandy Farmer by mail at the Office of Environmental Information, Collection Strategies Division (2822), U.S. EPA, 1200 Pennsylvania Avenue, NW., Washington, DC 20460; by electronic mail at *farmer.sandy@epa.gov;* or by calling (202) 260–2740. You may also download a copy off the Internet at *http://www.epa.gov/icr.* The information requirements are not effective until OMB approves them.

The information requirements are based on notification, recordkeeping, and reporting requirements in 40 CFR part 63, subpart A (NESHAP General Provisions), which are mandatory for all operators subject to national emission standards. These recordkeeping and reporting requirements are specifically authorized by section 114 of the CAA (42 U.S.C. 7414). All information submitted to EPA pursuant to the recordkeeping and reporting requirements for which a claim of confidentiality is made is safeguarded according to EPA's policies set forth in 40 CFR part 2, subpart B.

Today's final rule would require maintenance inspections of the control devices but would not require any notifications or reports beyond those required by 40 CFR part 63, subpart A (NESHAP General Provisions). The recordkeeping requirements require only the specific information needed to determine compliance.

The annual recordkeeping and reporting burden for this collection (averaged over the first 3 years after the effective date of the rule) has been determined to be approximately 1,400 labor hours per year, at a total annual cost of approximately $67,900. This burden estimate includes one-time notifications of applicability and performance test, reading instructions, training personnel, and developing a record system, SSM plan, and site-specific monitoring plan. The total annualized capital cost for monitoring equipment and for file cabinets used for storing collected data and reports averages approximately $56,600 over the 3-year period of the ICR. The total annual O&M cost for file storage, photocopying, and postage for notifications and reports averages approximately $200 over the 3-year period of the ICR.

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: (1) Review instructions; (2) 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; (3) adjust the existing ways to comply with any previously applicable instructions and

requirements; (4) train personnel to be able to respond to a collection of information; (5) search data sources; (6) complete and review the collection of information; and (7) 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.

I. National Technology Transfer and Advancement Act of 1995

As noted in the proposed rule, section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104–113, section 12(d) (15 U.S.C. 272 note), directs EPA to use voluntary consensus standards in its regulatory activities, unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) 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.

Today's final rule involves the following technical standards: EPA Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 3, 3A, 3B, 4, 15, 18, 21, 22, 25, and 25A (40 CFR part 60, appendix A); Performance Specification 7 (PS–7), PS–8, PS–9, and PS–15 (40 CFR part 60, appendix B); and the applicable wastewater test methods and procedures in 40 CFR 63.144 and 63.145. Consistent with the NTTAA, EPA conducted searches to identify voluntary consensus standards in addition to these EPA methods and performance specifications. The search and review results were documented and placed in the docket for today's final rule (Docket No. A–99–39).

No applicable voluntary consensus standards were identified as alternatives to EPA Methods 1A, 2A, 2D, 2F, 2G, 22, PS–7, PS–8, PS–9, and PS–15 for the purposes of the rule. However, three voluntary consensus standards were identified as acceptable alternatives to EPA Methods 3B, 18, and 624 for the purposes of the rule. The three standards are ASME Performance Test Code (PTC) 19.10–1981—Part 10 (Flue and Exhaust Gas Analysis), ASTM D6420–99 (Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry (GC/MS)), and ASTM D5790–95 (Standard Test Method for Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography-Mass Spectrometry).

The voluntary consensus standard ASME PTC 19.10–1981—Part 10 is cited in today's final rule for its manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas. This part of ASME PTC 19.10–1981—Part 10 is an acceptable alternative to EPA Method 3B.

The voluntary consensus standard ASTM D6420–99 is appropriate in certain cases as an alternative to EPA Method 18 for the measurement of toluene and total organic HAP. Similar to EPA Method 18, ASTM D6420–99 is also a performance-based method for measuring gaseous organic compounds. However, ASTM D6420–99 was written to support the specific use of highly portable and automated GC/MS. While offering advantages over the traditional EPA Method 18, the ASTM method does allow some less stringent criteria for accepting GC/MS results than required by EPA Method 18. Therefore, ASTM D6420–99 is a suitable alternative to EPA Method 18 only where: (1) The target compound(s) are those listed in Section 1.1 of ASTM D6420–99, and (2) the target concentration is between 150 parts per billion by volume and 100 parts per million by volume. For target compound(s) not listed in Section 1.1 of ASTM D6420–99, but potentially detected by mass spectrometry, today's final rule specifies that the additional system continuing calibration check after each run, as detailed in Section 10.5.3 of the ASTM method, must be followed, met, documented, and submitted with the data report even if there is no moisture condenser used or the compound is not considered water soluble. For target compound(s) not listed in Section 1.1 of ASTM D6420–99 and not amenable to detection by mass spectrometry, ASTM D6420–99 does not apply. As a result, EPA will cite ASTM D6420–99 in today's final rule. The EPA will also cite EPA Method 18 as a gas chromatography (GC) option in addition to ASTM D6420–99, which will allow the continued use of GC configurations other than GC/MS.

The voluntary consensus standard ASTM D5790–95 is a ''purge and trap'' method that is acceptable as an alternative analytical procedure for the wastewater test methods and procedures in 40 CFR 63.144 and 63.145 for the analysis of total organic HAP in wastewater samples. As a result, EPA will cite ASTM D5790–95 in today's final rule. However, this ASTM method should be used with the sampling procedures of EPA Method 25D or an equivalent method in order to be a complete alternative for the purposes of this rule, as per 40 CFR 63.144. The standard ASTM D5790–95 is similar to EPA Method 624, which is also a ''purge and trap'' procedure. The standard ASTM D5790–95 is validated for all of the 21 volatile organic HAP targeted by EPA Method 624, but it is also validated for an additional 14 HAP not targeted by the EPA method.

In addition to the three voluntary consensus standards EPA uses in the rule, the search for emissions measurement procedures identified 14 other voluntary consensus standards as potential alternatives to EPA Methods 1, 2, 2C, 3, 3A, 3B, 4, 15, 18, 21, 25, and 25A. The EPA determined that 12 of the 14 standards identified for measuring emissions of the HAP or surrogates subject to emission limits in today's final rule were impractical alternatives to EPA test methods for the purposes of the rule. Two of the 14 standards identified in the search were not available at the time the review was conducted because they are under development by a voluntary consensus body. For these reasons, EPA does not intend to adopt these 14 standards for today's final rule.

Sections 63.5535 and 63.5545 and Table 4 to Subpart UUUU of 40 CFR part 63 list the EPA test methods and performance specifications included in today's final rule. Under 40 CFR 63.7(f) and 63.8(f) of the NESHAP General Provisions, an affected source may apply to EPA for permission to use alternative test methods or alternative monitoring requirements in place of any of the EPA test methods, performance specifications, or procedures.

J. 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. 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). This rule is effective June 11, 2002.

List of Subjects in 40 CFR Part 63

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

Dated: May 15, 2002.

Christine Todd Whitman,

Administrator.

For the reasons stated in the preamble, title 40, chapter I, part 63 of the Code of the 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. Part 63 is amended by adding subpart UUUU to read as follows:

Subpart UUUU—National Emission Standards for Hazardous Air Pollutants for Cellulose Products Manufacturing

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What This Subpart Covers

§ 63.5480 What is the purpose of this subpart?

This subpart establishes emission limits, operating limits, and work practice standards for hazardous air pollutants (HAP) emitted from cellulose products manufacturing operations. Carbon disulfide, carbonyl sulfide, ethylene oxide, methanol, methyl chloride, propylene oxide, and toluene are the HAP emitted in the greatest quantities from cellulose products manufacturing operations. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limits, operating limits, and work practice standards.

§ 63.5485 Am I subject to this subpart?

You are subject to this subpart if you own or operate a cellulose products manufacturing operation that is located at a major source of HAP emissions.

(a) Cellulose products manufacturing includes both the Miscellaneous Viscose Processes source category and the Cellulose Ethers Production source category. The Miscellaneous Viscose Processes source category includes all of the operations that use the viscose process. These operations include the cellulose food casing, rayon, cellulosic sponge, and cellophane operations, as defined in § 63.5610. The Cellulose Ethers Production source category includes all of the cellulose ether operations, as defined in § 63.5610, that use the cellulose ether process.

(b) A major source of HAP is 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 any single HAP at a rate of 9.1 megagrams per year (Mg/yr) (10 tons per year (tpy)) or more or any combination of HAP at a rate of 23 Mg/yr (25 tpy) or more.

(c) The provisions of this subpart do not apply to research and development facilities, as defined in section 112(b)(7) of the Clean Air Act (CAA), regardless of whether the facilities are located at the same plant site as an operation subject to the provisions of this subpart.

(d) For cellulose ether operations, the applicability provisions in paragraph (d)(1) or (2) of this section apply.

(1) The applicability provisions in §§ 63.100(a) through (f) and 63.160 apply if you are complying with the equipment leak provisions of subpart H of this part.

(2) The applicability provisions in § 63.1019 apply if you are complying with the equipment leak provisions in subpart UU of this part.

(e) For cellulose ether operations, the applicability provisions in §§ 63.100(a) through (f) and 63.110(a), (e) and (h) apply if you are complying with the wastewater provisions in subparts F and G of this part.

§ 63.5490 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, or existing affected source for the Miscellaneous Viscose Processes and Cellulose Ethers Production source categories.

(b) The affected source for the Miscellaneous Viscose Processes source category is each cellulose food casing, rayon, cellulosic sponge, or cellophane operation, as defined in § 63.5610. The affected source for the Cellulose Ethers Production source category is each

cellulose ether operation, as defined in § 63.5610.

(c) You must consider storage vessels to be part of your process unit, as defined in § 63.5610, under either of the conditions described in paragraphs (c)(1) and (2) of this section. Otherwise, you may assign your storage vessels according to paragraph (c)(3) or (4) of this section.

(1) The input to the storage vessel from your viscose process or cellulose ether process (either directly or through other storage vessels assigned to your process unit) is greater than or equal to the input from any other process.

(2) The output from the storage vessel to your viscose process or cellulose ether process (either directly or through other storage vessels assigned to your process unit) is greater than or equal to the output to any other process.

(3) If the greatest input to and/or output from a shared storage vessel is the same for two or more processes, including at least one viscose process or cellulose ether process, you may assign the storage vessel to any process unit that has the greatest input or output.

(4) If the use varies from year to year, then you must base the determination on the utilization that occurred during the year preceding June 11, 2002 or, if the storage vessel was not operating during that year, you must base the use on the expected use for the first 5-year period after startup. You must include this determination in the Notification of Compliance Status Report specified in Table 7 to this subpart.

(d) An affected source is a new affected source if you began construction of the affected source after August 28, 2000 and you meet the applicability criteria in § 63.5485 at the time you began construction.

(e) An affected source is reconstructed if you meet the criteria as defined in § 63.2.

(f) An affected source is existing if it is not new or reconstructed.

(g) For the purposes of this subpart, the definitions of new and existing affected source in paragraphs (d) through (f) of this section supersede the definitions of new and existing affected source in subparts F, G, H, U and UU of this part.

§ 63.5495 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, then you must comply with this subpart according to the requirements in paragraphs (a)(1) and (2) of this section.

(1) If you start up your affected source before June 11, 2002, then you must comply with the emission limits, operating limits, and work practice standards for new and reconstructed sources in this subpart no later than June 11, 2002.

(2) If you start up your affected source after June 11, 2002, then you must comply with the emission limits, operating limits, and work practice standards for new and reconstructed sources in this subpart upon startup of your affected source.

(b) If you have an existing affected source, then you must comply with this subpart according to the requirements in paragraphs (b)(1) and (2) of this section.

(1) Cellulose food casing, cellulosic sponge, cellophane, and cellulose ether operations must comply with the emission limits, operating limits, and work practice standards for existing sources in this subpart no later than June 13, 2005.

(2) Rayon operations must comply with this subpart according to the requirements in paragraphs (b)(2)(i) through (iii) of this section.

(i) Rayon operations must comply with the 35 percent reduction emission limit and associated operating limits and work practice standards for existing sources in this subpart no later than June 13, 2005.

(ii) Rayon operations must comply with the work practice standard for carbon disulfide unloading and storage operations for existing sources in this subpart no later than June 13, 2005.

(iii) Rayon operations must comply with the 40 percent reduction emission limit and associated operating limits and work practice standards for existing sources in this subpart no later than June 11, 2010.

(c) If you have an area source that increases its emissions or its potential to emit so that it becomes a major source of HAP and an affected source subject to this subpart, then the requirements in paragraphs (c)(1) and (2) of this section apply.

(1) An area source that meets the criteria of a new affected source, as specified in § 63.5490(d), or a reconstructed affected source, as specified in § 63.5490(e), must be in compliance with this subpart upon becoming a major source.

(2) An area source that meets the criteria of an existing affected source, as specified in § 63.5490(f), must be in compliance with this subpart no later than 3 years after it becomes a major source.

(d) You must meet the notification requirements in § 63.5575 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limits, operating limits, and work practice standards in this subpart.

(e) For the purposes of this subpart, the compliance dates in this section supersede the compliance dates in subparts F, G, H, U and UU of this part.

Emission Limits, Operating Limits, and Work Practice Standards

§ 63.5505 What emission limits, operating limits, and work practice standards must I meet?

(a) You must meet each emission limit and work practice standard in Table 1 to this subpart that applies to you.

(b) You must meet each operating limit in Table 2 to this subpart that applies to you.

(c) As provided in § 63.6(g), you may apply to EPA for permission to use an alternative to the work practice standards in this section.

(d) Opening of a safety device, as defined in § 63.5610, is allowed at any time that conditions require venting to avoid unsafe conditions.

(e) The emission limits in Table 1 to this subpart used to control emissions from storage vessels do not apply during periods of planned routine maintenance. Periods of planned routine maintenance of each control device, during which the control device does not meet the emission limit specified in Table 1 to this subpart, must not exceed 240 hours per year.

General Compliance Requirements

§ 63.5515 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limits, operating limits, and work practice standards in this subpart at all times, except during periods of startup, shutdown, and malfunction.

(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in § 63.6(e)(1)(i).

(1) During the period between the compliance date specified for your affected source in § 63.5495 and the date upon which continuous monitoring systems (CMS) have been installed and validated and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) You must develop and implement a written startup, shutdown, and malfunction (SSM) plan according to the provisions in § 63.6(e)(3).

(d) After you treat a wastewater stream according to the provisions of

subparts F and G of this part, it is no longer subject to this subpart.

(e) If you use a boiler or process heater to comply with an emission limit or work practice standard in Table 1 to this subpart, then the vent stream must be introduced into the flame zone of the boiler or process heater.

(f) You are not required to conduct a performance test when you use any of the units specified in paragraphs (f)(1) through (5) of this section to comply with the applicable emission limit or work practice standard in Table 1 to this subpart. You are also exempt from the continuous compliance, reporting, and recordkeeping requirements specified in Tables 5 through 9 to of this subpart for any of these units. This exemption applies to units used as control devices or wastewater treatment units.

(1) A boiler or process heater with a design heat input capacity of 44 megawatts or greater;

(2) A boiler or process heater into which the vent stream is introduced with the primary fuel or is used as the primary fuel;

(3) A boiler or process heater burning hazardous waste that meets the requirements in paragraph (f)(3)(i) or (ii) of this section.

(i) The boiler or process heater has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart H; or

(ii) The boiler or process heater has certified compliance with the interim status requirements of 40 CFR part 266, subpart H.

(4) A hazardous waste incinerator that has been issued a final permit under 40 CFR part 270 and that complies with the requirements of 40 CFR part 264, subpart O, or that has certified compliance with the interim status requirements of 40 CFR part 265, subpart O.

(5) A control device for which a performance test was conducted for determining compliance with a rule promulgated by EPA and the test was conducted using the same test methods specified in Table 4 to this subpart and either you have made no deliberate process changes since the test, or you can demonstrate that the results of the performance test with or without adjustments, reliably demonstrate compliance despite process changes.

(g) For purposes of meeting any of the emission limits in Table 1 to this subpart, you may use either a single control technique or any combination of control techniques, as defined in § 63.5610.

(h) You must be in compliance with the provisions of subpart A of this part, except as noted in Table 10 to this subpart.

Testing and Initial Compliance Requirements

§ 63.5530 How do I demonstrate initial compliance with the emission limits and work practice standards?

(a) You must demonstrate initial compliance with each emission limit and work practice standard that applies to you according to Table 3 to this subpart. You must also install and operate the monitoring equipment according to the requirements in § 63.5545 that apply to you.

(b) You must establish each site-specific operating limit in Table 2 to this subpart that applies to you according to the requirements in § 63.5535 and Table 4 to this Subpart UUUU.

(c) You must submit the Notification of Compliance Status Report containing the results of the initial compliance demonstration according to the requirements in § 63.5575 and Table 7 to this Subpart UUUU.

§ 63.5535 What performance tests and other procedures must I use?

(a) You must conduct each performance test in Table 4 to this Subpart UUUU that applies to you.

(b) You must conduct each performance test for continuous process vents and combinations of batch and continuous process vents according to the requirements in § 63.7(e)(1) and under the specific conditions in Table 4 to this Subpart UUUU. Normal operating conditions will be defined by the affected source. You must conduct each performance test for batch process vents under the specific conditions in Table 4 to this subpart and not under normal operating conditions as specified in § 63.7(e)(1).

(c) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 63.7(e)(1).

(d) You must conduct three separate test runs for each performance test required in this section, as specified in § 63.7(e)(3). Each test run must last at least 1 hour.

(e) You must use the equations in paragraphs (e)(1) through (3) of this section to determine the control efficiency for each performance test.

(1) The total organic HAP emission rate is the sum of the emission rates of the individual HAP components. You must calculate the total organic HAP emission rate at the inlet and outlet of each control device for each test run using Equation 1 of this section:

$$ER_{HAP_t} = \sum_{j=1}^{m} ER_{HAP_j} \qquad \text{(Eq. 1)}$$

Where:

ER_{HAPt} = total emission rate of organic HAP in vent stream, kilograms per hour (kg/hr) (pounds per hour (lb/hr)).

ER_{HAPj} = emission rate of individual organic HAP in vent stream, kg/hr (lb/hr).

j = individual HAP.

m = number of individual HAP sampled in each test run.

(2) The total sulfide emission rate is the sum of the emission rates of the individual sulfide components, expressed as carbon disulfide. You must calculate the total sulfide emission rate at the inlet and outlet of each control device for each test run using Equation 2 of this section:

$$ER_{sulf_t} = ER_{CS_2} + \left(ER_{H_2S^*} \frac{M_{CS_2}}{M_{H_2S}} \right) + \left(ER_{COS^*} \frac{M_{CS_2}}{M_{COS}} \right) \qquad \text{(Eq. 2)}$$

Where:

ER_{sulf_t} = total emission rate of sulfide in vent stream, kg/hr (lb/hr), as carbon disulfide.

ER_{CS_2} = emission rate of carbon disulfide in vent stream, kg/hr (lb/hr).

ER_{H_2S} = emission rate of hydrogen sulfide in vent stream, kg/hr (lb/hr).

M_{CS_2} = mass of carbon disulfide per mole of carbon disulfide, 76 kilograms per kilogram-mole (kg/kg-mol) (76 pounds per pound-mole (lb/lb-mol)).

M_{H_2S} = mass of hydrogen sulfide per mole of carbon disulfide, 68 kg/kg-mol (68 lb/lb-mol).

ER_{COS} = emission rate of carbonyl sulfide in vent stream, kg/hr (lb/hr).

M_{COS} = mass of carbonyl sulfide per mole of carbon disulfide, 120 kg/kg-mol (120 lb/lb-mol).

(3) You must calculate the control efficiency for each control device for each test run using Equation 3 of this section:

$$CE = \frac{ER_i - ER_o}{ER_i}(100\%) \qquad \text{(Eq. 3)}$$

Where:

CE = control efficiency, percent.

ER_i = total emission rate of organic HAP (ER_{HAP_i}) or sulfide (ER_{sulf_i}) in the inlet vent stream of the control device, kg/hr (lb/hr).

ER_o = total emission rate of organic HAP (ER_{HAP_i}) or sulfide (ER_{sulf_i}) in the outlet vent stream of the control device, kg/hr (lb/hr).

(f) When a flare is used to comply with the applicable emission limit or work practice standard in Table 1 to this subpart, you must comply with the requirements in paragraphs (f)(1) through (3) of this section. You are not required to conduct a performance test to determine the control efficiency of the flare or the outlet organic HAP concentration. If you have previously conducted a compliance demonstration for a flare using the techniques specified in paragraphs (f)(1) through (3) of this section, you may use that compliance demonstration 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);

(2) Determine the net heating value of the gas being combusted using the techniques specified in § 63.11(b)(6); and

(3) Determine the exit velocity using the techniques specified in either § 63.11(b)(7) or (b)(8), as appropriate.

(g) Viscose process affected sources must conduct a month-long initial compliance demonstration according to the requirements in paragraphs (g)(1) through (5) of this section and Table 3 to this subpart.

(1) Viscose process affected sources that must use non-recovery control devices to meet the applicable emission limit in Table 1 to this subpart must conduct an initial performance test of their non-recovery control devices according to the requirements in Table 4 to this subpart to determine the control efficiency of their non-recovery control devices and incorporate this information in their material balance.

(2) Viscose process affected sources that use recovery devices to meet the applicable emission limit in Table 1 to this subpart must determine the quantity of carbon disulfide fed to the process and the quantity of carbon disulfide recovered using the recovery device and incorporate this information in their material balance.

(3) Viscose process affected sources that use viscose process changes to meet the applicable emission limit in Table 1 to this subpart must determine the quantity of carbon disulfide used before and after the process change and incorporate this information in their material balance.

(4) Cellophane operations that use recovery devices to meet the 95 percent toluene emission limit in Table 1 to this subpart must determine the quantity of toluene fed to the process and the toluene recovered using the solvent recovery device and incorporate this information in their material balance.

(5) Using the pertinent material balance information obtained according to paragraphs (g)(1) through (4) of this section, viscose process affected sources must calculate the monthly average percent reduction for their affected source over the month-long period of the compliance demonstration.

(h) During the period of each compliance demonstration, you must establish each site-specific operating limit in Table 2 to this subpart that applies to you according to the requirements in paragraphs (h)(1) through (10) of this section.

(1) For continuous process vents and combinations of batch and continuous process vents, establish your site-specific operating limit using the procedures in § 63.505(b)(2), except that, if you demonstrate initial compliance using a month-long compliance demonstration, references to ''compliance testing'' and ''1-hour runs'' mean ''compliance demonstration'' and references to ''three test runs'' mean ''daily averages during the compliance demonstration'' for purposes of this subpart.

(2) For batch process vents, establish your site-specific operating limit using the procedures in § 63.505(b)(3), except that, if you demonstrate initial compliance using a month-long compliance demonstration, references to ''compliance testing'' and ''performance test'' mean ''compliance demonstration'' for purposes of this subpart.

(3) For condensers, record the outlet (product side) gas or condensed liquid temperature averaged over the same period as the compliance demonstration while the vent stream is routed and constituted normally. Locate the temperature sensor in a position that provides a representative temperature.

(4) For thermal oxidizers, record the firebox temperature averaged over the same period as the compliance demonstration. Locate the temperature sensor in a position that provides a representative temperature.

(5) For water scrubbers, record the pressure drop and flow rate of the scrubber liquid averaged over the same time period as the compliance demonstration while the vent stream is routed and constituted normally. Locate the pressure and flow sensors in positions that provide representative measurements of these parameters.

(6) For caustic scrubbers, record the pressure drop, flow rate of the scrubber liquid, and either the pH, conductivity, or alkalinity of the scrubber liquid averaged over the same time period as the compliance demonstration while the vent stream is routed and constituted normally. Locate the pressure sensors, flow sensors, and pH, conductivity, or alkalinity sensors in positions that provide representative measurements of these parameters. Ensure the sample is properly mixed and representative of the fluid to be measured.

(7) For flares, record the presence of a pilot flame. Locate the pilot flame sensor in a position that provides an accurate and continuous determination of the presence of the pilot flame.

(8) For biofilters, record the pressure drop across the biofilter beds, inlet gas temperature, and effluent pH, averaged over the same time period as the compliance demonstration while the vent stream is routed and constituted normally. Locate the pressure, temperature, and pH sensors in positions that provide representative measurement of these parameters. Ensure the sample is properly mixed and representative of the fluid to be measured.

(9) For carbon adsorbers, record the total regeneration stream mass or volumetric flow during each carbon bed regeneration cycle during the period of the compliance demonstration. Record the temperature of the carbon bed after each carbon bed regeneration cycle during the period of the compliance demonstration (and within 15 minutes of completion of any cooling cycle(s)). Record the operating time since the end of the last carbon bed regeneration cycle and the beginning of the next carbon bed regeneration cycle during the period of the compliance demonstration. Locate the temperature and flow sensors in positions that provide representative measurement of these parameters.

(10) For oil absorbers, record the flow of absorption liquid through the absorber, the temperatures of the absorption liquid before and after the

steam stripper, and the steam flow through the steam stripper averaged during the same period of the compliance demonstration. Locate the temperature and flow sensors in positions that provide representative measurement of these parameters.

§ 63.5540 By what date must I conduct a performance test or other initial compliance demonstration?

(a) You must conduct performance tests or other initial compliance demonstrations no later than 180 calendar days after the compliance date that is specified for your source in § 63.5495 and according to the provisions in § 63.7(a)(2).

§ 63.5545 What are my monitoring installation, operation, and maintenance requirements?

(a) For each CMS required in this section, you must develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that addresses the provisions in paragraphs (a)(1) through (3) of this section.

(1) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and

(3) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(b) In your site-specific monitoring plan, you must also address the provisions in paragraphs (b)(1) through (3) of this section.

(1) Ongoing operation and maintenance procedures in accordance with the general requirements of §§ 63.8(c)(1), (3), (4)(ii) and 63.5580(c)(6);

(2) Ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d)(2); and

(3) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §§ 63.10(c), (e)(1), (e)(2)(i) and 63.5585.

(c) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(d) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

(e) For each continuous emissions monitoring system (CEMS), you must meet the requirements in paragraphs (e)(1) through (6) of this section.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specification (PS) listed in paragraphs (e)(1)(i) through (iv) of this section:

(i) PS–7 of 40 CFR part 60, appendix B, for CEMS used to measure hydrogen sulfide emissions;

(ii) PS–8 of 40 CFR part 60, appendix B, for CEMS used to measure volatile organic compound emissions;

(iii) PS–9 of 40 CFR part 60, appendix B, for CEMS that use gas chromatography to measure organic HAP emissions; and

(iv) PS–15 of 40 CFR part 60, appendix B, for CEMS that use Fourier transform infrared spectroscopy to measure organic HAP emissions.

(2) You must conduct a performance evaluation of each CEMS according to the requirements in § 63.8 and according to the applicable performance specification listed in paragraphs (e)(1)(i) through (iv) of this section.

(3) As specified in § 63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(4) The CEMS data must be reduced to operating data averages computed using valid data from at least 75 percent of the hours during the averaging period. To have a valid hour of data, you must have four or more data points equally spaced over the 1-hour period (or at least two data points during an hour when calibration, quality assurance, or maintenance activities are being performed), except as specified in paragraph (a)(5) of this section.

(5) The CEMS data taken during periods in which the control devices are not functioning in controlling emissions, as indicated by periods of no flow for all or a portion of an affected source, must not be considered in the averages.

(6) Determine the daily average of all recorded readings for each operating day during the semiannual reporting period described in Table 8 to this subpart.

(f) For each continuous parameter monitoring system (CPMS), you must meet the requirements in paragraphs (f)(1) through (9) of this section.

(1) Satisfy all requirements of performance specifications for CPMS upon promulgation of such performance specifications.

(2) Satisfy all requirements of quality assurance (QA) procedures for CPMS upon promulgation of such QA procedures.

(3) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period.

(4) To calculate a valid hourly average, there must be at least four equally spaced values for that hour, excluding data collected during the periods described in paragraph (f)(6) of this section.

(5) Have valid hourly data for at least 75 percent of the hours during the averaging period.

(6) The CPMS data taken during periods in which the control devices are not functioning in controlling emissions, as indicated by periods of no flow for all or a portion of an affected source, must not be considered in the averages.

(7) Calculate a daily average using all of the valid hourly averages for each operating day during the semiannual reporting period.

(8) Record the results of each inspection, calibration, and validation check.

(9) Except for redundant sensors, any device that is used to conduct an initial validation or accuracy audit of a CPMS must meet the accuracy requirements specified in paragraphs (f)(9)(i) and (ii) of this section.

(i) The device must have an accuracy that is traceable to National Institute of Standards and Technology (NIST) standards.

(ii) The device must be at least three times as accurate as the required accuracy for the CPMS.

(g) If flow to a control device could be intermittent, you must install, calibrate, and operate a flow indicator at the inlet or outlet of the control device to identify periods of no flow.

Continuous Compliance Requirements

§ 63.5555 How do I demonstrate continuous compliance with the emission limits, operating limits, and work practice standards?

(a) You must demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1 and 2 to this subpart that applies to you according to methods specified in Tables 5 and 6 to this subpart.

(b) You must report each instance in which you were not in continuous compliance (as specified in Tables 5 and 6 to this subpart) with each emission limit, each operating limit, and each work practice standard that apply to you. This includes periods of startup, shutdown, and malfunction. These instances are deviations from the emission limits, operating limits, and work practice standards in this subpart. These deviations must be reported

according to the requirements in § 63.5580.

(c) During periods of startup, shutdown, and malfunction, you must operate according to the SSM plan.

(d) Consistent with §§ 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating according to the SSM plan.

§ 63.5560 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating, including periods of startup, shutdown, and malfunction.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, required quality assurance or control activities, and periods of no flow for all or a portion of an affected source in data averages and calculations used to report emission or operating levels, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

(d) All terms in this subpart that define a period of time for completing required tasks (e.g., weekly, monthly, quarterly, or annually) refer to the standard calendar periods.

(1) You may change time periods specified in this subpart for completing required tasks by mutual agreement with the Administrator, as specified in subpart A of this part. For example, 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 must 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, then you must comply according to the schedule specified in paragraph (d)(2)(i) or (ii) of this section, as appropriate.

(i) You must comply before the end of the standard calendar period within which the compliance deadline occurs, if there remain at least 3 days for tasks that must be performed weekly, at least 2 weeks for tasks that must be performed monthly, at least 1 month for tasks that must be performed quarterly, or at least 3 months for tasks that must be performed annually; or

(ii) In all instances where a provision of this subpart requires completing a task during each of multiple successive periods, you 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.

Notifications, Reports, and Records

§ 63.5575 What notifications must I submit and when?

You must submit each notification in Table 7 to this subpart that applies to you by the date specified in Table 7 to this subpart.

§ 63.5580 What reports must I submit and when?

(a) You must submit each report in Table 8 to this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submitting reports under § 63.10, you must submit each compliance report by the date in Table 8 to this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.5495 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in § 63.5495.

(2) The first compliance report must be postmarked or delivered no later than August 31 or February 28, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in § 63.5495.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than August 31 or February 28, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in § 63.10(d)(5)(i).

(5) If there are no deviations from any emission limits, operating limits, or work practice standards that apply to you (see Tables 5 and 6 to this subpart), the compliance report must contain a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

(6) If there were no periods during which the CMS was out-of-control, the compliance report must contain a statement that there were no periods during which the CMS was out-of-control during the reporting period. You must include specifications for out-of-control operation in the quality control plan required under § 63.8(d)(2).

(d) For each deviation from an emission limit or work practice standard that occurs at an affected source where you are not using a CMS to demonstrate continuous compliance with the emission limits or work practice standards in this subpart (see Table 5 to this subpart), the compliance report must contain the information in paragraphs (c)(1) through (4) and (d)(1) and (2) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The total operating time of each affected source during the reporting period.

(2) Information on the number, duration, and cause of deviations

(including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission limit or operating limit occurring at an affected source where you are using a CMS to demonstrate continuous compliance with the emission limit or operating limit in this subpart (see Tables 5 and 6 to this subpart), you must include the information in paragraphs (c)(1) through (4) and (e)(1) through (13) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The date and time that each malfunction started and stopped.

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control.

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) An identification of each HAP that is known to be in the emission stream at the affected source.

(9) A brief description of the process units.

(10) A brief description of the CMS.

(11) The date of the latest CEMS certification or audit or CPMS inspection, calibration, or validation check.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(13) The operating day average values of monitored parameters.

(f) If you have obtained a title V operating permit according to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report according to Table 8 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice standard in this subpart, then submitting the compliance report will satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submitting a compliance report will not otherwise affect any obligation you may have to report deviations from permit requirements to the permit authority.

§ 63.5585 What records must I keep?

You must keep the records in Table 9 to this subpart that apply to you.

§ 63.5590 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1).

(b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1). You can keep the records offsite for the remaining 3 years.

(d) You may keep records in hard copy or computer-readable form including, but not limited to, paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

Other Requirements and Information

§ 63.5595 What compliance options do I have if part of my affected source is subject to both this subpart and another subpart?

(a) For any Group 1 or Group 2 wastewater stream that is subject to the wastewater provisions in this subpart and the wastewater provisions in 40 CFR parts 260 through 272, you must comply with the requirements of either paragraph (a)(1) or (2) of this section.

(1) You must comply with more stringent control, testing, monitoring, recordkeeping, and reporting requirements that overlap between the provisions of this subpart and the provisions of 40 CFR parts 260 through 272. You must keep a record of the information used to determine which requirements were the most stringent and submit this information if requested by the Administrator.

(2) You must submit, no later than 4 months before the applicable compliance date specified in § 63.5495, a request for a case-by-case determination of requirements. The request must include the information specified in paragraphs (a)(2)(i) and (ii) of this section.

