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National Emission Standards for Hazardous Air Pollutants: Asphalt Processing and Asphalt Roofing Manufacturing; Proposed Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[FRL–7101–7]

RIN 2060–AG66

National Emission Standards for Hazardous Air Pollutants: Asphalt Processing and Asphalt Roofing Manufacturing

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: This action proposes national emission standards for hazardous air pollutants (NESHAP) for existing and new asphalt processing and asphalt roofing manufacturing facilities. The EPA has identified asphalt processing and asphalt roofing manufacturing facilities as major sources of hazardous air pollutants (HAP) such as formaldehyde, hexane, hydrogen chloride (HCl), phenol, polycyclic organic matter (POM), and toluene. These proposed standards would 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 total HAP reduction is expected to be 8.87 megagrams per year (Mg/yr) (9.78 tons per year (tpy)).

DATES: *Comments.* Submit comments on or before January 22, 2002.

Public Hearing. If anyone contacts the EPA requesting to speak at a public hearing by December 11, 2001, a public hearing will be held on December 21, 2001.

ADDRESSES: *Comments.* By U.S. Postal Service, send comments (in duplicate if possible) to: Air and Radiation Docket and Information Center (6102), Attention Docket Number A–95–32, U.S. EPA, 1200 Pennsylvania Avenue, NW, Washington DC 20460. In person or by courier, deliver comments (in duplicate if possible) to: Air and Radiation Docket and Information Center (6102), Attention Docket Number A–95–32, U.S. EPA, 401 M Street, SW, Washington DC 20460. The EPA requests a separate copy also be sent to the contact person listed below.

Public Hearing. If a public hearing is held, it will be held at the EPA Office of Administration Auditorium, Research Triangle Park, North Carolina, beginning at 10 a.m., or at an alternate site nearby.

Docket. Docket No. A–95–32 contains supporting information used in developing the proposed standards. The docket is located at the U.S. EPA, 401 M Street, SW, Washington, DC 20460 in room M–1500, Waterside Mall (ground floor), and may be inspected from 7:30 a.m. to 5:30 p.m., Monday through Friday, excluding legal holidays.

FOR FURTHER INFORMATION CONTACT: Rick Colyer, Policy, Planning, and Standards Group, Emission Standards Division (MD–13), U.S. EPA, Research Triangle Park, North Carolina 27711, telephone number (919) 541–5262, e-mail address: *colyer.rick@epa.gov.*

SUPPLEMENTARY INFORMATION:

Comments. Comments and data may be submitted by e-mail to: *a-and-r-docket@epa.gov.* Electronic comments must be submitted as an ASCII file to avoid the use of special characters and encryption problems and will also be accepted on disks in WordPerfect'' version 5.1, 6.1 or Corel 8 file format. All comments and data submitted in electronic form must note the docket number: A–95–32. No confidential business information (CBI) should be submitted by e-mail. Electronic comments may be filed online at many Federal depository libraries.

Commenters wishing to submit proprietary information for consideration must clearly distinguish such information from other comments and clearly label it as CBI. Send submissions containing such proprietary information directly to the following address, and not to the public docket, to ensure that proprietary information is not inadvertently placed in the docket: Attention: Rick Colyer, U.S. EPA, c/o OAQPS Document Control Officer, 411 W. Chapel Hill Street, Room 740B, Durham NC 27701. The EPA will disclose information identified as CBI only to the extent allowed by the procedures set forth in 40 CFR part 2. If no claim of confidentiality accompanies a submission when it is received by the EPA, the information may be made available to the public without further notice to the commenter.

World Wide Web (WWW). In addition to being available in the docket, an electronic copy of this proposed 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.* 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.

Public Hearing. Persons interested in presenting oral testimony or inquiring as to whether a hearing is to be held should contact Dorothy Apple, Policy, Planning, and Standards Group, Emission Standards Division (MD–13), U.S. EPA, Research Triangle Park, North Carolina 27711, telephone number (919) 541–4487, at least 2 days in advance of the public hearing. Persons interested in attending the public hearing must also call Dorothy Apple to verify the time, date, and location of the hearing. The public hearing will provide interested parties the opportunity to present data, views, or arguments concerning these proposed emission standards.

Docket. The docket reflects the full administrative record for this action and includes all the information relied upon by EPA in development of this proposed 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 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.

Regulated Entities. Categories and entities potentially regulated by this action are shown in Table 1. 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 §§ 63.8681 and 63.8682 of the proposed 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.

TABLE 1.—REGULATED CATEGORIES AND ENTITIES

Category	NAICS [a]		SIC [b]	
	Code	Description	Code	Description
Manufacturing	324122	Asphalt shingle and coating materials manufacturing.	2952	Asphalt felts and coatings.
Manufacturing	32411	Petroleum refineries	2911	Petroleum refining.
Federal Government	Not affected		Not affected	
State/Local/Tribal Government	Not affected		Not affected	

[a] Standard Industrial Classification Code.
[b] North American Information Classification System.

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H. Paperwork Reduction Act
I. National Technology Transfer and Advancement Act

I. Background

A. What Is the Statutory Authority for the Proposed 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. A major source of HAP is any stationary source or group of stationary sources within a contiguous area under common control that emits or has the potential to emit, considering controls, in the aggregate, 9.1 Mg/yr (10 tpy) or more of any single HAP, or 22.7 Mg/yr (25 tpy) or more of any combination of HAP. Based on the emissions data collected for this rulemaking, asphalt processing and asphalt roofing manufacturing facilities have the potential to be major sources of HAP.

The asphalt processing and asphalt roofing manufacturing categories of major sources were listed as separate source categories on July 16, 1992 (57 FR 31576). However, because these processes are closely related and are often collocated, we are proposing to regulate emissions from both source categories under a single NESHAP.

B. What Criteria Are Used in the Development of NESHAP?

Section 112(c)(2) of the CAA requires that we establish NESHAP for control of HAP from both existing and new major sources, based upon the criteria set out in section 112(d). The CAA requires the NESHAP 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 the MACT.

The minimum control level allowed for NESHAP (the minimum level of stringency for MACT) is the so-called ''MACT floor,'' as defined under section 112(d)(3) of the CAA. The MACT floor for existing sources is the emission limitation achieved by the average of the best performing 12 percent of existing sources for categories and subcategories with 30 or more sources, or the average of the best performing 5 sources for categories or subcategories with fewer than 30 sources. For new sources, the MACT floor cannot be less stringent than the emission control achieved in practice by the best controlled similar source.

In developing the NESHAP, we also consider control options that are more stringent than the MACT floor (so-called beyond-the-floor control options), taking into consideration (as noted previously) the cost of achieving the emission reductions, and any non-air quality environmental impacts, and energy requirements. In this rule, EPA is proposing standards for both existing and new sources based on the MACT.

C. What Operations Constitute Asphalt Processing and Asphalt Roofing Manufacture?

The proposed NESHAP would regulate both asphalt processing and asphalt roofing manufacturing operations. Asphalt processing and asphalt roofing manufacturing operations can be stand-alone or integrated with each other or related operations such as wet-formed fiberglass mat manufacturing. Additionally, some asphalt processing is performed at petroleum refineries.

Processed asphalt is produced using asphalt flux as the raw material. Asphalt flux is a product that is obtained in the last stages of fractional distillation of crude oil. Asphalt is processed to change its physical properties for use primarily in the roofing industry. In asphalt processing, heated asphalt flux is taken from storage and charged to a heated blowing still where air is bubbled up through the flux. This process raises the softening temperature of the asphalt. The blowing process also decreases the penetration rate of the asphalt when applied to the roofing substrate. Some processing operations use a catalyst (e.g., ferric chloride, phosphoric acid) in the blowing still. A catalyst is used to promote the oxidation of asphalt in the blowing still. The need to use catalyst is primarily driven by the type of feedstock used. Certain feedstocks require catalyst to be used to attain desired product specifications.

In asphalt roofing manufacturing, processed or modified asphalt (also called modified bitumen) is applied to a fibrous substrate (typically made of fiberglass or organic felt) to produce the following types of roofing products: shingles, laminated shingles, smooth-surfaced roll roofing, mineral-surfaced roll roofing, and saturated felt roll roofing. Modified asphalt is asphalt that is mixed with plastic modifiers (which add strength and durability to the asphalt) and is typically used to produce roll roofing products. A roofing manufacturing line is a largely continuous operation, with line stoppages occurring primarily due to breaks in the substrate.

In asphalt roofing manufacturing, asphalt is typically mixed with filler materials before application to the substrate. If a fiberglass substrate is used, coating asphalt is applied by a coater. If an organic substrate is used, a saturator and wet looper are typically used prior to the coater to provide additional time for the asphalt to impregnate the substrate. The type of final product being manufactured determines the process steps that follow the coating or impregnation steps.

For shingles and mineral-surfaced roll roofing, granules are applied to the hot surface of the coated substrate. This step is omitted in manufacture of smooth-surfaced and saturated felt roll roofing. In shingle manufacture, a strip of sealant (typically oxidized or modified asphalt) is applied to the back of the product after it has cooled. This sealant strip, which is heated by the sun after the roofing product is installed, provides some adhesion and sealing between layers of roofing product. In shingle manufacture, the coated substrate is cut into the desired size. Multiple single-ply shingles can be glued together (typically using oxidized or modified asphalt as an adhesive) to produce laminated or dimensional shingles. When asphalt roofing manufacturing lines are collocated with asphalt processing operations, the two operations typically share storage and process tanks.

D. What Are the Emissions and Emission Sources?

Asphalt is essentially the material that remains after fractional distillation of crude oil. Consequently, asphalt consists primarily of heavy organic compounds with low boiling points. Hazardous air pollutants are volatilized from asphalt as it is heated and agitated during processing and roofing manufacturing operations. Hazardous air pollutants are also volatilized during asphalt processing as a result of the oxidation reactions that occur in the blowing still.

Because the HAP volatilized from asphalt generally have low boiling points, they can be present in both condensed particulate matter (PM) and gaseous forms, depending on the temperature of the vent or exhaust gas. When the temperature of the vent gas is below the boiling point of a HAP, the HAP will condense into particulate form (i.e., a cooler vent gas will have more HAP in the form of condensed PM, whereas a hotter vent stream will contain mostly gaseous HAP).

The following types of equipment are sources of PM and gaseous HAP emissions: asphalt storage and process tanks, asphalt blowing stills, oxidized asphalt loading racks, saturators, wet loopers, coating mixers, coaters, sealant applicators, and adhesive applicators. Most blowing stills are controlled by a thermal oxidizer to comply with the Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture (40 CFR part 60, subpart UU, hereafter referred to as the asphalt NSPS) or State regulations. If a chlorinated catalyst is used in the blowing still, HCl is emitted from the blowing still thermal oxidizer outlet.

E. What Are the Health Effects Associated With the Asphalt Processing and Asphalt Roofing Manufacturing Source Categories?

A variety of HAP are emitted from asphalt processing and asphalt roofing manufacturing source categories. The following HAP account for the majority (approximately 98 percent) of the total HAP emissions: formaldehyde, hexane, HCl (at asphalt processing facilities that use chlorinated catalysts), phenol, POM, and toluene. The remaining 2 percent of the total HAP emissions is a combination of several different organic HAP, each contributing less than 0.5 percent to the total HAP emissions.

The HAP emitted from these source categories (controlled under this proposed rule) are associated with a variety of adverse health effects. These adverse health effects include both chronic health disorders (e.g., irritation of the lung, skin, and mucous membranes; effects on the central nervous system; and damage to the blood and liver) and acute health disorders (e.g., respiratory irritation and central nervous system effects such as drowsiness, headache, and nausea). The EPA has classified two of the HAP (formaldehyde and POM) as probable human carcinogens.

The adverse health effects associated with the exposure to specific HAP are further described below. In general, these findings have only been shown with concentrations higher than those typically in the ambient air.

Formaldehyde. Both acute (short-term) and chronic (long-term) exposure to formaldehyde irritates the eyes, nose, and throat, and may cause coughing, chest pains, and bronchitis. Reproductive effects such as menstrual disorders and pregnancy problems have been reported in female workers exposed to formaldehyde. Limited human studies have reported an association between formaldehyde exposure and lung and nasopharyngeal cancer. Animal inhalation studies have reported an increased incidence of nasal squamous cell cancer. The EPA considers formaldehyde a probable human carcinogen (Group B2).

Hexane. Acute inhalation exposure of humans to high levels of hexane causes mild central nervous system effects, including dizziness, giddiness, slight nausea, and headache. Chronic exposure to hexane in air causes numbness in the extremities, muscular weakness, blurred vision, headache, and fatigue. One study reported testicular damage in rats exposed to hexane through inhalation. No information is available on the carcinogenic effects of hexane in humans or animals. The EPA has classified hexane in Group D, not classifiable as to human carcinogenicity.

Hydrogen Chloride. Hydrogen chloride, also called hydrochloric acid, is corrosive to the eyes, skin, and mucous membranes. Acute inhalation exposure may cause eye, nose, and respiratory tract irritation and inflammation and pulmonary edema in humans. Chronic occupational exposure to hydrochloric acid has been reported to cause gastritis, bronchitis, and

dermatitis in workers. Prolonged exposure to low concentrations may also cause dental discoloration and erosion. No information is available on the reproductive or developmental effects of hydrochloric acid in humans. In rats exposed to hydrochloric acid by inhalation, altered estrus cycles have been reported in females and increased fetal mortality and decreased fetal weight have been reported in offspring. The EPA has not classified hydrochloric acid for carcinogenicity.

Phenol. Acute inhalation and dermal exposure to phenol is highly irritating to the skin, eyes, and mucous membranes in humans. Oral exposure to small amounts of phenol may cause irregular breathing, muscular weakness and tremors, coma, and respiratory arrest at lethal concentrations. Anorexia, progressive weight loss, diarrhea, vertigo, salivation, and a dark coloration of the urine have been reported in chronically exposed humans. Gastrointestinal irritation and blood and liver effects have also been reported. No studies of developmental or reproductive effects of phenol in humans are available, but animal studies have reported reduced fetal body weights, growth retardation, and abnormal development in the offspring of animals exposed to phenol by the oral route. The EPA has classified phenol in Group D, not classifiable as to human carcinogenicity.

POM. The term polycyclic organic matter defines a broad class of compounds that includes the polycyclic aromatic hydrocarbon (PAH) compounds, of which benzo[a]pyrene is a member. Dermal exposures to mixtures of PAH cause skin disorders in humans and animals. No information is available on the reproductive or developmental effects of POM in humans. Human studies have reported an increase in lung cancer in humans exposed to POM-bearing mixtures including coke oven emissions, roofing tar emissions, and cigarette smoke. The EPA has classified seven PAH compounds (benzo[a]pyrene, benz[a]anthracene, chrysene, benzo[b]fluoranthene, benzo[k]fluoranthene, dibenz[a,h]anthracene, and indeno[1,2,3-cd]pyrene) as Group B2, probable human carcinogens.

Toluene. Acute inhalation of toluene by humans may cause effects to the central nervous system, such as fatigue, sleepiness, headache, and nausea, as well as irregular heartbeat. Adverse central nervous system effects have been reported in chronic abusers (those that inhale toluene or other toluene-containing substances) exposed to high levels of toluene. Symptoms include tremors, decreased brain size, involuntary eye movements, and impaired speech, hearing, and vision. Chronic (long-term) inhalation exposure of humans to lower levels of toluene also causes irritation of the upper respiratory tract, eye irritation, sore throat, nausea, dizziness, headaches, and difficulty with sleep. Studies of children whose mothers were exposed to toluene by inhalation or mixed solvents during pregnancy have reported central nervous system problems, facial and limb abnormalities, and delayed development. However, these effects may not be attributable to toluene alone. The EPA has classified toluene in Group D, not classifiable as to human carcinogenicity.

This proposed rule would also protect air quality and the public health by reducing emissions of volatile organic compounds (VOC) and PM from asphalt processing and asphalt roofing manufacturing.

Volatile Organic Compounds. Emissions of VOC have been associated with a variety of health and welfare impacts. Volatile organic compound emissions, together with nitrogen oxides, are precursors to the formation of tropospheric ozone. Exposure to ambient ozone is responsible for a number of public health impacts, such as alterations in lung capacity; eye, nose, and throat irritation; nausea; and aggravation of existing respiratory disease. Ozone exposure can also damage forests and crops.

Particulate Matter. Particulate matter can accumulate in the respiratory system and is associated with numerous adverse health effects. Exposure to coarse particles is primarily associated with the aggravation of respiratory conditions, such as asthma. Fine particles are most closely associated with such health effects as increased hospital admissions and emergency room visits for heart and lung disease, increased respiratory symptoms and disease, decreased lung function, and even premature death.

II. Summary of the Proposed Standards

A. Do These Proposed NESHAP Apply to Me?

This proposed rule would apply to you if you process asphalt or manufacture asphalt roofing products at a facility that is a major source of HAP emissions. Major sources of HAP are those that emit or have the potential to emit at least 10 tpy of any one HAP or 25 tpy of any combination of HAP. All emission sources at a facility, not just those related to asphalt processing or roofing manufacture, must be considered in determining major source status. If your facility is determined to be an area source (*i.e.,* not a major source), you would not be subject to these proposed NESHAP.

This proposed rule would not regulate emissions from the wet-formed fiberglass mat production industry, even though a wet-formed fiberglass mat is produced at both stand-alone facilities and those collocated with asphalt processing and roofing facilities. Emissions from wet-formed fiberglass mat manufacturing processes are being regulated by the Wet-Formed Fiberglass Mat NESHAP (40 CFR part 63, subpart HHHH).

B. What Are the Affected Sources?

An affected source is the process equipment that is regulated by the NESHAP. For these proposed NESHAP, there would be two affected sources: each asphalt processing facility and each asphalt roofing manufacturing line. An asphalt processing facility is any facility that prepares asphalt at asphalt processing plants, petroleum refineries, and asphalt roofing plants. An asphalt roofing manufacturing line is the collection of equipment used to manufacture asphalt roofing products through a series of sequential process steps.

C. What Pollutants Are Regulated by the Proposed NESHAP?

These proposed NESHAP would establish emission limits for PM and total hydrocarbons (THC) as surrogates for total organic HAP which includes the following compounds: formaldehyde, hexane, phenol, POM, and toluene.

Although HCl is emitted from some asphalt processing facilities (those that use chlorinated catalysts in the blowing still), we are proposing not to regulate HCl emissions since we can identify no duplicable or otherwise available means of controlling HCl as a floor standard, and beyond the floor controls are not warranted after considering the factors set out in section 112(d)(2) of the Act. A more detailed discussion of the basis for this decision is provided in section IV.C of this preamble.

D. What Emission Limits Must I Meet?

We are proposing that you meet the emission limits that are summarized in Table 2. The emission limits are expressed in appropriate formats for the various process equipment being regulated. Depending on the piece of process equipment, you have the option of complying with any of several formats. These formats include a PM

emission limit, expressed in terms of kilograms of PM per megagram (kg/Mg) of product manufactured, a THC percent reduction standard, or a combustion efficiency standard.

The combustion efficiency standard is provided as an alternative to the THC percent reduction standard. This option is provided in the proposed rule because there are some emission sources (*e.g.,* blowing stills) for which testing of the control device inlet is impractical.

Additionally, saturators (including wet loopers and coaters) at existing asphalt roofing manufacturing lines would have to meet an opacity limit, and the emission capture system for the saturator (including the wet looper and coater) would have to meet a visible emission standard. The proposed rule also provides the option for coating mixers, saturators (including wet loopers and coaters), sealant applicators, and adhesive applicators at existing asphalt roofing manufacturing lines to comply with either the THC or the combustion efficiency standards instead of the PM and opacity standards.

TABLE 2.—SUMMARY OF PROPOSED EMISSION LIMITS FOR EXISTING AND NEW ASPHALT PROCESSING AND ASPHALT ROOFING MANUFACTURING FACILITIES

For * * *	You must * * *
Each asphalt storage tank with a capacity of 1.93 Mg (2.13 tons) or greater of asphalt, blowing still, and loading rack at existing new, and reconstructed asphalt processing facilities.	Reduce THC mass emissions by 95 percent; or Route the emissions to a thermal oxidizer achieving a combustion efficiency of 99.6 percent.
Each coating mixer, saturator (including wet looper and coater), sealant applicator, and adhesive applicator at new and reconstructed asphalt roofing manufacturing lines.	Reduce THC mass emissions by 95 percent; or Route the emissions to a thermal oxidizer achieving a combustion efficiency of 99.6 percent.
The total emissions from the coating mixer, saturator (including wet looper and coater), sealant applicator, and adhesive applicator at each existing asphalt roofing manufacturing line..	Limit PM emissions to 0.04 kg/Mg (0.08 pounds per ton) of asphalt shingle or mineral-surfaced roll roofing produced, or 0.4 kg/Mg (0.8 pounds per ton) of saturated felt or smooth-surfaced roll roofing produced.
Each saturator (including wet looper and coater) at an existing or new asphalt roofing manufacturing line.	Limit exhaust gases to 20 percent opacity; and Limit visible emissions from the emission capture system to 20 percent of any period of consecutive valid observations totaling 60 minutes.

E. When Must I Comply?

We are proposing that existing sources would have to comply with the NESHAP no later than [DATE 3 YEARS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE **Federal Register**]. The 3-year period is necessary to allow owners and operators sufficient time to design, purchase, and install emission capture systems and air pollution control equipment. New or reconstructed sources would have to comply with the NESHAP at startup or [DATE THE FINAL RULE IS PUBLISHED IN THE **Federal Register**], whichever is later.

If your asphalt processing facility or asphalt roofing manufacturing line is located at a facility that is an area source which increases its emissions or its potential to emit such that it becomes a major source of HAP after [DATE THE FINAL RULE IS PUBLISHED IN THE **Federal Register**], then any portion of the existing facility that is a new affected source or a reconstructed affected source would have to either be in compliance with this subpart upon startup after becoming a major source or by [DATE 3 YEARS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE **Federal Register**], whichever is later. All other parts of any facility to which this proposed rule would apply would have to be in compliance with this subpart by 3 years after becoming a major source.

F. What Are the Testing and Initial Compliance Requirements?

You would have to conduct a performance test to demonstrate initial compliance with the NESHAP emission limits. As specified in § 63.7(e) of the NESHAP general provisions (40 CFR part 63, subpart A), performance tests would have to be conducted under normal operating conditions. To ensure that compliance can be achieved over the entire range of operating conditions, the performance tests should be conducted under the operating conditions that reflect the highest rate of asphalt processing or roofing production reasonably expected to be achieved by the facility. For example, performance tests of roofing manufacturing line equipment should be conducted while manufacturing the roofing product with the greatest asphalt content.

The proposed NESHAP contain PM emission limits, a THC percent reduction standard, and a combustion efficiency standard. For these standards, you would have to conduct a minimum of three 1-hour test runs to measure emissions. Compliance is determined based on the average of the three test runs. To measure PM, use EPA test method 5A; for THC emissions, use EPA test method 25A. The EPA reference methods are contained in appendix A of 40 CFR part 60. For the combustion efficiency standard, you would measure emissions of THC, carbon monoxide (CO), and carbon dioxide (CO_2) to demonstrate compliance. You would use EPA method 10 to measure CO emissions and EPA method 3A to measure CO_2 emissions. You would demonstrate compliance with the PM emission limit, THC percent reduction standard, and the combustion efficiency standard using the instructions and equations in the performance test requirement section of these proposed NESHAP.

The proposed NESHAP also contain opacity and visible emission standards for saturators at an existing asphalt roofing manufacturing line. Opacity and visible emission compliance determinations would be made using EPA methods 9 and 22, respectively, in appendix A of 40 CFR part 60.

You would have to install, calibrate, maintain, and operate a continuous monitoring system (CMS) to monitor the control device parameters. During the performance test, you would continuously monitor and record control device parameters and establish the monitoring parameter value(s) that constitute compliance with the emission limits. If you use a thermal oxidizer to comply with the standards, you would record the average operating temperature. The temperature monitoring device would be installed at the exit of the combustion zone or in the ductwork immediately downstream of the combustion zone, before any substantial heat loss occurs. If you use a PM control device, you would record

the device inlet gas temperature and pressure drop across the device.

For thermal oxidizers and PM control devices, the parameters would have to be monitored and values recorded in 15-minute blocks during each of three 1-hour test runs from which you would compute the 3-hour average parameter values. If you use a control device other than a thermal oxidizer or PM control device to comply with the NESHAP, you would propose to the Administrator the appropriate monitoring parameters, monitoring frequencies, and averaging periods. All monitoring parameters for control devices not specified in the proposed rule would have to be approved by the Administrator as specified in § 63.8(f) of the NESHAP general provisions.