(i) Identification of the wastewater streams that are subject to this subpart and to provisions in 40 CFR parts 260 through 272, determination of the Group 1/Group 2 status of those streams, determination of whether or not those streams are listed or exhibit a characteristic as specified in 40 CFR part 261, and determination of whether the waste management unit is subject to permitting under 40 CFR part 270.

(ii) Identification of the specific control, testing, monitoring, recordkeeping, and reporting requirements that overlap between the provisions of this subject and the provisions of 40 CFR parts 260 through 272.

(b) If any combustion device, recovery device, or recapture device, as defined in § 63.111, subject to this subpart is also subject to the monitoring, recordkeeping, and reporting requirements in 40 CFR part 264, subpart AA or CC, or is subject to monitoring and recordkeeping requirements in 40 CFR part 265, subpart AA or CC, and you comply with the periodic reporting requirements under 40 CFR part 264, subpart AA or CC, that would apply to the device if the affected source had final-permitted status, you 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 (b), which will constitute compliance with the monitoring, recordkeeping, and reporting requirements of this subpart. You must identify which option has been selected in the Notification of Compliance Status Report required in § 63.5575 and Table 7 to this subpart.

§ 63.5600 What other requirements apply to me?

(a) Table 10 to this subpart shows which provisions of the General Provisions in §§ 63.1 through 63.15 apply to you.

(b) For the purposes of this subpart, the applicable subpart A requirements in Table 10 to this subpart supersede the applicable subpart A requirements in subparts F, G, H, U and UU of this part.

§ 63.5605 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the US Environmental Protection Agency

(EPA), or a delegated authority, such as your State, local, or tribal agency. If the Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the Administrator keeps the authorities contained in paragraphs (b)(1) through (4) of this section and does not delegate such authorities to a State, local, or tribal agency.

(1) Approval of alternatives to the non-opacity emission limits, operating limits, and work practice standards in § 63.5505(a) through (c) and under § 63.6(g).

(2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.

(3) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.

(4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

§ 63.5610 What definitions apply to this subpart?

(a) For all affected sources complying with the batch process vent testing provisions in § 63.490(c) and the operating limit provisions in § 63.505(b), the terms used in this subpart and in subpart U of this part are defined in § 63.482 and paragraph (g) of this section.

(b) For all affected sources complying with the closed-vent system and bypass line requirements in § 63.148, the terms used in this subpart and in subpart G of this part are defined in § 63.111 and paragraph (g) of this section.

(c) For all affected sources complying with the heat exchanger system requirements in § 63.104, the terms used in this subpart and in subpart F of this part are defined in § 63.101 and paragraph (g) of this section.

(d) For cellulose ether affected sources complying with the maintenance wastewater, process wastewater, and liquid stream in open system requirements of subparts F and G of this part, the terms used in this subpart and in subparts F and G of this part are defined in §§ 63.101 and 63.111 and paragraph (g) of this section.

(e) For cellulose ether affected sources complying with the equipment leak requirements of subpart H of this part, the terms used in this subpart and in subpart H of this part are defined in § 63.161 and paragraph (g) of this section.

(f) For cellulose ether affected sources complying with the equipment leak requirements of subpart UU of this part, the terms used in this subpart and in subpart UU of this part are defined in § 63.1020 and paragraph (g) of this section.

(g) All other terms used in this subpart have the meaning given them in § 63.2 and this paragraph (g). If a term is defined in § 63.2, 63.101, 63.111, 63.161, or 63.1020 and in this paragraph (g), the definition in this paragraph (g) applies for purposes of this subpart.

Bottoms receiver means a tank that collects distillation bottoms before the stream is sent for storage or for further downstream processing.

Carbon disulfide unloading and storage operation means a system at an affected source that includes unloading of carbon disulfide from a railcar using nitrogen or water displacement and storage of carbon disulfide in a storage vessel using nitrogen or water padding.

Cellophane means a thin, transparent cellulose material, which is manufactured using the viscose process and used in food packaging (e.g., candy, cheese, baked goods), adhesive tapes, and membranes for industrial uses, such as batteries.

Cellophane operation means the collection of the cellophane process unit and any other equipment, such as heat exchanger systems, wastewater and waste management units, or cooling towers, that are not associated with an individual cellophane process unit, but are located at a cellophane operation for the purpose of manufacturing cellophane and are under common control.

Cellophane process unit means all equipment which collectively function to manufacture cellophane and any associated storage vessels, liquid streams in open systems (as defined in § 63.149), and equipment (as defined in § 63.161) that are used in the manufacturing of cellophane.

Cellulose ether means a compound, such as carboxymethyl cellulose, hydroxyethyl cellulose, hydroxypropyl cellulose, methyl cellulose, or hydroxypropyl methyl cellulose, which is manufactured using the cellulose ether process and used mainly as a thickener, viscosifier, or binder in a wide variety of consumer and other products.

Cellulose ether operation means the collection of the cellulose ether process unit and any other equipment, such as heat exchanger systems, wastewater and waste management units, or cooling towers, that are not associated with an individual cellulose ether process unit, but are located at a cellulose ether operation for the purpose of manufacturing a particular cellulose ether and are under common control.

Cellulose ether process means the following:

(1) A manufacturing process that includes the following process steps:

(i) Reaction of cellulose (e.g., wood pulp or cotton linters) with sodium hydroxide to produce alkali cellulose;

(ii) Reaction of the alkali cellulose with a chemical compound(s), such as ethylene oxide, propylene oxide, methyl chloride, or chloroacetic acid, to produce a particular cellulose ether;

(iii) Washing and purification of the cellulose ether; and

(iv) Drying of the cellulose ether.

(2) Solids handling steps downstream of the drying process are not considered part of the cellulose ether process.

Cellulose ether process change means a change to the cellulose ether process that occurred no earlier than January 1992 that allows the recovery of organic HAP, reduction in organic HAP usage, or reduction in organic HAP leaving the reactor. Includes extended cookout.

Cellulose ether process unit means all equipment which collectively function to manufacture a particular cellulose ether and any associated storage vessels, liquid streams in open systems (as defined in § 63.149), and equipment (as defined in § 63.161 or 63.1020) that are used in the manufacturing of a particular cellulose ether.

Cellulose Ethers Production source category means the collection of operations that use the cellulose ether process to manufacture a particular cellulose ether.

Cellulose food casing means a cellulose casing, which is manufactured using the viscose process, used in forming meat products (e.g., hot dogs, sausages) and, in most cases, removed from the meat products before sale.

Cellulose food casing operation means the collection of the cellulose food casing process unit and any other equipment, such as heat exchanger systems, wastewater and waste management units, or cooling towers, that are not associated with an individual cellulose food casing process unit, but are located at a cellulose food casing operation for the purpose of manufacturing cellulose food casings and are under common control.

Cellulose food casing process unit means all equipment which collectively function to manufacture cellulose food casings and any associated storage vessels, liquid streams in open systems (as defined in § 63.149), and equipment

(as defined in § 63.161) that are used in the manufacturing of cellulose food casings.

Cellulosic sponge means a porous cellulose product, which is manufactured using the viscose process and used mainly for consumer use (e.g., for cleaning).

Cellulosic sponge operation means the collection of the cellulosic sponge process unit and any other equipment, such as heat exchanger systems, wastewater and waste management units, or cooling towers, that are not associated with an individual cellulosic sponge process unit, but are located at a cellulosic sponge operation for the purpose of manufacturing cellulosic sponges and are under common control.

Cellulosic sponge process unit means all equipment which collectively function to manufacture cellulosic sponges and any associated storage vessels, liquid streams in open systems (as defined in § 63.149), and equipment (as defined in § 63.161) that are used in the manufacturing of cellulosic sponges.

Closed-loop system means a system wherein the emission stream is not normally vented to the atmosphere but is recycled back to the process.

Control technique means any equipment or process control used for capturing, recovering, treating, or preventing HAP emissions. The equipment includes recovery devices and non-recovery control devices, as defined in this paragraph. The process control includes cellulose ether process changes and viscose process changes, as defined in this paragraph.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emission limit, operating limit, or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Emission point means an individual process vent, storage vessel, waste management unit, or equipment leak.

Extended cookout (ECO) means a cellulose ether process change that reduces the amount of unreacted ethylene oxide, propylene oxide, methyl chloride, or chloroacetic acid leaving the reactor. This is accomplished by allowing the product to react for a longer time, thereby leaving less unreacted ethylene oxide, propylene oxide, methyl chloride, or chloroacetic acid and reducing emissions of ethylene oxide, propylene oxide, methyl chloride, or chloroacetic acid that might have occurred otherwise.

Miscellaneous Viscose Processes source category means the collection of operations that use the viscose process to manufacture a particular cellulose product. These cellulose products include cellulose food casings, rayon, cellulosic sponges, and cellophane.

Nitrogen storage system means a system of padding the carbon disulfide storage vessels with nitrogen to prevent contact with oxygen.

Nitrogen unloading and storage system means the combination of a nitrogen unloading system for unloading carbon disulfide and a nitrogen storage system for storing carbon disulfide.

Nitrogen unloading system means a system of unloading carbon disulfide from railcars to storage vessels using nitrogen displacement to prevent gaseous carbon disulfide emissions to the atmosphere and to preclude contact with oxygen.

Non-recovery control device means an individual unit of equipment capable of and normally used for the purpose of capturing or treating HAP emissions. Examples of equipment that may be non-recovery control devices include, but are not limited to, biofilters, caustic scrubbers, flares, thermal oxidizers, and water scrubbers.

Oil absorber means a packed-bed absorber that absorbs pollutant vapors using a type of oil (e.g., kerosene) as the absorption liquid.

Onsite means that records are stored at a location within a major source which encompasses the affected source. Onsite includes, but is not limited to, storage at the affected source or process unit to which the records pertain or storage in central files elsewhere at the major source.

Process vent means a point of discharge to the atmosphere (or the point of entry into a control device, if any) of a HAP-containing gas stream from the process operation. Process vents do not include vents with a flow rate less than 0.005 standard cubic meter per minute or with a concentration less than 50 parts per million by volume (ppmv), vents on storage tanks, vents on wastewater emission sources, or pieces of equipment regulated under equipment leak standards.

Rayon means cellulose fibers, which are manufactured using the viscose process and used in the production of either textiles (e.g., apparel, drapery, upholstery) or non-woven products (e.g., feminine hygiene products, wipes, computer disk liners, surgical swabs).

Rayon operation means the collection of the rayon process unit and any other equipment, such as heat exchanger systems, wastewater and waste management units, or cooling towers, that are not associated with an individual rayon process unit, but are located at a rayon operation for the purpose of manufacturing rayon and are under common control.

Rayon process unit means all equipment which collectively function to manufacture rayon and any associated storage vessels, liquid streams in open systems (as defined in § 63.149), and equipment (as defined in § 63.161) that are used in the manufacturing of rayon.

Recovery device means an individual unit of equipment capable of and normally used for the purpose of recovering HAP emissions 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, but are not limited to, absorbers, carbon adsorbers, condensers, oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units.

Responsible official means responsible official as defined in 40 CFR 70.2.

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 responses to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operation 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.

Solvent coating process means a manufacturing process in which cellophane film is coated (e.g., with Saran® or nitrocellulose) to impart moisture impermeability to the film and to make it printable. Both Saran and nitrocellulose use the same solvents—tetrahydrofuran and toluene.

Storage vessel means a tank or other vessel used to store liquids that contain one or more HAP. Storage vessels do not include the following:

(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 (30 pounds per square inch) and without emissions to the atmosphere;

(3) Vessels with capacities smaller than 38 cubic meters (10,000 gallons);

(4) Vessels and equipment storing and/or handling material that contains no HAP or contains HAP as impurities only;

(5) Bottoms receiver tanks;

(6) Surge control vessels;

(7) Wastewater storage vessels; and

(8) Storage vessels assigned to another process unit regulated under another subpart of part 63.

Surge control vessel means feed drums, recycle drums, and intermediate vessels. Surge control vessels are used within a process unit when in-process storage, mixing, or management of flow rates or volumes is needed to assist in production of a product.

Total HAP means the sum of organic HAP emissions measured using EPA Method 18.

Total sulfide means the sum of emissions for carbon disulfide, hydrogen sulfide, and carbonyl sulfide reported as carbon disulfide. Total sulfide, as defined for the purposes of this subpart, does not include other sulfur compounds, such as sulfur dioxide.

Viscose process means the following:

(1) A manufacturing process that includes the following process steps:

(i) Reaction of cellulose (e.g., wood pulp) with sodium hydroxide to produce alkali cellulose;

(ii) Reaction of alkali cellulose with carbon disulfide to produce sodium cellulose xanthate;

(iii) Combination of sodium cellulose xanthate with additional sodium hydroxide to produce viscose solution;

(iv) Extrusion of the viscose into various shapes (e.g., hollow casings, thin fibers, thin sheets, molds);

(v) Regeneration of the cellulose product;

(vi) Washing of the cellulose product; and

(vii) Possibly acid or salt recovery.

(2) The cellulose products manufactured using the viscose process include cellulose food casings, rayon, cellulosic sponges, and cellophane.

Viscose process change means a change to the viscose process that occurred no earlier than January 1992 that allows either the recovery of carbon disulfide or a reduction in carbon disulfide usage in the process.

Wastewater means water that:

(1) Contains either:

(i) An annual average concentration of organic HAP (listed in Table 9 to subpart G of this part) of at least 5 parts per million by weight (ppmw) 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 in Table 9 to subpart G of this part) of at least 10,000 ppmw at any flow rate.

(2) Is discarded from a cellulose food casing, rayon, cellulosic sponge, cellophane, or cellulose ether process unit that is part of an affected source. Wastewater is process wastewater or maintenance wastewater.

Water storage system means a system of padding the carbon disulfide storage vessels with water to prevent contact with oxygen. The water, which is saturated with carbon disulfide, is later sent to wastewater treatment.

Water unloading and storage system means the combination of a water unloading system for unloading carbon disulfide and a water storage system for storing carbon disulfide.

Water unloading system means a system of unloading carbon disulfide from railcars to storage vessels using water displacement to prevent gaseous carbon disulfide emissions to the atmosphere and to preclude contact with oxygen.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.

Tables to Subpart UUUU of Part 63

TABLE 1 TO SUBPART UUUU OF PART 63.—EMISSION LIMITS AND WORK PRACTICE STANDARDS

[As required in § 63.5505(a), you must meet the appropriate emission limits and work practice standards in the following table]

For . . .	at . . .	you must . . .
1. the sum of all viscose process vents	a. each existing cellulose food casing operation.	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 25% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.
	b. each new cellulose food casing operation.	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 75% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.

TABLE 1 TO SUBPART UUUU OF PART 63.—EMISSION LIMITS AND WORK PRACTICE STANDARDS—Continued

[As required in § 63.5505(a), you must meet the appropriate emission limits and work practice standards in the following table]

For . . .	at . . .	you must . . .
	c. each existing rayon operation	i. (1) reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 35% within 3 years after the effective date based on a 6-month rolling average; (2) for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and (3) comply with the work practice standard for closed-vent systems; and ii. (1) reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 40% within 8 years after the effective date based on a 6-month rolling average; (2) for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and (3) comply with the work practice standard for closed-vent systems.
	d. each new rayon operation	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 75% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.
	e. each existing or new cellulosic sponge operation.	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 75% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.
	f. each existing or new cellophane operation.	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 75% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.
2. the sum of all solvent coating process vents.	a. each existing or new cellophane operation.	i. reduce uncontrolled toluene emissions by at least 95% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.
3. the sum of all cellulose ether process vents.	a. each existing or new cellulose ether operation.	i. reduce total uncontrolled organic HAP emissions by at least 99%; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.
4. closed-loop systems	each existing or new cellulose ether operation.	comply by operating the closed-loop system.

TABLE 1 TO SUBPART UUUU OF PART 63.—EMISSION LIMITS AND WORK PRACTICE STANDARDS—Continued

[As required in § 63.5505(a), you must meet the appropriate emission limits and work practice standards in the following table]

For . . .	at . . .	you must . . .
5. each carbon disulfide unloading and storage operation.	a. each existing or new viscose process affected source.	i. reduce uncontrolled carbon disulfide emissions by at least 83% from unloading and storage operations based on a 6-month rolling average if you use an alternative control technique not listed in this table source for carbon disulfide unloading and storage operations; if using a control device to reduce emissions, route emissions through a closed-vent system to the control device; and comply with the work practice standard for closed-vent systems; ii. reduce uncontrolled carbon disulfide emissions by at least 0.14% from viscose process vents based on a 6-month rolling average; for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and comply with the work practice standard for closed-vent systems; iii. install a nitrogen unloading and storage system (as defined in § 63.5610); or iv. install a nitrogen unloading system (as defined in § 63.5610); reduce uncontrolled carbon disulfide emissions by at least 0.045% from viscose process vents based on a 6-month rolling average; for each vent stream that you control, route the vent stream through a closed-vent to the control device; and comply with the work practice standard for closed-vent systems.
6. each toluene storage vessel	a. each existing or new cellophane operation.	i. reduce uncontrolled toluene emissions by at least 95% based on a 6-month rolling average; ii. if using a control device to reduce emissions, route the emissions through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.
7. equipment leaks	a. each existing or new cellulose ether operation.	i. comply with the applicable equipment leak standards of §§ 63.162 through 63.179, except that references to ''process unit'' mean ''cellulose ether process unit'' for the purposes of this subpart; or ii. comply with the applicable equipment leak standards of §§ 63.1021 through 63.1037, except that references to ''process unit'' mean ''cellulose ether process unit'' for the purposes of this subpart.
8. all sources of wastewater emissions	each existing or new cellulose ether operation.	comply with the applicable wastewater provisions of §§ 63.105 and 63.132 through 63.140.
9. liquid streams in open system 2	each existing or new cellulose ether operation.	comply with the applicable provisions of § 63.149, except that references to ''chemical manufacturing process unit'' mean ''cellulose ether process unit'' for the purposes of this subpart.
10. closed-vent system used to route emissions to a control device.	each existing or new affected source	conduct annual inspections, repair leaks, and maintain records as specified in § 63.148.
11. closed-vent system containing a bypass line that could divert a vent stream away from a control device, except for equipment needed for safety purposes (described in § 63.148(f)(3)).	each existing or new affected source	i. install, calibrate, maintain, and operate a flow indicator as specified in § 63.148(f)(1); or ii. secure the bypass line valve in the closed position with a car-seal or lock-and-key type configuration and inspect the seal or closure mechanism at least once per month as specified in § 63.148(f)(2).
12. heat exchanger system that cools process equipment or materials in the process unit.	each existing or new affected source	monitor and repair the heat exchanger system according to § 63.104(a) through (e), except that references to ''chemical manufacturing process unit'' mean ''cellulose food casing, rayon, cellulosic sponge, cellophane, or cellulose ether process unit'' for the purposes of this subpart.

TABLE 2 TO SUBPART UUUU OF PART 63.—OPERATING LIMITS

[As required in § 63.5505(b), you must meet the appropriate operating limits in the following table]

For the following control technique . . .	you must . . .
1. condenser	maintain the daily average condenser outlet gas or condensed liquid temperature no higher than the value established during the compliance demonstration.

TABLE 2 TO SUBPART UUUU OF PART 63.—OPERATING LIMITS—Continued

[As required in § 63.5505(b), you must meet the appropriate operating limits in the following table]

For the following control technique . . .	you must . . .
2. thermal oxidizer	maintain the daily average thermal oxidizer firebox temperature no lower than the value established during the compliance demonstration.
3. water scrubber	maintain the daily average scrubber pressure drop and scrubber liquid flow rate within the operating values established during the compliance demonstration.
4. caustic scrubber	maintain the daily average scrubber pressure drop, scrubber liquid flow rate, and scrubber liquid pH, conductivity, or alkalinity within the operating values established during the compliance demonstration.
5. flare	maintain the presence of a pilot flame.
6. biofilter	maintain the daily average biofilter inlet gas temperature, biofilter effluent pH, and pressure drop within the operating values established during the compliance demonstration.
7. carbon absorber	maintain the regeneration frequency, total regeneration adsorber stream mass or volumetric flow during carbon bed regeneration, and temperature of the carbon bed after regeneration (and within 15 minutes of completing any cooling cycle(s)) for each regeneration cycle within the values established during the compliance demonstration.
8. oil absorber	maintain the daily average absorption liquid flow, absorption liquid temperature, and steam flow within the values established during the compliance demonstration.
9. any of the control techniques specified in this table.	if using a CEMS, maintain the daily average control efficiency of each control device no lower than the value established during the compliance demonstration.
10. any of the control techniques specified in this table.	a. if you wish to establish alternative operating parameters, submit the application for approval of the alternative operating parameters no later than the notification of the performance test or CEMS performance evaluation or no later than 60 days prior to any other initial compliance demonstration; b. the application must include: information justifying the request for alternative operating parameters (such as the infeasibility or impracticality of using the operating parameters in this final rule); a description of the proposed alternative control device operating parameters; the monitoring approach; the frequency of measuring and recording the alternative parameters; how the operating limits are to be calculated; and information documenting that the alternative operating parameters would provide equivalent or better assurance of compliance with the standard; c. install, operate, and maintain the alternative parameter monitoring systems in accordance with the application approved by the Administrator; d. establish operating limits during the initial compliance demonstration based on the alternative operating parameters included in the approved application; and e. maintain the daily average alternative operating parameter values within the values established during the compliance demonstration.
11. alternative control technique	a. submit for approval no later than the notification of the performance test or CEMS performance evaluation or no later than 60 days prior to any other initial compliance demonstration a proposed site-specific plan that includes: a description of the alternative control device; test results verifying the performance of the control device; the appropriate operating parameters that will be monitored; and the frequency of measuring and recording to establish continuous compliance with the operating limits; b. install, operate, and maintain the parameter monitoring system for the alternative control device in accordance with the plan approved by the Administrator; c. establish operating limits during the initial compliance demonstration based on the operating parameters for the alternative control device included in the approved plan; and d. maintain the daily average operating parameter values for the alternative control technique within the values established during the compliance demonstration.

TABLE 3 TO SUBPART UUUU OF PART 63.—INITIAL COMPLIANCE WITH EMISSION LIMITS AND WORK PRACTICE STANDARDS

[As required in §§ 63.5530(a) and 63.5535(g), you must demonstrate initial compliance with the appropriate emission limits and work practice standards according to the requirements in the following table]

For . . .	at . . .	for the following emission limit or work practice standard . . .	you have demonstrated initial compliance if . . .
1. the sum of all viscose process vents.	a. each existing cellulose food casing operation.	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 25% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.	(1) the average uncontrolled total sulfide emissions, measured during the month-long compliance demonstration, are reduced by at least 25%; (2) you have a record of the average operating parameter values over the month-long compliance demonstration during which the average uncontrolled total sulfide emissions were reduced by at least 25%; (3) you prepare a material balance that includes the pertinent data used to determine the percent reduction of total sulfide emissions; and (4) you comply with the initial compliance requirements for closed-vent systems.
	b. each new cellulose food casing operation.	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 75% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.	(1) the average uncontrolled total sulfide emissions, measured during the month-long compliance demonstration, are reduced by at least 75%; (2) you have a record of the average operating parameter values over the month-long compliance demonstration during which the average uncontrolled total sulfide emissions were reduced by at least 75%; (3) you prepare a material balance that includes the pertinent data used to determine the percent reduction of total sulfide emissions; and (4) you comply with the initial compliance requirements for closed-vent systems.
	c. each existing rayon operation ..	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 35% within 3 years after the effective date based on a 6-month rolling average; for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and comply with the work practice standard for closed-vent systems; and	(1) the average uncontrolled total sulfide emissions, measured during the month-long compliance demonstration, are reduced by at least 35% within 3 years after the effective date; (2) you have a record of the average operating parameter values over the month-long compliance demonstration during which the average uncontrolled total sulfide emissions were reduced by at least 35%; (3) you prepare a material balance that includes the pertinent data used to determine the percent reduction of total sulfide emissions; and (4) you comply with the initial compliance requirements for closed-vent systems; and

TABLE 3 TO SUBPART UUUU OF PART 63.—INITIAL COMPLIANCE WITH EMISSION LIMITS AND WORK PRACTICE STANDARDS—Continued

[As required in §§ 63.5530(a) and 63.5535(g), you must demonstrate initial compliance with the appropriate emission limits and work practice standards according to the requirements in the following table]

For . . .	at . . .	for the following emission limit or work practice standard . . .	you have demonstrated initial compliance if . . .
		ii. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 40% within 8 years after the effective date based on a 6-month rolling average; for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and comply with the work practice standard for closed-vent systems.	(1) the average uncontrolled total sulfide emissions, measured during the month-long compliance demonstration, are reduced by at least 40% within 8 years after the effective date; (2) you have a record of the average operating parameter values over the month-long compliance demonstration during which the average uncontrolled total sulfide emissions were reduced by at least 40%; (3) you prepare a material balance that includes the pertinent data used to determine the percent reduction of the total sulfide emissions; and (4) you comply with the initial compliance requirements for closed-vent systems.
	d. each new rayon operation	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 75%; based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.	(1) the average uncontrolled total sulfide emissions, measured during the month-long compliance demonstration, are reduced by at least 75%; (2) you have a record of the average operating parameter values over the month-long compliance demonstration during which the average uncontrolled total sulfide emissions were reduced by at least 75%; (3) you prepare a material balance that includes the pertinent data used to determine the percent reduction of total sulfide missions; and (4) you comply with the initial compliance requirements for closed-vent systems.
	e. each existing or new cellulosic sponge operation.	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 75% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.	(1) the average uncontrolled total sulfide emissions, measured during the month-long compliance demonstration, are reduced by at least 75%; (2) you have a record of the average operating parameter values over the month-long compliance demonstration during which the average uncontrolled total sulfide emissions were reduced by at least 75%; (3) you prepare a material balance that includes the pertinent data used to determine and the percent reduction of total sulfide emissions; and (4) you comply with the initial compliance requirements for closed-vent systems.

TABLE 3 TO SUBPART UUUU OF PART 63.—INITIAL COMPLIANCE WITH EMISSION LIMITS AND WORK PRACTICE STANDARDS—Continued

[As required in §§ 63.5530(a) and 63.5535(g), you must demonstrate initial compliance with the appropriate emission limits and work practice standards according to the requirements in the following table]

For . . .	at . . .	for the following emission limit or work practice standard . . .	you have demonstrated initial compliance if . . .
	f. each existing or new cellophane operation.	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 75% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.	(1) the average uncontrolled total sulfide emissions, measured during the month-long compliance demonstration, are reduced by at least 75%; (2) you have a record of the average operating parameter values over the month-long compliance demonstration during which the average uncontrolled total sulfide emissions were reduced by at least 75%; (3) you prepare a material balance that includes the pertinent data used to determine the percent reduction of total sulfide emissions; and (4) you comply with the initial compliance requirements for closed-vent systems.
2. the sum of all solvent coating process vents.	a. each existing or new cellophane operation.	i. reduce uncontrolled toluene emissions by at least 95% based on a 6-month folling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.	1. the average uncontrolled toluene emissions, measured during the month-long compliance demonstration, are reduced by at least 95%; 2. you have a record of the average operating parameter values over the month-long compliance demonstration during which the average uncontrolled toluene emissions were reduced by at least 95%; 3. you prepare a material balance that includes the pertinent data used to determine the percent reduction of toluene emissions; and 4. you comply with the initial compliance requirements for closed-vent systems.
3. the sum of all cellulose ether process vents.	a. each existing or new cellulose ether operation.	i. reduce total uncontrolled organic HAP emissions by at least 99%; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.	(1) average uncontrolled total organic HAP emissions, measured during the 3-hour performance test are reduced by at least 99%; (2) you have a record of the average operating parameter values over the 3-hour performance test during which the average uncontrolled total organic HAP emissions were reduced by at least 99%; (3) you comply with the initial compliance requirements for closed-vent systems; and (4) if you use extended cookout to comply, you measure the HAP charged to the reactor, record the grade of product produced, and then calculate reactor emissions prior to extended cookout by taking a percentage of the total HAP charged, with the percentage determined by the grade of product being produced.

TABLE 3 TO SUBPART UUUU OF PART 63.—INITIAL COMPLIANCE WITH EMISSION LIMITS AND WORK PRACTICE STANDARDS—Continued

[As required in §§ 63.5530(a) and 63.5535(g), you must demonstrate initial compliance with the appropriate emission limits and work practice standards according to the requirements in the following table]

For . . .	at . . .	for the following emission limit or work practice standard . . .	you have demonstrated initial compliance if . . .
4. closed-loop systems	each existing or new cellulose ether operation.	operate and maintain the closed-loop system for cellulose ether operations.	you have a record certifying that a closed-loop system is in use for cellulose ether operations.
5. each carbon disulfide unloading and storage operation.	a. each existing or new viscose process affected source.	i. reduce uncontrolled carbon disulfide emissions by at least 83% from unloading and storage operations based on a 6-month rolling average if you use an alternative control technique not listed in this table for carbon disulfide unloading and storage operations; if using a control device to reduce emissions, route emissions through a closed-vent system to the control device; and comply with the work practice standard for closed-vent systems;	(1) you have a record documenting the 83% reduction in uncontrolled carbon disulfide emissions; and (2) if venting to a control device to reduce emissions, you comply with the initial compliance requirements for closed-vent systems;
		ii. reduce uncontrolled carbon disulfide by at least 0.14% from viscose process vents based on a 6-month rolling average; for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and comply with the work practice standard for closed-vent systems;.	(1) you comply with the initial compliance requirements for viscose process vents at existing or new cellulose food casing, rayon, cellulosic sponge, or cellophane operations, as applicable; (2) the 0.14% reduction must be in addition to the reduction already required for viscose process vents at existing or new cellulose food casing, rayon, cellulosic sponge, or cellophane operations, as applicable; and (3) you comply with the initial compliance requirements for closed-vent systems;
		iii. install a nitrogen unloading and storage system; or	you have a record certifying that a nitrogen unloading and storage system is in use; or
		iv. install a nitrogen unloading system; reduce uncontrolled carbon disulfide by at least 0.045% from viscose process vents based on a 6-month rolling average; for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and comply with the work practice standard for closed-vent systems.	(1) you have a record certifying that a nitrogen unloading system is in use; (2) you comply with the initial compliance requirements for viscose process vents at existing or new cellulose food casing, rayon, cellulosic sponge, or cellophane operations, as applicable; (3) the 0.045% reduction must be in addition to the reduction already required for viscose process vents at cellulose food casing, rayon, cellulosic sponge, or cellophane operations, as applicable; and (4) you comply with the initial compliance requirements for closed-vent systems.

TABLE 3 TO SUBPART UUUU OF PART 63.—INITIAL COMPLIANCE WITH EMISSION LIMITS AND WORK PRACTICE STANDARDS—Continued

[As required in §§ 63.5530(a) and 63.5535(g), you must demonstrate initial compliance with the appropriate emission limits and work practice standards according to the requirements in the following table]

For . . .	at . . .	for the following emission limit or work practice standard . . .	you have demonstrated initial compliance if . . .
6. each toluene storage vessel	a. each existing or new cellophane operation.	i. reduce uncontrolled toluene emissions by at least 95% based on a 6-month rolling average; ii. if using a control device to reduce emissions, route the emissions through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.	(1) the average uncontrolled toluene emissions, measured during the month-long compliance demonstration, are reduced by at least 95%; (2) you have a record of the average operating parameter values over the month-long compliance demonstration during which the average uncontrolled toluene emissions were reduced by at least 95%; (3) you prepare a material balance that includes the pertinent data used to determine the percent reduction of toluene emissions; and (4) if venting to a control device to reduce emissions, you comply with the initial compliance requirements for closed-vent systems.
7. equipment leaks	a. each existing or new cellulose ether operation.	i. comply with the applicable equipment leak standards of §§ 63.162 through 63.179; or	you comply with the applicable requirements described in the Notification of Compliance Status Report provisions in § 63.182(a)(2) and (c)(1) through (3), except that references to the term ''process unit'' mean ''cellulose ether process unit'' for the purposes of this subpart; or
		ii. comply with the applicable equipment leak standards of §§ 63.1021 through 63.1027.	you comply with the applicable requirements described in the Initial Compliance Status Report provisions of § 63.1039(a), except that references to the term ''process unit'' mean ''cellulose ether process unit'' for the purposes of this subpart.
8. all sources of wastewater emissions.	each existing or new cellulose ether operation.	comply with the applicable wastewater provisions of § 63.105 and §§ 63.132 through 63.140.	you comply with the applicability and Group 1/Group 2 determination provisions of § 63.144 and the initial compliance provisions of §§ 63.105 and 63.145.
9. liquid streams in open systems ..	each existing or new cellulose ether operation.	comply with the applicable provisions of § 63.149, except that references to ''chemical manufacturing process unit'' mean ''cellulose ether process unit'' for the purposes of this subpart.	you install emission suppression equipment and conduct an initial inspection according to the provisions of to §§ 63.133 through 63.137.
10. closed-vent system used to route emissions to a control device.	a. each existing or new affected source.	i. conduct annual inspections, repair leaks, and maintain records as specified in § 63.148.	(1) you conduct an initial inspection of the closed-vent system and maintain records according to § 63.148; (2) you prepare a written plan for inspecting unsafe-to-inspect and difficult-to-inspect equipment according to § 63.148(g)(2) and (h)(2); and (3) you repair any leaks and maintain records according to § 63.148.