During the performance test, you would also monitor and record the average hourly roofing line production rate or the asphalt processing rate, as applicable. If you are complying with the PM emission limit, you would also determine the asphalt content of the product manufactured during the performance test.

G. What Are the Continuous Compliance Provisions?

After the performance test, you would have to demonstrate continuous compliance with the emission limits by monitoring either control device or process operating parameters. The parameters would have to remain within the limits established during the initial performance test.

If you use a thermal oxidizer or PM control device to achieve compliance with the emission limits, you would have to monitor the following operating parameters, determining and recording the parameter values in 15-minute and 3-hour block averages:

- The operating temperature for thermal oxidizers,
- The inlet gas temperature and pressure drop across the device for PM control devices.

If you use a control device other than a thermal oxidizer or PM control device to achieve compliance with the emission limits, you would have to monitor the parameters that were established during the initial performance test and approved by the Administrator. To change the value of any monitored parameter, you would have to conduct a performance test and submit a request to the Administrator for approval using the procedures specified in § 63.8(f) of the NESHAP general provisions.

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

You would have to comply with the notification, recordkeeping, and reporting requirements in 40 CFR part 63, subpart A general provisions, as specified in Table 7 of the proposed rule. The notification, recordkeeping, 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; (2) reports of any startup, shutdown, and malfunction events that occur; and (3) semiannual reports of excess emissions (*i.e.,* deviations from monitoring parameter limits). When no deviations occur, you would submit semiannual reports indicating that no deviations have occurred during the period. For a thermal oxidizer, a deviation would be any time (excluding periods of startup, shutdown and malfunction) that the operating temperature falls below the limit established during the initial performance test. For a PM control device, a deviation would be any time (excluding periods of startup, shutdown and malfunction) that the temperature of the gas at the inlet to the control device or the pressure drop across the control device are above their respective limits established during the initial performance test.

You would have to maintain records of the following, as applicable: (1) Thermal oxidizer operating temperature; (2) PM control device inlet gas temperature and pressure drop; (3) approved parameters for sources that comply with the emission limits using a control device other than a thermal oxidizer or PM control device; and (4) the date and time a deviation commenced if a monitoring parameter deviation occurs, the date and time corrective actions were initiated and completed, a description of the cause of the deviation, and a description of the corrective actions taken. You would also prepare a startup, shutdown, and malfunction plan and maintain records of actions taken during these events, as required by § 63.6(e)(3) of the NESHAP general provisions. The proposed rule also includes a requirement to develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that specifies how the continuous parameter monitoring system will be installed, operated, and maintained, as well as the data quality assurance procedures and ongoing recordkeeping and reporting procedures.

The NESHAP general provisions (§ 63.10(b)) require that records be maintained for at least 5 years from the date of each record. You would have to retain the records onsite for at least 2 years. You may retain records for the remaining 3 years at an offsite location. 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. Summary of Environmental, Energy and Economic Impacts

Although MACT floors must be based exclusively on the emission limitation achieved by the best performing sources (or, for new sources, the best performing source), EPA has compiled information on air quality impacts, costs, non-air quality impacts, and energy impacts in compliance with Executive Orders. We estimate the proposed NESHAP would affect a total of 18 existing facilities (ten asphalt processing and asphalt roofing facilities and eight petroleum refineries). We estimated the number of major sources by estimating emissions using emission factors and available production data and extrapolating potential emissions from actual emissions. We identified major facilities for the purposes of estimating emissions, emission reductions, control costs, and monitoring, recordkeeping, and reporting costs only. It should be noted that facilities may not necessarily be major sources for the purposes of determining applicability of these proposed NESHAP because they were identified as major by our estimates. Likewise, facilities would not be relieved from complying with these proposed NESHAP because they were not identified as major sources in our estimates.

A. What Are the Air Quality Impacts?

Baseline HAP emissions from the asphalt processing and asphalt roofing manufacturing facilities that would be subject to the proposed NESHAP are estimated to be 192 Mg/yr (212 tpy). Baseline THC emissions are estimated to be 173 Mg/yr (191 tpy). The baseline emission estimates were developed using equipment, control device, and production rate data reported in a 1995 industry survey. The proposed NESHAP would reduce HAP emissions by 8.87 Mg/yr (9.78 tpy) and THC by 135 Mg/yr (149 tpy). The proposed NESHAP would also reduce PM emissions from asphalt processing and asphalt roofing

manufacturing facilities. However, we do not have sufficient data to estimate baseline emissions or emission reductions for PM. The HAP reductions that would be achieved by these proposed NESHAP are limited because most of the emission sources in the asphalt processing and asphalt roofing manufacturing industry are currently controlled, and because these proposed NESHAP would not require control of HCl emissions.

The baseline emissions and emission reductions do not include contributions from area sources because they would not be subject to the proposed NESHAP. The estimates also do not include contributions from petroleum refineries because we did not have sufficient data (production rates for blowing stills or population sizes or control devices for storage tanks and loading racks) to estimate baseline emissions or emission reductions from those sources. We believe, based on limited information, most if not all asphalt processing facilities at petroleum refineries are well controlled using thermal oxidizers. Therefore, little additional emission reduction would occur. However, we are specifically requesting comment on the current level of control of asphalt processing facilities located at petroleum refineries.

The proposed NESHAP would also likely cause an increase in emissions of nitrogen oxides (NO_X), CO, and sulfur dioxide (SO_2) due to increased use of thermal oxidizers as control devices. The estimated secondary impacts of NO_X, CO, and SO_2 are approximately 32.0, 53.8, and 0.385 Mg/yr (35.3, 59.3, and 0.424 tpy), respectively. These estimates are based on the amount of exhaust and auxiliary fuel that will be burned at the ten asphalt processing and asphalt roofing manufacturing facilities that are estimated to be major sources.

B. What Are the Cost Impacts?

The cost impacts for the proposed NESHAP for asphalt processing and asphalt roofing manufacturing were developed using site-specific information, obtained by an industry information survey distributed by the Asphalt Roofing Manufacturers Association (ARMA), and the procedures contained in the Office of Air Quality Planning and Standards (OAQPS) Control 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 the industry data were used.

The total capital cost for the industry to achieve compliance with the proposed NESHAP for existing facilities is estimated to be $2.16 million. The capital costs arise from the purchase of emission capture systems and control devices. The total annualized cost is estimated to be $758,000. The annualized costs for the industry include the annualized capital cost of emission capture systems and control devices and operation, maintenance, supervisory labor, maintenance materials, utilities, administrative charges, taxes, and insurance. It is estimated that the industry will spend an additional industrywide average of $250,000 per year for monitoring, recordkeeping, and reporting to comply with the proposed NESHAP. This results in a total annualized cost of $1.01 million.

The total capital and annualized costs cited above do not include the control costs for asphalt processing facilities that would be subject to the proposed NESHAP that are located at petroleum refineries. For petroleum refineries, we did not have data on actual production rates for blowing stills or the populations, capacities, and types of control devices used for storage tanks and loading racks. The capital and annualized costs are anticipated to be significantly less for petroleum refineries than asphalt processing and asphalt roofing manufacturing facilities because most of the blowing stills at these sources are already controlled. Additionally, refineries typically have existing combustion sources (flares, process heaters, and boilers) that can be used as control devices. The only cost anticipated for petroleum refineries will be for emission capture systems.

C. What Are the Economic Impacts?

The Agency conducted a detailed economic impact analysis to determine the market- and industry-level impacts associated with the proposed rule. The compliance costs of today's proposed rule are expected to increase the prices of asphalt roofing and processing products by less than 0.1 percent across the directly affected product markets, and domestic production and consumption of the affected products are expected to decrease by less than 0.1 percent also.

In terms of industry impacts, the asphalt roofing and processing manufacturers are projected to experience a decrease in operating profits of about 0.1 percent, which reflects the compliance costs associated with the production of asphalt roofing and processing products and the resulting reductions in revenues due to the increase in the prices of the directly affected product markets and reduced quantities purchased. Through the market impacts described above, the proposed rule created both gainers and losers within the asphalt roofing and processing industry. The majority of facilities, almost 76 percent, are expected to experience profit increases with the proposed rule; however, there are some facilities projected to lose profits (about 8 percent). Furthermore, the economic impact analysis indicates that of the 123 existing asphalt roofing and processing facilities, none are at risk of closure because of the proposed standards. Therefore, none of the companies that own asphalt roofing and processing facilities are projected to close due to this proposed rule.

Based on the market analysis, the annual social costs of the proposed rule is projected to be about $1.01 million. The estimated social costs differ from the projected engineering costs by less than 0.01 percent for this proposed rule. These two costs differ because social costs account for producer and consumer behavior. These social costs are distributed across the many consumers and producers of asphalt roofing and processing products. For this proposed rule, the producers of asphalt roofing and processing products, in aggregate, are expected to incur about $0.46 million annually in costs, while the consumers of asphalt roofing and processing products are expected to incur $0.55 million annually across the product markets.

The economic analysis also addressed potential changes in new asphalt roofing and processing facility construction for the year following promulgation of this rule. This was done by estimating the total annualized costs for new facilities and projecting changes in equilibrium output due to the proposed rule. The economic impact analysis estimated a very small reduction in the growth of the asphalt industry represented by a small reduction in equilibrium output of asphalt products in the year following promulgation. However, the reduction in equilibrium output was only a small fraction of estimated new plant capacity. Thus, the control costs are not expected to influence the decision to enter the market for asphalt products. For more information, consult the Economic Impact Analysis report supporting this proposed rule.

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

Spent filter media from certain types of PM control devices (e.g., high-efficiency air filters) is periodically replaced and disposed of as solid waste. Although many of the emission sources subject to the proposed NESHAP are already controlled by PM devices, an

increase in the generation of spent filter media is expected as a result of the proposed NESHAP. However, we do not have sufficient data to quantify this anticipated increase in solid waste generation.

No water impacts are anticipated due to the proposed NESHAP since none of the control devices expected to be used to comply with the proposed NESHAP require the use of water or generate wastewater streams.

Increased energy usage is expected due to the proposed NESHAP. Electricity is required to power fans for emission capture systems, and new thermal oxidizers will require supplemental fuel (e.g., natural gas) to efficiently combust the HAP vent streams. The estimated annual increase in electricity consumption is 0.787 million kilowatt hours. The approximate increase in natural gas consumption is 12.0 million standard cubic feet per year. These estimates are for the ten facilities considered to be major sources.

IV. Rationale for Selecting the Proposed Standards

A. How Did We Select the Source Categories To Regulate?

In section 112(c)(2), the CAA requires that we regulate each category of major sources of HAP. An initial list of source categories was published on July 16, 1992 (57 FR 31576) and, pursuant to section 112(c)(1) of the CAA, we have revised the list on four occasions in response to public comment or new information. Asphalt processing and asphalt roofing manufacture are on the list of source categories because these processes can be major sources of HAP or located at major sources of HAP. Hazardous air pollutants are any of the 188 chemicals listed under section 112(b) of the CAA. The proposed NESHAP do not apply to processes that are located at area sources.

B. How Did We Select the Affected Sources?

The affected sources are the pieces of process equipment that are subject to the NESHAP emission limits. The two affected sources in this proposal are defined as each asphalt processing facility and each asphalt roofing manufacturing line. An asphalt processing facility includes the following process equipment: Blowing stills, asphalt flux storage tanks, oxidized asphalt storage tanks, and oxidized asphalt loading racks. An asphalt roofing manufacturing line includes the following process equipment: A saturator, a wet looper, a coater, coating mixers, sealant applicators, adhesive applicators, and associated storage tanks.

Asphalt storage tanks at asphalt processing and asphalt roofing manufacturing facilities that are collocated may be shared by the two operations. If the asphalt roofing manufacturing line is collocated with an asphalt processing facility, the storage tanks that receive asphalt directly from the on-site blowing stills would be defined as part of the asphalt processing affected source.

A facility that manufactures asphalt roofing may have more than one manufacturing line. At these facilities, asphalt storage tanks and sealant and adhesive applicators may be shared by roofing manufacturing lines. A shared storage tank would be considered part of the asphalt roofing manufacturing line to which the tank supplies the greatest amount of asphalt, on an annual basis. A sealant or adhesive applicator that is shared by two or more asphalt roofing manufacturing lines would be considered part of the line that provides the greatest throughput to the applicator, on an annual basis.

This definition of affected source would also be used to determine if new source standards apply when subject equipment is ''constructed'' or ''reconstructed,'' as defined in the NESHAP general provisions (§ 63.2). We defined the affected source as the asphalt processing facility or asphalt roofing manufacturing line rather than on a narrow equipment-piece basis because we believe that it is inappropriate for small changes (*e.g.,* the addition of a sealant applicator to a manufacturing line) to trigger the new source emission limits for only part of the manufacturing line. For asphalt processing facilities, this is not a concern since the existing and new source standards are the same. However, the existing and new source standards are substantially different for asphalt roofing manufacturing lines.

For asphalt roofing manufacturing lines, the new source emission limits would be triggered only when an entire new line is added or when an existing line is reconstructed. This is appropriate because the manufacture of roofing products is a continuous process, with the equipment for the different process steps arranged in sequence. Consequently, an increase in production cannot be achieved simply by adding a single piece of process equipment (e.g., a coater). To increase production capacity, the entire line would have to be modified or a new line would need to be constructed.

C. How Did We Select the Pollutants To Regulate?

The available emission data show that HAP are emitted from asphalt processing and asphalt roofing manufacturing facilities. As discussed previously in section I.D of this preamble, HAP emitted from the sources that would be regulated by these proposed NESHAP can be present in both gaseous and condensed PM forms, depending on the temperature of the vent or exhaust gas.

For the purposes of this proposed rule, the HAP emitted from asphalt processing and asphalt roofing manufacturing facilities have been divided into three categories: Total gaseous organic HAP, total particulate organic HAP, and HCl.

Total Gaseous Organic HAP. We are proposing to regulate gaseous HAP emissions using THC as a surrogate. Total hydrocarbons are an appropriate surrogate for total HAP, since organic HAP constitute a significant portion of the THC. Controlling THC would result in a proportionate amount of organic HAP control.

Total Particulate Organic HAP. Particulate matter emitted from blowing stills consists of condensed organic hydrocarbons. For organic HAP that are present in condensed PM form, we are proposing to use PM as a surrogate. Similarly to the THC surrogate for gaseous HAP, PM is an appropriate surrogate because it would include the HAP that would be emitted as condensed PM. Controlling PM would result in a proportionate amount of condensed particulate organic HAP control.

Hydrogen Chloride. We are proposing not to regulate HCl emissions associated with blowing stills that use chlorinated catalysts. The reasons are discussed in section IV.D of this preamble.

D. How Did We Determine the Basis and Level of the Proposed Standards for Existing and New Sources?

How did we determine the MACT floor? The majority of data used for the MACT floor analysis were obtained from responses to a survey distributed by ARMA in 1995. We reviewed the survey information and obtained clarifications and additional information in subsequent meetings with representatives of the asphalt processing and asphalt roofing manufacturing industry.

Approximately half of the asphalt processing and roofing manufacturing facilities in the industry responded to the survey. Because the survey was not targeted at a specific subset of the

industry (for example, large facilities or well-controlled facilities), we believe the collected data provide a generally representative sample of the industry, but may in fact be slightly biased to larger, well-controlled facilities that had the resources to respond to the survey.

The survey requested information on the types of products manufactured, process equipment, and control devices used in asphalt processing and roofing manufacturing operations. Data were provided on the following types of equipment which have been identified as sources of HAP emissions: blowing stills, loading racks, storage tanks, coaters, saturators, wet loopers, coating mixers, sealant applicators and adhesive applicators. Data characterizing the performance of control devices were not collected by the survey. Data for blowing stills at petroleum refineries (which were gathered to support development of the petroleum refineries NESHAP but were not covered by those NESHAP) were included in the MACT floor analysis for blowing stills.

To establish the MACT floor, we considered two approaches: determine the MACT floor across the affected source as a whole, and determine the MACT floor for each type of process equipment. To determine the MACT floor using the first approach, a mass emission limit or a mass emission reduction percentage across the affected source as a whole must be established. For the definition of affected source in this proposal, this approach would require determination of the best performing 12 percent of the asphalt processing facilities and asphalt roofing manufacturing lines. However, the data currently available are not sufficient to establish either a mass emission limit or a percent reduction for entire affected sources. The variety of equipment configurations used in the asphalt processing and asphalt roofing manufacturing industries makes it difficult to compare mass emissions or overall levels of control from various affected sources. For example, not all processing facilities, especially those collocated with roofing manufacturing facilities, have loading racks. Additionally, adequate test data for estimating uncontrolled emissions and the emission reductions associated with the variety of control devices used are not available.

Consequently, we have decided to establish the existing and new source MACT floors for each type of process equipment used in asphalt processing facilities and in asphalt roofing manufacturing lines. We believe that this approach is the most appropriate use of the available data. Additionally, this approach provides assurance that the resulting MACT floors for each piece of equipment, when combined, would not be less stringent than the MACT floor for the affected source as a whole.

Section 112(d)(3)(A) of the CAA requires that standards be no 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.'' We have interpreted this language to mean that EPA first determines the emission limitations achieved by sources within the best performing 12 percent and then averages those limitations. In this proposal, we interpret the term ''average'' to mean the mean, median, or mode, or some other measure of central tendency. In most cases, ''average'' is interpreted to be the arithmetic mean or the median. The choice between using the median value or mean value depends on which value best represents the central tendency of the data. For asphalt processing and roofing sources, we have determined that the median best represents the central tendency. For most pieces of equipment, the control devices used by the best performing 12 percent are limited to two types (thermal oxidizers and PM control devices). A mean destruction efficiency would result in a floor that does not correspond to any actual control device in use. The median of the best performing 12 percent of sources was identified to determine the MACT floor for blowing stills, loading racks, storage tanks, coaters, coating mixers, and sealant and adhesive applicators.

For saturators and wet loopers, we have data for less than 30 pieces of equipment. Section 112(d)(3)(B) of the CAA requires that standards be no less stringent than ''the average emission limitation achieved by the best performing five sources * * * for categories or subcategories with fewer than 30 sources.'' Therefore, the MACT floor for saturators and wet loopers is based on the average emission limitation achieved by the best performing five sources, rather than the best performing 12 percent of sources. As with other equipment, the median of the five best performing sources was determined to best represent the central tendency of the data.

To identify the best performing sources and the median level of emission reduction, we determined the level of control for each piece of process equipment based on the type of control device installed and the operating characteristics of the control device. For each equipment type, the equipment pieces were ranked in order of level of control. The categories of control, in descending order of HAP emission reduction, are as follows: thermal oxidizers operating at or above 1200 degrees Fahrenheit (°F); thermal oxidizers operating below 1200°F; PM control devices (e.g., high-velocity air filters (HVAF), electrostatic precipitators (ESP); fiberbed filters) used to comply with the asphalt new source performance standard (NSPS) (40 CFR 60, subpart UU); PM control devices not used to comply with the asphalt NSPS; and no control device.

We ranked thermal oxidizers over PM control devices because thermal oxidizers reduce both gaseous HAP and condensed HAP. Particulate matter control devices control only the HAP that have condensed into PM at the operating temperature of the control device.

Thermal oxidizers operating at or above 1200°F were considered to achieve a greater emission reduction than those operating below 1200°F. This conclusion was based on a study of thermal oxidizers that found that most hydrocarbons are destroyed at a temperature of 1200°F or above. Although operating temperatures for thermal oxidizers reported in the survey range up to 1600°F, thermal oxidizers operating at or above 1200°F were not further subdivided. The EPA/ARMA test program showed no consistent increase in emission reduction with increased temperatures above 1200°F. For example, the THC destruction efficiencies for some test runs of a thermal oxidizer operating at 1400°F were less than the destruction efficiencies achieved at 1250°F, while other runs were greater than the efficiencies achieved at 1600°F.

Particulate matter control devices used to comply with the emission limits of the asphalt NSPS were assumed to be better performing than those that were not. This assumption was based on the fact that a performance test is required to demonstrate compliance with the asphalt NSPS PM emission limits. After the performance test, continuous compliance with the emission limits is demonstrated by monitoring the inlet gas temperature. We ranked the PM control devices above no control because PM emissions contain condensed HAP and, in controlling PM, some HAP control is achieved.

Blowing Stills. All blowing stills emit organic HAP. However, blowing stills in which a chlorinated catalyst is used to promote the oxidation reaction also produce emissions of chlorinated compounds. When these compounds are combusted in the thermal oxidizer

typically used to control blowing still emissions, HCl emissions are produced. Because different methods are used to control organic HAP and HCl, separate analyses were conducted to identify the MACT floor for organic HAP and HCl from blowing stills.

We have control device information for 91 blowing stills. Organic HAP emissions from all of these blowing stills are controlled using a thermal oxidizer. All of the best performing 12 percent of blowing stills are controlled with a thermal oxidizer operating at or above 1200°F. Therefore, a thermal oxidizer operating at or above 1200°F is the basis for the floor for control of organic HAP from blowing stills at existing, new, and reconstructed affected sources.

Of the 91 blowing stills for which we have data, 37 use a chloride-based catalyst. In considering a potential floor for HCl emissions from these sources, we considered both at-the-stack controls and prohibiting chlorinated catalyst use as a potential basis for a standard. None of these facilities use a control device to reduce HCl emissions generated by the thermal oxidizer. Therefore, an add-on control device (i.e., a further control in addition to the thermal oxidizer, which is itself an add-on control device) cannot be the basis for a floor standard for HCl emissions.

The only other potential MACT floor for HCl emissions that we considered (and the only potential means available) was the pollution prevention option of not allowing use of a chlorinated catalyst. This would eliminate HCl emissions from the thermal oxidizer. Well over 12 percent of blowing stills do not use a catalyst. However, the need to use catalyst is driven by the type of asphalt feedstocks used.

The asphalt flux used in the production of asphalt roofing materials is a by-product of the petroleum refining process. Because the characteristics of crude oil are highly variable, the quality of the asphalt flux that remains after the refinery distillation processes also varies. Also, the degree of refining has an effect on the suitability of the asphalt flux for use in manufacturing asphalt roofing products. Because the demand for high-quality asphalt flux can sometimes be greater than the supply and because high-quality feedstocks might not be available in a particular region, some roofing manufacturers must accept lower quality feedstock. Catalysts must be used to attain the desired roofing product specifications if certain low-quality asphalt flux feedstocks (e.g., the flux derived from crude oils that have been extensively refined) are used. These sources must use a catalyst in the asphalt flux blowing operation or an acceptable asphalt product for roofing materials cannot be produced. Thus, for these sources, use of a catalyst (with consequent HCl emissions when other organic emissions are controlled with a thermal oxidizer control device) is a necessity unless asphalt production is discontinued. This, of course, is not an intended result from application of MACT. See H. Rep. No. 490, 101st Cong. 2d sess. 328 (''However, MACT is not intended * * * to drive sources to the brink of shutdown'').

Consequently, control of HCl emissions through substitution of higher quality asphalt flux is not an achievable means of control, because such higher quality flux is not consistently or reliably available, i.e., there is generally not enough higher quality flux available at any one time for the demand. Since this potential means of control is not duplicable (i.e., not consistently or reliably available to all sources), standards based on this means of control would not be achievable, as required by section 112(d)(2) of the Act. EPA consequently is not proposing a floor standard based on the unavailable means of process substitution.[1]

Because there are no control devices in use to control HCl from blowing still thermal oxidizers and disallowing the use of catalyst is not a technically achievable option for all sources, the MACT floor for HCl emissions at existing, new, and reconstructed affected sources is based on no emission reduction.

We do not believe this proposal is inconsistent with the holding in *National Lime* v. *EPA*, 233 F. 3d 625 (D.C. Cir. 2000). That case remanded MACT standards of no control for consideration of whether various types of process substitution could establish a MACT floor. 233 F. 3d at 634. There was no showing, however, that such means of control were unavailable (so that plant closure was the only alternative should standards based on process substitution be adopted). Nor was *National Lime* a situation where emission of one HAP resulted from application of control technology for other HAPs.

Loading Racks. We have control device information for 52 loading racks. All of the best performing 12 percent of loading racks are controlled with a thermal oxidizer operating at or above 1200°F. Therefore, a thermal oxidizer operating at or above 1200°F is the basis for the MACT floor for loading racks at existing, new, and reconstructed affected sources.