TABLE 3 TO SUBPART UUUU OF PART 63.—INITIAL COMPLIANCE WITH EMISSION LIMITS AND WORK PRACTICE STANDARDS—Continued

[As required in §§ 63.5530(a) and 63.5535(g), you must demonstrate initial compliance with the appropriate emission limits and work practice standards according to the requirements in the following table]

For . . .	at . . .	for the following emission limit or work practice standard . . .	you have demonstrated initial compliance if . . .
11. closed-vent system containing a bypass line that could divert a vent stream away from a control device, except for equipment needed for safety purposes (described in § 63.148(f)(3)).	a. each existing or new affected source.	i. install, calibrate, maintain, and operate a flow indicator as specified in § 63.148(f)(1); or.	you have a record documenting that you installed a flow indicator as specified in Table 1 to this subpart; or
		ii. secure the bypass line valve in the closed position with a car-seal or lock-and-key type configuration and inspect the seal or closure mechanism at lease once per month as specified in § 63.148(f)(2).	you have record documenting that you have secured the bypass line valve as specified in Table 1 to this subpart.
12. heat exchanger system that cools process equipment or materials in the process unit.	a. each existing or new affected source.	i. monitor and repair the heat exchanger system according to § 63.104(a) through (e), except that references to ''chemical manufacturing process unit'' mean ''cellulose food casing, rayon, cellulosic sponge, cellophane, or cellulose ether process unit'' for the purposes of this subpart.	(1) you determine that the heat exchanger system is exempt from monitoring requirements because it meets one of the conditions in § 63.104(a)(1) through (6), and you document this finding in your Notification of Compliance Status Report; or (2) if your heat exchanger system is not exempt, i. you identify in your Notification of Compliance Status Report the HAP or other representative substance that you will monitor, or ii. you prepare and maintain a site-specific plan containing the information required by § 63.104(c)(1) (i) through (iv) that documents the procedures you will use to detect leaks by monitoring surrogate indicators of the leak.

TABLE 4 TO SUBPART UUUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS

[As required in §§ 63.5530(b) and 63.5535(a), (b), and (g)(1), you must conduct performance tests, other initial compliance demonstrations, and CEMS performance evaluations and establish operating limits according to the requirements in the following table]

For . . .	at . . .	you must . . .	using . . .	according to the following requirements . . .
1. the sum of all process vents	a. each existing or new affected source.	i. select sampling port's location and the number of traverse points;	EPA Method 1 or 1A of 40 CFR part 60, appendix A; § 63.7(d)(1)(i);	sampling sites must be located at the inlet and outlet to each control device;
		ii. determine velocity and volumetric flow rate;	EPA Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A to part 60 of this chapter;	you may use EPA Method 2A, 2C, 2D, 2F, or 2G as an alternative to using EPA Method 2, as appropriate;
		iii. conduct gas analysis; and	(1) EPA Method 3, 3A, or 3B in appendix A to part 60 of this chapter; or (2) ASME PTC 19.10–1981—Part 10; and	you may use EPA Method 3A or 3B as an alternative to using EPA Method 3; or you may use ASME PTC 19.10–1981—Part 10 (available for purchase from Three Park Avenue, New York, NY 10016–5990) as an alternative to using EPA Method 3B.

TABLE 4 TO SUBPART UUUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS—Continued

[As required in §§ 63.5530(b) and 63.5535(a), (b), and (g)(1), you must conduct performance tests, other initial compliance demonstrations, and CEMS performance evaluations and establish operating limits according to the requirements in the following table]

For . . .	at . . .	you must . . .	using . . .	according to the following requirements . . .
		iv. measure moisture content of the stack gas.	EPA Method 4 in appendix A to part 60 of this chapter.	
2. the sum of all viscose process vents.	a. each existing or new viscose process source.	i. measure total sulfide emissions.	(1) EPA Method 15 in Appendix A to part 60 of this chapter; or	(a) you must conduct testing of emissions at the inlet and outlet of each control device; (b) you must conduct testing of emissions from continuous viscose process vents and combinations of batch and continuous viscose process vents at normal operating conditions, as specified in §§ 63.7(e)(1) and 63.5535; (c) you must conduct testing of emissions from batch viscose process vents as specified in § 63.490(c), except that the emission reductions required for process vents under this subpart supersede the emission reductions required for process vents under subpart U of this part; and (d) you must collect CPMS data during the period of the initial compliance demonstration and determine the CPMS operating limit during the period of the initial compliance demonstration; or
			(2) carbon disulfide and/or hydrogen sulfide CEMS, as applicable.	(a) you must measure emissions at the inlet and outlet of each control device using CEMS; (b) you must install, operate, and maintain the CEMS according to the applicable performance specification (PS–7, PS–8, PS–9, or PS–15) of 40 CFR part 60, appendix B; and (c) you must collect CEMS emissions data at the inlet and outlet of each control device during the period of the initial compliance demonstration and determine the CEMS operating limit during the period of the initial compliance demonstration.

TABLE 4 TO SUBPART UUUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS—Continued

[As required in §§ 63.5530(b) and 63.5535(a), (b), and (g)(1), you must conduct performance tests, other initial compliance demonstrations, and CEMS performance evaluations and establish operating limits according to the requirements in the following table]

For . . .	at . . .	you must . . .	using . . .	according to the following requirements . . .
			3. the sum of all solvent coating process vents.	a. each existing or new cellophane operation i. measure toluene emissions (1) EPA Method 18 in appendix A to part 60 of this chapter; or (a) you must conduct testing of emissions at the inlet and outlet of each control device; (b) you may use EPA Method 18 to determine the control efficiency of any control device for organic compounds; for a combustion device, you must use only HAP that are present in the inlet to the control device to characterize the percent reduction across the combustion device; (c) you must conduct testing of emissions from continuous solvent coating process vents and combinations of batch and continuous solvent coating process vents at normal operating conditions, as specified in §§ 63.7(e)(1) and 63.5535; (d) you must conduct testing of emissions from batch solvent coating process vents as specified in § 63.490(c), except that the emission reductions required for process vents under this subpart supersede the emission reductions required for process vents under subpart U of this part; and (e) you must collect CPMS data during the period of the initial compliance demonstration and determine the CPMS operating limit during the period of the initial compliance demonstration; or
			(2) ASTM D6420–99	(a) you must conduct testing of emissions at the inlet and outlet of each control device;

TABLE 4 TO SUBPART UUUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS—Continued

[As required in §§ 63.5530(b) and 63.5535(a), (b), and (g)(1), you must conduct performance tests, other initial compliance demonstrations, and CEMS performance evaluations and establish operating limits according to the requirements in the following table]

For . . .	at . . .	you must . . .	using . . .	according to the following requirements . . .
				(b) you may use ASTM D6420–99 (available for purchase from at least one of the following addresses: 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959; or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106) as an alternative to EPA Method 18 only where: the target compound(s) are those listed in Section 1.1 of ASTM D6420–99; and the target concentration is between 150 parts per billion by volume (ppbv) and 100 ppmv; for target compound(s) not listed in Section 1.1 of ASTM D6420–99, but potentially detected by mass spectrometry, the additional system continuing calibration check after each run, as detailed in Section 10.5.3 of the ASTM method, must be followed, met, documented, and submitted with the data report even if there is no moisture condenser used or the compound is not considered water soluble; and for target compound(s) not listed in Section 1.1 of ASTM D6420–99 and not amenable to detection by mass spectrometry, ASTM D6420–99 does not apply; (c) you must conduct testing of emissions from continuous solvent coating process vents and combinations of batch and continuous solvent coating process vents at normal operating conditions, as specified in §§ 63.7(e)(1) and 63.5535;

TABLE 4 TO SUBPART UUUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS—Continued

[As required in §§ 63.5530(b) and 63.5535(a), (b), and (g)(1), you must conduct performance tests, other initial compliance demonstrations, and CEMS performance evaluations and establish operating limits according to the requirements in the following table]

For . . .	at . . .	you must . . .	using . . .	according to the following requirements . . .
				(d) you must conduct testing of emissions from batch solvent coating process vents as specified in § 63.490(c), except that the emission reductions required for process vents under this subpart supersede the emission reductions required for process vents under subpart U of this part; and (e) you must collect CPMS data during the period of the initial compliance demonstration and determine the CPMS operating limit during the period of the initial compliance demonstration.
4. the sum of all cellulose ether process vents.	a. each existing or new cellulose ether operation.	i. measure total organic HAP emissions.	(1) EPA Method 18 in appendix A to part 60 of this chapter;	(a) you must conduct testing of emissions at the inlet and outlet of each control device; (b) you may use EPA Method 18 to determine the control efficiency of any control device for organic compounds; for a combustion device, you must use only HAP that are present in the inlet to the control device to characterize the percent reduction across the combustion device; (c) you must conduct testing of emissions from continuous cellulose ether process vents and combinations of batch and continuous cellulose ether process vents at normal operating conditions, as specified in §§ 63.7(e)(1) and 63.5535; (d) you must conduct testing of emissions from batch cellulose ether process vents as specified in § 63.490(c), except that the emission reductions required for process vents under this subpart supersede the emission reductions required for process vents under subpart U of this part; and

TABLE 4 TO SUBPART UUUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS—Continued

[As required in §§ 63.5530(b) and 63.5535(a), (b), and (g)(1), you must conduct performance tests, other initial compliance demonstrations, and CEMS performance evaluations and establish operating limits according to the requirements in the following table]

For . . .	at . . .	you must . . .	using . . .	according to the following requirements . . .
				(e) you must collect CPMS data during the period of the initial performance test and determine the CPMS operating limit during the period of the initial performance test;
			(2) ASTM D6420–99	(a) you must conduct testing of emissions at the inlet and outlet of each control device; (b) you may use ASTM D6420–99 (available for purchase from at least one of the following addresses: 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959; or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI (48106) as an alternative to EPA Method 18 only where: the target compound(s) are those listed in Section 1.1 of ASTM D6420–99; and the target concentration is between 150 ppbv and 100 ppmv; for target compound(s) not listed in Section 1.1 of ASTM D6420–99, but pontentially detected by mass spectrometry, the additional system continuing calibration check after each run, as detailed in Section 10.5.3 of the ASTM method, must be followed, met, documented, and submitted with the data report even if there is no moisture condenser used or the compound is not considered water soluble; and for target compound(s) not listed in Section 1.1 of ASTM D6420–99 and not amenable to detection by mass spectrometry, ASTM D6420–99 does not apply;

TABLE 4 TO SUBPART UUUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS—Continued

[As required in §§ 63.5530(b) and 63.5535(a), (b), and (g)(1), you must conduct performance tests, other initial compliance demonstrations, and CEMS performance evaluations and establish operating limits according to the requirements in the following table]

For . . .	at . . .	you must . . .	using . . .	according to the following requirements . . .
				(c) you must conduct testing of emissions from continuous cellulose ether process vents and combinations of batch and continuous cellulose ether process vents at normal operating conditions, as specified in §§ 63.7(e)(1) and 63.5535; (d) you must conduct testing of emissions from batch cellulose ether process vents as specified in § 63.490(c), except that the emission reductions required for process vents under this subpart supersede the emission reductions required for process vents under subpart U of this part; and (e) you must collect CPMS data during the period of the initial performance test and determine the CPMS operating limit during the period of the initial performance test;
			(3) EPA Method 25 in appendix A to part 60 of this chapter; or	(a) you must conduct testing of emissions at the inlet and outlet of each control device; (b) you may use EPA Method 25 to determine the control efficiency of combustion devices for organic compounds; you may not use EPA Method 25 to determine the control efficiency of noncombustion control devices;

TABLE 4 TO SUBPART UUUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS—Continued

[As required in §§ 63.5530(b) and 63.5535(a), (b), and (g)(1), you must conduct performance tests, other initial compliance demonstrations, and CEMS performance evaluations and establish operating limits according to the requirements in the following table]

For . . .	at . . .	you must . . .	using . . .	according to the following requirements . . .
				(c) you must conduct testing of emissions from continuous cellulose ether process vents and combinations of batch and continuous cellulose ether process vents at normal operating conditions, as specified in §§ 63.7(e)(1) and 63.5535; (d) you must conduct testing of emissions from batch cellulose ether process vents as specified in § 63.490(c), except that the emission reductions required for process vents under this subpart supersede the emission reductions required for process vents under subpart U of this part; and (e) you must collect CPMS data during the period of the initial performance test and determine the CPMS operating limit during the period of the initial performance test; or
			(4) EPA Method 25A in appendix A to part 60 of this chapter.	(a) you must conduct testing of emissions at the inlet and outlet of each control device; (b) you may use EPA Method 25A if: an exhaust gas volatile organic matter concentration of 50 ppmv or less is required in order to comply with the emission limit; the volatile organic matter concentration at the inlet to the control device and the required level of control are such as to result in exhaust volatile organic matter concentrations of 50 ppmv or less; or because of the high control efficiency of the control device, the anticipated volatile organic matter concentration at the control device exhaust is 50 ppmv or less, regardless of the inlet concentration;

TABLE 4 TO SUBPART UUUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS—Continued

[As required in §§ 63.5530(b) and 63.5535(a), (b), and (g)(1), you must conduct performance tests, other initial compliance demonstrations, and CEMS performance evaluations and establish operating limits according to the requirements in the following table]

For . . .	at . . .	you must . . .	using . . .	according to the following requirements . . .
				(c) you must conduct testing of emissions from continuous cellulose ether process vents and combinations of batch and continuous cellulose ether process vents at normal operating conditions, as specified in §§ 63.7(e)(1) and 63.5535; (d) you must conduct testing of emissions from batch cellulose ether process vents as specified in § 63.490(c), except that the emission reductions required for process vents under this subpart supersede the emission reductions required for process vents under subpart U of this part; and (e) you must collect CPMS data during the period of the initial performance test and determine the CPMS operating limit during the period of the initial performance test.
5. each toluene storage vessel	a. each existing or new cellophane operation.	i. measure toluene emissions.	(1) EPA Method 18 in appendix A to part 60 of this chapter; or	(a) if venting to a control device to reduce emissions, you must conduct testing of emissions at the inlet and outlet of each control device; (b) you may use EPA Method 18 to determine the control efficiency of any control device for organic compounds; for a combustion device, you must use only HAP that are present in the inlet to the control device to characterize the percent reduction across the combustion device; (c) you must conduct testing of emissions from continuous storage vessel vents and combinations of batch and continuous storage vessel vents at normal operating conditions, as specified in §§ 63.7(e)(1) and 63.5535 for continuous process vents;

TABLE 4 TO SUBPART UUUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS—Continued

[As required in §§ 63.5530(b) and 63.5535(a), (b), and (g)(1), you must conduct performance tests, other initial compliance demonstrations, and CEMS performance evaluations and establish operating limits according to the requirements in the following table]

For . . .	at . . .	you must . . .	using . . .	according to the following requirements . . .
				(d) you must conduct testing of emissions from batch storage vessel vents as specified in § 63.490(c) for batch process vents, except that the emission reductions required for process vents under this subpart supersede the emission reductions required for process vents under subpart U of this part; and
				(e) you must collect CPMS data during the period of the initial compliance demonstration and determine the CPMS operating limit during the period of the initial compliance demonstration; or
			(2) ASTM D6420–99	(a) if venting to a control device to reduce emissions, you must conduct testing of emissions at the inlet and outlet of each control device;

TABLE 4 TO SUBPART UUUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS—Continued

[As required in §§ 63.5530(b) and 63.5535(a), (b), and (g)(1), you must conduct performance tests, other initial compliance demonstrations, and CEMS performance evaluations and establish operating limits according to the requirements in the following table]

For . . .	at . . .	you must . . .	using . . .	according to the following requirements . . .
				(b) you may use ASTM D6420–99 (available for purchase from at least one of the following addresses: 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959; or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106) as an alternative to EPA Method 18 only where: the target compound(s) are those listed in Section 1.1 of ASTM D6420–99, and the target concentration is between 150 ppbv and 100 ppmv; for target compound(s) not listed in Section 1.1 of ASTM D6420-99, but potentially detected by mass spectrometry, the additional system continuing calibration check after each run, as detailed in Section 10.5.3 of the ASTM method, must be followed, met, documented, and submitted with the data report even if there is no moisture condenser used or the compound is not considered water soluble; and for target compound(s) not listed in Section 1.1 of ASTM D6420–99 and not amenable to detection by mass spectrometry, ASTM D6420–99 does not apply;
				(c) you must conduct testing of emissions from continuous storage vessel vents and combinations of batch and continuous storage vessel vents at normal operating conditions, as specified in §§ 63.7(e)(1) and 63.5535 for continuous process vents;

TABLE 4 TO SUBPART UUUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS—Continued

[As required in §§ 63.5530(b) and 63.5535(a), (b), and (g)(1), you must conduct performance tests, other initial compliance demonstrations, and CEMS performance evaluations and establish operating limits according to the requirements in the following table]

For . . .	at . . .	you must . . .	using . . .	according to the following requirements . . .
				(d) you must conduct testing of emissions from batch storage vessel vents as specified in § 63.490(c) for batch process vents, except that the emission reductions required for process vents under this subpart supersede the emission reductions required for process vents under subpart U of this part; and (e) you must collect CPMS data during the period of the initial compliance demonstration and determine the CPMS operating limit during the period of the initial compliance demonstration.
6. the sum of all process vents controlled using a flare.	each existing or new affected source.	measure visible emissions.	EPA Method 22 in appendix A to part 60 of this chapter.	you must conduct the flare visible emissions test according to § 63.11(b).
7. equipment leaks	a. each existing or new cellulose ether operation.	i. measure leak rate	(1) applicable equipment leak test methods in § 63.180; or	you must follow all requirements for the applicable equipment leak test methods in § 63.180; or
			(2) applicable equipment leak test methods in 63.1023.	you must follow all requirements for the applicable equipment leak test methods in § 63.1023.
8. all sources of wastewater emissions.	a. each existing or new cellulose ether operation.	i. measure wastewater HAP emissions.	(1) applicable wastewater test methods and procedures in §§ 63.144 and 63.145; or	You must follow all requirements for the applicable wastewater test methods and procedures in §§ 63.144 and 63.145; or

TABLE 4 TO SUBPART UUUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS—Continued

[As required in §§ 63.5530(b) and 63.5535(a), (b), and (g)(1), you must conduct performance tests, other initial compliance demonstrations, and CEMS performance evaluations and establish operating limits according to the requirements in the following table]

For . . .	at . . .	you must . . .	using . . .	according to the following requirements . . .
			(2) applicable wastewater test methods and procedures in §§ 63.144 and 63.145, using ASTM D5790–95 as an alternative to EPA Method 624 in appendix A to part 163 of this chapter.	you must follow all requirements for the applicable waste water test methods and procedures in §§ 63.144 and 63.145, except that you may use ASTM D5790–95 (available for purchase from at least one of the following addresses: 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959; or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106) as an alternative to EPA Method 624, under the condition that this ASTM method be used with the sampling procedures of EPA Method 25D or an equivalent method.
9. any emission point	a. each existing or new affected source using a CEMS to demonstrate compliance.	i. conduct a CEMS performance evaluation.	(1) applicable requirements in § 63.8 and applicable performance specification (PS–7, PS–8, PS–9, or PS–15) in appendix B to part 60 of this chapter.	(a) you must conduct the CEMS performance evaluation during the period of the initial compliance demonstration according to the applicable requirements in § 63.8 and the applicable performance specification (PS–7, PS–8, PS–9, or PS–15) of 40 CFR part 60, appendix B; (b) you must install, operate, and maintain the CEMS according to the applicable performance specification (PS–7, PS–8, PS–9, or PS–15) of 40 CFR part 60, appendix B; and (c) you must collect CEMS emissions data at the inlet and outlet of each control device during the period of the initial compliance demonstration and determine the CEMS operating limit during the period of the initial compliance demonstration.

TABLE 5 TO SUBPART UUUU OF PART 63.—CONTINUOUS COMPLIANCE WITH EMISSION LIMITS AND WORK PRACTICE STANDARDS

[As required in § 63.5555(a), you must demonstrate continuous compliance with the appropriate emission limits and work practice standards according to the requirements in the following table]

For . . .	at . . .	for the following emission limit or work practice standard . . .	you must demonstrate continuous compliance by . . .
1. the sum of all viscose process vents.	a. each existing or new viscose process affected source.	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least the specified percentage based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and c. comply with the work practice standard for closed-vent systems.	(1) maintaining a material balance that includes the pertinent data used to determine the percent reduction of total sulfide emissions; (2) documenting the percent reduction of total sulfide emissions using the pertinent data from the material balance; and (3) complying with the continuous compliance requirements for closed-vent systems.
2. the sum of all solvent coating process vents.	a. each existing or new cellophane operation.	i. reduce uncontrolled toluene emissions by at least 95% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.	(1) maintaining a material balance that includes the pertinent data used to determine the percent reduction of toluene emissions; (2) documenting the percent reduction of toluene emissions using the pertinent data from the material balance; and (3) complying with the continuous compliance requirements for closed-vent systems.
3. the sum of all cellulose ether process vents.	a. each existing or new cellulose ether operation.	i. reduce total uncontrolled organic HAP emissions by at least 99%; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.	(1) complying with the continuous compliance requirements for closed-vent systems; and (2) if using extended cookout to comply, monitoring reactor charges and keeping records to show that extended cookout was employed.
4. closed-loop systems	each existing or new cellulose either operation.	operate and maintain a closed-loop system.	keeping a record certifying that a closed-loop system is in use for cellulose ether operations.
5. each carbon disulfide unloading and storage operation.	a. each existing or new viscose process affected source.	i. (1) reduce uncontrolled carbon disulfide emissions by at least 83% based on a 6-month rolling average if you use an alternative control technique not listed in this table for carbon disulfide unloading and storage operations; (2) if using a control device to reduce emissions, route emissions through a closed-vent system to the control device; and (3) comply with the work practice standard for closed-vent systems;	(a) keeping a record documenting the 83% reduction in carbon disulfide emissions; and (b) if venting to a control device to reduce emissions, complying with the continuous compliance requirements for closed-vent systems;
		ii. (1) reduce total uncontrolled sulfide emissions by at least 0.14% from viscose process vents based on a 6-month rolling average; (2) for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and (3) comply with the work practice standard for closed-vent systems;	(a) maintaining a material balance that includes the pertinent data used to determine the percent reduction of total sulfide emissions; (b) documenting the percent reduction of total sulfide emissions using the pertinent data from the material balance; and (c) complying with the continuous compliance requirements for closed-vent systems;

TABLE 5 TO SUBPART UUUU OF PART 63.—CONTINUOUS COMPLIANCE WITH EMISSION LIMITS AND WORK PRACTICE STANDARDS—Continued

[As required in § 63.5555(a), you must demonstrate continuous compliance with the appropriate emission limits and work practice standards according to the requirements in the following table]

For . . .	at . . .	for the following emission limit or work practice standard . . .	you must demonstrate continuous compliance by . . .
		iii. install a nitrogen unloading and storage system; or	Keeping a record certifying that a nitrogen unloading and storage system is in use; or
		iv. (1) install a nitrogen unloading system; (2) reduce total uncontrolled sulfide emissions by at least 0.045% from viscose process vents based on a 6-month rolling average; (3) for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and (4) comply with the work practice standard for closed-vent systems.	(a) keeping a record certifying that a nitrogen unloading system is in use; (b) maintaining a material balance that includes the pertinent data used to determine the percent reduction of total sulfide emissions; (c) documenting the percent reduction of total sulfide emissions using the pertinent data from the material balance; and (d) complying with the continuous compliance requirements for closed-vent systems.
6. each toluene storage vessel	a. each existing or new cellophane operation.	i. reduce uncontrolled toluene emissions by at least 95% based on a 6-month rolling average; ii. if using a control device to reduce emissions, route the emissions through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.	(1) maintaining a material balance that includes the pertinent data used to determine the percent reduction of toluene emissions; (2) documenting the percent reduction of toluene emissions using the pertinent data from the material balance; and (3) if venting to a control device to reduce emissions, complying with the continuous compliance requirements for closed-vent systems.
7. equipment leaks	a. each existing or new cellulose ether operation.	i. applicable equipment leak standards of §§ 63.162 through 63.179; or ii. applicable equipment leak standards of §§ 63.1021 through 63.1037.	complying with the applicable equipment leak continuous compliance provisions of §§ 63.162 through 63.179; or complying with the applicable equipment leak continuous compliance provisions of §§ 63.1021 through 63.1037.
8. all sources of wasstewater emissions.	each existing or new cellulose ether operation.	applicable wastewater provisions of § 63.105 and §§ 63.132 through 63.140.	complying with the applicable wastewater continuous compliance provisions of §§ 63.105, 63.143, and 63.148.
9. liquid streams in open systems ..	each existing or new cellulose ether operation.	comply with the applicable provisions of § 63.149, except that references to ''chemical manufacturing process unit'' mean ''cellulose ether process unit'' for the purposes of this subpart.	conducting inspections, repairing failures, documenting delay of repair, and maintaining records of failures and corrective actions according to §§ 63.133 through 63.137.
10. closed-vent system used to route emissions to a control device.	each existing or new affected source.	conduct annual inspections, repair leaks, maintain records as specified in § 63.148.	conducting the inspections, repairing leaks, and maintaining records according to § 63.148.
11. closed-vent system containing a bypass line that could divert a vent stream away from a control device, except for equipment needed for safety purposes (described in § 63.148(f)(3).	a. each existing or new affected source.	i. install, calibrate, maintain, and operate a flow indicator as specified in § 63.148(f)(1); or	(1) taking readings from the flow indicator at least once every 15 minutes; (2) maintaining hourly records of flow indicator operation and detection of any diversion during the hour, and (3) recording all periods when the vent stream is diverted from the control stream or the flow indicator is not operating; or

TABLE 5 TO SUBPART UUUU OF PART 63.—CONTINUOUS COMPLIANCE WITH EMISSION LIMITS AND WORK PRACTICE STANDARDS—Continued

[As required in § 63.5555(a), you must demonstrate continuous compliance with the appropriate emission limits and work practice standards according to the requirements in the following table]

For . . .	at . . .	for the following emission limit or work practice standard . . .	you must demonstrate continuous compliance by . . .
		ii. secure the bypass line valve in the closed position with a car-seal or lock-and-key type configuration and inspect the seal or mechanism at least once per month as specified in § 63.148(f)(2).	(1) maintaining a record of the monthly visual inspection of the seal or closure mechanism for the bypass line; and (2) recording 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.
12. heat exchanger system that cools process equipment or materials in the process unit.	a. each existing or new affected source.	i. monitor and repair the heat exchanger system according to § 63.104(a) through (e), except that references to ''chemical manufacturing process unit'' mean ''cellulose food casing, rayon, cellulosic sponge, cellophane, or cellulose ether process unit'' for the purposes of this subpart.	(1) monitoring for HAP compounds, other substances, or surrogate indicators at the frequency specified in § 63.104(b) or (c); (2) repairing leaks within the time period specified in § 63.104(d)(1); (3) confirming that the repair is successful as specified in § 63.104(d)(2); (4) following the procedures in § 63.104(e) if you implement delay of repair; and (5) recording the results of inspections and repair according to § 63.104(f)(1).

TABLE 6 TO SUBPART UUUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS

[As required in § 63.5555(a), you must demonstrate continuous compliance with the appropriate operating limits according to the requirements in the following table:]

For the following control technique . . .	for the following operating limit . . .	you must demonstrate continuous compliance by . . .
1. condenser	maintain the daily average condenser outlet gas or condensed liquid temperature no higher than the value established during the compliance demonstration.	collecting the condenser outlet gas or condensed liquid temperature data according to § 63.5545; reducing the condenser outlet gas temperature data to daily averages; and maintaining the daily average condenser outlet gas or condensed liquid temperature no higher than the value established during the compliance demonstration.
2. thermal oxidizer	maintain the daily average thermal oxidizer firebox temperature no lower than the value established during the compliance demonstration.	collecting the thermal oxidizer firebox temperature data according to § 63.5545; reducing the thermal oxidizer firebox temperature data to daily averages; and maintaining the daily average thermal oxidizer firebox temperature no lower than the value established during the compliance demonstration.
3. water scrubber	maintain the daily average scrubber pressure drop and scrubber liquid flow rate within the values established during the compliance demonstration.	collecting the scrubber pressure drop and scrubber liquid flow rate data according to § 63.5545; reducing the scrubber parameter data to daily averages; and maintaining the daily scrubber parameter values within the values established during the compliance demonstration.
4. caustic scrubber	maintain the daily average scrubber pressure drop, scrubber liquid flow rate, and scrubber liquid pH, conductivity, or alkalinity within the values established during the compliance demonstration.	collecting the scrubber pressure drop, scrubber liquid flow rate, and scrubber liquid pH, conductivity, or alkalinity data according to § 63.5545; reducing the scrubber parameter data to daily averages; and maintaining the daily scrubber parameter values within the values established during the compliance demonstration.
5. flare	maintain the presence of a pilot flame	collecting the pilot flame data according to § 63.5545; and maintaining the presence of the pilot flame.

TABLE 6 TO SUBPART UUUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS—Continued

[As required in § 63.5555(a), you must demonstrate continuous compliance with the appropriate operating limits according to the requirements in the following table:]

For the following control technique . . .	for the following operating limit . . .	you must demonstrate continuous compliance by . . .
6. biofilter	maintain the daily average biofilter inlet gas temperature, biofilter effluent pH, and pressure drop within the values established during the compliance demonstration.	collecting the biofilter inlet gas temperature, biofilter effluent pH, and biofilter pressure drop data according to § 63.5545; reducing the biofilter parameter data to daily averages; and maintaining the daily biofilter parameter values within the values established during the compliance demonstration.
7. carbon absorber	maintain the regeneration frequency, total regeneration stream mass or volumetric flow during carbon bed regeneration and temperature of the carbon bed after regeneration (and within 15 minutes of completing any cooling cycle(s)) for each regeneration cycle within the values established during the compliance demonstration.	collecting the data on regeneration frequency, total regeneration stream mass or volumetric flow during carbon bed regeneration and temperature of the carbon bed after regeneration (and within 15 minutes of completing any cooling cycle(s)) for each regeneration cycle according to § 63.5545; and maintaining carbon absorber parameter values for each regeneration cycle within the values established during the compliance demonstration.
8. oil absorber	maintain the daily average absorption liquid flow, absorption liquid temperature, and steam flow within the values established during the compliance demonstration.	collecting the absorption liquid flow, absorption liquid temperature, and steam flow data according to § 63.5545; reducing the oil absorber parameter data to daily averages; and maintaining the daily oil absorber parameter values within the values established during the compliance demonstration.
9. any of the control techniques specified in this table.	if using a CEMS, maintain the daily average control efficiency for each control device no lower than the value established during the compliance demonstration.	collecting CEMS emissions data at the inlet and outlet of each control device according to § 63.5545; determining the control efficiency values for each control device using the inlet and outlet CEMS emissions data; reducing the control efficiency values for each control device to daily averages; and maintaining the daily average control efficiency for each control device no lower than the value established during the compliance demonstration.

TABLE 7 TO SUBPART UUUU OF PART 63.—NOTIFICATIONS

[As required in §§ 63.5490(c)(4), 63.5530(c), 63.5575, and 63.5595(b), you must submit the appropriate notifications specified in the following table]

If you . . .	then you must . . .
1. are required to conduct a performance test	submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, as specified in §§ 63.7(b)(1) and 63.9(e).
2. wish to use an alternative monitoring method	submit a request to use alternative monitoring method no later than the notification of the initial performance test or CEMS performance evaluation or 60 days prior to any other initial compliance demonstration, as specified in § 63.8(f)(4).
3. start up your affected source before June 11, 2002	submit an initial notification no later than 120 days after June 11, 2002, as specified in § 63.9(b)(2).
4. start up your new or reconstructed source on or after June 11, 2002.	submit an initial notification no later than 120 days after you become subject to this subpart, as specified in § 63.9(b)(3).
5. cannot comply with the relevant standard by the applicable compliance date.	submit a request for extension of compliance no later than 120 days before the compliance date, as specified in §§ 63.9(c) and 63.6(i)(4).
6. are subject to special requirements as specified in § 63.6(b)(3) and (4).	notify the Administrator of your compliance obligations no later than the initial notification dates established in § 63.9(b) for new sources not subject to the special provisions, as specified in § 63.9(d).
7. are required to conduct visible emission observations to determine the compliance of flares as specified in § 63.11(b)(4).	notify the Administrator of the anticipated date for conducting the observations specified in § 63.6(h)(5), as specified in §§ 63.6(h)(4) and 63.9(f).
8. are required to conduct a performance test or other initial compliance demonstration as specified in Table 3 to this subpart.	a. submit a Notification of Compliance Status Report, as specified in § 63.9(h); and b. submit the Notification of Compliance Status Report, including the performance test, CEMS performance evaluation, and any other initial compliance demonstration results within 240 calendar days following the compliance date specified in § 63.5495.

TABLE 7 TO SUBPART UUUU OF PART 63.—NOTIFICATIONS—Continued

[As required in §§ 63.5490(c)(4), 63.5530(c), 63.5575, and 63.5595(b), you must submit the appropriate notifications specified in the following table]

If you . . .	then you must . . .
9. comply with the equipment leak requirements of subpart H of this part for existing or new cellulose ether affected sources.	comply with the notification requirements specified in § 63.182(a)(1) and (2), (b), and (c)(1) through (3) for equipment leaks, with the Notification of Compliance Status Reports required in subpart H included in the Notification of Compliance Status Report required in this subpart.
10. comply with the equipment leak requirements of subpart UU of this part for existing or new cellulose ether affected sources.	comply with the notification requirements specified in § 63.1039(a) for equipment leaks, with the Notification Compliance Status Reports required in subpart UU of this part included in the Notification of Compliance Status Report required in this subpart.
11. comply with the wastewater requirements of subparts F and G of this part for existing or new cellulose ether affected sources.	comply with the notification requirements specified in §§ 63.146(a) and (b), 63.151, and 63.152(a)(1) through (3) and (b)(1) through (5) for wastewater, with the Notification of Compliance Status Reports required in subpart G of this part included in the Notification of Compliance Status Report required in this subpart.

TABLE 8 TO SUBPART UUUU OF PART 63.—REPORTING REQUIREMENTS

[As required in § 63.5580, you must submit the appropriate reports specified in the following table]

You must submit a compliance report, which must contain the following information . . .	and you must submit the report . . .
1. if there are no deviations from any emission limit, operating limit, or work practice standard during the reporting period, then the report must contain the information specified in § 63.5580(c); 2. if there were no periods during which the CMS was out-of-control, then the report must contain a statement that there were no periods during which the CMS was out-of-control during the reporting period; you must develop and include specifications for out-of-control operation in the CMS quality control plan required under § 63.8(d)(2); 3. if there is a deviation from any emission limit, operating limit, or work practice standard during the reporting period, then the report must contain the information specified in § 63.5580(c) and (d); 4. if there were periods during which the CMS was out-of-control, then the report must contain the information specified in § 63.5580(e); 5. if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSM plan, then the report must contain the information specified in § 63.10(d)(5)(i); 6. if you had a startup, shutdown, or malfunction during the reporting period and you took actions that are not consistent with your SSM plan, then the report must contain the information specified in § 63.10(d)(5)(ii); 7. the report must contain any change in information already provided, as specified in § 63.9(j); 8. for cellulose ether affected sources complying with the equipment leak requirements of subpart H of this part, the report must contain the information specified in § 63.182(a)(3) and (6) and (d)(2) through (4); 9. for cellulose ether affected sources complying with the equipment leak requirements of subpart UU of this part, the report must contain the information specified in § 63.1039(b); 10. for cellulose ether affected sources complying with the wastewater requirements of subparts F and G of this part, the report must contain the information specified in §§ 63.146(c) through (e) and 63.152(a)(4) and (5) and (c) through (e); 11. for affected sources complying with the closed-vent system provisions in § 63.148, the report must contain the information specified in § 63.148(j)(1); 12. for affected sources complying with the bypass line provisions in § 63.148(f), the report must contain the information specified in § 63.148(j)(2) and (3); 13. for affected sources invoking the delay of repair provisions in § 63.104(e) for heat exchanger systems, the next compliance report must contain the information in § 63.104(f)(2)(i) through (iv); if the leak remains unrepaired, the information must also be submitted in each subsequent compliance report until the repair of the leak is reported; and 14. for storage vessels subject to the emission limits and work practice standards in Table 1 to Subpart UUUU, the report must contain the periods of planned routine maintenance during which the control device does not comply with the emission limits or work practice standards in Table 1 to this subpart	semiannually as specified in § 63.5580(b).

TABLE 9 TO SUBPART UUUU OF PART 63.—RECORDKEEPING REQUIREMENTS

[As required in § 63.5585, you must keep the appropriate records specified in the following table]

If you operate . . .	then you must keep . . .	and the record(s) must contain . . .
1. an existing or new affected source.	a copy of each notification and report that you submitted to comply with this subpart.	all documentation supporting any Initial Notification or Notification of Compliance Status Report that you submitted, according to the requirements in § 63.10(b)(2)(xiv), and any compliance report required under this subpart.

TABLE 9 TO SUBPART UUUU OF PART 63.—RECORDKEEPING REQUIREMENTS—Continued

[As required in § 63.5585, you must keep the appropriate records specified in the following table]

If you operate . . .	then you must keep . . .	and the record(s) must contain . . .
2. an existing or new affected source.	a. the records in § 63.6(e)(3)(iii) through (iv) related to startup, shutdown, and malfunction.	i. SSM plan; ii. when actions taken during a startup, shutdown, or malfunction are consistent with the procedures specified in the SSM plan, records demonstrating that the procedures specified in the plan were followed; iii. records of the occurrence and duration of each startup, shutdown, or malfunction; and iv. when actions taken during a startup, shutdown, or malfunction are not consistent with the procedures specified in the SSM plan, records of the actions taken for that event.
3. an existing or new affected source.	a. a site-specific monitoring plan ..	i. information regarding the installation of the CMS sampling source probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device); ii. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; iii. performance evaluation procedures and acceptance criteria (e.g., calibrations); iv. ongoing operation and maintenance procedures in accordance with the general requirements of §§ 63.8(c)(1), (3), and (4)(ii) and 63.5580(c)(6); v. ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d)(2); and vi. ongoing recordkeeping and reporting procedures in accordance with the general requirements of §§ 63.10(c), (e)(1), and (e)(2)(i) and 63.5585.
4. an existing or new affected source.	records of performance tests and CEMS performance evaluations, as required in § 63.10(b)(2)(viii) and any other initial compliance demonstrations.	all results of performance tests, CEMS performance evaluations, and any other initial compliance demonstrations, including analysis of samples, determination of emissions, and raw data.
5. an existing or new affected source.	a. records for each CEMS	i. records described in § 63.10(b)(2)(vi) through (xi); ii. previous (superseded) versions of the performance evaluation plan as required in § 63.8(d)(3); iii. request for alternatives to relative accuracy test for CEMS as required in § 63.8(f)(6)(i); iv. records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period; and v. records required in Table 6 to Subpart UUUU to show continuous compliance with the operating limit.
6. an existing or new affected source.	a. records for each CPMS	i. records required in Table 6 to Subpart UUUU to show continuous compliance with each operating limit that applies to you; and ii. results of each CPMS calibration, validation check, and inspection required by § 63.5545(b)(4).
7. an existing or new cellulose ether affected ether source.	records of closed-loop systems	records certifying that a closed-loop system is in use for cellulose ether operations.
8. an existing or new viscose process affected source.	records of nitrogen unloading and storage systems or nitrogen unloading systems.	records certifying that a nitrogen unloading and storage system or nitrogen unloading system is in use.
9. an existing or new viscose process affected source.	records of material balances	all pertinent data from the material balances used to estimate the 6-month rolling average percent reduction in HAP emissions.
10. an existing or new viscose process affected source.	records of calculations	documenting the percent reduction in HAP emissions using pertinent data from the material balances.
11. an existing or new cellulose ether affected source.	a. extended cookout records	i. the amount of HAP charged to the reactor; ii. the grade of product produced; iii. the calculated amount of HAP remaining before extended cookout; and iv. information showing that extended cookout was employed.
12. an existing or new cellulose ether affected source.	a. equipment leak records	i. the records specified in § 63.181 for equipment leaks; or ii. the records specified in 63.1038 for equipment leaks.
13. an existing or new cellulose ether affected source.	wastewater records	the records specified in §§ 63.105, 63.147, and 63.152(f) and (g) for wastewater.
14. an existing or new affected source.	closed-vent system records	the records specified in § 63.148(i).

TABLE 9 TO SUBPART UUUU OF PART 63.—RECORDKEEPING REQUIREMENTS—Continued

[As required in § 63.5585, you must keep the appropriate records specified in the following table]

If you operate . . .	then you must keep . . .	and the record(s) must contain . . .
15. an existing or new affected source.	a. bypass line records	i. hourly records of flow indicator operation and detection of any diversion during the hour and records of all periods when the vent stream is diverted from the control stream or the flow indicator is not operating; or ii. the records of the monthly visual inspection of the seal or closure mechanism and 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.
16. an existing or new affected source.	heat exchanger system records	records of the results of inspections and repair according to source § 63.104(f)(1).
17. an existing or new affected source.	control device maintenance records.	records of planned routine maintenance for control devices used to comply with the percent reduction emission limit for storage vessels in Table 1 to Subpart UUUU.
18. an existing or new affected source.	safety device records	a record of each time a safety device is opened to avoid unsafe conditions according to § 63.5505(d).

TABLE 10 TO SUBPART UUUU OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART UUUU

[As required in §§ 63.5515(h) and 63.5600, you must comply with the appropriate General Provisions requirements specified in the following table]

Citation	Subject	Brief description	Applies to Subpart UUUU
§ 63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications.	Yes.
§ 63.2	Definitions	Definitions for part 63 standards	Yes.
§ 63.3	Units and Abbreviations	Units and abbreviations for part 63 standards.	Yes.
§ 63.4	Prohibited Activities	Prohibited activities; compliance date; circumvention, severability.	Yes.
§ 63.5	Construction and Reconstruction	Applicability; applications; approvals	Yes.
§ 63.6(a)	Applicability	General provisions apply unless compliance extension; general provisions apply to area sources that become major.	Yes.
§ 63.6(b)(1) through(4)	Compliance Dates for New and Reconstructed sources.	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for CAA section 112(f).	Yes.
§ 63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal.	Yes.
§ 63.6(b)(6)	[Reserved].		
§ 63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major.	Area sources that become major must comply with major source and standards immediately upon becoming major, regardless of whether required to comply when they were an area source.	Yes.
§ 63.6(c)(1) and (2)	Compliance Dates for Existing Sources.	Comply according to date in subpart, which must be no later than 3 years after effective date; for CAA section 112(f) standards, comply within 90 days of effective date unless compliance extension.	Yes, except that existing rayon operations are given 8 years to comply with 40% reduction emission limit, as specified in § 63.5495(b)(2)(iii).
§ 63.6(c)(3) and (4)	[Reserved].		
§ 63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major.	Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (e.g., 3 years).	Yes.
§ 63.6(d)	[Reserved].		

TABLE 10 TO SUBPART UUUU OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART UUUU—Continued

[As required in §§ 63.5515(h) and 63.5600, you must comply with the appropriate General Provisions requirements specified in the following table]

Citation	Subject	Brief description	Applies to Subpart UUUU
§ 63.6(e)(1) and (2)	Operation and Maintenance	Operate to minimize emissions at all times; correct malfunctions as soon as practicable; operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met.	Yes.
§ 63.6(e)(3)	Startup, Shutdown, and Malfunction Plan.	Requirement for startup, shutdown, and malfunction and SSM plan; content of SSM plan.	Yes.
§ 63.6(f)(1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM.	Yes.
§ 63.6(f)(2) and (3)	Methods for Determining Compliance.	Compliance based on performance test, operation and maintenance plans, records, inspection.	Yes.
§ 63.6(g)(1) through (3)	Alternative Standard	Procedures for getting an alternative standard.	Yes.
§ 63.6(h)	Opacity and Visible Emission (VE) Standards.	Requirements for opacity and visible emission limits.	Yes, but only for flares for which EPA Method 22 observations are required under § 63.11(b).
§ 63.6(i)(1) through (14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension.	Yes.
§ 63.6(j)	Presidential Compliance Exemption	President may exempt source category from requirement to comply with subpart.	Yes.
§ 63.7(a)(1) and (2)	Performance Test Dates	Dates for conducting initial performance test; testing and other compliance demonstrations; must conduct 180 days after first subject to subpart.	Yes.
§ 63.7(a)(3)	Section 114 Authority	Administrator may require a performance test under CAA Section 114 at any time.	Yes.
§ 63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test.	Yes.
§ 63.7(b)(2)	Notification of Rescheduling	If rescheduling a performance test is necessary, must notify Administrator 5 days before scheduled date of rescheduled test.	Yes.
§ 63.7(c)	Quality Assurance and Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing.	No.
§ 63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
§ 63.7(e)(1)	Conditions for Conducting Performance Tests.	Performance tests must be conducted under representative conditions; cannot conduct performance tests during SSM; not a violation to exceed standard during SSM.	Yes, except that performance tests for batch process vents must be conducted under other conditions, as specified in Table 4 to this subpart.
§ 63.7(e)(2)	Conditions for Conducting Performance Tests.	Must conduct according to this subpart and EPA test methods unless Administrator approves alternative.	Yes.
§ 63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used.	Yes.
§ 63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an alternative test method.	Yes.

TABLE 10 TO SUBPART UUUU OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART UUUU—Continued

[As required in §§ 63.5515(h) and 63.5600, you must comply with the appropriate General Provisions requirements specified in the following table]

Citation	Subject	Brief description	Applies to Subpart UUUU
§ 63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status Report; keep data for 5 years.	Yes.
§ 63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test.	Yes.
§ 63.8(a)(1)	Applicability of Monitoring Requirements.	Subject to all monitoring requirements in standard.	Yes.
§ 63.8(a)(2)	Performance Specifications	Performance specifications in Appendix B of 40 CFR part 60 apply.	Yes.
§ 63.8(a)(3)	[Reserved].		
§ 63.8(a)(4)	Monitoring with Flares	Unless your subpart says otherwise, the requirements for flares in § 63.11 apply.	Yes.
§ 63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative.	Yes.
§ 63.8(b)(2) and (3)	Multiple Effluents and Multiple Monitoring Systems.	Specific requirements for installing monitoring systems; must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup.	Yes.
§ 63.8(c)(1)	Monitoring System Operation and Maintenance.	Maintain monitoring system in a manner consistent with good air pollution control practices.	Yes.
§ 63.8(c)(1)(i)	Routine and Predictable SSM	Follow the SSM plan for routine repairs; keep parts for routine repairs readily available; reporting requirements for SSM when action is described in SSM plan.	Yes.
§ 63.8(c)(1)(ii)	SSM Not in SSM plan	Reporting requirements for SSM when action is not described in SSM plan.	Yes.
§ 63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements.	How Administrator determines if source complying with operation and maintenance requirements; review of source operation and maintenance procedures, records; manufacturer's instructions, recommendations; inspection.	Yes.
§ 63.8(c)(2) and (3)	Monitoring System Installation	Must install to get representative emission of parameter measurements; must verify operational status before or at performance test.	Yes.
§ 63.8(c)(4)	Continuous Monitoring System (CMS) Requirements.	CMS must be operating except during breakdown, out-of control, repair, maintenance, and high-level calibration drifts.	No. Replaced with language in § 63.5560.
§ 63.8(c)(4)(i) and (ii)	Continuous Monitoring System (CMS) Requirements.	Continuous opacity monitoring systems (COMS) must have a minimum of one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period; CEMS must have a minimum of one cycle of operation for each successive 15-minute period.	Yes, except that § 63.8(c)(4)(i) does not apply because subpart UUUU does not require COMS.

TABLE 10 TO SUBPART UUUU OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART UUUU—Continued

[As required in §§ 63.5515(h) and 63.5600, you must comply with the appropriate General Provisions requirements specified in the following table]

Citation	Subject	Brief description	Applies to Subpart UUUU
§ 63.8(c)(5)	COMS Minimum Procedures	COMS minimum procedures	No. Subpart UUUU does not require COMS.
§ 63.8(c)(6)	CMS Requirements	Zero and high level calibration check requirements; out-of-control periods.	No. Replaced with language in § 63.5545.
§ 63.8(c)(7) and (8)	CMS Requirements	Out-of-control periods, including reporting.	No. Replaced with language in § 63.5580(c)(6).
§ 63.8(d)	CMS Quality Control	Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years; keep old versions for 5 years after revisions.	No, except for requirements in § 63.8(d)(2).
§ 63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports.	Yes, except that § 63.8(e)(5)(ii) does not apply because subpart UUUU does not require COMS.
§ 63.8(f)(1) through (5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring.	Yes, except that no site-specific test plan is required. The request to use an alternative monitoring method must be submitted with the notification of performance test or CEMS performance evaluation or 60 days prior to any initial compliance demonstration.
§ 63.8(f)(6)	Alternative to Relative Accuracy Test.	Procedures for Administrator to approve alternative relative accuracy tests for CEMS.	Yes.
§ 63.8(g)(1) through (4)	Data Reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1-hour averages computed over at least four equally spaced data points; data that cannot be used in average.	No. Replaced with language in § 63.5545(e).
§ 63.8(g)(5)	Data Reduction	Data that cannot be used in computing averages for CEMS and COMS.	No. Replaced with language in § 63.5560(b).
§ 63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
§ 63.9(b)(1) through (5)	Initial Notifications	Submit notification subject 120 days after effective date; notification of intent to construct or reconstruct; notification of commencement of construction or reconstruction; notification of startup; contents of each.	Yes.
§ 63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed BACT/LAER.	Yes.
§ 63.9(d)	Notification of Special Compliance Requirements for New Source.	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date.	Yes.
§ 63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes.
§ 63.9(f)	Notification of VE or Opacity Test	Notify Administrator 30 days prior	Yes, but only for flares for which EPA Method 22 observations are required as part of a flare compliance assessment.
§ 63.9(g)	Additional Notifications When Using CMS.	Notification of performance evaluation; notification using COMS data; notification that exceeded criterion for relative accuracy.	Yes, except that § 63.9(g)(2) does not apply because subpart UUUU does not require COMS.
§ 63.9(h)(1) through (6)	Notification of Compliance Status Report.	Contents; due 60 days after end of performance test or other compliance demonstration, except for opacity or VE, which are due 30 days after; when to submit to Federal vs. State authority.	Yes, except that Table 7 to this subpart specifies the submittal date for the notification. The contents of the notification will also include the results of EPA Method 22 observations required as part of a flare compliance assessment.

TABLE 10 TO SUBPART UUUU OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART UUUU—Continued

[As required in §§ 63.5515(h) and 63.5600, you must comply with the appropriate General Provisions requirements specified in the following table]

Citation	Subject	Brief description	Applies to Subpart UUUU
§ 63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change in when notifications must be submitted.	Yes.
§ 63.9(j)	Change in Previous Information	Must submit within 15 days after the change.	Yes, except that the notification must be submitted as part of the next semiannual compliance report, as specified in Table 8 to this subpart.
§ 63.10(a)	Recordkeeping and Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source.	Yes.
§ 63.10(b)(1)	Recordkeeping and Reporting	General requirements; keep all records readily available; keep for 5 years.	Yes.
§ 63.10(b)(2)(i) through (iv)	Records Related to Startup, Shutdown, and Malfunction.	Occurrence of each of operation (process equipment); occurrence of each malfunction of air pollution equipment; maintenance on air pollution control equipment; actions during startup, shutdown, and malfunction.	Yes.
§ 63.10(b)(2)(vi), (x), and (xi)	CMS Records	Malfunctions, inoperative, out-of-control; calibration checks, adjustments, maintenance.	Yes.
§ 63.10(b)(2)(vii) and (ix)	Records	Measurements to demonstrate compliance with emission limits; performance test, performance evaluation, and VE observation results; measurements to determine conditions of performance tests and performance evaluations.	Yes, including results of EPA Method 22 observations required as part of a flare compliance assessment.
§ 63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
§ 63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test.	Yes.
§ 63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status Report.	Yes.
§ 63.10(b)(3)	Records	Applicability determinations	Yes.
§ 63.10(c)(1) through (6), (9) through (15).	Records	Additional records for CMS	Yes.
§ 63.10(c)(7) and (8)	Records	Records of excess emissions and parameter monitoring exceedances for CMS.	No. Replaced with language in Table 9 to this subpart.
§ 63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes.
§ 63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority.	Yes, except that Table 7 to this subpart specifies the submittal date for the Notification of Compliance Status Report.
§ 63.10(d)(3)	Reporting Opacity or VE Observations.	What to report and when	Yes, but only for flares for which EPA Method 22 observations are required as part of a flare compliance assessment.
§ 63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension.	Yes.
§ 63.10(d)(5)	Startup, Shutdown, and Malfunction Reports.	Contents and submission	Yes, except that the immediate SSM report must be submitted as part of the next semiannual compliance report, as specified in Table 8 to this subpart.
§ 63.10(e)(1) and (2)	Additional CMS Reports	Must report results for each CEMS on a unit; written copy of performance evaluation; three copies of COMS performance evaluation.	Yes, except that § 63.10(e)(2)(ii) does not apply because subpart UUUU does not require COMS.
§ 63.10(e)(3)	Reports	Excess emission reports	No. Replaced with language in § 63.5580.

TABLE 10 TO SUBPART UUUU OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART UUUU—Continued

[As required in §§ 63.5515(h) and 63.5600, you must comply with the appropriate General Provisions requirements specified in the following table]

Citation	Subject	Brief description	Applies to Subpart UUUU
§ 63.10(e)(3)(i) through (iii)	Reports	Schedule for reporting excess emissions and parameter monitor exceedance (now defined as deviations).	No. Replaced with language in § 63.5580.
§ 63.10(e)(3)(iv) through (v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedance (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emission (now defined as deviations), report contents is a statement that there have been no deviations.	No. Replaced with language in § 63.5580.
§ 63.10(e)(3)(iv) and (v)	Excess Emissions Reports	Must submit report containing all of the information in § 63.10(c)(5) through (13), § 63.8(c)(7) and (8).	No. Replaced with language in § 63.5580.
§ 63.10(e)(3)(vi) through (viii)	Excess Emissions Report and Summary Report.	Requirements for reporting excess emissions for CMS (now called deviations); requires all of the information in § 63.10(c)(5) through (13), § 63.8(c)(7) and (8).	No. Replaced with language in § 63.5580.
§ 63.10(e)(4)	Reporting COMS data	Must submit COMS data with performance test data.	No. Subpart UUUU does not require COMS.
§ 63.10(f)	Waiver for Recordkeeping or Reporting.	Procedures for Administrator to waive.	Yes.
§ 63.11	Flares	Requirements for flares	Yes.
§ 63.12	Delegation	State authority to enforce standards	Yes.
§ 63.13	Addresses	Addresses where reports, notifications, and requests are sent.	Yes.
§ 63.14	Incorporation by Reference	Test methods incorporated by reference.	Yes.
§ 63.15	Availability of Information	Public and confidential information	Yes.

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Part II

Environmental Protection Agency

40 CFR Part 63

National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[FRL–7214–7]

RIN 2060–AG29

National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action finalizes national emission standards for hazardous air pollutants (NESHAP) for new and existing sources at rubber tire manufacturing facilities. The EPA has identified rubber tire manufacturing facilities as major sources of hazardous air pollutants (HAP) emissions. These standards will implement section 112(d) of the Clean Air Act (CAA) by requiring all such major sources to meet HAP emission standards that reflect the application of maximum achievable control technology (MACT). The primary HAP that will be controlled with this action include toluene and hexane. These HAP are associated with a variety of adverse health effects including chronic health disorders (e.g., polyneuropathy, degenerative lesions of the nasal cavity) and acute health disorders (*e.g.,* respiratory irritation, headaches).

EFFECTIVE DATE: July 9, 2002.

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–97–14 at the following address: Air and Radiation Docket and Information Center (6102), U.S. EPA, 401 M Street, SW., Washington, DC 20460. The docket is located at the above address in Room M–1500, Waterside Mall (ground floor), and may be inspected from 8 a.m. to 5:30 p.m., Monday through Friday, excluding legal holidays. 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: For information concerning applicability and rule determinations, contact your State or local regulatory agency representative or the appropriate EPA Regional Office representative. For information concerning analyses performed in developing this rule, contact Mr. Anthony Wayne, Policy, Planning and Standards Group, Emission Standards Division (C439–04), U.S. EPA, Research Triangle Park, North Carolina, 27711; telephone number (919) 541–5439; fax number (919) 541–0942; electronic mail address: *wayne.tony@epa.gov.*

SUPPLEMENTARY INFORMATION:

Judicial Review. Under CAA section 307(b), judicial review of the final NESHAP is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit on or before September 9, 2002. Only those objections to the NESHAP which were raised with reasonable specificity during the period for public comment may be raised during judicial review. Under section 307(b)(2)of the CAA, the requirements established by today's final action may not be challenged separately in any civil or criminal proceeding we bring to enforce these requirements.

Regulated Entities. Categories and entities potentially regulated by this action include:

Category	SIC [a]	NAICS [b]	Regulated entities
Industry	3011 7534 2296	326211 326212 314992	Rubber tire manufacturing facilities.

[a] Standard Industrial Classification.
[b] North American Information Classification System.

This list 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 § 63.5981 of the rule. If you have questions regarding the applicability of this action to a particular entity, consult your State or local agency (or EPA Regional Office) described in the preceding **FOR FURTHER INFORMATION CONTACT** section.

Worldwide Web (WWW). In addition to being available in the docket, an electronic copy of this final rule will also be available on the WWW through the Technology Transfer Network (TTN). Following signature, 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.*

Outline. The information in this preamble is organized as follows:

I. Background
A. What Is the Source of Authority for Development of NESHAP?
B. What Criteria Are Used In the Development of NESHAP?
C. How Did the Public Participate in Developing the Rule?
II. Summary of the Final Rule
III. Significant Comments and Changes Since Proposal
A. What Sources Are Subject to the Rule?
B. How Did We Determine MACT?
C. Can EPA Provide a Universal Certification Compliance Alternative?
D. What Role Should EPA Method 311 Play in Compliance Determinations?
E. How Should the Tire Cord Compliance Requirements Address Potential Mixing Reactions?
F. What Data Requirements Should Sources Using Continuous Parameter Monitoring Systems Meet?
G. Is Compliance Based on Daily Recordkeeping Needed?
H. Has EPA Properly Considered the Cost Impacts of the Rule?
I. What Other Changes Has EPA Made for the Final Rule?
J. What Are the Environmental, Cost, and Economic Impacts of the Final Rule?
IV. Administrative Requirements
A. Executive Order 12866—Regulatory Planning and Review
B. Executive Order 13045 -Protection of Children from Environmental Health Risks and Safety Risks
C. Executive Order 13175—Consultation and Coordination with Indian Tribal Governments
D. Executive Order 13132—Federalism
E. Executive Order 13211—Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use
F. Unfunded Mandates Reform Act of 1995
G. Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 *et seq.*
H. Paperwork Reduction Act
I. National Technology Transfer and Advancement Act of 1995
J. Congressional Review Act

I. Background

A. What Is the Source of Authority for Development of NESHAP?

Section 112 of the CAA requires us to list categories and subcategories of major sources and area sources of HAP and to establish NESHAP for the listed source categories and subcategories. The category of major sources covered by today's final rule was listed on July 16, 1992 (57 FR 31576). Major source means 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, considering controls, 10 tons per year (tons/yr) or more of any one HAP or 25 tons/yr or more of any combination of HAP.

B. What Criteria Are Used in the Development of NESHAP?

Section 112 of the CAA requires that we establish NESHAP for the control of HAP from both new and existing major sources. The CAA requires the NESHAP to reflect the maximum degree of reduction in emissions of HAP that is achievable. This level of control is commonly referred to as the maximum achievable control technology (MACT).

The MACT floor is the minimum control level allowed for NESHAP and is defined under section 112(d)(3) of the CAA. In essence, the MACT floor ensures that the standard is set at a level that assures that all major sources achieve the level of control at least as stringent as that already achieved by the better-controlled and lower-emitting sources in each source category or subcategory. For new sources, the MACT floor cannot be less stringent that the emission control that is achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than standards for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing 5 sources for categories or subcategories with fewer than 30 sources).

In developing MACT, we also consider control options that are more stringent than the floor. We may establish standards more stringent than the floor based on consideration of the cost of achieving the emission reductions, any health and environmental impacts, and energy requirements.

C. How Did the Public Participate in Developing the Rule?

Prior to proposal, we 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 rule was published in the **Federal Register** on October 18, 2000 (65 FR 62414). The preamble to the proposed rule 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.

We received 19 public comment letters on the proposed rule. The commenters represent the following affiliations: Rubber tire manufacturers (4 companies), industrial trade associations (5), and one State and local agency association. In the post-proposal period, we talked with commenters and other stakeholders to clarify comments and to assist in our analysis of the comments. Records of these contacts are found in docket A–97–14. All of the comments have been carefully considered, and, where appropriate, changes have been made for the final rule.

II. Summary of Final Rule

The rule will apply to existing, new and reconstructed rubber tire manufacturing facilities that are major sources of HAP emissions standing alone or are major sources due to collocation with other facilities that emit HAP. We have subcategorized the rubber tire manufacturing source category into the following four subcategories of affected sources:

- Rubber processing
- Tire production
- Tire cord production
- Puncture sealant application.

Table 1 summarizes the emission limit options for the tire production, tire cord production, and puncture sealant application affected sources. There are no emission limits or other requirements associated with rubber processing affected sources.

TABLE 1.—EMISSION LIMIT OPTIONS FOR AFFECTED SOURCES

Affected source	Pollutant	Limita[a]
Existing, new or reconstructed tire production facility—Option 1.	Selected organic HAP (See Table 16 of final rule).	Emissions must not exceed 1,000 grams per megagram (2 pounds per ton) of the total cements and solvents used.
	All other organic HAP	Emissions must not exceed 10,000 grams per megagram (20 pounds per ton) of the total cements and solvents used.
Existing, new or reconstructed tire production facility—Option 2.	All organic HAP	Emissions must not exceed 0.024 grams per megagram (0.00005 pounds per ton) of rubber used.
Existing tire cord production facility—Option 1	All organic HAP	Emissions must not exceed 280 grams per megagram (0.56 pounds per ton) of fabric processed.
New or reconstructed tire cord production facility—Option 1.	All organic HAP	Emissions must not exceed 220 grams per megagram (0.43 pounds per ton) of fabric processed.
Existing, new or reconstructed tire cord production facility—Option 2.	Selected organic HAP (See Table 16 of final rule).	Emissions must not exceed 1,000 grams HAP per megagram (2 pounds per ton) of total coatings used.
	All other organic HAP	Emissions must not exceed 10,000 grams HAP per megagram (20 pounds per ton) of total coatings used.

TABLE 1.—EMISSION LIMIT OPTIONS FOR AFFECTED SOURCES—Continued

Affected source	Pollutant	Limita[a]
New or reconstructed puncture sealant application booth—Option 1.	All organic HAP (measured as volatile organic compounds (VOC)).	Reduce spray booth emissions by at least 95 percent.
Existing puncture sealant application booth—Option 1	All organic HAP (measured as VOC).	Reduce spray booth emissions by at least 86 percent.
Existing, new or reconstructed puncture sealant application booth—Option 2.	Selected organic HAP (See Table 16 of final rule).	Emissions must not exceed 1,000 grams HAP per megagram (2 pounds per ton) of total puncture sealants used.
	All other organic HAP	Emissions must not exceed 10,000 grams HAP per megagram (20 pounds per ton) of total puncture sealants used.

[a] Emission limits are expressed as monthly average emission limits except for: (1) Tire production affected sources that comply by demonstrating that the cements and solvents that they use comply with the emission limit for every purchase; and (2) puncture sealant application affected sources that comply by meeting the overall control efficiency option which requires such sources to meet the emission reduction limit on a 3-hour average.

The final rule also establishes operating limits for puncture sealant application affected sources that are complying with the overall control efficiency standards (*i.e.,* 86 percent emission reduction or 95 percent emission reduction). The operating limits are established on a source-specific basis. Once established, sources must maintain specified control device and capture system operating parameter(s) within the range(s) established during the performance test and according to the source's monitoring plan.

The final rule requires demonstrations of initial and ongoing compliance with the emission limitations. The specific requirements vary according to the affected source and the compliance alternative selected by that source. The final rule also establishes compliance dates, as well as provisions for performance testing, monitoring, recordkeeping, and reporting.

III. Significant Comments and Changes Since Proposal

This section includes discussion of significant comments on the proposed rule, particularly where we have made changes for the final rule to address those comments. For a complete summary of all the comments received on the proposed rule and our responses to them, refer to the ''Technical Document for Promulgation of Standards, National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing, Comment and Response Summary'' (hereafter called the ''response to comments document'') in docket A–97–14. The docket also contains the actual comment letters and supporting documentation developed for the final rule.

A. What Sources Are Subject to the Rule?

We received several comments raising questions on the applicability of the rule to specific sources at rubber tire manufacturing facilities. We have clarified the applicability provisions in the final rule. This section describes in more detail how the rule applies to various operations at rubber tire manufacturing facilities.

1. Tire Bladders

The final rule applies to manufacturers of rubber tires and components integral to rubber tires, as well as tire cord producers and puncture sealant operations. One commenter suggested that EPA clarify that tire bladders used in the manufacturing process are not ''components integral to rubber tires.'' We agree that tire bladders are not integral components in a tire because they are used in an intermediate production process and are not found in the final product. Their manufacture does not involve the use of cements or solvents. Therefore, the final rule reflects this exclusion in § 63.5981.

2. Tire Retread Operations

Based on public comments, we reconsidered whether to include tire retread manufacturing operations in the source category definition. At the time of proposal, no major tire retread manufacturing sources were identified that would be subject to the rubber tire manufacturing rule. However, to the extent that these facilities use cements and solvents in producing retread tires, and they are a major source (standing alone or due to collocation), they would have been subject to the proposed version of the rule because of similarities in the solvents, cements, and adhesives used and the process used to build tires. In evaluating comments on this topic, we reconsidered information regarding the potential for HAP emissions from retreading operations, the applicability of the proposed rule, and the appropriateness of the tire production MACT floor for retreading operations.

In both ''new'' tire production and retread tire production, tire building stations are used to create the pre-cured or pre-vulcanized tire. Several tire components can be combined for a virgin tire versus only two to three components for a retread tire. In the latter case, the carcass has been constructed eliminating those component steps in tire building for the retreader. The vulcanizing and curing of both the retread and the ''green'' tire are identical in their use of tire molds, the time for curing, the temperatures, and the pressures. These parameters are set in order to meet the tire safety and longevity specifications of the industry.

The HAP emissions associated with sidewall cementing, tread end cementing, tire building and retread tire building all use similar cement and solvent formulations. Specifically, the main component of the cements and solvents used by both new and retread manufacturers are hexane and toluene. The primary purpose of these cements and solvents is as a temporary aid to ensure that the rubber compound surface remains ''tacky'' during tire building. However, several tire manufacturers and retreaders have reformulated or eliminated the use of these toxic compounds in their operations, while presumably still achieving the desired performance characteristics.