Coaters. We have control device information for 73 coaters. Of the nine best performing coaters (the best performing 12 percent of sources), four are controlled with a thermal oxidizer operating at or above 1200°F, and five with a PM control device that is subject to the asphalt NSPS limits. The median, or fifth, source is controlled with a PM control device that is subject to the asphalt NSPS limits. Therefore, the floor level of control for coaters at existing affected sources is based on a PM control device that achieves the asphalt NSPS limits. The floor for coaters at new and reconstructed affected sources is based on a thermal oxidizer operating at or above 1200°F.

Coating Mixers. We have data for 60 coating mixers. Of the eight coating mixers that represent the best performing 12 percent, three are controlled with a thermal oxidizer operating at or above 1200°F, three are controlled with a PM control device that is subject to the asphalt NSPS limits, and two are controlled with a PM control device that is not used to comply with the asphalt NSPS. The fourth and fifth coating mixers, representing the median, are controlled with a PM control device that is subject to the asphalt NSPS limits. Therefore, the MACT floor for coating mixers at existing affected sources is based on a PM control device that achieves the asphalt NSPS limits. The floor for coating mixers at new and reconstructed affected sources is based on a thermal oxidizer operating at or above 1200°F.

Saturators and Wet Loopers. We have data for less than 30 saturators and less than 30 wet loopers, therefore the floor for these types of equipment is based on the ''average'' emission limit achieved by the five best performing sources. Of the five best performing saturators, one is controlled with a thermal oxidizer operating at or above 1200°F, one is controlled by a thermal oxidizer operating below 1200°F, and the remaining saturators, including the median source, are controlled with a PM control device that is subject to the asphalt NSPS limits. A PM control device that achieves the asphalt NSPS limits is therefore the basis for the floor for saturators at existing affected sources. A thermal oxidizer operating at or above 1200°F is the basis for the floor

[1] The situation might also be conceptualized in terms of subcategories: plants that produce asphalt using higher quality flux, and those without access to higher quality flux producing asphalt using catalysts. The higher quality flux process subcategory controls HCl emissions through its process (in essence, there are no such emissions); the catalyst subcategory does not control HCl emissions at the floor level.

for saturators at new and reconstructed affected sources.

All of the five best performing wet loopers are controlled with a PM control device that is subject to the asphalt NSPS limits. Therefore, the floor for wet loopers at existing, new, and reconstructed affected sources is based on a PM control device that achieves the asphalt NSPS limits.

Asphalt Storage Tanks. As discussed previously, storage tanks may be associated with either asphalt processing or asphalt roofing manufacturing or shared between the two source categories at collocated facilities. To address the possibility that the floor for asphalt storage tanks would be different for asphalt processing and asphalt roofing manufacturing facilities, we performed the floor analysis for five different groupings of facilities: facilities that only process asphalt, facilities that only manufacture roofing products, facilities that both process asphalt and manufacture roofing products, facilities that process asphalt (including stand-alone and collocated asphalt processing facilities), and all facilities.

In addition, storage tanks can vary in function based on the material stored. Large bulk storage tanks are used to store asphalt flux and oxidized asphalt; modified bitumen tanks are used to mix asphalt flux and plastic modifiers; and relatively small process tanks, such as sealant and adhesive tanks, supply asphalt directly to the roofing line. To address the possibility that the level of emission reduction is related to the function of a tank, we grouped the tanks by the type of material stored, as an indication of the tank's function. The material groupings included: asphalt flux, oxidized asphalt, modified bitumen, and sealant and adhesive.

We found that, regardless of the facility or material grouping, a thermal oxidizer operating at or above 1200°F is the basis for the MACT floor for storage tanks at existing, new, and reconstructed affected sources.

Through the MACT floor analysis, we determined, based on available data, that no sources are using a thermal oxidizer to control emissions from storage tanks with a capacity less than 1.93 megagrams (2.13 tons) of asphalt. Therefore, the MACT floor level of control does not include controlling tanks with capacities less than 1.93 megagrams.

Sealant and Adhesive Applicators. There are 60 applicators for which we have data. Therefore, the eight best performing applicators represent the top 12 percent of sources. Of these, four applicators are controlled with a thermal oxidizer operating at or above 1200°F and four applicators are controlled with a PM control device subject to the asphalt NSPS limits. Because there are an even number of control devices in the top 12 percent, there is no clear median control. However, as stated previously, the database of applicators includes only those of companies that responded to the survey, which may be biased toward the better-controlled facilities (those with more available resources to respond). In light of this uncertainty, and the fact that there is no clear median source, we have assumed that some bias may exist toward reporting of better-controlled facilities. The lesser-controlled nonrespondents, if included in the floor determination, would then produce an identifiable median of PM control at the NSPS level. This would thus cause us to identify a more stringent MACT floor than if we have information on all applicators. Consequently, to allow for any bias that may exist in the database due to this marginal uncertainty, we have determined that the average emission limitation achieved by the best performing 12 percent is more appropriately represented by the emission reduction achieved for the fifth-ranked applicator, which is controlled with a PM control device subject to the asphalt NSPS limits. The MACT floor of applicators at existing affected sources is based on a PM control device achieving the asphalt NSPS limits, and the MACT floor for applicators at new and reconstructed sources is based on a thermal oxidizer operating at or above 1200°F.

In summary, the MACT floor for the equipment at existing, new, and reconstructed asphalt processing facilities (blowing stills, loading racks, and storage tanks with capacity of 1.93 megagrams or greater) is based on a thermal oxidizer operating at or above 1200°F for control of organic HAP. With the exception of asphalt storage tanks, the MACT floor for equipment at existing asphalt roofing manufacturing lines (coaters, saturators, wet loopers, coating mixers and sealant and adhesive applicators) is based on a PM control device complying with the asphalt NSPS. Compliance with the asphalt NSPS includes limiting PM emissions to a process weight-based limit and complying with opacity and visible emission limits. For the coaters, saturators, wet loopers, coating mixers, and sealant and adhesive applicators at new and reconstructed affected sources, the MACT floor is based on a thermal oxidizer operating at or above 1200°F. For wet loopers at new and reconstructed affected sources, the MACT floor is based on a PM control device complying with the asphalt NSPS. For storage vessels with a capacity of 1.93 megagrams or greater at existing, new, and reconstructed asphalt roofing manufacturing lines, the MACT floor is based on a thermal oxidizer operating at or above 1200°F.

How did we consider beyond-the-floor options? There are three groups of equipment for which we identified potential options for achieving emission reductions more stringent than the floor (beyond-the-floor options): saturators, wet loopers, coaters, coating mixers, and sealant and adhesive applicators at existing sources; blowing stills that use a chlorinated catalyst at existing, new, and reconstructed sources; and wet loopers at new and reconstructed sources.

For all other equipment (blowing stills, loading racks, and storage tanks at existing, new, and reconstructed sources; and for saturators, coaters, coating mixers, and sealant and adhesive applicators at new and reconstructed sources), the MACT floor is based on a thermal oxidizer operating with a minimum operating temperature of 1200°F. There are no known technologies in use at asphalt processing or roofing manufacturing facilities or similar sources that would be capable of achieving a greater emission reduction than these thermal oxidizers and, thus, no beyond-the-floor options were considered.

We also considered whether facilities could use ''cleaner'' or lower-emitting asphalt feedstocks when processing asphalt or manufacturing roofing products as a beyond-the-floor option for all equipment at existing, new, and reconstructed affected sources. We do not have data to determine the relationship between HAP emissions and various types of feedstocks. Additionally, we do not have sufficient data to determine definitively whether this is a viable option, although we believe that it is not feasible because a facility's choice of feedstocks is dictated primarily by its location. For example, it would be impractical for an asphalt processing facility on the East coast to obtain asphalt feedstock from a petroleum refinery on the West coast. Consequently, we have determined that restricting the type of feedstock used is not technically achievable for all sources, and, therefore, cannot be considered as a beyond-the-floor option.

Saturators, Wet Loopers, Coaters, Coating Mixers, and Sealant and Adhesive Applicators at Existing Sources. For saturators, wet loopers, coating mixers, coaters, and sealant and

adhesive applicators at existing affected sources, the floor is based on a PM control device used to comply with the asphalt NSPS limits. The level of control achieved by a thermal oxidizer with a minimum operating temperature of 1200°F was identified as the only beyond-the-floor option. It is estimated that requiring a thermal oxidizer for these pieces of equipment would result in an total annualized cost (capital amortization plus operating costs) to industry of $3.3 million. The additional emission reduction associated with this option is estimated to be 5.36 megagrams of HAP per year, resulting in a cost per megagram of HAP reduced of $616,000 per megagram ($559,000 per ton of HAP.) Additionally, the option would result in significant increases in emissions of criteria pollutants due to the combustion of the exhaust gas and supplemental fuel.

Due to the cost per megagram of HAP reduction and the increase in criteria pollutant emissions, requiring the level of control achieved by a thermal oxidizer for saturators, wet loopers, coaters, coating mixers, and sealant and adhesive applicators at existing sources is not a justifiable option at this time without further evaluation of the associated risks. Therefore, the MACT for saturators, wet loopers, coating mixers, coaters, and sealant and adhesive applicators at existing sources is determined to be the floor level of control, which is based a PM control device meeting the asphalt NSPS limits.

Blowing stills that use a chlorinated catalyst. Blowing stills that use a chlorinated catalyst produce a vent stream that contains chlorinated organic compounds. When this vent stream is sent to a thermal oxidizer, the chlorinated organic compounds are oxidized to HCl which is a HAP. Typical HCl emission from a blowing still using catalyst are 0.117 kilograms per megagram of asphalt processed.

As discussed earlier, we considered prohibiting catalyst as a potential MACT floor option for existing, new, and reconstructed blowing stills but this option was rejected because it was determined not to be available because the substitute, high quality flux, is not consistently or reliably available to all sources. This option was also considered as a beyond-the-floor option but was rejected for the same reasons. Also, we considered the option of requiring the addition of a scrubber to control HCl emissions.

Emissions of HCl can be reduced by a gas scrubber using caustic scrubbing media. Gas scrubbers typically achieve 95 percent reduction of HCl emissions in other applications in other industries. However, there are currently no asphalt processing facilities using gas scrubbers to control HCl emissions. Additionally, catalyst is not added continuously to the blowing still, but at the beginning of the blowing cycle, resulting in variable HCl emissions over the cycle. This variability makes it difficult to assess the expected reduction efficiency of a given scrubber.

Based on the information collected by the ARMA survey, ten asphalt processing facilities in the roofing industry that are major sources use a chlorinated catalyst. The total capital cost for gas scrubbers for the six facilities is estimated to be $1,220,000; the total annualized cost (capital amortization plus operating costs) of the ten gas scrubbers is estimated to be $4,020,000. These costs are based on typical scrubbers used in other industries for similar flow rates and do not take into consideration the variable HCl emissions in asphalt processing, and thus may be understated. Using these costs and estimated HCl emission reductions of 168.1 Mg/yr (185.4 tpy) (this reduction is based on 95 percent reduction, but the actual overall reduction could be less due to the variability of HCl emissions over the blowing cycle) yields a cost per megagram of HAP removal value of $23,900 per megagram ($21,700 per ton) of HCl removed. The use of gas scrubbers would also result in increases in electricity usage (needed to run scrubber pumps) and generation of solid and liquid waste streams due to disposal of spent scrubber media.

Because it is not available to sources using catalyst, prohibiting the use of catalyst is not considered a feasible beyond-the-floor option. Because scrubbing has not been demonstrated as an effective technology for controlling HCl emissions from asphalt processing and due to the potentially high cost per megagram of HCl reduced, we do not believe the additional cost of going beyond-the-floor is warranted at this time without a further evaluation of risk. Therefore, because there are no feasible pollution prevention practices or demonstrated add-on control devices options for controlling HCl from blowing stills, MACT for blowing stills using catalyst is based on no emission reduction.

Wet Loopers at New and Reconstructed Sources. The floor for wet loopers at new and reconstructed affected sources is based on a PM control device that is achieving the asphalt NSPS limits. Therefore, controlling a wet looper to achieve the level of control of a thermal oxidizer operating at a minimum of 1200°F was considered as a beyond-the-floor option.