Our review and evaluation of the tire building methods, tire building machinery, solvent and cement usage and application, and vulcanizing and curing processes for both new and retread tire operations has not indicated

significant differences in production techniques or in the types of tires being made. Our original conclusion to include retreading in the tire production subcategory, therefore, has not changed under this subsequent analysis.

Evaluation of the tire production MACT floor database identified retreading operations at sources that also manufactured new tires. The HAP emissions associated with these facilities were minor in comparison to the overall facility emissions, and compliance with the MACT standards is anticipated using the facility-wide standards that have been established for the industry. Therefore, emissions associated with the retreading operations at facilities included in the Rubber Manufacturers Association's (RMA's) database are included in the overall emissions reported from the RMA and the individual companies.

In addition, EPA examined the 1996 National Toxics Inventory (NTI) data, which revealed only three potential stand-alone major source facilities for retreading in the U.S. The primary pollutants reported were hexane and toluene. The 1996 NTI reported that HAP emissions from these sources ranged from 8 to 16 tons per year. Subsequent contacts with the permitting agencies for these sources revealed that the facilities have significantly reduced or eliminated HAP emissions. This analysis demonstrates the ability of retread facilities to substantially reduce or eliminate their HAP emissions.

In conclusion, we believe that tread is an integral component of tires, and retread manufacturers should be subject to the emission standards for tire producers to the extent that they use cements and solvents.

3. Fabric Coating Operations

The final rule clarifies the potential overlapping applicability of MACT standards for tire manufacturers who own and operate cord-treating facilities that produce tire cord as well as other fabric products, such as belts and hoses. For example, currently we are developing the fabric printing, coating, and dyeing NESHAP, which will potentially address the same cord coating operations as today's rubber tire manufacturing rule. In order to minimize potentially redundant requirements at these types of facilities, we have included in the final rule an exemption for coating activities where the primary product is a Web substrate other than tire cord, and the activities are regulated by another NESHAP. In other words, where tire cord is the primary product, the rubber tire manufacturing NESHAP would apply. Where it is not, the other NESHAP would apply. Any facility with potential overlapping applicability would have to determine which NESHAP apply to the facility by the compliance date of the first applicable NESHAP.

4. Research and Development Operations

We have also determined that research and development (R&D) operations should not be subject to the rubber tire manufacturing rule. At proposal, we included them in the definition of HAP emission sources. However, we now believe that excluding them is more consistent with our statements in an advanced notice of proposed rulemaking in which we suggested that R&D operations should be listed as a separate source category (62 FR 25877) because including R&D operations in a rule governing manufacturing operations would be problematic. We are not aware of any stand-alone major R&D facilities. In fact, R&D is focused on development of rubber compounds, which should involve minimal solvent use. For these reasons and because R&D operations were not necessarily addressed in the MACT floor determination, the final rule exempts R&D facilities as defined in section 112(c)(7) of the CAA. An R&D facility is one ''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.'' *See* CAA section 112(c)(7).

B. How Did We Determine MACT?

1. Rubber Processing MACT

Commenters said we did not provide data to support our conclusion that add-on control devices for rubber processing emissions are feasible but unreasonably expensive. According to the commenters, we should have considered the use of high-volume low-concentration (HVLC) technologies, which are available, proven, and cost-effective.

At proposal, we considered beyond-the-floor control options in establishing MACT for the rubber processing source category based on regenerative incineration. We concluded that the costs of these controls, more than $200,000 per ton of HAP controlled, were too high to require them as the basis of the standard. However, in considering public comments on the proposed rule, we reviewed information provided by a commenter to further evaluate the applicability of a specific HVLC technology to rubber processing operations. The technology is a hybrid system that incorporates a rotary concentrator with conventional oxidation (emission reduction) technology. The concentrator provides a mechanism to concentrate low organic concentration gas streams in order to make destruction or removal, for example, with a following oxidizer, a more cost-effective control technique.

As described in the response to comments document, our analysis showed that using the HVLC technology at a model facility would cost approximately $40,000 dollars per ton of emission reduction. While this is an improvement relative to the original cost impact, it is still too high to be considered a beyond-the-floor technology for existing and new facilities. Therefore, we have not revised the original MACT determination for this subcategory.

2. Tire Production MACT

Several commenters said the two emission limit options proposed for the tire production subcategory are not equivalent, because Option 2 (production-based option) is more stringent than Option 1 (HAP-constituent option). They said these options should be equivalent because, otherwise, Option 2 represents a beyond-the-floor requirement. At a minimum, they thought that Option 2 should be based on the average emissions of the five best-performing sources.

We disagree with these comments. As described in the proposal preamble, Option 1 represents the MACT floor and MACT. We developed Option 2 to represent a second form of the emission limit expressed in mass of HAP emitted per mass of rubber processed. Option 2 must be at least as stringent as Option 1, but is not required to be equivalent. Because the use of Option 2 is not required, it is not a beyond-the-floor requirement. Instead, it provides sources flexibility in how they meet the emission limit.

Commenters also said the proposal failed to set an emission limit with a meaningful control technology option, because the allowable emission levels in Options 1 and 2 effectively rule out control devices as a significant compliance option due to achievable capture efficiency rates in the tire production industry. This is important, commenters said, because reformulation is not an option in all cases due to the need for extensive equipment modification, modernization, and

facility reconfiguration as well as the high costs associated with such changes (likely exceeding $50 to $100 million per plant according to commenters).

A central fact in our response to these issues is that Option 1 is based on the MACT floor determination for tire production affected sources. Based on data provided by the RMA, we determined that emissions from these sources are controlled primarily through pollution prevention measures such as reformulation or other changes in process operations, which reduce or eliminate HAP. In fact, of the 41 reported existing tire production facilities, 11 reported no potential for HAP emissions from cement or solvent use above the Superfund Amendments and Reauthorization Act (SARA) de minimis reporting threshold limitations for HAP-containing compounds. No additional information in support of subcategorizing the source category was provided by the industry. Because we did not identify any basis for further subcategorizing tire production sources, this level of performance represents MACT for all tire production affected sources.

Despite a MACT floor determination based on pollution prevention, the proposed emission limits were crafted to allow the use of add-on control technologies as a compliance option because we recognized that some existing facilities currently use them to control a portion of their emissions. We also wanted to allow all sources the flexibility to use add-on controls, as long as the MACT floor requirements were met, if they found them more attractive than pollution prevention measures in reducing emissions from certain operations. We believe the result is a meaningful control technology option. While most facilities would have to achieve some increased level of pollution prevention to comply with the final rule, they would have the option to use add-on controls on any of the emission sources at the facility to provide additional needed reductions. Assuming sources used add-on controls on all of the available emission sources, the additional pollution prevention reductions to meet the emission limits would range from 0 to 54 percent, with 27 percent as the average reduction. Given the tremendous strides in pollution prevention already achieved by the industry, we believe the NESHAP limits are achievable and that the control technology option is viable.

3. Puncture Sealant MACT

Commenters said we overreached in establishing a standard for new sources that is more stringent than the standard for existing sources. The new source standard is on a single facility, which is operating a carbon absorber with a removal efficiency of 86 percent. According to commenters, we failed to conduct a beyond-the-floor analysis that includes the cost and technical feasibility to support our determination.

We determined the new source MACT floor by looking at similar sources in other industries and found that their carbon absorbers are achieving better performance than that at the one existing puncture sealant source. Industries that emit VOC have extensive experience in using pollution control technologies to control the gaseous pollutants. Carbon adsorption can typically achieve greater than 90 percent efficiencies with inlet gaseous pollutant concentrations greater than a few hundred parts per million by volume (ppmv). At concentrations greater than 1000 ppmv, efficiencies can exceed 95 percent. The existing puncture sealant facility shows an inlet stream concentration of at least 1,400 ppmv. Use of combustion technologies, even at low pollutant concentrations (less than 100 ppmv), can generally achieve 90 to 95 percent destruction efficiency. At higher concentrations, destruction efficiencies of 95 to 98 percent are achieved. Therefore, we believe that control devices at new facilities should be able to should be able to achieve at least 95 percent efficiency.

Because commenters raised cost concerns, we compared the cost of installing an 86-percent efficient control device to the cost of a 95-percent efficient control device at a new facility. Because the driving factor in the cost analysis is the airflow rate of the inlet stream, it actually costs less to install a 95-percent efficient carbon adsorber than an 86-percent efficient one. This is because both units would have the same total annual cost in the absence of recovery credits, but the more efficient device would achieve greater product recovery, which reduces the annual operating cost. Therefore, even if the standard for new sources were considered a beyond-the-floor standard, the MACT determination would be the same.

C. Can EPA Provide a Universal Certification Compliance Alternative?

Commenters asked us to develop an alternative standard (and associated compliance procedures) for tire cord production and/or puncture sealant operations that would be analogous to the ''HAP constituent option'' (Option 1) for tire production sources. They said we should allow tire cord and puncture sealant facilities to certify annually that formulations used in such operations contain less than 0.1 percent of those HAP specified in Table 16 of the proposed rule and less than 1 percent of all other HAP, and that this change would encourage pollution prevention.

We agree that providing a similar HAP-constituent option for tire cord producers and puncture sealant operations would encourage pollution prevention. Demonstrating compliance with a HAP-constituent option would require additional emission reductions beyond those required by the MACT, but since its use would be optional, it would not constitute a beyond-the-floor requirement. However, we believe that its use should be limited to a monthly compliance alternative, reserving the annual alternative to the purchase of cements and solvents. Most, if not all, tire cord manufacturers and puncture sealant application facilities mix their coatings and puncture sealants on-site, which would require the use of the monthly compliance demonstration. We have written the final rule to add these compliance options.

D. What Role Should EPA Method 311 Play in Compliance Determinations?

Commenters requested several clarifications regarding the role that EPA Method 311 (found in Appendix A of 40 CFR part 63) (Analysis of Hazardous Air Pollutant Compounds in Paints and Coatings by Direct Injection Into a Gas Chromatograph) should play in ongoing compliance determinations. For example, is an individual Method 311 test required to verify the HAP content for every batch of solvent or cement? Must the compliance demonstration determine the precise HAP content of the tested material, or can the de minimis reporting threshold discussed in the proposed rule (0.1 percent for certain listed HAP and 1.0 percent for other HAP) suffice? Can the tire manufacturing facility owner or operator rely on information provided by suppliers regarding the HAP content of materials? Can formulation data (material safety data sheets (MSDS) and certificates of compliance) be used in lieu of Method 311 testing? Commenters stated that use of the MSDS and other data to screen products for HAP content will eliminate testing of hundreds of non-HAP containing materials.

We reviewed the use of Method 311 in other recent coating standards we have proposed or promulgated. In order to be consistent with these standards and minimize the need for individual facilities to apply for approval of alternative methods, we have added flexibility to the process of certifying HAP contents of materials used in the

tire manufacturing industry. However, the reference test method for measuring the HAP content of tire manufacturing cements, solvents, coatings, and puncture sealants will be EPA Method 311. This is an established method that is appropriate for measuring the types of HAP used in these materials.

The final rule, therefore, does not require a Method 311 test for HAP content, nor does it require you to test every shipment of materials you receive. You will be responsible for verifying, by any reasonable means such as periodic testing or manufacturer's certification, the HAP content (at least above the de minimis thresholds) of materials used at the facility. We may require you to conduct a test at any time using EPA Method 311 (or any approved alternative method) to confirm the HAP content reported in the compliance reports. If there is any inconsistency between the results of the EPA Method 311 test and any other means of determining HAP content, the Method 311 results will govern.

E. How Should the Tire Cord Compliance Requirements Address Potential Mixing Reactions?

Commenters raised the issue of how to treat emissions from tire cord mixing operations in compliance determinations when reactions during mixing may affect emissions. For example, at what point in the mixing process should Method 311 samples (or other analytical means) be taken? If the analysis is based on the coating after it is mixed, reacted, and aged, the results will not account for the HAP emitted from or converted by the mixing process. However, if the analysis is based on coating collected from the mix tank after the addition of all the chemicals, but prior to subsequent processing, the analysis could overestimate the overall HAP emissions from the affected source. This is because tire cord coatings (''dip formulations'') commonly react during the mixing and storage operations. During these reactions, a HAP such as formaldehyde cross-links the polymers contained in the dip formulation. After this cross-linking reaction occurs, the chemical is unavailable to be released as an air emission during subsequent processing steps. For formaldehyde, the chemical conversion rate typically equals or exceeds 99 percent.

At proposal, we assumed that the amount of HAP used in the tire cord production process would equal the amount of HAP emitted. We assumed you would document your material balances using records of the HAP contents of raw materials delivered to the mixing process. Alternatively, you could sample the coating mixture to verify HAP content. However, based on comments, it appears that the issue of reactive coatings is significant for tire cord production. We are concerned, however, that the commenters' solution to only address post-mixing HAP would ignore potential fugitive emission losses from mixers.

In the final rule, we have assumed that you will base your material balance on the assumption that 100 percent of the HAP added to a coating mixture is emitted. However, you will be allowed to account for HAP ''losses'' resulting from chemical reactions, *e.g.,* curing or post-application reactions. You can calculate these losses based on the conversion rates of the individual coating formulations, chemistry demonstrations, or other demonstrations that are verifiable to the approving agency. You may than use the revised value in your compliance demonstration. We have written the final rule to add these provisions.

F. What Data Requirements Should Sources Using Continuous Parameter Monitoring Systems Meet?

1. Deviations

Commenters noted that proposed § 63.5990, which requires facilities to be in compliance with the MACT standards at all times regardless of whether a source is using control equipment to comply, fails to recognize that several factors make it almost inevitable that the source's emissions will exceed the standards at times. Instead, sources should be given a chance to quickly correct a deviation from their operating parameter limits before a violation is registered. This encourages quick action and is appropriate because emissions may be underneath the regulatory limit even though the parameter limit is exceeded.

The monitoring provisions in the final rule are structured to require a source to establish an individual operating limit (or operating parameter value) based on a site-specific performance test. Once established, the source should have the ability to operate as far as desired and/or necessary on the compliance side of the operating parameter.

The length of the averaging time for the associated emission limit is another variable that affects the likelihood of deviations. For example, cases in which the monitoring data are used to demonstrate instantaneous compliance are more likely to create the exceedances suggested by the commenters. This is not the case in the final rule. Puncture sealant affected sources meeting the overall control efficiency compliance option are subject to operating limits based on a 3-hour averaging period. Tire producers, tire cord producers, and puncture sealant applicators choosing to comply with one of the monthly average compliance options have a month in which to ensure that deviations from control device monitoring parameters do not affect their overall compliance status. In summary, we believe the final rule is based on parameters and averaging times that allow a conscientious operator to remain in compliance with the standards. Therefore, we have not made the changes suggested by commenters.

2. Startups, Shutdowns, and Malfunctions

Commenters were concerned that Table 17 to proposed subpart XXXX indicates that the 40 CFR part 63, subpart A, General Provisions requirements regarding startups, shutdowns, and malfunctions (§§ 63.6(e)(3) and (f)(1)) do not apply to sources that choose to use control devices to comply with the standards. One commenter cited precedents regarding the need for ''achievable'' standards and argued that the final rule should be written to indicate that these sections do apply to facilities complying through the use of control devices.

We agree that puncture sealant affected sources that are subject to operating limits should be allowed to use the startup, shutdown, and malfunction provisions, and have corrected this oversight for the final rule. We separately considered whether to extend these provisions to tire production, tire cord production, and puncture sealant affected sources complying with the monthly average compliance options because compliance with the monitored parameter is only a trigger that determines whether the source can use the established emission reductions of the capture and control system in the compliance demonstration. Because the overall compliance demonstration is based on a month's worth of data, we considered whether the startup, shutdown, and malfunction provisions were needed to ensure an achievable standard. We determined that for sources relying heavily on the use of control equipment to meet the overall emission limit, the inability to exclude periods of startups, shutdowns, and malfunctions from the compliance demonstration could increase their risk of failing to comply with the emission limit. Therefore, we have written the final rule to add the startup, shutdown, and malfunction

provisions for sources complying with the standards through control devices.

3. Minimum Data Collection Requirements

Commenters said the proposal fails to allow for the loss of even minimal amounts of test or monitoring data when sources are complying by using add-on control devices. They suggested adding provisions similar to those found in the municipal waste combuster MACT standards issued under section 129 of the CAA.

We have therefore written the final rule to provide information on these minimum data requirements. We agree that the proposed rule, by being silent on minimum data requirements, could have caused confusion for compliance demonstrations. The tradeoff to consider in adding these requirements is that the monitoring system should be optimized to limit occurrences when data collection is jeopardized because of system faults and failures. Therefore, we have clarified in the final rule the establishment of reasonable minimum data collection requirements, implemented through the use of a site-specific monitoring plan designed to optimize system performance.

The final rule requires you, for each operating parameter you monitor, to install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the following requirements:

- Operate CPMS at all times the process is operating;
- Collect data from at least four equally spaced periods each hour;
- For at least 75 percent of the hours in an operating day, have valid data (as defined in the site-specific monitoring plan) for at least four equally spaced periods each hour;
- For each hour of valid data from at least four equally spaced periods, calculate the hourly average value using all valid data;
- Calculate the daily average using all of the hourly averages; and
- Record the results for each inspection, calibration, and validation check as specified in the site-specific monitoring plan.

For each monitoring system required, you must develop and submit for approval a site-specific monitoring plan that addresses the following requirements:

- Installation of the continuous monitoring system (CMS) sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.,* on or downstream of the last control device);
- Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and
- Performance evaluation procedures and acceptance criteria (*e.g.,* calibrations).

The plan must also address the following ongoing procedures:

- Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (3), (4)(ii), (7), and (8), and 63.5990;
- Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d); and
- Ongoing recordkeeping and reporting procedures in accordance the general requirements of 40 CFR 63.10(c) and (e)(1) and (2)(i).

G. Is Compliance Based on Daily Recordkeeping Needed?

Commenters recommended specifying that monthly average compliance demonstrations should be based on monthly inventory and usage records, instead of daily ones, for several reasons:

- The proposal to require daily records of many parameters (control devices are the exception) is inconsistent with the requirement for a monthly average, is very burdensome, and would not serve any environmental purpose.
- Use of monthly data would eliminate the need for proposed equation 3 of § 63.5997(b)(3) of proposed subpart XXXX.
- Monthly records are consistent with other MACT standards, and it would be arbitrary and capricious to single out the tire manufacturing standards for daily recordkeeping when it is unnecessary to show compliance with a monthly averaging period, and other similar standards require only monthly recordkeeping.
- Monitoring the flow of cements and solvents through the plant's central dispensing area on a monthly basis is less burdensome than on a daily basis.
- The accuracy of a monthly system is significantly better than individual measurements of hundreds of containers on a daily basis.

We believe the commenters have overstated the need for complex recordkeeping systems to implement the rule as proposed. For example, we believe sources could monitor daily flow of cements and solvents through one or two central locations instead of at the point of use. However, upon consideration, we agree that a monthly system of cement, solvent, and coating use is sufficient to demonstrate compliance with the emission limitations. Therefore, we have written the final rule to implement a monthly system. This change simplifies the compliance equations and should reduce recordkeeping burden without compromising compliance assurance.

H. Has EPA Properly Considered the Cost Impacts of the Rule?

Commenters felt we underestimated the cost impacts of the proposed rule by failing to incorporate significant costs associated with creating systems to track daily material usage. They suggested that monthly recordkeeping would be more economical, could be more easily maintained, and would still demonstrate compliance with the standards.

We believe that the commenters misinterpreted the proposed recordkeeping requirements to require tracking cement, solvent, and coating use at every single step in the process. Instead, we believe facilities should be able to monitor a limited number of central locations (*e.g.,* amount of coating leaving mix area, amount of solvent distributed from storage), and thereby avoid significant costs. However, as described above, we have determined that monthly recordkeeping will be sufficient to demonstrate compliance with the emission limitations and have written the final rule to allow it.

Commenters also were concerned that we presented the proposed rule as a nonsignificant regulatory action, when it may force technology developments that are not incorporated into the analysis presented. Commenters said reformulation is not an option in every case, and the lack of a meaningful control technology option will force significant technology upgrades to comply with the standards. According to one commenter, this type of modernization costs $50 to $100 million per plant, and these types of costs are not reflected in the impacts analysis of the proposed rule.

As earlier described, we believe the rule contains a viable emission control technology option. In addition to the cost estimate prepared for the final rule, we also conducted a theoretical cost analysis using more conservative (*i.e.,* high-end) assumptions regarding the level of reformulation and the probable capture efficiencies. That analysis maximized the number of sources installing add-on control devices, reduced add-on control capture efficiencies, and determined solvent

reformulation costs on a facility-specific basis. (See the response to comments document for more details.) Based on these assumptions, total annual control costs to all tire producers combined could be as high as $35 million. Even considering impacts based on these more conservative (higher end of range) assumptions, the final rule will not trigger the $100 million criterion used by the Office of Management and Budget (OMB), let alone approach the estimate provided by one commenter of $50 to $100 million per plant to meet the emission limits.

I. What Other Changes Has EPA Made for the Final Rule?

We have made several other changes for the final rule. These changes include the following:

- Changes to the compliance equations to clarify them, address the addition of new compliance options, make them consistent with monthly recordkeeping, and fix errors.
- Revisions or additions to clarify applicability in definitions (cements and solvents, fabric processed, tire cord, *etc.*).
- Other minor changes to correct editorial and minor technical errors in the proposal package.

J. What Are the Environmental, Cost, and Economic Impacts of the Final Rule?

The final rule will eliminate approximately 983 megagrams per year (Mg/yr) (1,084 tons/yr) (52 percent) of the baseline annual HAP emissions from this industry. For the tire production source subcategory, we estimate that the final rule will reduce HAP emissions by approximately 949 Mg/yr (1,047 tons/yr). For the tire cord production source subcategory, we estimate that the final rule will reduce HAP emissions by approximately 34 Mg/yr (37 tons/yr). We also estimate that the final rule will reduce emissions of VOC by the same amount.

For the one existing puncture sealant application affected source, we are not requiring different emissions control than what is currently done. Therefore, the final rule will not reduce HAP or other emissions from baseline emissions levels at this facility.

The final rule encourages the adoption of pollution prevention measures. As a result, we believe that most manufacturers will adopt these measures and expect minimal, if any, increases in energy consumption, and minimal reductions in water pollution and solid waste.

Actual compliance costs will depend on each source's existing cement, solvent, and coating formulations and control equipment, and the modifications made to comply with the final rule. Table 2 shows the total annual costs for affected sources to comply with the final rule. These costs include the estimated costs of reformulating cements, solvents, and coatings or installation of add-on control devices, as well as monitoring, reporting, and recordkeeping costs.

TABLE 2.—TOTAL ANNUAL COSTS OF THE RUBBER TIRE MANUFACTURING RULE FOR TIRE PRODUCTION, TIRE CORD PRODUCTION, AND PUNCTURE SEALANT APPLICATION

Annual costs	Tire production/ puncture sealant application [a]	Tire cord	
Control	$21,359,000	$2,477,000	
Monitoring	1,161,000	193,000	
Recordkeeping and reporting average	597,000	105,000	
Total nationwide costs	23,117,000	2,775,000	=$25,892,000

[a] Puncture sealant monitoring and reporting recordkeeping costs are included in the tire production costs.

The economic impact analysis (EIA) provides an estimate of the anticipated regulatory impacts of the rule for rubber tire manufacturing. The information collected for this rule from rubber tire manufacturers indicates that there are 14 companies potentially affected by the rule. States with the largest concentration of facilities are Alabama, Illinois, North Carolina, South Carolina, and Ohio. None of the facilities manufacturing rubber tires are owned by companies that are classified as small businesses.

In general, the economic impacts of the rule are expected to be minimal. A market price increase of less than 1 percent, or $0.03 per tire, is projected. Domestic producer pre-tax earnings are projected to decrease by $14 million, or 1.2 percent. The EIA estimates that domestic tire output will decline by 154,000 tires (0.05 percent), while imports will increase by 24,000 tires (0.05 percent), resulting in a net decline of 130,000 tires, or 0.04 percent.

The value of a regulatory action is traditionally measured by the change in economic welfare that it generates. The final rule's welfare impacts, or the social costs required to achieve environmental improvements, will extend to tire consumers and producers alike. The social costs for existing sources are projected to be approximately $24 million.

IV. Administrative Requirements

A. Executive Order 12866—Regulatory Planning and 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 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 obligation 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.

B. 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 Agency must evaluate the environmental health or safety effects of the planned rule on children and explain why the planned rule is preferable to other potentially effective and reasonably feasible alternatives that we considered.

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. In addition, EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health and 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 based on technology performance and not on health or safety risks.

C. Executive Order 13175—Consultation and Coordination With Indian Tribal Governments

Executive Order 13175, entitled ''Consultation and Coordination with Indian Tribal Governments'' (65 FR 67249, November 6, 2000), requires EPA to develop an accountable process to ensure ''meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.'' ''Policies that have tribal implications'' is defined in the Executive Order to include regulations that have ''substantial direct effects on one or more Indian tribes, on the relationship between the Federal government and the Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes.''

This final rule does not have tribal implications. It will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175. This is because no tribal governments own or operate a rubber tire manufacturing facility. Thus, Executive Order 13175 does not apply to this rule.

D. Executive Order 13132—Federalism

Executive Order 13132, entitled ''Federalism'' (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' are defined in the Executive Order to include regulations that have ''substantial direct effects on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of Government.''

This final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of Government, as specified in Executive Order 13132. The standards apply only to rubber tire manufacturers and do not pre-exempt States from adopting more stringent standards or otherwise regulate State or local governments. Thus, Executive Order 13132 does not apply to this final rule.

Although section 6 of Executive Order 13132 does not apply to this final rule, EPA did consult with State and local officials in developing this final rule. No concerns were raised by these officials during this consultation.

E. Executive Order 13211—Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This rule is not subject to Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

F. Unfunded Mandates Reform Act of 1995

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, we generally must prepare a written statement, including 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 us 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 us to adopt an alternative with other than the least costly, most cost-effective, or least burdensome alternative if we publish with the final rule an explanation why that alternative was not adopted.

Before we establish any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, we 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 our regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

We have determined that this final rule does not contain a Federal mandate that may result in expenditures of $100 million or more for State, local, or tribal governments, in the aggregate, or the private sector in any 1 year. The maximum total annual cost of this rule for any year has been estimated to be less than $26 million. Thus, today's final rule is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, we have determined that this final rule contains no regulatory requirements that might significantly or uniquely affect small governments because it contains no regulatory requirements that apply to such governments or impose obligations upon them. Therefore, this final rule is not subject to the requirements of section 203 of the UMRA.

G. Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 et seq.

The RFA generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the Agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses,

small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's final rule on small entities, small entity is defined as: (1) A small business according to the Small Business Administration (SBA) size standards by NAICS code (which ranges from 500 to 1,000 employees for the rubber tire manufacturing industry); (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. This final rule will not impose any requirements on small entities. We have determined that none of the 43 facilities expected to be subject to the final rule are small entities.

H. Paperwork Reduction Act

The information collection requirements in this final rule have been submitted for approval to OMB under the requirements of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1982.01), and a copy may be obtained from Ms. Sandy Farmer by mail at the U.S. Environmental Protection Agency, Office of Environmental Information, Collection Strategies Division (2822), 1200 Pennsylvania Avenue, NW., Washington, DC 20460–0001, 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.

The final information requirements are based on notifications, records, and reports required by the General Provisions (40 CFR part 63, subpart A), which are mandatory for all operators subject to national emission standards. These recordkeeping and reporting requirements are specifically authorized under section 114 of the CAA (42 U.S.C. 7414). All information submitted to the EPA pursuant to the recordkeeping and reporting requirements for which a claim of confidentiality is made will be safeguarded according to Agency policies in 40 CFR part 2, subpart, Confidentiality of Business Information.

The annual public reporting and recordkeeping burden for this collection of information (averaged over the first 3 years after the effective date of the promulgated rule) is estimated to total 12,807 labor hours per year at a total annual cost of $701,337. This estimate includes notifications, a performance test and report for sources using control devices to comply with the regulation, semiannual compliance reports, annual compliance certifications, records of cements and solvents composition, records of cements and solvents use, records of HAP use, and records of any required parameter monitoring.

The total estimated annual and capital monitoring, inspection, reporting and recordkeeping (MIRR) costs for existing and new major sources to comply with the final standards when an affected source opts to comply via the use of add-on control equipment are determined based on the estimated capital costs of equipment required for MIRR activities. For the rubber tire manufacturing industry, the total estimated installed capital costs of this equipment is $2.9 million for existing major sources and $569,558 for new major sources. Annualized capital MIRR costs for existing and new major sources to comply with the final standards through the use of add-on controls were estimated to be $1.6 million and $220,386, respectively.

The total annual estimated operating and maintenance costs (O&M) were calculated based on: (1) The estimated storage, filing, photocopying, and postage costs for the estimated total annual responses associated with the provisions of the rubber tire rule; and (2) the O&M costs for the equipment required for compliance with these standards. The total storage, filing, photocopying, and postage cost per response was $20.67, for an annual estimated average of $1,778.

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 purpose of collecting, validating, and verifying information; process and maintain information and disclose and provide information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to respond to a collection of information; search existing data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

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 OMB control number(s) for the information collection requirements in this rule will be listed in an amendment to 40 CFR part 9 or 48 CFR chapter 15 in a subsequent **Federal Register** document after OMB approves the ICR.

I. National Technology Transfer and Advancement Act of 1995

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995, Public Law 104–113, section 12(d) 15 U.S.C. 272 note) directs us to use voluntary consensus standards (VCS) in our 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) developed or adopted by one or more voluntary consensus bodies. The NTTAA directs us to provide Congress, through annual reports to OMB, with explanations when we do not use available and applicable VCS.

This rulemaking involves technical standards. We are citing the following methods in this rule: EPA Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 3, 3A, 3B, 4, 25, and 25A of 40 CFR part 60, appendix A; EPA Methods 204 and 204A–F of 40 CFR part 51, appendix M; and EPA Method 311 of 40 CFR part 63, appendix A. Consistent with the NTTAA, we conducted searches to identify VCS in addition to these EPA methods. No applicable VCS were identified for EPA Methods 1A, 2A, 2D, 2F, 2G, 204, 204A–F, and 311. The search and review results have been documented and are placed in the docket (A–97–14) for this rule.

Five voluntary consensus standards: ASTM D1979–97, ASTM D3432–89, ASTM D4747–87, ASTM D4827–93, and ASTM PS 9–94 are already incorporated by reference in EPA Method 311.

The search for emissions measurement procedures identified 14 other VCS. We determined that 11 of these 14 VCS identified for measuring emissions of HAP or surrogates subject to emission standards in this rule were impractical alternatives to EPA test methods for the purposes of this rule. Therefore, we do not intend to adopt these VCS. The reasons for the determinations of these 11 VCS are discussed below.

The VCS ASTM D3154–91 ''Standard Method for Average Velocity in a Duct (Pitot Tube Method),'' is an impractical

alternative to EPA Methods 1, 2, 2C, 3, 3B, and 4 for the purposes of this rulemaking because it lacks in quality control and quality assurance requirements. Specifically, ASTM D3154–91 (1995) does not include the following: (1) Proof that openings of standard pitot tubes have not plugged during the test; (2) if differential pressure gauges other than inclined manometers (*e.g.,* magnehelic gauges) are used, their calibration must be checked after each test series; and (3) the frequency and validity range for calibration of the temperature sensors.

The VCS ISO 10780:1994, ''Stationary Source Emissions—Measurement of Velocity and Volume Flowrate of Gas Streams in Ducts,'' is impractical as an alternative to EPA Method 2 in this rulemaking. This standard, ISO 10780:1994, recommends the use of L-shaped pitots, which historically have not been recommended because the S-type design has large openings which are less likely to plug up with dust.

The VCS ASTM D3464–96 (2001), ''Standard Test Method Average Velocity in a Duct Using a Thermal Anemometer,'' is impractical as an alternative to EPA Method 2 for the purposes of this rulemaking primarily because applicability specifications are not clearly defined, *e.g.,* range of gas composition, temperature limits. Also, the lack of supporting quality assurance data for the calibration procedures and specifications, and certain variability issues that are not adequately addressed by the standard limit our ability to make a definitive comparison of the method in these areas.

Two very similar standards, ASTM D5835–95, ''Standard Practice for Sampling Stationary Source Emissions for Automated Determination of Gas Concentration,'' and ISO 10396:1993, ''Stationary Source Emissions: Sampling for the Automated Determination of Gas Concentrations,'' are impractical alternatives to EPA Method 3A for the purposes of this rulemaking because they lack in detail and quality assurance/quality control requirements. Specifically, these two standards do not include the following: (1) Sensitivity of the method; (2) acceptable levels of analyzer calibration error; (3) acceptable levels of sampling system bias; (4) zero drift and calibration drift limits, time span, and required testing frequency; (5) a method to test the interference response of the analyzer; (6) procedures to determine the minimum sampling time per run and minimum measurement time; and (7) specifications for data recorders, in terms of resolution (all types) and recording intervals (digital and analog recorders, only).

Two VCS, EN 12619:1999 ''Stationary Source Emissions-Determination of the Mass Concentration of Total Gaseous Organic Carbon at Low Concentrations in Flue Gases—Continuous Flame Ionization Detector Method'' and ISO 14965:2000(E) ''Air Quality-Determination of Total Nonmethane Organic Compounds-Cryogenic Preconcentration and Direct Flame Ionization Method,'' are impractical alternatives to EPA Method 25A for the purposes of this rulemaking because the standards do not apply to solvent process vapors in concentrations greater than 40 ppm carbon for EN 12619 and 10 ppm carbon for ISO 14965. Methods whose upper limits are this low are too limited to be useful in measuring source emissions, which are expected to be much higher.

Four VCS are impractical alternatives to EPA test methods for the purposes of this rulemaking because they are too general, too broad, or not sufficiently detailed to assure compliance with EPA regulatory requirements: ASTM D3796–90 (Reapproved 1996), ''Standard Practice for Calibration of Type S Pitot Tubes,'' for EPA Method 2; ASME C00031 or PTC 19–10–1981—Part 10, ''Flue and Exhaust Gas Analyses,'' for EPA Method 3; CAN/CSA Z223.2–M86(1986), ''Method for the Continuous Measurement of Oxygen, Carbon Dioxide, Carbon Monoxide, Sulphur Dioxide, and Oxides of Nitrogen in Enclosed Combustion Flue Gas Streams,'' for EPA Method 3A; and ASTM E337–84 (Reapproved 1996), ''Standard Test Method for Measuring Humidity with a Psychrometer (the Measurement of Wet- and Dry-Bulb Temperatures),'' for EPA Method 4.

Three of the 14 VCS identified in this search were not available at the time the review was conducted for the purposes of this rulemaking because they are under development by a voluntary consensus body: ASME/BSR MFC 13M, ''Flow Measurement by Velocity Traverse,'' for EPA Method 2 (and possibly 1); ASME/BSR MFC 12M, ''Flow in Closed Conduits Using Multiport Averaging Pitot Primary Flowmeters,'' for EPA Method 2; and ISO/DIS 12039, ''Stationary Source Emissions—Determination of Carbon Monoxide, Carbon Dioxide, and Oxygen—Automated Methods,'' for EPA Method 3A.

Sections 63.5993, 63.5994, 63.5997, and 63.6000 to subpart XXXX list the EPA testing methods in the final rule. Under 40 CFR 63.8 of subpart A of the General Provisions, a source may apply to obtain permission to use alternative monitoring in place of any of the EPA testing methods.

J. 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. 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 on July 9, 2002.

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedure, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements, Rubber tire manufacturing.

Dated: May 15, 2002.

Christine Todd Whitman,

Administrator.

For the reasons stated in the preamble, title 40, chapter I, part 63 of the Code of the 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. Part 63 is amended by adding subpart XXXX to read as follows:

Subpart XXXX—National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing

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Subpart XXXX—National Emissions Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing

What This Subpart Covers

§ 63.5980 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for rubber tire manufacturing. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

§ 63.5981 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a rubber tire manufacturing facility that is located at, or is a part of, a major source of hazardous air pollutant (HAP) emissions.

(1) Rubber tire manufacturing includes the production of rubber tires and/or the production of components integral to rubber tires, the production of tire cord, and the application of puncture sealant. Components of rubber tires include, but are not limited to, rubber compounds, sidewalls, tread, tire beads, tire cord and liners. Other components often associated with rubber tires but not integral to the tire, such as wheels, inner tubes, tire bladders, and valve stems, are not components of rubber tires or tire cord and are not subject to this subpart.

(2) A major source of HAP emissions is any stationary source or group of stationary sources within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or

any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year.

(b) You are not subject to this subpart if the affected source at your rubber tire manufacturing facility meets either of the conditions described in paragraph (b)(1) or (2) of this section.

(1) You own or operate a tire cord production affected source, but the primary product produced at the affected source is determined to be subject to another subpart under this part 63 as of the effective date of that subpart (publication date of the final rule) or startup of the source, whichever is later. In this case, you must determine which subpart applies to your source and you must be in compliance with the applicable subpart by the compliance date of that subpart. The primary product is the product that is produced for the greatest operating time over a 5-year period, based on expected utilization for the 5 years following the compliance date or following initial startup of the source, whichever is later.

(2) Your rubber tire manufacturing affected source is a research and development facility 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.

§ 63.5982 What parts of my facility does this subpart cover?

(a) This subpart applies to each existing, new, or reconstructed affected source at facilities engaged in the manufacture of rubber tires or their components.

(b) The affected sources are defined in paragraph (b)(1) of this section (tire production), paragraph (b)(2) of this section (tire cord production), paragraph (b)(3) of this section (puncture sealant application), and paragraph (b)(4) of this section (rubber processing).

(1) The tire production affected source is the collection of all processes that use or process cements and solvents as defined in § 63.6015, located at any rubber tire manufacturing facility. It includes, but is not limited to: Storage and mixing vessels and the transfer equipment containing cements and/or solvents; wastewater handling and treatment operations; tread and cement operations; tire painting operations; ink and finish operations; undertread cement operations; process equipment cleaning materials; bead cementing operations; tire building operations; green tire spray operations; extruding, to the extent cements and solvents are used; cement house operations; marking operations; calendar operations, to the extent solvents are used; tire striping operations; tire repair operations; slab dip operations; other tire building operations, to the extent that cements and solvents are used; and balance pad operations.

(2) The tire cord production affected source is the collection of all processes engaged in the production of tire cord. It includes, but is not limited to: dipping operations, drying ovens, heat-set ovens, bulk storage tanks, mixing facilities, general facility vents, air pollution control devices, and warehouse storage vents.

(3) The puncture sealant application affected source is the puncture sealant application booth operation used to apply puncture sealant to finished tires.

(4) The rubber processing affected source is the collection of all rubber mixing processes (e.g., banburys and associated drop mills) that either mix compounds or warm rubber compound before the compound is processed into components of rubber tires. The mixed rubber compound itself is also included in the rubber processing affected source. There are no emission limitations or other requirements for the rubber processing affected source.

(c) An affected source is a new affected source if construction of the affected source commenced after October 18, 2000, and it met the applicability criteria of § 63.5981 at the time construction commenced.

(d) An affected source is reconstructed if it meets the criteria as defined in § 63.2.

(e) An affected source is existing if it is not new or reconstructed.

§ 63.5983 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, except as provided in §§ 63.5982(b)(4) and 63.5981(b)(1), you must comply with the emission limitations for new and reconstructed sources in this subpart upon startup.

(b) If you have an existing affected source, you must comply with the emission limitations for existing sources no later than July 11, 2005.

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the affected source(s) must be in compliance with existing source emission limitations no later than 3 years after the date on which the area source became a major source.

(d) You must meet the notification requirements in § 63.6009 according to the schedule in § 63.6009 and in subpart A of this part. Some of the notifications must be submitted before the date you are required to comply with the emission limitations in this subpart.

Emission Limits for Tire Production Affected Sources

§ 63.5984 What emission limits must I meet for tire production affected sources?

You must meet each emission limit in either option 1 or option 2 of Table 1 to this subpart that applies to you.

§ 63.5985 What are my alternatives for meeting the emission limits for tire production affected sources?

You must use one of the compliance alternatives in paragraphs (a) through (c) of this section to meet either of the emission limits in § 63.5984.

(a) *Purchase alternative.* Use only cements and solvents that, as purchased, contain no more HAP than allowed by the emission limits in Table 1 to this subpart, option 1 (HAP constituent option).

(b) *Monthly average alternative, without using an add-on control device.* Use cements and solvents in such a way that the monthly average HAP emissions do not exceed the emission limits in Table 1 to this subpart, option 1 or option 2.

(c) *Monthly average alternative, using an add-on control device.* Use a control device to reduce HAP emissions so that the monthly average HAP emissions do not exceed the emission limits in Table 1 to this subpart, option 1 or option 2.

Emission Limits for Tire Cord Production Affected Sources

§ 63.5986 What emission limits must I meet for tire cord production affected sources?

You must meet each emission limit in either option 1 or option 2 of Table 2 to this subpart that applies to you.

§ 63.5987 What are my alternatives for meeting the emission limits for tire cord production affected sources?

You must use one of the compliance alternatives in paragraph (a) or (b) of this section to meet the emission limits in § 63.5986.

(a) *Monthly average alternative, without using an add-on control device.* Use coatings in such a way that the monthly average HAP emissions do not exceed the emission limits in Table 2 to this subpart.

(b) *Monthly average alternative, using an add-on control device.* Use a control device to reduce HAP emissions so that the monthly average HAP emissions do not exceed the emission limits in Table 2 to this subpart.

Emission Limitations for Puncture Sealant Application Affected Sources

§ 63.5988 What emission limitations must I meet for puncture sealant application affected sources?

(a) You must meet each emission limit in either option 1 or option 2 of Table 3 to this subpart that applies to you.

(b) If you use an add-on control device to meet the emission limits in Table 3 to this subpart, you must also meet each operating limit in Table 4 to this subpart that applies to you.

§ 63.5989 What are my alternatives for meeting the emission limitations for puncture sealant application affected sources?

You must use one of the compliance alternatives in paragraphs (a) through (d) of this section to meet the emission limitations in § 63.5988.

(a) *Overall control efficiency alternative.* Use an emissions capture system and control device and demonstrate that the application booth emissions meet the emission limits in Table 3 to this subpart, option 1a or 1b, and the control device and capture system meet the operating limits in Table 4 to this subpart.

(b) *Permanent total enclosure and control device efficiency alternative.* Use a permanent total enclosure that satisfies the Method 204 criteria in 40 CFR part 51, appendix M. Demonstrate that the control device meets the emission limits in Table 3 to this subpart, option 1a or 1b. You must also show that the control device and capture system meet the operating limits in Table 4 to this subpart.

(c) *Monthly average alternative, without using an add-on control device.* Use puncture sealants in such a way that the monthly average HAP emissions do not exceed the emission limits in Table 3 to this subpart, option 2.

(d) *Monthly average alternative, using an add-on control device.* Use a control device to reduce HAP emissions so that monthly average HAP emissions do not exceed the emission limits in Table 3 to this subpart, option 2.

General Compliance Requirements

§ 63.5990 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the applicable emission limitations specified in Tables 1 through 4 to this subpart at all times, except during periods of startup, shutdown, and malfunction if you are using a control device to comply with an emission limit.

(b) Except as provided in § 63.5982(b)(4), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in § 63.6(e)(1)(i).

(c) During the period between the compliance date specified for your source in § 63.5983 and the date upon which continuous compliance monitoring systems (CMS) have been installed and validated and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emission control equipment.

(d) For each affected source that complies with the emission limits in Tables 1 through 3 to this subpart using a control device, you must develop and implement a written startup, shutdown, and malfunction plan according to the provisions in § 63.6(e)(3).

(e) For each monitoring system required in this section, you must develop and submit for approval a site-specific monitoring plan that addresses the requirements in paragraphs (e)(1) through (3) of this section as follows:

(1) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit so that the measurement is representative of control of the exhaust emissions (*e.g.,* on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and

(3) Performance evaluation procedures and acceptance criteria (*e.g.,* calibrations).

(f) In your site-specific monitoring plan, you must also address the ongoing procedures specified in paragraphs (f)(1) through (3) of this section as follows:

(1) Ongoing operation and maintenance procedures in accordance with the general requirements of § 63.8(c)(1), (3), (4)(ii), (7), and (8), and this section;

(2) Ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d); and

(3) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 63.10(c), (e)(1), and (e)(2)(i).

General Testing and Initial Compliance Requirements

§ 63.5991 By what date must I conduct an initial compliance demonstration or performance test?

(a) If you have a new or reconstructed affected source, you must conduct each required initial compliance demonstration or performance test within 180 calendar days after the compliance date that is specified for your new or reconstructed affected source in § 63.5983(a). If you are required to conduct a performance test, you must do so according to the provisions of § 63.7(a)(2).

(b) If you have an existing affected source, you must conduct each required initial compliance demonstration or performance test no later than the compliance date that is specified for your existing affected source in § 63.5983(b). If you are required to conduct a performance test, you must do so according to the provisions of § 63.7(a)(2).

(c) If you commenced construction or reconstruction between October 18, 2000 and July 9, 2002, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than January 6, 2003, or within 180 calendar days after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(d) If you commenced construction or reconstruction between October 18, 2000 and July 9, 2002, and you chose to comply with the proposed emission limitation when demonstrating initial compliance, you must conduct a second compliance demonstration for the promulgated emission limitation no later than January 5, 2006, or after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

§ 63.5992 When must I conduct subsequent performance tests?

If you use a control system (add-on control device and capture system) to meet the emission limitations, you must also conduct a performance test at least once every 5 years following your initial compliance demonstration to verify control system performance and reestablish operating parameters or operating limits for control systems used to comply with the emissions limits.

§ 63.5993 What performance tests and other procedures must I use?

(a) If you use a control system to meet the emission limitations, you must conduct each performance test in Table 5 to this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements in § 63.7(e)(1) and under the specific conditions specified in Table 5 to this subpart.

(c) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 63.7(e)(1).

(d) You must conduct three separate test runs for each performance test required in this section, as specified in § 63.7(e)(1), unless otherwise specified in the test method. Each test run must last at least 1 hour.

(e) If you are complying with the emission limitations using a control system, you must also conduct performance tests according to the requirements in paragraphs (e)(1) through (3) of this section as they apply to you.

(1) *Determining capture efficiency of permanent or temporary total enclosure.* Determine the capture efficiency of a capture system by using one of the procedures in Table 5 to this subpart.

(2) *Determining capture efficiency of an alternative method.* As an alternative to constructing a permanent or temporary total enclosure, you may determine the capture efficiency using any capture efficiency protocol and test methods if the data satisfy the criteria of either the Data Quality Objective or the Lower Confidence Limit approach in appendix A to subpart KK of this part.

(3) *Determining efficiency of an add-on control device.* Use Table 5 to this subpart to select the test methods for determining the efficiency of an add-on control device.

Testing and Initial Compliance Requirements for Tire Production Affected Sources

§ 63.5994 How do I conduct tests and procedures for tire production affected sources?

(a) *Methods to determine the mass percent of HAP in cements and solvents.* To determine the HAP content in the cements and solvents used at your tire production affected source, use EPA Method 311 of appendix A of this part, an approved alternative method, or any other reasonable means for determining the HAP content of your cements and solvents. Other reasonable means include, but are not limited to: a material safety data sheet (MSDS), provided it contains appropriate information; a certified product data sheet (CPDS); or a manufacturer's hazardous air pollutant data sheet. You are not required to test the materials that you use, but the Administrator may require a test using EPA Method 311 (or an approved alternative method) to confirm the reported HAP content. If the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations.

(b) *Methods to demonstrate compliance with the HAP constituent emission limits in Table 1 to this subpart (option 1).* Use the method in paragraph (b)(1) of this section to demonstrate initial and continuous compliance with the applicable emission limits for tire production affected sources using the compliance alternative described in § 63.5985(a), purchase alternative. Use the equations in paragraphs (b)(2) and (3) of this section to demonstrate initial and continuous compliance with the emission limits for tire production affected sources using the monthly average compliance alternatives described in § 63.5985(b) and (c).

(1) Determine the mass percent of each HAP in each cement and solvent according to the procedures in paragraph (a) of this section.

(2) Use Equation 1 of this section to calculate the HAP emission rate for each monthly operating period when complying by using cements and solvents without using an add-on control device so that the monthly average HAP emissions do not exceed the HAP constituent emission limits in Table 1 to this subpart, option 1. Equation 1 follows:

$$E_{month} = \frac{\left(\sum_{i=1}^{n}(HAP_i)(TMASS_i)\right)(10^6)}{\sum_{i=1}^{n} TMASS_i} \qquad \text{(Eq. 1)}$$

Where:

E_{month}=mass of the specific HAP emitted per total mass cements and solvents from all cements and solvents used in tire production per month, grams per megagram.

HAP_i=mass percent, expressed as a decimal, of the specific HAP in cement and solvent i, as purchased, determined in accordance with paragraph (a) of this section.

$TMASS_i$=total mass of cement and solvent i used in the month, grams.

n=number of cements and solvents used in the month.

(3) Use Equation 2 of this section to calculate the HAP emission rate for each monthly period when complying by using a control device to reduce HAP emissions so that the monthly average HAP emissions do not exceed the HAP constituent emission limits in Table 1 to this subpart (option 1). Equation 2 follows:

$$E_{month} = \frac{\left\{\sum_{i=1}^{n}(HAP_i)(TMASS_i) + \sum_{j=1}^{m}(HAP_j)(TMASS_j)\left(1-\frac{EFF}{100}\right) + \sum_{k=1}^{p}(HAP_k)(TMASS_k)\right\}(10^6)}{\sum_{i=1}^{n} TMASS_i + \sum_{j=1}^{m} TMASS_j + \sum_{k=1}^{p} TMASS_k} \qquad \text{(Eq. 2)}$$

Where:

E_{month}=mass of the specific HAP emitted per total mass cements and solvents from all cements and solvents used in tire production per month, grams per megagram.

HAP_i=mass percent, expressed as a decimal, of the specific HAP in cement and solvent i, as purchased, determined in accordance with paragraph (a) of this section for cements and solvents used in the month in processes that are not routed to a control device.

$TMASS_i$=total mass of cement and solvent i used in the month in processes that are not routed to a control device, grams.

n=number of cements and solvents used in the month in processes that are not routed to a control device.

HAP_j=mass percent, expressed as a decimal, of the specific HAP in cement and solvent j, as purchased, determined in accordance with paragraph (a) of this section, for cements and solvents used in the month in

processes that are routed to a control device during operating days, which are defined as days when the control system is operating within the operating range established during the performance test and when monitoring data are collected.

$TMASS_j$=total mass of cement and solvent j used in the month in processes that are routed to a control device during all operating days, grams.

EFF=efficiency of the control system determined during the performance test (capture system efficiency multiplied by the control device efficiency), percent.

m=number of cements and solvents used in the month that are routed to a control device during all operating days.

HAP_k=mass percent, expressed as a decimal, of the specific HAP in cement and solvent k, as purchased, for cements and solvents used in the month in processes that are routed to a control device during non-control operating days, which are defined as days when either the control system is not operating within the operating range established during the performance test or when monitoring data are not collected.

$TMASS_k$=total mass of cement and solvent k used in the month in processes that are routed to a control device during all non-control operating days, grams.

p=number of cements and solvents used in the month that are routed to a control device during all non-control operating days.

(4) Each monthly calculation is a compliance demonstration for the purpose of this subpart.

(c) *Methods to demonstrate compliance with the production-based emission limits in Table 1 to this subpart, option 2.* Use the methods and equations in paragraphs (c)(1) through (6) of this section to demonstrate initial and continuous compliance with the production-based emission limits for tire production affected sources using the compliance alternatives described in § 63.5985(b) and (c).

(1) *Methods to determine the mass percent of each HAP in cements and solvents.* Determine the mass percent of all HAP in cements and solvents using the applicable methods specified in paragraph (a) of this section.

(2) *Quantity of rubber used.* Determine your quantity of rubber used (megagrams) by accounting for the total mass of mixed rubber compound that is delivered to the tire production operation.

(3) *Compliance without use of an add-on control device.* If you do not use an add-on control device to meet the emission limits, use Equation 3 of this section to calculate the monthly HAP emission rate in grams of HAP emitted per megagram of rubber used, using the quantity of rubber used per month (megagrams), as determined in paragraph (c)(2) of this section so that the monthly average HAP emission does not exceed the HAP emission limit in Table 1 to this subpart, option 2. Equation 3 follows:

$$E_{month} = \frac{\sum_{i=1}^{n}(HAP_i)(TMASS_i)}{RMASS} \quad \text{(Eq. 3.)}$$

Where:

E_{month}=mass of all HAP emitted per total mass of rubber used month, grams per megagram.

HAP_i=mass percent, expressed as a decimal, of all HAP in cement and solvent i, as purchased, determined in accordance with paragraph (a) of this section.

$TMASS_i$=total mass of cement and solvent i used in the month, grams.

n=number of cements and solvents used in the month.

RMASS=total mass of rubber used per month, megagrams.

(4) *Compliance with use of an add-on control device.* If you use a control device to meet the emission limits, use Equation 4 of this section to calculate the monthly HAP emission rate in grams of HAP emitted per megagram of rubber used, using the quantity of rubber used per month (megagrams), as determined in paragraph (c)(2) of this section so that the monthly average HAP emission does not exceed the HAP emission limit in Table 1 of this subpart, option 2. Equation 4 follows:

$$E_{month} = \frac{\sum_{i=1}^{n}(HAP_i)(TMASS_i) + \sum_{j=1}^{m}(HAP_j)(TMASS_j)\left(1 - \frac{EFF}{100}\right) + \sum_{k=1}^{p}(HAP_k)(TMASS_k)}{RMASS} \quad \text{(Eq. 4)}$$

Where:

E_{month}=mass of all HAP emitted per total mass rubber used per month, grams per megagram.

HAP_i=mass percent, expressed as a decimal, of all HAP in cement and solvent i, as purchased, determined in accordance with paragraph (a) of this section for cements and solvents used in the month in processes that are not routed to a control device.

$TMASS_i$=total mass of cement and solvent i used in the month in processes that are not routed to a control device, grams.

n=number of cements and solvents used in the month in processes that are not routed to a control device.

HAP_j=mass percent, expressed as a decimal, of all HAP in cement and solvent j, as purchased, determined in accordance with paragraph (a) of this section, for cements and solvents used in the month in processes that are routed to a control device during operating days, which are defined as days when the control system is operating within the operating range established during the performance test and when monitoring data are collected.

$TMASS_j$=total mass of cement and solvent j used in the month in processes that are routed to a control device during all operating days.

EFF=efficiency of the control system determined during the performance test (capture system efficiency multiplied by the control device efficiency), percent.

m=number of cements and solvents used in the month that are routed to a control device during all operating days.

HAP_k=mass percent, expressed as a decimal, of the specific HAP in cement and solvent k, as purchased, for cements and solvents used in the month in processes that are routed to a control device during non-control operating days, which are defined as days when either the control system is not operating within the operating range established during the performance test or when monitoring data are not collected.

$TMASS_k$=total mass of cement and solvent k used in the month in processes that are routed to a control device during all non-control operating days, grams.

p=number of cements and solvents used in the month that are routed to a control device during all non-control operating days.

RMASS=total mass of rubber used per month, megagrams.

(5) Each monthly calculation is a compliance demonstration for the purpose of this subpart.

(d) *Specific compliance demonstration requirements for tire production affected sources.* (1) Conduct any required compliance demonstration according to the requirements in § 63.5993.

(2) If you are demonstrating compliance with the HAP constituent option in Table 1 to this subpart, option 1, conduct the compliance demonstration using cements and solvents that are representative of cements and solvents typically used at your tire production affected source.

(3) Establish an operating range that corresponds to the control efficiency as described in Table 5 to this subpart.

(e) *How to take credit for HAP emissions reductions from add-on control devices.* If you want to take credit in Equations 2 and 4 of this

section for HAP emissions reduced using a control system, you must meet the requirements in paragraphs (e)(1) and (2) of this section.

(1) Monitor the established operating parameters as appropriate.

(i) If you use a thermal oxidizer, monitor the firebox secondary chamber temperature.

(ii) If you use a carbon adsorber, monitor the total regeneration stream mass or volumetric flow for each regeneration cycle, and the carbon bed temperature after each regeneration, and within 15 minutes of completing any cooling cycle.

(iii) If you use a control device other than a thermal oxidizer or a regenerative carbon adsorber, install and operate a continuous parameter monitoring system according to your site-specific performance test plan submitted according to § 63.7(c)(2)(i).

(iv) If you use a permanent total enclosure, monitor the face velocity across the natural draft openings (NDO) in the enclosure. Also, if you use an enclosure, monitor to ensure that the sizes of the NDO have not changed, that there are no new NDO, and that a HAP emission source has not been moved closer to an NDO since the last compliance demonstration was conducted.

(v) If you use other capture systems, monitor the parameters identified in your monitoring plan.

(2) Maintain the operating parameters within the operating range established during the compliance demonstration.

(f) *How to take credit for HAP emissions reductions when streams are combined.* When performing material balances to demonstrate compliance, if the storage of materials, exhaust, or the wastewater from more than one affected source are combined at the point where control systems are applied, any credit for emissions reductions needs to be prorated among the affected sources based on the ratio of their contribution to the uncontrolled emissions.

§ 63.5995 What are my monitoring installation, operation, and maintenance requirements?

(a) For each operating parameter that you are required by § 63.5994(e)(1) to monitor, you must install, operate, and maintain a continuous parameter monitoring system (CPMS) according to the requirements in § 63.5990(e) and (f) and in paragraphs (a)(1) through (6) of this section.

(1) You must operate your CPMS at all times that the process is operating.

(2) You must collect data from at least four equally spaced periods each hour.

(3) For at least 75 percent of the hours in an operating day, you must have valid data (as defined in your site-specific monitoring plan) for at least four equally spaced periods each hour.

(4) For each hour that you have valid data from at least four equally spaced periods, you must calculate the hourly average value using all valid data.

(5) You must calculate the daily average using all of the hourly averages calculated according to paragraph (a)(3) of this section for the 24-hour period.

(6) You must record the results for each inspection, calibration, and validation check as specified in your site-specific monitoring plan.

(b) For each temperature monitoring device, you must meet the requirements in paragraphs (a) and (b)(1) through (8) of this section.

(1) Locate the temperature sensor in a position that provides a representative temperature.

(2) For a non-cryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.2 degrees centigrade or 0.75 percent of the temperature value, whichever is larger.

(3) For a cryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.2 degrees centigrade or 2 percent of the temperature value, whichever is larger.

(4) Shield the temperature sensor system from electromagnetic interference and chemical contaminants.

(5) If a chart recorder is used, it must have a sensitivity in the minor division of at least 20 degrees Fahrenheit.

(6) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual. Following the electronic calibration, you must conduct a temperature sensor validation check in which a second or redundant temperature sensor placed near the process temperature sensor must yield a reading within 16.7 degrees centigrade of the process temperature sensor's reading.

(7) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

(8) At least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.

(c) For each integrating regeneration stream flow monitoring device associated with a carbon adsorber, you must meet the requirements in paragraphs (a) and (c)(1) and (2) of this section.

(1) Use a device that has an accuracy of ±10 percent or better.

(2) Use a device that is capable of recording the total regeneration stream mass or volumetric flow for each regeneration cycle.

(d) For any other control device, or for other capture systems, ensure that the CPMS is operated according to a monitoring plan submitted to the Administrator with the compliance status report required by § 63.9(h). The monitoring plan must meet the requirements in paragraphs (a) and (d)(1) through (3) of this section. Conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.

(1) Identify the operating parameter to be monitored to ensure that the control or capture efficiency measured during the initial compliance test is maintained.

(2) Discuss why this parameter is appropriate for demonstrating ongoing compliance.

(3) Identify the specific monitoring procedures.

(e) For each pressure differential monitoring device, you must meet the requirements in paragraphs (a) and (e)(1) and (2) of this section.

(1) Conduct a quarterly EPA Method 2 procedure (found in 40 CFR part 60, appendix A) on the applicable NDOs and use the results to calibrate the pressure monitor if the difference in results are greater than 10 percent.

(2) Inspect the NDO monthly to ensure that their size has not changed, that there are no new NDO, and that no HAP sources have been moved closer to the NDO than when the last performance test was conducted.

§ 63.5996 How do I demonstrate initial compliance with the emission limits for tire production affected sources?

(a) You must demonstrate initial compliance with each emission limit that applies to you according to Table 6 to this subpart.

(b) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.6009(e).

Testing and Initial Compliance Requirements for Tire Cord Production Affected Sources

§ 63.5997 How do I conduct tests and procedures for tire cord production affected sources?

(a) *Methods to determine the mass percent of each HAP in coatings.* (1) To determine the HAP content in the

coating used at your tire cord production affected source, use EPA Method 311 of appendix A of this part, an approved alternative method, or any other reasonable means for determining the HAP content of your coatings. Other reasonable means include, but are not limited to: an MSDS, provided it contains appropriate information; a CPDS; or a manufacturer's HAP data sheet. You are not required to test the materials that you use, but the Administrator may require a test using EPA Method 311 (or an approved alternative method) to confirm the reported HAP content. If the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations.

(2) Unless you demonstrate otherwise, the HAP content analysis must be based on coatings prior to any cross-linking reactions, *i.e.*, curing. However, you may account for differences in HAP emissions resulting from chemical reactions based on the conversion rates of the individual coating formulations, chemistry demonstrations, or other demonstrations that are verifiable to the approving agency. Use the revised value in your compliance demonstration in the relevant equations in paragraph (b) of this section.

(b) *Methods to determine compliance with the emission limits in Table 2 to this subpart, option 1.* Use the equations in this paragraph (b) to demonstrate initial and continuous compliance with the emission limits for tire cord production sources using the compliance alternatives described in § 63.5987(a) and (b).

(1) *Determine mass percent of HAP.* Determine the mass percent of all HAP in each coating according to the procedures in paragraph (a) of this section.

(2) *Compliance without use of an add-on control device.* If you do not use an add-on control device to meet the emission limits, use Equation 1 of this section to calculate the monthly HAP emission rate in grams of HAP emitted per megagram of fabric processed at the tire cord production source to show that the monthly average HAP emissions do not exceed the emission limits in Table 2 to this subpart, option 1. Equation 1 follows:

$$E_{month} = \frac{\sum_{i=1}^{n}(HAP_i)(TCOAT_i)}{TFAB} \quad \text{(Eq. 1)}$$

Where:

E_{month}=mass of all HAP emitted per total mass of fabric processed in the month, grams per megagram.

HAP_i=mass percent, expressed as a decimal, of all HAP in the coating i, prior to curing and including any application station dilution, determined in accordance with paragraph (a) of this section.

$TCOAT_i$=total mass of coating i made and used for application to fabric at the facility in the month, grams.

n=number of coatings used in the month.

TFAB=total mass of fabric processed in the month, megagrams.

(3) *Compliance with use of an add-on control device.* If you use a control device to meet the emission limits, use Equation 2 of this section to calculate the monthly HAP emission rate in grams of HAP emitted per megagram of fabric processed to show that the monthly average HAP emissions do not exceed the HAP emission limit in Table 2 of this subpart, option 1. Equation 2 follows:

$$E_{month} = \frac{\sum_{i=1}^{n}(HAP_i)(TCOAT_i) + \sum_{j=1}^{m}(HAP_j)(TCOAT_j)\left(1-\frac{EFF}{100}\right) + \sum_{k=1}^{p}(HAP_k)(TCOAT_k)}{TFAB} \quad \text{(Eq. 2)}$$

Where:

E_{month}=mass of all HAP emitted per total mass of fabric processed in the month, grams per megagram.

HAP_i=mass percent, expressed as a decimal, of all HAP in coating i, prior to curing and including any application stations dilution, determined in accordance with paragraph (a) of this section, for coatings used in the month in processes that are not routed to a control device.

$TCOAT_i$=total mass of coating i made and used for application to fabric at the facility in the month in processes that are not routed to a control device, grams.

n=number of coatings used in the month in processes that are not routed to a control device.

HAP_j=mass percent, expressed as a decimal, of all HAP in coating j, prior to curing and including any application station dilution, determined in accordance with paragraph (a) of this section, for coatings used in the month in processes that are routed to a control device during operating days, which are defined as days when the control system is operating within the operating range established during the performance test and when monitoring data are collected.

$TCOAT_j$=total mass of coating j made and used for application to fabric at the facility in the month in processes that are routed to a control device during all operating days, grams.

EFF=efficiency of the control system determined during the performance test (capture system efficiency multiplied by the control device efficiency), percent.

m=number of coatings used in the month that are routed to a control device during all operating days.

HAP_k=mass percent, expressed as a decimal, of all HAP in coating k, prior to curing and including any application station dilution, for coatings used in the month in processes that are routed to a control device during non-control operating days, which are defined as days when either the control system is not operating within the operating range established during the performance test or when monitoring data are not collected.

$TCOAT_k$=total mass of coating k made and used for application to fabric at the facility in the month in processes that are routed to a control device during all non-control operating days, grams.

p=number of coatings used in the month that are routed to a control device during all non-control operating days.

TFAB=total mass of fabric processed in the month, megagrams.

(4) Each monthly calculation is a compliance demonstration for the purpose of this subpart.

(c) *Methods to determine compliance with the emission limits in Table 2 of this subpart, option 2.* Use the equations in this paragraph (c) to demonstrate initial and continuous compliance with the emission limits for tire cord production sources using the compliance alternatives described in § 63.5987(a) and (b).

(1) Determine the mass percent of each HAP in each coating according to the procedures in paragraph (a) of this section.

(2) Use Equation 3 of this section to calculate the monthly average HAP emission rate when complying by using coatings without using an add-on control device to show that the monthly average HAP emissions do not exceed the emission limits in Table 2 to this subpart, option 2. Equation 3 follows:

$$E_{month} = \frac{\left(\sum_{i=1}^{n}(HAP_i)(TCOAT_i)\right)(10^6)}{\sum_{i=1}^{n} TCOAT_i} \qquad \text{(Eq. 3)}$$

Where:

E_{month}=mass of the specific HAP emitted per total mass of coatings from all coatings made and used in tire cord fabric production per month, grams per megagram.

HAP_i=mass percent, expressed as a decimal, of the specific HAP in the coating i, prior to curing and including any application station dilution, determined in accordance with paragraph (a) of this section.

$TCOAT_i$=total mass of coating i made and used for application to fabric at the facility in the month, grams.

n=number of coatings used in the month.

(3) Use Equation 4 of this section to calculate the monthly average HAP emission rate when complying by using an add-on control device to show that the monthly average HAP emissions do not exceed the emission limits in Table 2 to this subpart, option 2. Equation 4 follows:

$$E_{month} = \frac{\left\{\sum_{i=1}^{n}(HAP_i)(TCOAT_i) + \sum_{j=1}^{m}(HAP_j)(TCOAT_j)\left(1-\frac{EFF}{100}\right) + \sum_{k=1}^{p}(HAP_k)(TMASS_k)\right\}(10^6)}{\sum_{i=1}^{n} TCOAT_i + \sum_{j=1}^{m} TCOAT_j + \sum_{k=1}^{p} TCOAT_k} \qquad \text{(Eq. 4)}$$

Where:

E_{month}=mass of the specific HAP emitted per total mass of coatings from all coatings made and used in tire cord fabric production per month, grams per megagram.