Because new affected sources will be required to control all blowing stills, storage tanks with a capacity of 1.93 megagrams (2.13 tons) or greater, loading racks, saturators, coating mixers, coaters, and sealant and adhesive applicators to the level of control achieved by a thermal oxidizer, we expect a source to tie its wet looper exhaust stream into the other exhaust streams going to the thermal oxidizer. We anticipate that the addition of wet looper exhaust to the other exhaust streams that would have to be controlled will add little, if any, cost to the cost of a new thermal oxidizer. Additionally, because wet loopers are adjacent to or are part of an associated saturator, controlling the wet looper along with the saturator would not require additional costs for the emission capture system. Because of this, the cost of adding a separate thermal oxidizer to control a wet looper at a new source was not estimated.

This option would result in negligible increases in emissions of criteria pollutants due to the combustion of the exhaust gas and supplemental fuel. Because controlling wet loopers at new affected sources is expected to add minimal if any cost to the total control cost, MACT for wet loopers at new or reconstructed affected sources is based on a thermal oxidizer operating at a minimum of 1200°F.

The MACT floor for blowing stills, loading racks, and storage tanks at existing, new, and reconstructed sources, and for saturators, wet loopers, coating mixers, coaters, and sealant and adhesive applicators at new and reconstructed sources is based on a thermal oxidizer operating with a minimum operating temperature of 1200°F. There are no known technologies in use at asphalt processing or asphalt roofing manufacturing facilities or similar sources that would be capable of achieving a greater emission reduction, therefore, the MACT for these types of equipment is the same as the MACT floor.

E. How Did We Select the Format of the Standards?

The EPA and ARMA conducted a joint test program to characterize the HAP emissions from the facilities using the MACT. Six facilities using the MACT were tested under the test program (four collocated processing and roofing facilities, one stand-alone roofing facility, and one modified bitumen facility). In general, the data collected from the test program were not

sufficient to develop performance standards based on HAP emissions per unit of production. First, different products were manufactured during the tests at the various facilities. Therefore, the emissions from the different facilities cannot be related on a common basis. Second, technical problems with the HAP data collected, due to calibration errors of the instrument, introduced a degree of uncertainty into the test results. However, based in part on the test program and on other information, we were able to select the format of the standard for process equipment using thermal oxidizers and PM control devices.

Total Hydrocarbon Emissions. The basis for MACT for HAP emissions from blowing stills, loading racks and asphalt storage tanks (with a capacity of 1.93 megagrams (2.13 tons) or greater) at existing and new asphalt processing facilities and for equipment at new asphalt roofing manufacturing lines is use of a thermal oxidizer. Unfortunately, the majority of the speciated HAP data collected from the test program were not valid due to calibration errors during testing. However, emissions data for THC did not contain the calibration errors. Therefore, we were able to evaluate the performance of thermal oxidizers using THC data as a surrogate for total HAP. Total hydrocarbons are an appropriate surrogate for total HAP since all of the HAP that are present as gaseous and condensible PM are organic compounds.

Because of the lack of a common product manufactured during the emission tests, we could not evaluate the performance of the thermal oxidizers based on emissions per unit of production. Therefore, we evaluated the thermal oxidizer performance on a THC percent reduction basis.

Most facilities that would be subject to the proposed THC emission limit are expected to comply using a thermal oxidizer; in fact, we are not aware of any other type of control device used at asphalt processing facilities to control both gaseous and particulate THC. However, testing of the thermal oxidizer inlet, which is necessary to demonstrate compliance with a percent reduction standard, may not be feasible when the thermal oxidizer is used to control emissions from certain emission sources, such as blowing stills. Due to the nature of the organic compounds in the exhaust gas and the high concentrations at the thermal oxidizer inlet, fouling of the testing equipment can occur. To address this problem, we also evaluated the performance of thermal oxidizers on a combustion efficiency basis which only requires outlet testing. The combustion efficiency standard defines how well the organic compounds in the process vent streams and the supplemental fuel are converted to CO_2 by the thermal oxidizer.

Particulate Matter Emissions. The MACT for equipment at existing asphalt roofing manufacturing lines (except for asphalt storage tanks) is based on a PM control device installed to comply with the asphalt NSPS. However, we did not have sufficient data to evaluate the performance of PM control devices based on HAP or THC emissions per unit of production or based on percent reduction. Therefore, the format of the standard for PM control devices is expressed as the asphalt NSPS limits for PM, opacity, and visible emissions. The use of PM, opacity, and visible emissions as surrogates for HAP in this case is appropriate since a portion of the HAP is in the form of condensed PM.

F. How Did We Select the Emission Limits?

As discussed in the previous section, the HAP data collected from the test program were not sufficient to develop emission limits based on HAP emissions per unit of production. However, for gaseous matter control devices, we were able to establish a THC percent reduction standard and a combustion efficiency based on thermal oxidizer test data. Particulate matter standards were established for PM control devices based on the limits specified in the asphalt NSPS.

Total Hydrocarbon Limits. The thermal oxidizers tested represent the basis of MACT for blowing stills, loading racks, and storage tanks at existing, new, and reconstructed sources, and for saturators, wet loopers, coating mixers, coaters, and sealant and adhesive applicators at new and reconstructed sources. The inlet and outlet THC concentration data collected from the test program were used to calculate the THC percent reduction achieved by each of the thermal oxidizers tested. Although there were variations in the calculated THC percent reductions, there was not a consistent trend of increasing THC reduction with increasing operating temperature, as long as the operating temperature was 1200°F or greater. We believe that this variability reflects normal operation of the control devices. Therefore, we averaged together the THC destruction efficiencies of the tested thermal oxidizers to determine the emission limits for gaseous matter control devices.

Specifically, we calculated the average THC reduction efficiency achieved by each thermal oxidizer tested by averaging the THC destruction efficiency of the individual test runs performed. We then calculated an overall average THC destruction efficiency of 95.9 percent reduction for all five of the thermal oxidizers tested. To account for variability in the performance of thermal oxidizers and ensure achievability, the standard deviation (0.99) of the individual thermal oxidizer averages was subtracted from the overall average. This resulted in an emission limit for reduction of THC emissions of 95 percent.

An alternative expression of the standard for thermal oxidizers is the combustion efficiency standard. To establish the combustion efficiency that represents MACT, we used the outlet THC, CO, and CO_2 concentration data from the same thermal oxidizers that were used to develop the percent reduction emission limit and the same statistical approach (i.e., determined overall combustion efficiency average and added one standard deviation). Using this approach, we established an average combustion efficiency of 99.6 percent.

Particulate Matter Limits. Since MACT for equipment at existing asphalt roofing manufacturing lines (with the exception of asphalt storage tanks) is based on a PM control device installed to comply with the asphalt NSPS, we selected the following current PM, opacity, and visible emission standards of the asphalt NSPS as the emission limits that represent MACT:

- Limit PM emissions to 0.04 kg/Mg of asphalt shingle or mineral-surfaced roll roofing produced, or 0.4 kg/Mg of saturated felt or smooth-surfaced roll roofing;
- Limit opacity emissions from the control device exhaust to less than 20 percent; and
- Limit visible emissions from the emission capture system to 20 percent. (It should be noted that this limit also applies when the saturator is controlled with a thermal oxidizer.)

No additional data were available to provide a basis for selecting more stringent limits.

G. How Did We Select the Testing and Initial Compliance Requirements?

Under these proposed NESHAP, a performance test would be required to demonstrate initial compliance with the emission limits. With the exception of PM, opacity, and visible emissions, we selected the EPA reference test methods that were used in the EPA/ARMA test program to collect the original data. For PM, opacity, and visible emissions, we

selected the EPA reference test methods that are specified in the asphalt NSPS. However, you may use any alternative method that has been approved by the Administrator under § 63.7(f) of the NESHAP general provisions.

To demonstrate compliance with the THC percent reduction standard, you would measure the THC emissions at the inlet and outlet of the control device using EPA method 25A in appendix A of 40 CFR part 60. For the combustion efficiency compliance option, you would measure the CO, CO_2, and THC concentrations at the thermal oxidizer outlet using EPA reference methods 10, 3A, and 25A in appendix A of 40 CFR part 60, respectively. To determine compliance with the PM emission limit, you would measure the PM emissions at the control device outlet using EPA method 5A in appendix A of 40 CFR part 60. The production rate would also be determined during the performance test for PM. The EPA methods 9 and 22 in appendix A of 40 CFR part 60 would be used to determine the opacity and visible emissions, respectively.

H. How Did We Select the Continuous Compliance Requirements?

We considered two options for monitoring compliance with the emission limits of this proposed rule: (1) The use of continuous emission monitoring systems (CEMS), and (2) continuous monitoring of control device operating parameters. Continuous emission monitoring systems provide a direct measurement of pollutant emissions. Parameter monitoring provides a measure of the control device's operation.

If CEMS were used to demonstrate continuous compliance with the THC percent reduction standard, a CEMS and flow monitors would be needed at both the inlet and outlet of each control device to determine percent reduction. For the combustion efficiency option, a CEMS would be needed to monitor the concentrations of THC, CO and CO_2 at the thermal oxidizer outlet. For the PM emission limits, a CEMS would be needed at the control device outlet, as well as a system for continuously monitoring production rates. A continuous opacity monitor system (COMS) at the control device outlet would be needed to demonstrate continuous compliance with the opacity limit.

The capital cost of installing and calibrating a CEMS ranges from $29,000 to $118,000 with annualized costs of operating and maintaining the CEMS ranging from $11,000 to $42,000. The total capital and annualized costs for COMS are approximately $29,000 and $11,000, respectively. The capital cost estimates include the purchased equipment cost and other ancillary capital costs, such as planning, providing support facilities, installation, calibrating the CEMS, certification tests, and preparing a quality assurance/quality control (QA/QC) plan. The annualized cost estimates include operation and maintenance, indirect costs, and ancillary costs, such as annual relative accuracy test audits, quarterly cylinder gas audits, recordkeeping, reporting, and annual reviews and updates.

Although we considered requiring the use of CEMS, we believe that compliance with the proposed THC, PM and combustion efficiency standards can be achieved by monitoring of control device parameters to determine continuous compliance with the operating limits. Consequently, CEMS are not justified and the additional costs of requiring the use of a CEMS would be unreasonable. Additionally, the test methods for determining opacity and visible emissions are based on visual observations and compliance can be determined at any time. Based on this, and the fact that the proposed rule contains an opacity limit for only one type of process equipment, we determined COMS to be unreasonable in this situation. However, we are specifically requesting comment on including a provision in the NESHAP to allow facilities to use CEMS and COMS as options to parametric monitoring.

To demonstrate continuous compliance, the proposed NESHAP requires continuous monitoring of control device operating parameters. The monitoring parameter values would have to be established during the initial performance test. Additionally, you would have to be able to demonstrate compliance with the opacity and visible emission standards at any time. We believe that the monitoring requirements will provide sufficient information needed to determine continuous compliance with the operating limits. At the same time, the provisions are not labor intensive, do not require expensive or complex equipment, and do not require burdensome recordkeeping.

For PM devices (*e.g.,* HVAF, ESP) used to demonstrate compliance with the PM standard for existing asphalt roofing manufacturing line equipment, we selected inlet gas temperature and pressure drop across the device as the monitoring parameters. For ESP, no additional monitoring parameters (e.g., ESP voltage) were required since the ESP used in the asphalt processing and roofing industries are typically low-voltage, modular designs. The PM removal performance of these devices is adequately characterized by inlet gas temperature and pressure drop. For all PM control devices, the inlet gas temperature would have to be at or below the temperature at which the performance test was conducted to ensure that a sufficient amount of PM has condensed from the vent gas prior to entering the PM control device. The control device pressure drop would have to be at or below the value established during the performance test to ensure that the control device is providing sufficient removal of PM and that the removal mechanism (e.g., filter media) does not become plugged or fouled. Although monitoring of pressure drop is not required by the asphalt NSPS, monitoring of inlet gas temperature for PM control devices is the same as the monitoring requirements of the asphalt NSPS. This minimizes the monitoring, recordkeeping, and reporting burden on facilities.

For thermal oxidizers used to achieve compliance with the THC or combustion efficiency standards, we selected combustion zone temperature for monitoring. The performance of thermal oxidizers is dictated by the turbulence and residence time of the gases in the combustion zone and by the combustion zone temperature. For a given flow rate, the turbulence and residence time are fixed properties. Therefore, the remaining parameter necessary for determining the operation of the thermal oxidizer is combustion zone temperature. Additionally, most thermal oxidizers are already equipped with systems for monitoring and recording operating temperature. The combustion zone temperature would have to be at or above the temperature at which the performance test was conducted. Monitoring of combustion zone temperature is also the same as the monitoring requirements of the asphalt NSPS. For each monitoring parameter, you would determine 3-hour average values. We selected this averaging period to reflect operating conditions during the performance test used to demonstrate initial compliance.