HAP_i=mass percent, expressed as a decimal, of the specific HAP in coating i, prior to curing and including any application station dilution, determined in accordance with paragraph (a) of this section, for coatings used in the month in processes that are not routed to a control device.

$TCOAT_i$=total mass of coating i made and used for application to fabric at the facility in the month in processes that are not routed to a control device, grams.

n=number of coatings used in the month in processes that are not routed to a control device.

HAP_j=mass percent, expressed as a decimal, of the specific HAP in coating j, prior to curing and including any application station dilution, determined in accordance with paragraph (a) of this section, for coatings used in the month in processes that are routed to a control device during operating days, which are defined as days when the control system is operating within the operating range established during the performance test and when monitoring data are collected.

$TCOAT_j$=total mass of coating i made and used for application to fabric at the facility in the month in processes that are routed to a control device during all operating days, grams.

EFF=efficiency of the control system determined during the performance test (capture system efficiency multiplied by the control device efficiency), percent.

m=number of coatings used in the month that are routed to a control device during all operating days.

HAP_k=mass percent, expressed as a decimal, of the specific HAP in coating k, prior to curing and including any application station dilution, for coatings used in the month in processes that are routed to a control device during non-control operating days, which are defined as days when either the control system is not operating within the operating range established during the performance test or when monitoring data are not collected.

$TCOAT_k$=total mass of coating i made and used for application to fabric at the facility in the month in processes that are routed to a control device during all non-control operating days, grams.

p = number of coatings used in the month that are routed to a control device during all non-control operating days.

(4) Each monthly calculation is a compliance demonstration for the purpose of this subpart.

(d) *Specific compliance demonstration requirements for tire cord production affected sources.* (1) Conduct any required compliance demonstrations according to the requirements in § 63.5993.

(2) Conduct the compliance demonstration using coatings with average mass percent HAP content that are representative of the coatings typically used at your tire cord production affected source.

(3) Establish an operating range that corresponds to the control efficiency as described in Table 5 to this subpart.

(e) *How to take credit for HAP emissions reductions from add-on control devices.* If you want to take credit in Equations 2 and 4 of this section for HAP emissions reduced using a control system, you must meet the requirements in paragraphs (e)(1) and (2) of this section.

(1) Monitor the established operating parameters as appropriate.

(i) If you use a thermal oxidizer, continuously monitor the firebox secondary chamber temperature.

(ii) If you use a carbon adsorber, monitor the total regeneration stream mass or volumetric flow for each regeneration cycle and the carbon bed temperature after each regeneration and within 15 minutes of completing any cooling cycle.

(iii) If you use a control device other than a thermal oxidizer or a regenerative carbon adsorber, install and operate a continuous parameter monitoring system according to your site-specific performance test plan submitted according to § 63.7(c)(2)(i).

(iv) If you use a permanent total enclosure, monitor the face velocity across the NDO in the enclosure. Also, if you use an enclosure, monitor to ensure that the sizes of the NDO have not changed, that there are no new NDO, and that a HAP emission source has not been moved closer to an NDO since the last performance test was conducted.

(v) If you use other capture systems, monitor the parameters identified in your monitoring plan.

(2) Maintain the operating parameter within the operating range established during the compliance demonstration.

(f) *How to take credit for HAP emissions reductions when streams are combined.* When performing material balances to demonstrate compliance, if the storage of materials, exhaust, or the wastewater from more than one affected source are combined at the point where control systems are applied, any credit for emissions reductions needs to be prorated among the affected sources based on the ratio of their contribution to the uncontrolled emissions.

§ 63.5998 What are my monitoring installation, operation, and maintenance requirements?

For each operating parameter that you are required by § 63.5997(e)(1) to monitor, you must install, operate, and maintain a continuous parameter monitoring system according to the provisions in § 63.5995(a) through (e).

§ 63.5999 How do I demonstrate initial compliance with the emission limits for tire cord production affected sources?

(a) You must demonstrate initial compliance with each emission limit that applies to you according to Table 7 to this subpart.

(b) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.6009(e).

Testing and Initial Compliance Requirements for Puncture Sealant Application Affected Sources

§ 63.6000 How do I conduct tests and procedures for puncture sealant application affected sources?

(a) *Methods to determine compliance with the puncture sealant application emission limitations in Table 3 to this subpart.* Use the methods and equations in paragraph (b) of this section to demonstrate initial and continuous compliance with the overall control efficiency compliance alternatives described in § 63.5989(a) and (b). Use the methods and equations in paragraphs (c) through (g) of this section to demonstrate initial and continuous compliance with the HAP constituent compliance alternative described in § 63.5989(c) and (d).

(b) *Methods to determine compliance with the emission limits in Table 3 to this subpart, option 1.* Follow the test procedures described in § 63.5993 to determine the overall control efficiency of your system.

(1) You must also meet the requirements in paragraphs (b)(1)(i) and (ii) of this section.

(i) Conduct the performance test using a puncture sealant with an average mass percent HAP content that is representative of the puncture sealants typically used at your puncture sealant application affected source.

(ii) Establish all applicable operating limit ranges that correspond to the control system efficiency as described in Table 5 to this subpart.

(2) Use Equation 1 of this section to calculate the overall efficiency of the control system. If you have a permanent total enclosure that satisfies EPA Method 204 (found in 40 CFR part 51, appendix M) criteria, assume 100 percent capture efficiency for variable F. Equation 1 follows:

$$R = \frac{(F)(E)}{100} \qquad \text{(Eq. 1)}$$

Where:

R=overall control system efficiency, percent.

F=capture efficiency of the capture system on add-on control device, percent, determined during the performance test.

E=control efficiency of add-on control device k, percent, determined during the performance test.

(3) Monitor the established operating limits as appropriate.

(i) If you use a thermal oxidizer, monitor the firebox secondary chamber temperature.

(ii) If you use a carbon adsorber, monitor the total regeneration stream mass or volumetric flow for each regeneration cycle, and the carbon bed temperature after each regeneration, and within 15 minutes of completing any cooling cycle.

(iii) For each control device used other than a thermal oxidizer or a regenerative carbon adsorber, install and operate a continuous parameter monitoring system according to your site-specific performance test plan submitted according to § 63.7(c)(2)(i).

(iv) If you use a permanent total enclosure, monitor the face velocity across the NDO in the enclosure. Also, if you use an enclosure, monitor to ensure that the sizes of the NDO have not changed, that there are no new NDO, and that a HAP emission source has not been moved closer to an NDO since the last performance test was conducted.

(v) If you use other capture systems, monitor the parameters identified in your monitoring plan.

(vi) Maintain the operating parameter within the operating range established during the performance test.

(c) *Methods to determine the mass percent of each HAP in puncture sealants.* To determine the HAP content in the puncture sealant used at your puncture sealant application affected source, use EPA Method 311 of appendix A of 40 CFR part 63, an approved alternative method, or any other reasonable means for determining the HAP content of your puncture sealants. Other reasonable means include, but are not limited to: an MSDS, provided it contains appropriate information; a CPDS; or a manufacturer's hazardous air pollutant data sheet. You are not required to test the materials that you use, but the Administrator may require a test using EPA Method 311 (or an approved alternative method) to confirm the reported HAP content. If the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations.

(d) *Methods to determine compliance with the emission limits in Table 3 to this subpart, option 2.* Use the equations in this paragraph (d) to demonstrate initial and continuous compliance with the HAP constituent emission limits for puncture sealant application affected sources using the compliance alternatives described in § 63.5989(c) and (d).

(1) Use Equation 2 of this section to calculate the monthly average HAP emission rate when complying by using puncture sealants without using an add-on control device to show that the monthly average HAP emissions do not exceed the emission limits in Table 3 to this subpart, option 2. Equation 2 follows:

$$E_{month} = \frac{\left(\sum_{i=1}^{n}(HAP_i)(TPSEAL_i)\right)(10^6)}{\sum_{i=1}^{n} TPSEAL_i} \qquad \text{(Eq. 2)}$$

Where:

E_{month}=mass of the specific HAP emitted per total mass of puncture sealants from all puncture sealants used at the puncture

sealant affected source per month, grams per megagram.

HAP_i=mass percent, expressed as a decimal, of the specific HAP in puncture sealant i, including any application booth dilution, determined in accordance with paragraph (c) of this section.

$TPSEAL_i$=total mass of puncture sealant i used in the month, grams.

n=number of puncture sealants used in the month.

(2) Use Equation 3 of this section to calculate the monthly average HAP emission rate when complying by using puncture sealants by using an add-on control device to show that the monthly average HAP emissions do not exceed the emission limits in Table 3 to this subpart, option 2. Equation 3 follows:

$$E_{month} = \frac{\left\{\sum_{i=1}^{n}(HAP_i)(TPSEAL_i) + \sum_{j=1}^{m}(HAP_j)(TPSEAL_j)\left(1-\frac{EFF}{100}\right) + \sum_{k=1}^{p}(HAP_k)(TPSEAL_k)\right\}(10^6)}{\sum_{i=1}^{n}TPSEAL_i + \sum_{j=1}^{m}TPSEAL_j + \sum_{k=1}^{p}TPSEAL_k} \quad \text{(Eq. 3)}$$

Where:

E_{month}=mass of the specific HAP emitted per total mass of puncture sealants used at the puncture sealant affected source per month, grams per megagram.

HAP_i=mass percent, expressed as a decimal, of the specific HAP in puncture sealant i, including any application booth dilution, determined in accordance with paragraph (c) of this section for puncture sealants used in the month in processes that are not routed to a control device.

$TPSEAL_i$=total mass of puncture sealant i used in the month in processes that are not routed to a control device, gram.

n=number of puncture sealants used in the month in processes that are not routed to a control device.

HAP_j=mass percent, expressed as a decimal, of the specific HAP, in puncture sealant j, including any application booth dilution, determined in accordance with paragraph (c) of this section, for puncture sealants used in the month in processes that are routed to a control device during operating days, which are defined as days when the control system is operating within the operating range established during the performance test and when monitoring data are collected.

$TPSEAL_j$=total mass of puncture sealant j used in the month in processes that are routed to a control device during all operating days, grams.

EFF=efficiency of the control system determined during the performance test (capture system efficiency multiplied by the control device efficiency), percent.

m=number of puncture sealants used in the month that are routed to a control device during all operating days.

HAP_k=mass percent, expressed as a decimal, of the specific HAP, in puncture sealant k, including any application booth dilution, for puncture sealants used in the month in processes that are routed to a control device during non-control operating days, which are defined as days when either the control system is not operating within the operating range established during the performance test or when monitoring data are not collected.

$TPSEAL_k$=total mass of total mass of puncture sealant k used in the month in processes that are routed to a control device during all non-control operating days, grams.

p=number of puncture sealants used in the month that are routed to a control device during all non-control operating days.

(3) Each monthly calculation is a compliance demonstration for the purpose of this subpart.

(e) *Specific compliance demonstration requirements for puncture sealant application affected sources.* (1) Conduct any required compliance demonstrations according to the requirements in § 63.5993.

(2) Conduct the compliance demonstration using a puncture sealant with average mass percent HAP content that is representative of the puncture sealants typically used at your puncture sealant application affected source.

(3) Establish an operating range that corresponds to the appropriate control efficiency described in Table 5 to this subpart.

(f) *How to take credit for HAP emissions reductions from add-on control devices.* If you want to take credit in Equation 3 of this section for HAP emissions reduced using a control system, you must monitor the established operating parameters as appropriate and meet the requirements in paragraph (b)(3) of this section.

(g) *How to take credit for HAP emissions reductions when streams are combined.* When performing material balances to demonstrate compliance, if the storage of materials, exhaust, or the wastewater from more than one affected source are combined at the point where control systems are applied, any credit for emissions reductions needs to be prorated among the affected sources based on the ratio of their contribution to the uncontrolled emissions.

§ 63.6001 What are my monitoring installation, operation, and maintenance requirements?

For each operating limit that you are required by § 63.6000(b)(3) to monitor or each operating parameter that you are required by § 63.6000(f) to monitor, you must install, operate, and maintain a continuous parameter monitoring system according to the provisions in § 63.5995(a) through (e).

§ 63.6002 How do I demonstrate initial compliance with the emission limits for puncture sealant application affected sources?

(a) You must demonstrate initial compliance with each emission limit that applies to you according to Table 8 to this subpart.

(b) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.6009(e).

Continuous Compliance Requirements for Tire Production Affected Sources

§ 63.6003 How do I monitor and collect data to demonstrate continuous compliance with the emission limits for tire production affected sources?

(a) You must monitor and collect data as specified in Table 9 to this subpart.

(b) Except for periods of monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) while the affected source is operating. This includes periods of startup, shutdown, and malfunction when the affected source is operating.

(c) In data average calculations and calculations used to report emission or operating levels, you may not use data recorded during periods of monitoring malfunctions or associated repairs, or recorded during required quality assurance or control activities. Such data may not be used in fulfilling any applicable minimum data availability requirement. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

§ 63.6004 How do I demonstrate continuous compliance with the emission limits for tire production affected sources?

(a) You must demonstrate continuous compliance with each applicable limit in Table 1 to this subpart using the methods specified in Table 10 to this subpart.

(b) You must report each instance in which you did not meet an emission limit in Table 1 to this subpart. You must also report each instance in which you did not meet the applicable requirements in Table 10 to this subpart. These instances are deviations from the emission limits in this subpart. The deviations must be reported in accordance with the requirements in § 63.6010(e).

(c) You also must meet the following requirements if you are complying with the purchase alternative for tire production sources described in § 63.5985(a):

(1) If, after you submit the Notification of Compliance Status, you use a cement or solvent for which you have not previously verified percent HAP mass using the methods in § 63.5994(a), you must verify that each cement and solvent used in the affected source meets the emission limit, using any of the methods in § 63.5994(a).

(2) You must update the list of all the cements and solvents used at the affected source.

(3) With the compliance report for the reporting period during which you used the new cement or solvent, you must submit the updated list of all cements and solvents and a statement certifying that, as purchased, each cement and solvent used at the affected source during the reporting period met the emission limits in Table 1 to this subpart.

Continuous Compliance Requirements for Tire Cord Production Affected Sources

§ 63.6005 How do I monitor and collect data to demonstrate continuous compliance with the emission limits for tire cord production affected sources?

(a) You must monitor and collect data to demonstrate continuous compliance with the emission limits for tire cord production affected sources as specified in Table 11 to this subpart.

(b) You must monitor and collect data according to the requirements in § 63.6003(b) and (c).

§ 63.6006 How do I demonstrate continuous compliance with the emission limits for tire cord production affected sources?

(a) You must demonstrate continuous compliance with each applicable emission limit in Table 2 to this subpart using the methods specified in Table 12 to this subpart.

(b) You must report each instance in which you did not meet an applicable emission limit in Table 2 to this subpart. You must also report each instance in which you did not meet the applicable requirements in Table 12 to this subpart. These instances are deviations from the emission limits in this subpart. The deviations must be reported in accordance with the requirements in § 63.6010(e).

Continuous Compliance Requirements for Puncture Sealant Application Affected Sources

§ 63.6007 How do I monitor and collect data to demonstrate continuous compliance with the emission limitations for puncture sealant application affected sources?

(a) You must monitor and collect data to demonstrate continuous compliance with the emission limitations for puncture sealant application affected sources as specified in Table 13 to this subpart.

(b) You must monitor and collect data according to the requirements in § 63.6003(b) and (c).

§ 63.6008 How do I demonstrate continuous compliance with the emission limitations for puncture sealant application affected sources?

(a) You must demonstrate continuous compliance with each applicable emission limitation in Tables 3 and 4 to this subpart using the methods specified in Table 14 to this subpart.

(b) You must report each instance in which you did not meet an applicable emission limit in Table 3 to this subpart. You must also report each instance in which you did not meet the applicable requirements in Table 14 to this subpart. These instances are deviations from the emission limits in this subpart. The deviations must be reported in accordance with the requirements in § 63.6010(e).

Notifications, Reports, and Records

§ 63.6009 What notifications must I submit and when?

(a) You must submit all of the notifications in §§ 63.7 (b) and (c), 63.8(f) (4) and (6), and 63.9 (b) through (e) and (h) that apply to you by the dates specified.

(b) As specified in § 63.9(b)(2), if you startup your affected source before July 9, 2002, you must submit an Initial Notification not later than November 6, 2002.

(c) As specified in § 63.9(b)(3), if you startup your new or reconstructed affected source on or after July 9, 2002, you must submit an Initial Notification not later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in § 63.7(b)(1).

(e) If you are required to conduct a performance test, design evaluation, or other initial compliance demonstration as specified in Tables 5 through 8 to this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii). The Notification must contain the information listed in Table 15 to this subpart for compliance reports. The Notification of Compliance Status must be submitted according to the following schedules, as appropriate:

(1) For each initial compliance demonstration required in Tables 6 through 8 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Tables 6 through 8 to this subpart that includes a performance test conducted according to the requirements in Table 5 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to § 63.10(d)(2).

(f) For each tire production affected source, the Notification of Compliance Status must also identify the emission limit option in § 63.5984 and the compliance alternative in § 63.5985 that you have chosen to meet.

(g) For each tire production affected source complying with the purchase compliance alternative in § 63.5985(a), the Notification of Compliance Status must also include the information listed in paragraphs (g)(1) and (2) of this section.

(1) A list of each cement and solvent, as purchased, that is used at the affected source and the manufacturer or supplier of each.

(2) The individual HAP content (percent by mass) of each cement and solvent that is used.

(h) For each tire production or tire cord production affected source using a control device, the Notification of Compliance Status must also include the information in paragraphs (h) (1) and (2) of this section for each operating

parameter in §§ 63.5994(e)(1) and 63.5997(e)(1) that applies to you.

(1) The operating parameter value averaged over the full period of the performance test (e.g., average secondary chamber firebox temperature over the period of the performance test was 1,500 degrees Fahrenheit).

(2) The operating parameter range within which HAP emissions are reduced to the level corresponding to meeting the applicable emission limits in Tables 1 and 2 to this subpart.

(i) For each puncture sealant application affected source using a control device, the Notification of Compliance Status must include the information in paragraphs (i)(1) and (2) of this section for each operating limit in § 63.6000(b)(3) and each operating parameter in § 63.6000(f).

(1) The operating limit or operating parameter value averaged over the full period of the performance test.

(2) The operating limit or operating parameter range within which HAP emissions are reduced to the levels corresponding to meeting the applicable emission limitations in Table 3 to this subpart.

(j) For each tire cord production affected source required to assess the predominant use for coating web substrates as required by § 63.5981(b), you must submit a notice of the results of the reassessment within 30 days of completing the reassessment. The notice shall specify whether this subpart XXXX is still the applicable subpart and, if it is not, which part 63 subpart is applicable.

§ 63.6010 What reports must I submit and when?

(a) You must submit each applicable report in Table 15 to this subpart.

(b) Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report by the date in Table 15 to this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.5983 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in § 63.5983.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in § 63.5983.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting subparts pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain information specified in paragraphs (c)(1) through (10) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in § 63.10(d)(5)(i).

(5) If there are no deviations from any emission limitations (emission limit or operating limit) that applies to you, a statement that there were no deviations from the emission limitations during the reporting period.

(6) If there were no periods during which the operating parameter monitoring systems were out-of-control as specified in § 63.8(c)(7), a statement that there were no periods during which the operating parameter monitoring systems or CPMS were out-of-control during the reporting period.

(7) For each tire production affected source, the emission limit option in § 63.5984 and the compliance alternative in § 63.5985 that you have chosen to meet.

(8) For each tire production affected source complying with the purchase compliance alternative in § 63.5985(a), and for each annual reporting period during which you use a cement and solvent that, as purchased, was not included in the list submitted with the Notification of Compliance Status in § 63.6009(g), an updated list of all cements and solvents used, as purchased, at the affected source. You must also include a statement certifying that each cement and solvent, as purchased, that was used at the affected source during the reporting period met the HAP constituent limits (option 1) in Table 1 to this subpart.

(9) For each tire cord production affected source, the emission limit option in § 63.5986 and the compliance alternative in § 63.5987 that you have chosen to meet.

(10) For each puncture sealant application affected source, the emission limit option in § 63.5988 and the compliance alternative in § 63.5989 that you have chosen to meet.

(d) For each deviation from an emission limitation (emission limit or operating limit) that occurs at an affected source where you are not using a CPMS to comply with the emission limitations in this subpart, the compliance report must contain the information in paragraphs (c)(1) through (4) and paragraphs (d)(1) and (2) of this section. This includes periods of startup, shutdown, and malfunction when the affected source is operating.

(1) The total operating time of each affected source during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) and the corrective action taken.

(e) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report (pursuant to Table 10 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A) which includes all required information concerning deviations from any emission limitation (including any operating limit) or work practice requirement in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(f) Upon notification to the Administrator that a tire production affected source has eliminated or reformulated cement and solvent so that the source can demonstrate compliance using the purchase alternative in § 63.5985(a), future compliance reports for this affected source may be submitted annually.

(g) If acceptable to both the Administrator and you, you may submit reports and notifications electronically.

§ 63.6011 What records must I keep?

(a) You must keep the records specified in paragraphs (a)(1) through (3) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in § 63.10(b)(2)(xiv).

(2) Records of performance tests as required in § 63.10(b)(2)(viii).

(3) The records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(b) For each tire production affected source, you must keep the records specified in Table 9 to this subpart to show continuous compliance with each emission limit that applies to you.

(c) For each tire cord production affected source, you must keep the records specified in Table 11 to this subpart to show continuous compliance with each emission limit that applies to you.

(d) For each puncture sealant application affected source, you must keep the records specified in Table 13 to this subpart to show continuous compliance with each emission limit that applies to you.

§ 63.6012 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1).

(b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1). You can keep the records offsite for the remaining 3 years.

Other Requirements and Information

§ 63.6013 What parts of the General Provisions apply to me?

Table 17 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you.

§ 63.6014 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the United States Environmental Protection Agency, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA has delegated authority to your State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§ 63.5981 through 63.5984, 63.5986, and 63.5988.

(2) Approval of major changes to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.

(3) Approval of major changes to monitoring under § 63.8(f) and as defined in § 63.90.

(4) Approval of major changes to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

§ 63.6015 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act and in § 63.2, the General Provisions. The following are additional definitions of terms used in this subpart:

As purchased means the condition of a cement and solvent as delivered to the facility, prior to any mixing, blending, or dilution.

Capture system means a hood, enclosed room, or other means of collecting organic HAP emissions into a closed-vent system that conveys these emissions to a control device.

Cements and solvents means the collection of all organic chemicals, mixtures of chemicals, and compounds used in the production of rubber tires, including cements, solvents, and mixtures used as process aids. Cements and solvents include, but are not limited to, tread end cements, undertread cements, bead cements, tire building cements and solvents, green tire spray, blemish repair paints, side wall protective paints, marking inks, materials used to process equipment, and slab dip mixtures. Cements and solvents do not include coatings or process aids used in tire cord production, puncture sealant application, rubber processing, or materials used to construct, repair, or maintain process equipment, or chemicals and compounds that are not used in the tire production process such as materials used in routine janitorial or facility grounds maintenance, office supplies (*e.g.,* dry-erase markers, correction fluid), architectural paint, or any substance to the extent it is used for personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution to and use by the general public.

Coating means a compound or mixture of compounds that is applied to a fabric substrate in the tire cord production operation that allows the fabric to be prepared (*e.g.,* by heating, setting, curing) for incorporation into a rubber tire.

Components of rubber tires means any piece or part used in the manufacture of rubber tires that becomes an integral portion of the rubber tire when manufacture is complete and includes mixed rubber compounds, sidewalls, tread, tire beads, and liners. Other components often associated with rubber tires such as wheels, valve stems, tire bladders and inner tubes are not considered components of rubber tires for the purposes of these standards. Tire cord and puncture sealant, although components of rubber tires, are considered as separate affected sources in these standards and are defined separately.

Control device means a combustion device, recovery device, recapture device, or any combination of these devices used for recovering or oxidizing organic hazardous air pollutant vapors. Such equipment includes, but is not limited to, absorbers, carbon adsorbers, condensers, incinerators (oxidizers), flares, boilers, and process heaters.

Control system efficiency means the percent of total volatile organic compound emissions, as measured by EPA Method 25 or 25A (40 CFR part 60, appendix A), recovered or destroyed by a control device multiplied by the percent of total volatile organic compound emissions, as measured by

Method 25 or 25A, that are captured and conveyed to the control device.

Deviation means any instance in which an affected source, subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limitation (including any operating limit) or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation (including any operating limit) or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Emission limitation means any emission limit, opacity limit, operating limit, or visible emission limit.

Fabric processed means the amount of fabric coated and finished for use in subsequent product manufacturing.

Mixed rubber compound means the material, commonly referred to as rubber, from which rubber tires and components of rubber tires are manufactured. For the purposes of this definition, mixed rubber compound refers to the compound that leaves the rubber mixing process (*e.g.,* banburys) and is then processed into components from which rubber tires are manufactured.

Monthly operating period means the period in the Notification of Compliance Status report comprised of the number of operating days in the month.

Operating day means the period defined in the Notification of Compliance Status report. It may be from midnight to midnight or a portion of a 24-hour period.

Process aid means a solvent, mixture, or cement used to facilitate or assist in tire component identification; component storage; tire building; tire curing; and tire repair, finishing, and identification.

Puncture sealant means a mixture that may include, but is not limited to, solvent constituents, mixed rubber compound, and process oil that is applied to the inner liner of a finished tire for the purpose of sealing any future hole which might occur in the tread when an object penetrates the tire.

Responsible official means responsible official as defined in 40 CFR 70.2.

Rubber means the sum of the materials (for example, natural rubber, synthetic rubber, carbon black, oils, sulfur) that are combined in specific formulations for the sole purpose of making rubber tires or components of rubber tires.

Rubber mixing means the physical process of combining materials for use in rubber tire manufacturing to make mixed rubber compound using the collection of banburys and associated drop mills.

Rubber tire means a continuous solid or pneumatic cushion typically encircling a wheel and usually consisting, when pneumatic, of an external rubber covering.

Rubber used means the total mass of mixed rubber compound delivered to the tire production operations in a tire manufacturing facility (*e.g.,* the collection of warm-up mills, extruders, calendars, tire building, or other tire component and tire manufacturing equipment).

Tire cord means any fabric (*e.g.,* polyester, cotton) that is treated with a coating mixture that allows the fabric to more readily accept impregnation with rubber to become an integral part of a rubber tire.

Tables to Subpart XXXX of Part 63

As stated in § 63.5984, you must comply with the emission limits for each new, reconstructed, or existing tire production affected source in the following table:

TABLE 1 TO SUBPART XXXX OF PART 63.—EMISSION LIMITS FOR TIRE PRODUCTION AFFECTED SOURCES

For each . . .	You must meet the following emission limits.
1. Option 1—HAP constituent option	a. Emissions of each HAP in Table 16 to this subpart must not exceed 1,000 grams HAP per megagram (2 pounds per ton) of total cements and solvents used at the tire production affected source, and b. Emissions of each HAP not in Table 16 to this subpart must not exceed 10,000 grams HAP per megagram (20 pounds per ton) of total cements and solvents used at the tire production affected source.
2. Option 2—production-based option	Emissions of HAP must not exceed 0.024 grams per megagram (0.00005 pounds per ton) of rubber used at the tire production affected source.

As stated in § 63.5986, you must comply with the emission limits for tire cord production affected sources in the following table:

TABLE 2 TO SUBPART XXXX OF PART 63.—EMISSION LIMITS FOR TIRE CORD PRODUCTION AFFECTED SOURCES

For each . . .	You must meet the following emission limits.
1. Option 1.a (production-based option)—Existing tire cord production affected source.	Emissions must not exceed 280 grams HAP per megagram (0.56 pounds per ton) of fabric processed at the tire cord production affected source.
2. Option 1.b (production-based option)—New or reconstructed tire cord production affected source.	Emissions must not exceed 220 grams HAP per megagram (0.43 pounds per ton) of fabric processed at the tire cord production affected source.
3. Option 2 (HAP constituent option)—Existing, new or reconstructed tire cord production affected source.	a. Emissions of each HAP in Table 16 to this subpart must not exceed 1,000 grams HAP per megagram (2 pounds per ton) of total coatings used at the tire cord production affected source, and b. Emissions of each HAP not in Table 16 to this subpart must not exceed 10,000 grams HAP per megagram (20 pounds per ton) of total coatings used at the tire cord production affected source.

As stated in § 63.5988(a), you must comply with the emission limits for puncture sealant application affected sources in the following table:

TABLE 3 TO SUBPART XXXX OF PART 63.—EMISSION LIMITS FOR PUNCTURE SEALANT APPLICATION AFFECTED SOURCES

For each . . .	You must meet the following emission limit.
1. Option 1.a (percent reduction option)—Existing puncture sealant application spray booth.	Reduce spray booth HAP (measured as volatile organic compounds (VOC)) emissions by at least 86 percent by weight.
2. Option 1.b (percent reduction option)—New or reconstructed puncture sealant application spray booth.	Reduce spray booth HAP (measured as VOC) emissions by at least 95 percent by weight.
3. Option 2 (HAP constituent option) Existing, new or reconstructed puncture sealant application spray booth.	a. Emissions of each HAP in Table 16 to this subpart must not exceed 1,000 grams HAP per megagram (2 pounds per ton) of total puncture sealants used at the puncture sealant affected source, and b. Emissions of each HAP not in Table 16 to this subpart must not exceed 10,000 grams HAP per megagram (20 pounds per ton) of total puncture sealants used at the puncture sealant affected source.

As stated in § 63.5988(b), you must comply with the operating limits for puncture sealant application affected sources in the following table unless you are meeting Option 2 (HAP constituent option) limits in Table 3 to this subpart:

TABLE 4 TO SUBPART XXXX OF PART 63.—OPERATING LIMITS FOR PUNCTURE SEALANT APPLICATION CONTROL DEVICES

For each . . .	You must . . .
1. Thermal oxidizer to which puncture sealant application spray booth emissions are ducted.	Maintain the daily average firebox secondary chamber temperature within the operating range established during the performance test.
2. Carbon adsorber (regenerative) to which puncture sealant application spray booth emissions are ducted.	a. Maintain the total regeneration mass, volumetric flow, and carbon bed temperature at the operating range established during the performance test. b. Reestablish the carbon bed temperature to the levels established during the performance test within 15 minutes of each cooling cycle.
3. Other type of control device to which puncture sealant application spray booth emissions are ducted.	Maintain your operating parameter(s) within the range(s) established during the performance test and according to your monitoring plan.
4. Permanent total enclosure capture system	a. Maintain the face velocity across any NDO at least at the levels established during the performance test. b. Maintain the size of NDO, the number of NDO, and their proximity to HAP emission sources consistent with the parameters established during the performance test.
5. Other capture system	Maintain the operating parameters within the range(s) established during the performance test and according to your monitoring plan.

As stated in § 63.5993, you must comply with the requirements for performance tests in the following table:

TABLE 5 TO SUBPART XXXX OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS

If you are using . . .	You must . . .	Using . . .	According to the following requirements . . .
1. A thermal oxidizer.	a. Measure total HAP emissions, determine destruction efficiency of the control device, and establish a site-specific firebox secondary chamber temperature limit at which the emission limit that applies to the affected source is achieved.	i. Method 25 or 25A performance test and data from the temperature monitoring system.	(1). Measure total HAP emissions and determine the destruction efficiency of the control device using Method 25 (40 CFR part 60, appendix A). You may use Method 25A (40 CFR part 60, appendix A) if: an exhaust gas volatile organic matter concentration of 50 parts per million (ppmv) or less is required to comply with the standard; the volatile organic matter concentration at the inlet to the control system and the required level of control are such that exhaust volatile organic matter concentrations are 50 ppmv or less; or because of the high efficiency of the control device exhaust, is 50 ppmv or less, regardless of the inlet concentration. (2). Collect firebox secondary chamber temperature data every 15 minutes during the entire period of the initial 3-hour performance test, and determine the average firebox temperature over the 3-hour performance test by computing the average of all of the 15-minute reading.