I. How Did We Select the Notification, Recordkeeping and Reporting Requirements?

We evaluated the notification, recordkeeping, and reporting requirements of the NESHAP general provisions and selected those requirements determined to be the minimum necessary to determine continuous compliance with the proposed NESHAP. The requirements

for notification, recordkeeping and reporting that were selected have been used by previous NESHAP with similar emission limit formats.

The NESHAP general provisions notification requirements (§ 63.9) include: Initial notifications, notification of performance test, notification of compliance status, and additional notifications required for affected sources with continuous monitoring systems. Semiannual compliance reports and reports of startup, shutdown, and malfunction events that occur are also required.

We also determined that the proposed requirement to prepare a written, site-specific monitoring plan is necessary to ensure that the continuous parameter monitoring systems are installed, operated, and maintained properly. Because the monitoring plan does not require Administrator approval, we do not believe that it imposes an undue burden on the industry.

J. What Is the Relationship of This Subpart to Other Standards?

Existing standards may apply to facilities subject to these proposed NESHAP because they apply to facilities at which asphalt roofing manufacturing or asphalt processing facilities are located. In most cases, although other standards may apply at the same facility, the specific requirements of the standards are not likely to apply to the same pieces of equipment as these proposed NESHAP. The petroleum refineries NESHAP (40 CFR part 63, subpart CC); the petroleum liquids and volatile organic liquid (VOL) storage vessel NSPS (40 CFR part 60, subparts K, Ka, and Kb); and the petroleum refineries NSPS (40 CFR part 60, subpart J) apply to petroleum refineries, which may also have asphalt blowing stills, storage tanks, and loading racks. However, those standards apply to different pieces of equipment than these proposed NESHAP. Similarly, the wet-formed fiberglass mat manufacturing NESHAP (40 CFR part 63, subpart HHHH) apply to fiberglass manufacturing facilities, some of which are collocated with asphalt roofing manufacturing facilities (fiberglass mat is used as a substrate in roofing manufacturing.) The wet-formed fiberglass mat manufacturing NESHAP do not apply to the same pieces of equipment as these proposed NESHAP. The asphalt NSPS (40 CFR part 60, subpart UU) apply to both the same facilities and some of the same equipment as these proposed NESHAP.

Standards That Apply to Petroleum Refineries. These proposed NESHAP would apply to asphalt blowing stills, asphalt storage tanks, and asphalt loading racks. These pieces of equipment can also be located at petroleum refineries which are subject to the petroleum refineries NESHAP, the petroleum liquids and VOL storage vessel NSPS, and the petroleum refinery NSPS.

The petroleum refineries NESHAP include requirements for process units, storage tanks, and loading racks. However, limited definitions and applicability cut-offs make it unlikely that the petroleum refineries NESHAP would apply to the same pieces of equipment subject to these proposed NESHAP. For the petroleum refineries NESHAP, ''asphalt'' was intentionally not added to the list of products produced by petroleum refining process units because asphalt processing was listed as a separate source category. The asphalt storage tanks found at petroleum refineries store oxidized asphalt and asphalt flux. The petroleum refineries NESHAP control requirements do not apply to storage vessels storing liquids with a maximum true vapor pressure less than 10.4 kilopascals (kPa) at existing sources and 3.4 kPa at new sources. Based on limited vapor pressure data and average operating temperatures for asphalt tanks, it is unlikely that the vapor pressure of asphalt would trigger the petroleum refinery NESHAP control requirements. It is estimated that the vapor pressure of asphalt at typical storage temperatures is an order of magnitude (in the range of 0.4 kPa) less than the lower applicability cutoff. Loading rack provisions of the petroleum refineries NESHAP are limited to gasoline loading racks. There are no requirements in the petroleum refineries NESHAP for asphalt loading racks.

Similarly to the petroleum refineries NESHAP, the petroleum storage vessel NSPS (40 CFR part 60, subparts K, Ka, and Kb) apply to storage vessels at petroleum refineries, but control requirement applicability is limited based on the vapor pressure of the stored liquid. In the three NSPS, the lowest vapor pressure cutoff for recordkeeping requirement applicability is 3.5 kPa (subpart Kb), and the lowest vapor pressure cutoff for control applicability is 5.2 kPa (subpart Kb). As discussed previously, the vapor pressure of asphalt flux and oxidized asphalt would not be high enough to trigger control requirements.

The petroleum refineries NSPS apply to fluid catalytic cracking unit catalyst regenerators, fuel gas combustion devices, and Claus sulfur recovery plants with a capacity greater than 20 long tons per day. None of these sources would be subject to requirements of these proposed NESHAP.

Wet-formed Fiberglass Mat Manufacturing NESHAP. Wet-formed fiberglass mat is used as a substrate for roofing products. A small number of asphalt processing and roofing facilities also manufacture fiberglass mat. These proposed NESHAP and the wet-formed fiberglass mat manufacturing NESHAP would cover different pieces of equipment. Therefore, while some facilities may be subject to both rules, individual pieces of equipment will be subject to one or the other rule, but not both.

Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture. Both the asphalt NSPS and these proposed NESHAP regulate emissions from the following process equipment: Asphalt storage and process tanks, blowing stills, saturators, coaters, and wet loopers. Mineral handling and storage facilities are covered by the asphalt NSPS but are not covered by these proposed NESHAP because these facilities are not sources of HAP emissions. Asphalt loading racks, coating mixers, sealant applicators, and adhesive applicators are covered by these proposed NESHAP but not by the asphalt NSPS.

With one exception, these proposed NESHAP have different emission limits than the asphalt NSPS. For most equipment, these proposed NESHAP specify THC emission limits while the asphalt NSPS specify PM and opacity or visible emission limits. Therefore, the testing, monitoring, recordkeeping, and reporting requirements of the two rules are different. The exception is for saturators, wet loopers, and coaters constructed after November 18, 1980 (the asphalt NSPS applicability date) but on or before November 21, 2001. These pieces of equipment would be considered a ''new'' source with respect to the asphalt NSPS but would be considered an ''existing'' source for these proposed NESHAP. The emission limits and, consequently, the procedures for testing and demonstrating continuous compliance are the same for the most part.

Saturators, wet loopers, and coaters that are part of an affected source that was constructed or reconstructed after November 21, 2001 would be subject to both the asphalt NSPS PM emission limits and the proposed NESHAP emission limits for THC. For these pieces of equipment, we are proposing that compliance with the NESHAP would constitute compliance with the asphalt NSPS. Support for this finding is provided by data collected for the Background Information Document

(BID) for the asphalt NSPS and information collected by the ARMA industry survey. The BID presents test data for PM emissions from saturators controlled by an ESP, thermal oxidizer (operating at 1200° F), and a HVAF. The data show that a thermal oxidizer can achieve a PM emission limit of 0.02 kg/Mg or less, which is below the asphalt NSPS emission limits. Further support for equating NESHAP compliance with asphalt NSPS compliance is provided by the fact that, according to the ARMA survey data, four facilities are complying with the asphalt NSPS emission limits for saturators using a thermal oxidizer.

For blowing stills and asphalt storage and process tanks, compliance with these proposed NESHAP would also constitute compliance with the asphalt NSPS. This finding is based on the fact that the thermal oxidizers which provide the basis for the MACT floor are also controlling emissions from blowing stills and asphalt storage tanks that are subject to the asphalt NSPS.

Both these proposed NESHAP and the asphalt NSPS require inlet gas and operating temperature monitoring for PM control devices and thermal oxidizers, respectively, and specify the same data reduction procedures. This proposed rule includes the additional requirement to monitor the PM control device pressure drop in addition to the inlet gas temperature.

The notification, recordkeeping, and reporting requirements of the proposed NESHAP are more stringent than those required by the asphalt NSPS. For example, the asphalt NSPS does not require subject facilities to develop site-specific performance test plans or startup, shutdown, and malfunction plans. The notifications, recordkeeping, and reporting required by the proposed NESHAP can be used to satisfy the asphalt NSPS requirements, except for the requirements associated with mineral handling and storage.

As discussed previously, mineral handling and storage facilities are covered by the asphalt NSPS but are not covered by these proposed NESHAP. Compliance with these proposed NESHAP would not constitute compliance with the asphalt NSPS provisions for mineral handling and storage facilities.

V. Administrative Requirements

A. Executive Order 12866, Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the EPA must determine whether the regulatory action is ''significant,'' and therefore subject to 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 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 proposed rule is not a ''significant regulatory action.''

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.''

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

In the spirit of Executive Order 13132 and consistent with EPA policy to promote communications between EPA and State and local governments, EPA specifically solicits comment on this proposed rule from State and local officials.

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 proposed 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 affected facilities are owned or operated by Indian tribal governments. Thus, Executive Order 13175 does not apply to this proposed 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 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 proposed rule is not subject to Executive Order 13045 because it is based on technology performance and not on health and safety risks.

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

This proposed 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, or 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, or tribal governments, in the aggregate, or to the private sector, of $100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The EPA has determined that this proposed 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. In the Economic Impact Assessment (EIA) for this proposed rule, EPA estimates that the total nationwide capital cost for the proposed standard is $2.16 million. The total nationwide annual cost for the proposed standards is $1.01 million. In addition, EPA has determined that this proposed 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, this proposed rule is not subject to the requirements of sections 202 or 205 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 business, small organizations, and small government jurisdictions.

For purposes of assessing the impacts of today's proposed rule on small entities, a small entity is defined as: (1) A small business according to Small Business Administration (SBA) size standards by NAICS code (in this case, ranging from 100 to 500 employees or $5 million in annual sales); (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.

In accordance with the RFA, EPA conducted an assessment of the proposed standards on small businesses within the asphalt roofing and processing industry. Based on SBA NAICS-based size definitions and reported sales and employment data, EPA identified 26 of the 40 companies that own potentially affected asphalt roofing and processing facilities as small. For four of the small companies, sales and employment data were not available; therefore, they were assumed to be small businesses. Although small businesses represent 65 percent of the companies within the source category, they are expected to incur less than 40 percent of the total industry compliance costs of about $1.01 million. There are no companies with compliance costs equal to or greater than 1 percent of their sales. No firms are expected to close rather than incur the costs of compliance with the proposed rule. Furthermore, firms are not projected to shut down their facilities due to these proposed NESHAP. For further information, consult the ''Economic Impact Analysis for the Proposed Asphalt Roofing and Processing NESHAP,'' in docket A–95–32.

After considering the economic impacts of today's proposed rule on small entities, I hereby certify that this proposed rule, if promulgated, will not have a significant impact on a substantial number of small entities.

Although this proposed rule will not have any significant economic impacts on a substantial number of small entities, we continue to be interested in the potential impacts of the proposed rule on small entities and welcome comments on issues related to such impacts.

H. Paperwork Reduction Act

The information collection requirements of this proposed rule have been submitted for approval to OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 2029.01) and a copy may be obtained from Sandy Farmer by mail at Collection Strategies Division, U.S. EPA (2822), 1200 Pennsylvania Ave., 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 would be used by the EPA to ensure that the asphalt processing and roofing NESHAP requirements are implemented properly and are complied with on a continuous basis. Records and reports are necessary to identify asphalt processing and asphalt roofing facilities that might not be in compliance with the NESHAP. Based on reported information, the implementing agency will decide which asphalt processing and asphalt roofing facilities should be inspected and what records or processes should be inspected. Records that owners and operators of asphalt processing and asphalt roofing facilities maintain indicate whether personnel are operating and maintaining control equipment properly.

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 for which a claim of confidentiality is made will be safeguarded according to EPA policies in 40 CFR part 2, subpart B, Confidentiality of Business Information.

We estimate the proposed NESHAP would affect a total of 18 existing facilities (10 asphalt processing and asphalt roofing facilities and 8 petroleum refineries). We estimated the number of major sources by estimating emissions using emission factors and available production data and extrapolating potential emission from actual emissions. We identified major facilities for the purposes of estimating emissions, emission reductions, control costs, and monitoring, recordkeeping, and reporting costs only. Facilities would not necessarily be major sources for the purposes of determining applicability of these proposed NESHAP because they were identified as major by our estimates. Likewise, facilities would not be relieved from complying with these proposed NESHAP because they were not identified as major sources in our estimates. We expect that existing facilities will begin complying 3 years after promulgation of this proposed rule but will perform related activities (*e.g.*, reading and understanding the rule, conducting performance tests) before they are in compliance. We project that one new asphalt processing and asphalt roofing facility will become subject to the proposed NESHAP during each of the first 3 years.