TABLE 5 TO SUBPART XXXX OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS—Continued

If you are using . . .	You must . . .	Using . . .	According to the following requirements . . .
2. A carbon adsorber (regenerative).	a. Measure total organic HAP emissions, establish the total regeneration mass or volumetric flow, and establish the temperature of the carbon bed within 15 minutes of completing any cooling cycles. The total regeneration mass, volumetric flow, and carbon bed temperature must be those at which the emission limit that applies to the affected source is achieved.	i. Method 25 or Method 25A performance test and data from the carbon bed temperature monitoring device.	(1). Measure total HAP emissions using Method 25. You may use Method 25A, if an exhaust gas volatile organic matter concentration of 50 ppmv or less; or because of the high efficiency of the control device, exhaust is 50 ppmv or less is required to comply with the standard; the volatile organic matter concentration (VOMC) at the inlet to the control system and the required level of control are such that exhaust VOMCs are 50 ppmv or less; or because of the high efficiency of the control device, exhaust is 50 ppmv or less, regardless of the inlet concentration. (2). Collect carbon bed total regeneration mass or volumetric flow for each carbon bed regeneration cycle during the performance test. (3). Record the maximum carbon bed temperature data for each carbon bed regeneration cycle during the performance test. (4). Record the carbon bed temperature within 15 minutes of each cooling cycle during the performance test. (5). Determine the average total regeneration mass or the volumetric flow over the 3-hour performance test by computing the average of all of the readings. (6). Determine the average maximum carbon bed temperature over the 3-hour performance test by computing the average of all of the readings. (7). Determine the average carbon bed temperature within 15 minutes of the cooling cycle over the 3-hour performance test.
3. Any control device other than a thermal oxidizer or carbon adsorber.	Determine control device efficiency and establish operating parameter limits with which you will demonstrate continuous compliance with the emission limit that applies to the affected source.	EPA-approved methods and data from the continuous parameter monitoring system.	Conduct the performance test according to the site-specific plan submitted according to § 63.7(c)(2)(i).
4. All control devices.	a. Select sampling ports' location and the number of traverse ports.	Method 1 or 1A of 40 CFR part 60, appendix A.	Locate sampling sites at the inlet and outlet of the control device and prior to any releases to the atmosphere.
	b. Determine velocity and volumetric flow rate.	Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A.	
	c. Conduct gas analysis	Method 3, 3A, or 3B of 40 CFR part 60 appendix A.	
	d. Measure moisture content of the stack gas.	Method 4 of 40 CFR part 60, appendix A.	
5. A permenent total enclosure (PTE).	Measure the face velocity across natural draft openings and document the design features of the enclosure.	Method 204 of CFR part 51, appendix M.	Capture efficiency is assumed to be 100 percent if the criteria are met
6. Temporary total enclosure (TTE).	Construct a temporarily installed enclosure that allows you to determine the efficiency of your capture system and establish operating parameter limits.	Method 204 and the appropriate combination of Methods 204A–204F of 40 CFR part 51, appendix M.	

As stated in § 63.5996, you must show initial compliance with the emission limits for tire production affected sources according to the following table:

TABLE 6 TO SUBPART XXXX OF PART 62.—INITIAL COMPLIANCE WITH THE EMISSION LIMITS FOR TIRE PRODUCTION AFFECTED SOURCES

For . . .	For the following emission limit . . .	You have demonstrated initial compliance if . . .
1. Sources complying with the purchase compliance alternative in § 63.5985(a).	The HAP constituent option in Table 1 to this subpart, option 1.	You demonstrate for each monthly period that no cements and solvents were purchased and used at the affected source containing HAP in amounts above the composition limits in Table 1 to this subpart, option 1, determined according to the procedures in § 63.5994(a) and (b)(1).
2. Sources complying with the monthly average compliance alternative without using a control device in § 63.5985(b).	The HAP constituent option in Table 1 to this subpart, option 1.	You demonstrate that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 1 to this subpart, option 1, determined according to the applicable procedures in § 63.5994(a) and (b)(2).
3. Sources complying with the monthly average compliance alternative using a control device in § 63.5985(c).	The HAP constituent option in Table 1 to this subpart, option 1.	You demonstrate that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 1 to this subpart, option 1, determined according to the applicable procedures in § 63.5994(a), (b)(3) and (4), and (d) through (f).
4. Sources complying with the monthly average compliance alternative without use of a control device in § 63.5985(b).	The production-based option in Table 1 to this subpart, option 2.	You demonstrate that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 1 to this subpart, option 2, determined according to the applicable procedures in § 63.5994(c)(1) through (3).
5. Sources complying with the monthly average compliance alternative using a control device in § 63.5985(c).	The production-based option in Table 1 to this subpart, option 2.	You demonstrate that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 1 to this subpart, option 2, determined according to the applicable procedures in § 63.5994(c)(1) and (2), (4) and (5), and (d) through (f).

As stated in § 63.5999, you must show initial compliance with the emission limits for tire cord production affected sources according to the following table:

TABLE 7 TO SUBPART XXXX OF PART 63.—INITIAL COMPLIANCE WITH THE EMISSION LIMITS FOR TIRE CORD PRODUCTION AFFECTED SOURCES

For . . .	For the following emission limit . . .	You have demonstrated initial compliance if . . .
1. Sources complying with the monthly average alternative without using an add-on control device according to § 63.5987(a).	The production-based option in Table 2 to this subpart, option 1.	You demonstrate that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 2 to this subpart, option 1, determined according to the procedures in § 63.5997(a), (b)(1) and (2).
2. Sources complying with the monthly average alternative using an add-on control device according to § 63.5987(b).	The production-based option in Table 2 to this subpart, option 1.	You demonstrate that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 2 to this subpart, option 1, determined according to the procedures in § 63.5997(a), (b)(1) and (3) through (4), and (d) through (f).
3. Sources complying with the monthly average alternative without using an add-on control device according to § 63.5987(a).	The HAP constituent option in Table 2 to this subpart, option 2.	You demonstrate that the monthly average HAP emissions for each monthly operating period do not exceed the HAP constituent emission limits in Table 2 to this subpart, option 2, determined according to the applicable procedures in § 63.5997(a) and (c)(1) and (2).
4. Sources complying with the monthly average alternative using an add-on control device according to § 63.5987(b).	The HAP constituent option in Table 2 to this subpart, option 2.	You demonstrate that the monthly average HAP emissions for each monthly operating period do not exceed the HAP constituent emission limits in Table 2 to this subpart, option 2, determined according to the applicable procedures in § 63.5997(c)(1) and (3) through (4), and (d) through (f).

As stated in § 63.6002, you must show initial compliance with the emission limits for puncture sealant application affected sources according to the following table:

TABLE 8 TO SUBPART XXXX OF PART 63.—INITIAL COMPLIANCE WITH THE EMISSION

For . . .	For the following emission limit . . .	You have demonstrated initial compliance if . . .
1. Sources complying with the overall control efficiency alternative in § 63.5989(a).	The percent reduction option in Table 3 to this subpart, option 1.	You demonstrate that you conducted the performance tests, determined the overall efficiency of your control system, demonstrated that the applicable limits in Table 3 to this subpart, option 1, have been achieved, and established the operating limits in Table 4 of this subpart for your equipment according to the applicable procedures in § 63.6000(b).
2. Sources complying with the permanent total enclosure and control device efficiency alternative in § 63.5989(b).	The percent reduction option in Table 3 to this subpart, option 1.	You demonstrate that you conducted the performance tests, determined the individual efficiencies of your capture and control systems, demonstrated that the applicable limits in Table 3 to this subpart, option 1, have been achieved, and established the operating limits in Table 4 of this subpart for your equipment according to the applicable procedures in § 63.6000(b).
3. Sources complying with the monthly average alternative in § 63.5989(c) without using an add-on control device.	The HAP constituent option in Table 3 to this subpart, option 2.	You demonstrate that the monthly average HAP emissions for each monthly operating period do not exceed the HAP constituent emission limits in Table 3 to this subpart, option 2, determined according to the applicable procedures in § 63.6000(c) and (d)(1).
4. Sources complying with the HAP constituent alternative in § 63.5989(d) by using an add-on control device.	The HAP constituent option in Table 3 to this subpart, option 2.	You demonstrate that the monthly average HAP emissions for each monthly operating period do not exceed the HAP constituent emission limits in Table 3 to this subpart, option 2, determined according to the applicable procedures in § 63.6000(c), (d)(2) and (3), and (e) through (f).

As stated in § 63.6003, you must maintain minimum data to show continuous compliance with the emission limits for tire production affected sources according to the following table:

TABLE 9 TO SUBPART XXXX OF PART 63.—MINIMUM DATA FOR CONTINUOUS COMPLIANCE WITH THE EMISSION LIMITS FOR TIRE PRODUCTION AFFECTED SOURCES

For . . .	You must maintain . . .
1. Sources complying with purchase compliance alternative in § 63.5985(a) that are meeting the HAP constituent emission limit (option 1) in Table 1 to this subpart.	a. A list of each cement and solvent as purchased and the manufacturer or supplier of each. b. A record of Method 311 (40 CFR part 60, appendix A), or approved alternative method, test results indicating the mass percent of each HAP for each cement and solvent as purchased.
2. Sources complying with the monthly average compliance alternative without using a control device according to § 63.5985(b) that are meeting emission limits in Table 1 to this subpart.	a. A record of Method 311, or approved alternative method, test results, indicating the mass percent of each HAP for each cement and solvent, as purchased. b. The mass of each cement and solvent used each monthly operating period. c. The total mass of rubber used each monthly operating period (if complying with the production-based emission limit, option 2, in Table 1 to this subpart). d. All data and calculations used to determine the monthly average mass percent for each HAP for each monthly operating period. e. Monthly averages of emissions in the appropriate emission limit format.
3. Sources complying with the monthly average compliance alternative using a control device according to § 63.5985(c) that are meeting emission limits in Table 1 to this subpart.	a. The same information as sources complying with the monthly average alternative without using a control device. b. Records of operating parameter values for each operating parameter that applies to you.

As stated in § 63.6004, you must show continuous compliance with the emission limits for tire production affected sources according to the following table:

TABLE 10 TO SUBPART XXXX OF PART 63.—CONTINUOUS COMPLIANCE WITH THE EMISSION LIMITS FOR TIRE PRODUCTION AFFECTED SOURCES

For . . .	For the following emission limit . . .	You must demonstrate continuous compliance by . . .
1. Sources complying with purchase compliance alternative in § 63.5985(a).	The HAP constituent option in Table 1 to this subpart, option 1.	Demonstrating for each monthly period that no cements and solvents were purchased and used at the affected source containing HAP in amounts above the composition limits in Table 1 to this subpart, option 1, determined according to the procedures in § 63.5994(a) and (b)(1).

TABLE 10 TO SUBPART XXXX OF PART 63.—CONTINUOUS COMPLIANCE WITH THE EMISSION LIMITS FOR TIRE PRODUCTION AFFECTED SOURCES—Continued

For . . .	For the following emission limit . . .	You must demonstrate continuous compliance by . . .
2. Sources complying with the monthly average compliance alternative without using a control device according to § 63.5985(b).	The HAP constituent option in Table 1 to this subpart, option 1.	Demonstrating that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 1 to this subpart, option 1, determined according to the applicable procedures in § 63.5994(a) and (b)(2).
3. Sources complying with the monthly average compliance alternative using a control device according to § 63.5985(c).	The HAP constituent option in Table 1 to this subpart, option 1.	Demonstrating that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 1 to this subpart, option 1, determined according to the applicable procedures in § 63.5994(a), (b)(3) and (4), and (d) through (f).
4. Sources complying with the monthly average compliance alternative without using a control device according to § 63.5985(b).	The production-based option in Table 1 to this subpart, option 2.	Demonstrating that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 1 to this subpart, option 2, determined according to the applicable procedures in § 63.5994(c)(1) through (3).
5. Sources complying with the monthly average compliance alternative using a control device according to § 63.5985(c).	The production-based option in Table 1 to this subpart, option 2.	Demonstrating that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 1 to this subpart, option 2, determined according to the applicable procedures in § 63.5994(c)(1) and (2), (4) and (5), and (d) through (f).

As stated in § 63.6005, you must maintain minimum data to show continuous compliance with the emission limits for tire cord production affected sources according to the following table:

TABLE 11 TO SUBPART XXXX OF PART 63.—MINIMUM DATA FOR CONTINUOUS COMPLIANCE WITH THE EMISSION LIMITS FOR TIRE CORD PRODUCTION AFFECTED SOURCES

For . . .	You must maintain . . .
1. Sources complying with the monthly average alternative without using an add-on control device according to § 63.5987(a) that are meeting emission limits in Table 2 to this subpart.	a. A record of Method 311 (40 CFR part 63, appendix A), or approved alternative method, test results, indicating the mass percent of each HAP for coating used. b. The mass of each coating used each monthly operating period. c. The total mass of fabric processed each monthly operating period (if complying with the production-based option in Table 2 to this subpart, option 1). d. All data and calculations used to determine the monthly average mass percent for each HAP for each monthly operating period. e. Monthly averages of emissions in the appropriate emission emission limit format.
2. Sources complying with the monthly average alternative using an add-on control device according to § 63.5987(b) that are meeting emission limits in Table 2 to this subpart.	a. The same information as sources complying with the monthly average alternative without using a control device. b. Records of operating parameter values for each operating parameter that applies to you.

As stated in § 63.6006, you must show continuous compliance with the emission limits for tire cord production affected sources according to the following table:

TABLE 12 TO SUBPART XXXX OF PART 63.—CONTINUOUS COMPLIANCE WITH THE EMISSION LIMITS FOR TIRE CORD PRODUCTION AFFECTED SOURCES

For . . .	For the following emission limit . . .	You must demonstrate continuous compliance by . . .
1. Sources complying with the monthly average compliance alternative without using an add-on control device according to § 63.5987(a).	In Table 2 to this subpart	a. Demonstrating that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 2 to this subpart, option 1, determined according to the applicable procedures in § 63.5997(a) and (b)(1) and (2). b. Demonstrating that the monthly average HAP emissions for each monthly operating period do not exceed the HAP constituent emission limits in Table 2 to this subpart, option 2, determined according to the applicable procedures in § 63.5997(a) and (c)(1) and (2).

TABLE 12 TO SUBPART XXXX OF PART 63.—CONTINUOUS COMPLIANCE WITH THE EMISSION LIMITS FOR TIRE CORD PRODUCTION AFFECTED SOURCES—Continued

For . . .	For the following emission limit . . .	You must demonstrate continuous compliance by . . .
2. Sources complying with the monthly average compliance alternative using an add-on control device according to § 63.5987(b).	In Table 2 to this subpart	a. Demonstrating that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 2 to this subpart, option 1, determined according to the applicable procedures in § 63.5997(a), (b)(1) and (3) through (4), and (d) through (f). b. Demonstrating that the monthly HAP emissions for each monthly operating period do not exceed the HAP constituent emission limits in Table 2 to this subpart, option 2, determined according to the applicable procedures in § 63.5997(c)(1) and (3) through (4), and (d) through (f).

As stated in § 63.6007, you must maintain minimum data to show continuous compliance with the emission limitations for puncture sealant application affected sources according to the following table:

TABLE 13 TO SUBPART XXXX OF PART 63.—MINIMUM DATA FOR CONTINUOUS COMPLIANCE WITH THE EMISSION LIMITATIONS FOR PUNCTURE SEALANT APPLICATION AFFECTED SOURCES

For . . .	You must maintain . . .
1. Sources complying with the control efficiency alternatives in § 63.5989(a) or (b) that are meeting the percent reduction emission limits in Table 3 to this subpart, option 1, using a thermal oxidizer to reduce HAP emissions so that they do not exceed the operating limits in Table 4 to this subpart.	Records of the secondary chamber firebox temperature for 100 percent of the hours during which the process was operated.
2. Sources complying with the control efficiency alternatives in § 63.5989(a) or (b) that are meeting the percent reduction emission limits in Table 3 to this subpart, option 1, using a carbon adsorber to reduce HAP emissions so that they do not exceed the operating limits in Table 4 to this subpart.	Records of the total regeneration stream mass or volumetric flow for each regeneration cycle for 100 percent of the hours during which the process was operated, and a record of the carbon bed temperature after each regeneration, and within 15 minutes of completing any cooling cycle for 100 percent of the hours during which the process was operated.
3. Sources complying with the control efficiency alternatives in § 63.5989(a) or (b) that are meeting the percent reduction emission limits in Table 3 to this subpart, option 1, using any other type of control device to which puncture sealant application spray booth HAP emissions are ducted so that they do not exceed the operating limits in Table 4 to this subpart.	Records of operating parameter values for each operating parameter that applies to you.
4. Sources complying with the permanent total enclosure compliance alternative in § 63.5989(b) that are meeting the percent reduction emission limits in Table 3 to this subpart, option 1, using a permanent total enclosure capture system to capture HAP emissions so that they do not exceed the operating limits in Table 4 to this subpart.	Records of the face velocity across any NDO, the size of NDO, the number of NDO, and their proximity to HAP emission sources.
5. Sources complying with the overall control efficiency alternative in § 63.5989(a) that are meeting the percent reduction emission limits in Table 3 to this subpart, option 1, using any other capture system to capture HAP emissions so that they do not exceed the operating limits in Table 4 to this subpart.	Records of operating parameter values for each operating parameter that applies to you.
6. Sources complying with the monthly average alternative without using an add-on control device according to § 63.5988(a) that are meeting the HAP constituent emission limits in Table 3 to this subpart, option 2.	a. A record of Method 311 (40 CFR part 63, appendix A), or approved alternative method, test results, indicating the mass percent of each HAP for puncture sealant used. b. The mass of each puncture sealant used each monthly operating period. c. All data and calculations used to determine the monthly average mass percent for each HAP for each monthly operating period. d. Monthly averages of emissions in the appropriate emission limit format.

TABLE 13 TO SUBPART XXXX OF PART 63.—MINIMUM DATA FOR CONTINUOUS COMPLIANCE WITH THE EMISSION LIMITATIONS FOR PUNCTURE SEALANT APPLICATION AFFECTED SOURCES—Continued

For . . .	You must maintain . . .
7. Sources complying with the monthly average alternative using an add-on control device according to § 63.5988(a) that are meeting the HAP constituent emission limits in Table 3 to this subpart, option 2.	a. The same information as sources complying with the monthly average alternative that are not using a control device. b. Records of operating parameter values for each operating parameter that applies to you.

As stated in § 63.6008, you must show continuous compliance with the emission limitations for puncture sealant application affected sources according to the following table:

TABLE 14 TO SUBPART XXXX OF PART 63.—CONTINUOUS COMPLIANCE WITH THE EMISSION LIMITATIONS FOR PUNCTURE SEALANT APPLICATION AFFECTED SOURCES

For . . .	You must demonstrate continuous compliance by . . .
1. Each carbon adsorber used to comply with the operating limits in Table 4 to this subpart.	a. Monitoring and recording every 15 minutes the total regeneration stream mass or volumetric flow, and the carbon bed temperature after each regeneration, and within 15 minutes of completing any cooling cycle, and b. Maintaining the total regeneration stream mass or volumetric flow, and the carbon bed temperature after each regeneration, and within 15 minutes of completing any cooling cycle within the operating levels established during your performance test.
2. Each thermal oxidizer used to comply with operating limits in Table 4 to this subpart.	a. Continuously monitoring and recording the firebox temperature every 15 minutes, and b. Maintaining the daily average firebox temperature within the operating level established during your performance test.
3. Other ''add-on'' control or capture system hardware used to comply with the operating limits in Table 4 to this subpart.	Continuously monitoring and recording specified parameters identified through compliance testing and identified in the Notification of Compliance Status report.
4. Sources complying with the monthly average compliance alternative without using an add-on control device according to § 63.5989(c) that are meeting the HAP constituent emission limits in Table 3 to this subpart, option 2.	Demonstrating that the monthly average HAP emissions for each monthly operating period do not exceed the HAP constituent emission limits in Table 3 to this subpart, option 2, determined according to the applicable procedures in § 63.6000(c) and (d)(1).
5. Sources complying with the monthly average compliance alternative by using an add-on control device according to § 63.5989(d) that are the HAP constituent emission limits in Table 3 to this subpart, option 2.	Demonstrating that the monthly average HAP emissions for each monthly operating period do not exceed the HAP constituent emission limits in Table 3 to this subpart, option 2, determined according to the applicable procedures in § 63.6000(c), (d)(2) and (3), and (e) through (g).

As stated in § 63.6010, you must submit each report that applies to you according to the following table:

TABLE 15 TO SUBPART XXXX OF PART 63.—REQUIREMENTS FOR REPORTS

You must submit a(n)	The report must contain . . .	You must submit the report . . .
1. Compliance report	a. If there are no deviations from any emission limitations that apply to you, a statement that there were no deviations from the emission limitations during the reporting period. If there were no periods during which the CPMS was out-of-control as specified in § 63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.	Semiannually according to the requirements in § 63.6010(b), unless you meet the requirements for annual reporting in § 63.6010(f).
	b. If you have a deviation from any emission limitation during the reporting period at an affected source where you are not using a CPMS, the report must contain the information in § 63.6010(d). If the deviation occurred at a source where you are using a CMPS or if there were periods during which the CPMS were out-of-control as specified in § 63.8(c)(7), the report must contain the information required by § 63.5990(f)(3).	Semiannually according to the requirements in § 63.6010(b), unless you meet the requirements for annual reporting in § 63.6010(f).
	c. If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in § 63.10(d)(5)(i).	Semiannually according to the requirements in § 63.6010(b), unless you meet the requirements for annual reporting in § 63.6010(f).

TABLE 15 TO SUBPART XXXX OF PART 63.—REQUIREMENTS FOR REPORTS—Continued

You must submit a(n)	The report must contain . . .	You must submit the report . . .
2. Immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your startup, shutdown, and malfunction plan..	a. Actions taken for the event	By fax or telephone within 2 working days after starting actions inconsistent with the plan.
	b. The information in § 63.10(d)(5)(ii)	By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority (§ 63.10(d)(5)(ii)).

You must use the information listed in the following table to determine which emission limit in the HAP constituent options in Tables 1 through 3 to this subpart is applicable to you:

TABLE 16 TO SUBPART XXXX OF PART 63.—SELECTED HAZARDOUS AIR POLLUTANTS

CAS No.	Selected hazardous air pollutants
50000	Formaldehyde
51796	Ethyl carbamate (Urethane)
53963	2-Acetylaminofluorene
56235	Carbon tetrachloride
57147	1,1-Dimethyl hydrazine
57578	beta-Propiolactone
58899	Lindane (all isomers)
59892	N-Nitrosomorpholine
60117	Dimethyl aminoazobenzene
62759	N-Nitrosodimethylamine
64675	Diethyl sulfate
67663	Chloroform
67721	Hexachloroethane
71432	Benzene (including benzene from gasoline)
75014	Vinyl chloride
75070	Acetaldehyde
75092	Methylene chloride (Dichloromethane)
75218	Ethylene oxide
75558	1,2-Propylenimine (2-Methyl aziridine)
75569	Propylene oxide
77781	Dimethyl sulfate
79061	Acrylamide
79447	Dimethyl carbamoyl chloride
79469	2-Nitropropane
88062	2,4,6-Trichlorophenol
91941	3,3-Dichlorobenzidene
92671	4-Aminobiphenyl
92875	Benzidine
95534	o-Toluidine
95807	2,4-Toluene diamine
96128	1,2-Dibromo-3-chloropropane
96457	Ethylene thiourea
98077	Benzotrichloride
101144	4,4-Methylene bis(2-chloroaniline)
101779	4,4-Methylenedianiline
106467	1,4-Dichlorobenzene(p)
106898	Epichlorohydrin (l-Chloro-2,3-epoxypropane)
106934	Ethylene dibromide (Dibromoethane)
106990	1,3-Butadiene
107062	Ethylene dichloride (1,2-Dichloroethane)
107131	Acrylonitrile
107302	Chloromethyl methyl ether
117817	Bis(2-ethylhexyl)phthalate (DEHP)
118741	Hexachlorobenzene
119904	3,3-Dimethoxybenzidine
119937	3,3-Dimethyl benzidine
122667	1,2-Diphenylhydrazine
123911	1,4-Dioxane (1,4-Diethyleneoxide)
127184	Tetrachloroethylene (Perchloroethylene)
140885	Ethyl acrylate
302012	Hydrazine
542756	1,3-Dichloropropene

TABLE 16 TO SUBPART XXXX OF PART 63.—SELECTED HAZARDOUS AIR POLLUTANTS—Continued

CAS No.	Selected hazardous air pollutants
542881	Bis(chloromethyl)ether
680319	Hexamethylphosphoramide
684935	N-Nitroso-N-methylurea
1120714	1,3-Propane sultone
1332214	Asbestos
1336363	Polychlorinated biphenyls (Aroclors)
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin
8001352	Toxaphene (chlorinated camphene)
	Arsenic Compounds
	Chromium Compounds
	Coke Oven Emissions

As stated in § 63.6013, you must comply with the applicable General Provisions (GP) requirements according to the following table:

TABLE 17 TO SUBPART XXXX OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO THIS SUBPART XXXX

Citation	Subject	Brief description of applicable sections	Applicable to Subpart XXXX?	
			Using a control device	Not using a control device
§ 63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions; notifications.	Yes	Yes.
§ 63.2	Definitions	Definitions for part 63 standards	Yes	Yes.
§ 63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes	Yes.
§ 63.4	Prohibited Activities	Prohibited activities; compliance date; circumvention; severability.	Yes	Yes.
§ 63.5	Construction/Reconstruction.	Applicability; applications; approvals	Yes	Yes.
§ 63.6(a)	Applicability	GP apply unless compliance extension; GP apply to area sources that become major.	Yes	Yes.
§ 63.6(b)(1)–(4)	Compliance Dates for New and Reconstructed Sources.	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f).	Yes	Yes.
§ 63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal.	Yes	Yes.
§ 63.6(b)(6)	[Reserved]			
§ 63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources that Become Major.		No	No.
§ 63.6(c)(1)–(2)	Compliance Dates for Existing Sources.	Comply according to date in subpart, which must be no later than 3 years after effective date; for CAA section 112(f) standards, comply within 90 days of effective date unless compliance extension.	Yes	Yes.
§ 63.6(c)(3)–(4)	[Reserved]			
§ 63.6(c)(5)	Compliance Dates for Existing Area Sources that Become Major.	Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years).	Yes	Yes.
§ 63.6(d)	[Reserved]			

TABLE 17 TO SUBPART XXXX OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO THIS SUBPART XXXX—Continued

Citation	Subject	Brief description of applicable sections	Applicable to Subpart XXXX?	
			Using a control device	Not using a control device
§ 63.6(e)(1)–(2)	Operation & Maintenance	Operate to minimize emissions at all times; correct malfunctions as soon as practicable; and operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met.	Yes	Yes.
§ 63.6(e)(3)	Startup, Shutdown, and Malfunction Plan (SSMP).		Yes	No.
§ 63.6(f)(1)	Compliance Except During SSM.		Yes	No.
§ 63.6(f)(2)–(3)	Methods for Determining Compliance.	Compliance based on performance test; operation and maintenance plans; records; inspection.	Yes	Yes.
§ 63.6(g)(1)–(3)	Alternative Standard	Procedures for getting an alternative standard	Yes	Yes.
§ 63.6(h)	Opacity/Visible Emission (VE) Standards.		No	No.
§ 63.6(i)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension.	Yes	Yes.
§ 63.6(j)	Presidential Compliance Exemption.	President may exempt source category from requirement to comply with rule.	Yes	Yes.
§ 63.7(a)(1)–(2)	Performance Test Dates		No	No.
§ 63.7(a)(3)	CAA section 114 Authority	Administrator may require a performance test under CAA section 114 at any time.	Yes	No.
§ 63.7(b)(1)	Notification of Performance Test.	Must notify Administrator 60 days before the test	Yes	No.
§ 63.7(b)(2)	Notification of Rescheduling.	If rescheduling a performance test is necessary, must notify Administrator 5 days before scheduled date of rescheduled date.	Yes	No.
§ 63.7(c)	Quality Assurance/Test Plan.	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with: test plan approval procedures; performance audit requirements; and internal and external quality assurance procedures for testing.	Yes	No.
§ 63.7(d)	Testing Facilities	Requirements for testing facilities	Yes	No.
§ 63.7(e)(1)	Conditions for Conducting Performance Tests.	Performance tests must be conducted under representative conditions; cannot conduct performance tests during SSM; not a violation to exceed standard during SSM.	Yes	No.
§ 63.7(e)(2)	Conditions for Conducting Performance Tests.	Must conduct according to rule and EPA test methods unless Administrator approves alternative.	Yes	No.
§ 63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; and conditions when data from an additional test run can be used.	Yes	No.
§ 63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an alternative test method.	Yes	No.
§ 63.7(g)	Performance Test Data Analysis.	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status report; and keep data for 5 years.	Yes	No.

TABLE 17 TO SUBPART XXXX OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO THIS SUBPART XXXX—Continued

Citation	Subject	Brief description of applicable sections	Applicable to Subpart XXXX?	
			Using a control device	Not using a control device
§ 63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test.	Yes	No.
§ 63.8(a)(1)	Applicability of Monitoring Requirements.	Subject to all monitoring requirements in standard	Yes	Yes.
§ 63.8(a)(2)	Performance Specifications.	Performance Specifications in appendix B of 40 CFR part 60 apply.	Yes	No.
§ 63.8(a)(3)	[Reserved]			
§ 63.8(a)(4)	Monitoring with Flares		No	No.
§ 63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative.	Yes	Yes.
§ 63.8(b)(2)–(3)	Multiple Effluents and Multiple Monitoring Systems.	Specific requirements for installing monitoring systems; must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup.	Yes	Yes.
§ 63.8(c)(1)	Monitoring System Operation and Maintenance.	Maintain monitoring system in a manner consistent with good air pollution control practices.	Applies as modified by § 63.5990(e) and (f).	No.
§ 63.8(c)(1)(i)	Routine and Predictable SSM.		No	No.
§ 63.8(c)(1)(ii)	SSM not in SSMP		No	No.
§ 63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements.	How Administrator determines if source complying with operation and maintenance requirements; review of source operation and maintenance procedures, records, manufacturer's instructions, recommendations, and inspection of monitoring system.	Yes	Yes.
§ 63.8(c)(2)–(3)	Monitoring System Installation.	Must install to get representative emission and parameter measurements; must verify operational status before or at performance test.	Yes	No.
§ 63.8(c)(4)	Continuous Monitoring System (CMS) Requirements.		Applies as modified by § 63.5990(f).	No.
§ 63.8(c)(5)	Continuous Opacity Monitoring Systems (COMS) Minimum Procedures.		No	No.
§ 63.8(c)(6)	CMS Requirements		Applies as modified by § 63.5990(e).	No.
§ 63.8(c)(7)–(8)	CMS Requirements	Out-of-control periods, including reporting	Yes	No.
§ 63.8(d)	CMS Quality Control		Applies as modified by § 63.5990(e) and (f).	No.
§ 63.8(e)	CMS Performance Evaluation.		No	No.
§ 63.8(f)(1)–(5)	Alternative Monitoring Method.	Procedures for Administrator to approve alternative monitoring.	Yes	Yes.

TABLE 17 TO SUBPART XXXX OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO THIS SUBPART XXXX—Continued

Citation	Subject	Brief description of applicable sections	Applicable to Subpart XXXX?	
			Using a control device	Not using a control device
§ 63.8(f)(6)	Alternative to Relative Accuracy Test.		No	No.
§ 63.8(g)	Data Reduction		Applies as modified by § 63.5990(f).	No.
§ 63.9(a)	Notification Requirements	Applicability and state delegation	Yes	Yes.
§ 63.9(b)(1)-(5)	Initial Notifications	Submit notification 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construct/reconstruct, notification of startup; and contents of each.	Yes	Yes.
§ 63.9(c)	Request for Compliance Extension.	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate.	Yes	Yes.
§ 63.9(d)	Notification of Special Compliance Requirements for New Source.	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date.	Yes	Yes.
§ 63.9(e)	Notification of Performance Test.	Notify Administrator 60 days prior	Yes	No.
§ 63.9(f)	Notification of VE/Opacity Test.	No	No.	
§ 63.9(g)	Additional Notifications When Using CMS.	No	No.	
§ 63.9(h)	Notification of Compliance Status.	Contents; due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority.	Yes	Yes.
§ 63.9(i)	Adjustment of Submittal Deadlines.	Procedures for Administrator to approve change in when notifications must be submitted.	Yes	Yes.
§ 63.9(j)	Change in Previous Information.	Must submit within 15 days after the change	Yes	Yes.
§ 63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than 1 source.	Yes	Yes.
§ 63.10(b)(1)	Recordkeeping/Reporting	General Requirements; keep all records readily available; and keep for 5 years..	Yes	Yes.
§ 63.10(b)(2)(i)-(iv)	Records related to Start-up, Shutdown, and Malfunction..	Yes	No.	
§ 63.10(b)(2)(vi) and (x)–(xi).	CMS Records	Malfunctions, inoperative, out-of-control; calibration checks; adjustments, maintenance.	Yes	No.
§ 63.10(b)(2) (vii)–(ix).	Records	Measurements to demonstrate compliance with emission limitations; performance test, performance evaluation, and visible emission observation results; and measurements to determine conditions of performance tests and performance evaluations.	Yes	Yes.
§ 63.10(b)(2) (xii)	Records	Records when under waiver	Yes	Yes.
§ 63.10(b)(2) (xiii)	Records		No	No.
§ 63.10(b)(2) (xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status.	Yes	Yes.
§ 63.10(b)(3)	Records	Applicability determinations	Yes	Yes.

TABLE 17 TO SUBPART XXXX OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO THIS SUBPART XXXX—Continued

Citation	Subject	Brief description of applicable sections	Applicable to Subpart XXXX?	
			Using a control device	Not using a control device
§ 63.10(c)	Records		No	No.
§ 63.10(d)(1)	General Reporting Requirements.	Requirement to report	Yes	Yes.
§ 63.10(d)(2)	Report of Performance Test Results.	When to submit to Federal or State authority	Yes	No.
§ 63.10(d)(3)	Reporting Opacity or VE Observations.		No	No.
§ 63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension.	Yes	Yes.
§ 63.10(d)(5)	Startup, Shutdown, and Malfunction Reports.		Yes	No.
§ 63.10(e)	Additional CMS Reports		No	No.
§ 63.10(f)	Waiver for Recordkeeping/Reporting.	Procedures for Administrator to waive	Yes	Yes.
§ 63.11	Flares		No	No.
§ 63.12	Delegation	State authority to enforce standards	Yes	Yes.
§ 63.13	Addresses	Addresses where reports, notifications, and requests are sent.	Yes	Yes.
§ 63.14	Incorporation by Reference.	Test methods incorporated by reference	Yes	Yes.
§ 63.15	Availability of Information	Public and confidential information	Yes	Yes.

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