The estimated average annual burden for industry for the first 3 years after implementation of the final rule would be 1,894 person-hours annually. There will be no capital costs for monitoring or recordkeeping during the first 3 years. The total average annual reporting and recordkeeping burden (including industry and EPA) for this collection is estimated at 2,678 labor hours per year at an average annual cost of $341,000.

Burden means total time, effort, or financial resources expended by persons to generate, maintain, retain, 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.

Comments are requested on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques. Send comments on the ICR to the Director, Collection Strategies Division, U.S. EPA (2822), 1200 Pennsylvania Ave., NW, Washington, DC 20460–0001; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th St., NW, Washington, DC 20503, marked ''Attention: Desk Officer for EPA.'' Include the ICR number in any correspondence. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after November 21, 2001, a comment to OMB is best assured of having its full effect if OMB receives it by December 21, 2001. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995, Public Law No. 104–113, § 12(d), (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, and business practices) that are 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 proposed rulemaking involves technical standards. The EPA proposes in this rule to use EPA Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 3, 3A, 3B, 4, 5A, 9, 10, 22, and 25A. Consistent with the NTTAA, EPA conducted searches to identify voluntary consensus standards in addition to these EPA methods. No applicable voluntary consensus standards were identified for EPA Methods 1A, 2A, 2D, 2F, 2G, 5A, 9, and 22.

The search for emissions measurement procedures identified 16 voluntary consensus standards potentially applicable to this proposed rule. Three of the voluntary consensus standards were not available at the time this review was conducted. For the remaining 13 standards identified for measuring emissions of the HAP or surrogates subject to emission standards in this proposed rule, we determined that they were impractical alternatives to EPA test methods for the purposes of this proposed rule. Therefore, the EPA does not intend to adopt these standards. The search and review results of the voluntary methods can be found in docket A–95–32 (see **ADDRESSES** section of this preamble).

The EPA takes comment on the compliance demonstration requirements in this proposed rulemaking and specifically invites the public to identify potentially applicable voluntary consensus standards. Commenters should also explain why this regulation should adopt these voluntary consensus standards in lieu of or in addition to EPA's standards. Emission test methods submitted for evaluation should be accompanied by a basis for the recommendation, including method validation data and the procedure used to validate the candidate method (if a method other than Method 301, 40 CFR part 63, appendix A was used).

Section 63.8687 of the proposed standards lists the EPA testing methods included in the proposed rule. Under § 63.7(f) of subpart A of the General Provisions, a source may apply to EPA for approval to use an alternative test method in place of any of the EPA testing methods.

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedure, Air pollution control, Asphalt processing, Asphalt roofing manufacturing, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: November 1, 2001.

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 proposed to be 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 LLLLL to read as follows:

Sec.

Subpart LLLLL—National Emission Standards for Hazardous Air Pollutants: Asphalt Processing and Asphalt Roofing Manufacturing

What This Subpart Covers

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63.8681 Am I subject to this subpart?
63.8682 What parts of my plant does this subpart cover?
63.8683 When do I have to comply with this subpart?

Emission Limitations

63.8684 What emission limitations must I meet?

General Compliance Requirements

63.8685 What are my general requirements for complying with this subpart?

Testing and Initial Compliance Requirements

63.8686 By what date must I conduct performance tests or other initial compliance demonstrations?
63.8687 What performance tests, design evaluations, and other procedures must I use?
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Continuous Compliance Requirements

63.8690 How do I monitor and collect data to demonstrate continuous compliance?
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Notifications, Reports, and Records

63.8692 What notifications must I submit and when?
63.8693 What reports must I submit and when?
63.8694 What records must I keep?
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Other Requirements and Information

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Tables

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Table 2 to Subpart LLLLL—Operating Limits
Table 3 to Subpart LLLLL—Requirements for Performance Tests
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Subpart LLLLL—National Emission Standards for Hazardous Air Pollutants: Asphalt Processing and Asphalt Roofing Manufacturing

What This Subpart Covers

§ 63.8680 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants for existing and new asphalt processing and asphalt roofing manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

§ 63.8681 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate an asphalt processing facility or an asphalt roofing manufacturing facility that is, is located at, or is part of a major source of hazardous air pollutant (HAP) emissions.

(1) An asphalt processing facility includes any facility engaged in preparing asphalt at asphalt processing plants, petroleum refineries, or asphalt roofing plants. Asphalt preparation, called ''blowing,'' is the oxidation of asphalt flux by bubbling air through the heated asphalt. An asphalt processing facility includes the following processes: asphalt heating, blowing stills, asphalt flux storage tanks, oxidized asphalt storage tanks, and oxidized asphalt loading racks.

(2) An asphalt roofing manufacturing facility includes any facility engaged in manufacturing asphalt roofing products such as asphalt-saturated felt roll roofing, roll roofing with mineral granules on the surface, smooth roll roofing and fiberglass shingles. An asphalt roofing manufacturing facility includes the following processes: asphalt storage, felt saturation, coating, and sealant and adhesive application.

(b) After [DATE 3 YEARS AFTER THE DATE THE FINAL RULE IS PUBLISHED IN THE **FEDERAL REGISTER**], blowing stills, storage tanks, and saturators that are also subject to 40 CFR part 60, subpart UU, are required to comply only with provisions of this subpart.

(c) A major source of HAP emissions is any stationary source or group of stationary sources within a contiguous area under common control 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.

§ 63.8682 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, or existing affected source at asphalt processing and asphalt roofing manufacturing facilities.

(b) The affected source is:

(1) Each asphalt processing facility as defined in § 63.8698; and

(2) Each asphalt roofing manufacturing line as defined in § 63.8698.

(i) If the asphalt roofing manufacturing line is collocated with an asphalt processing facility, the storage tanks that receive asphalt directly from the on-site blowing stills are part of the asphalt processing facility.

(ii) If an asphalt storage tank is shared by two or more lines at an asphalt roofing manufacturing facility, the shared storage tank is considered part of the line to which the tank supplies the greatest amount of asphalt, on an annual basis.

(iii) If a sealant or adhesive applicator is shared by two or more asphalt roofing manufacturing lines, the shared applicator is considered part of the line that provides the greatest throughput to the applicator, on an annual basis.

(c) An affected source is a new affected source if you commenced construction of the affected source after November 21, 2001 and you met the applicability criteria at the time you commenced construction.

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

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

§ 63.8683 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with the following:

(1) If you startup your new or reconstructed affected source on or before [DATE OF PUBLICATION OF THE FINAL RULE IN THE **FEDERAL REGISTER**], then you must comply with the requirements for new and reconstructed sources in this subpart no later than [DATE OF PUBLICATION OF THE FINAL RULE IN THE **FEDERAL REGISTER**].

(2) If you startup your new or reconstructed affected source after [DATE OF PUBLICATION OF THE FINAL RULE IN THE **FEDERAL REGISTER**], then you must comply with the requirements for new and reconstructed sources in this subpart upon startup.

(b) If you have an existing affected source, you must comply with the requirements for existing sources no

later than [DATE 3 YEARS AFTER DATE THE FINAL RULE IS PUBLISHED IN THE **FEDERAL REGISTER**].

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a (or part of a) major source of HAP, then the following requirements apply:

(1) Any portion of the existing facility that becomes a new or reconstructed affected source must be in compliance with this subpart upon startup or no later than [DATE OF PUBLICATION OF THE FINAL RULE IN THE **FEDERAL REGISTER**], whichever is later.

(2) All other parts of the source to which this subpart applies must be in compliance with this subpart by 3 years after the date the source becomes a major source.

(d) You must meet the notification requirements in § 63.8692 according to the schedule in § 63.8692 and in § 63.9. Some of the notifications must be submitted before you are required to comply with the emission limitations in this subpart.

Emission Limitations

§ 63.8684 What emission limitations must I meet?

(a) You must meet each emission limitation in Table 1 of this subpart that applies to you.

(b) You must meet each operating limit in Table 2 of this subpart that applies to you.

General Compliance Requirements

§ 63.8685 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations (including operating limits) 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).

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

(d) You must develop and implement a written site-specific monitoring plan according to the provisions in § 63.8688.

Testing and Initial Compliance Requirements

§ 63.8686 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) For existing affected sources, you must conduct performance tests no later than 60 days prior to the compliance date that is specified for your source in § 63.8683 and according to the provisions in § 63.7(a)(2).

(b) If you commenced construction or reconstruction between November 20, 2001 and [DATE OF PUBLICATION OF THE FINAL RULE IN THE **Federal Register**], you must demonstrate initial compliance with either the proposed requirements or the promulgated requirements no later than 180 calendar days after [DATE OF PUBLICATION OF THE FINAL RULE IN THE **Federal Register**] or within 180 calendar days after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between November 21, 2001 and [DATE OF PUBLICATION OF THE FINAL RULE IN THE **Federal Register**], and you chose to comply with the proposed requirements when demonstrating initial compliance, you must conduct a second compliance demonstration for the promulgated requirements within 3 years and 180 calendar days after [DATE OF PUBLICATION OF THE FINAL RULE IN THE **Federal Register**] or after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

§ 63.8687 What performance tests, design evaluations, and other procedures must I use?

(a) You must conduct each performance test in Table 3 of 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 conditions specified in Table 3 of this subpart.

(c) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 63.7(e)(1).

(d) Except for opacity and visible emission observations, 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 following equations to determine compliance with the emission limitations.

(1) To determine compliance with the particulate matter mass emission rate, you must use equations 1 and 2 of this section as follows:

$$E = M_{PM}/P \qquad \text{(Eq. 1)}$$

Where:

E = Particulate matter emission rate, kilograms (pounds) of particulate matter per megagram (ton) of roofing product manufactured.

M_{PM} = Particulate matter mass emission rate, kilograms (pounds) per hour, determined using Equation 2.

P = The asphalt roofing product manufacturing rate during the emissions sampling period, including any material trimmed from the final product, megagram (tons) per hour.

$$M_{PM} = C\,Q\,K \qquad \text{(Eq. 2)}$$

Where:

M_{PM} = Particulate matter mass emission rate, kilograms (pounds) per hour.

C = Concentration of particulate matter on a dry basis, grams per dry standard cubic meter (g/dscm), as measured by the test method specified in Table 3 of this subpart.

Q = Vent gas stream flow rate (dry standard cubic meters per minute) at a temperature of 20 °C as measured by the test method specified in Table 3 of this subpart.

K = Unit conversion constant (0.06 minute-kilogram/hour-gram.

(2) To determine compliance with the total hydrocarbon percent reduction standard, you must use equations 3 and 4 of this section as follows:

$$RE = \left[\left(M_{THCi} - M_{THCo}\right)/\left(M_{THCi}\right)\right] * (100) \qquad \text{(Eq. 3)}$$

Where:

RE = Emission reduction efficiency, percent.

M_{THCi} = Mass flow rate of total hydrocarbons entering the control device, kilograms (pounds) per hour, determined using Equation 4.

M_{THCo} = Mass flow rate of total hydrocarbons exiting the control device, kilograms (pounds) per hour, determined using Equation 4.

$$M_{THC} = C\,Q\,K \qquad \text{(Eq. 4)}$$

Where:

M_{THC} = Total hydrocarbon emission rate, kilograms (pounds) per hour.

C = Concentration of total hydrocarbons on a dry basis, parts per million by volume (ppmv), as measured by the test method specified in Table 3 of this subpart.

Q = Vent gas stream flow rate (dscmm) at a temperature of 20 °C as measured by the test method specified in Table 3 of this subpart.
K = Unit conversion constant (3.00E–05) $(ppmv)^{-1}$ (gram-mole/standard cubic meter) (kilogram/gram) (minutes/hour)), where standard temperature for gram-mole/standard cubic meter is 20 °C.

(3) To determine compliance with the combustion efficiency standard, you must use equation 5 of this section as follows:

$$CE = \left[1 - \left(CO/CO_2\right) - \left(THC/CO_2\right)\right] \qquad \text{(Eq. 5)}$$

Where:

CE = Combustion efficiency, percent.
CO = Carbon monoxide concentration at the thermal oxidizer outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 of this subpart.
CO_2 = Carbon dioxide concentration at the thermal oxidizer outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 of this subpart.
THC = Total hydrocarbon concentration at the thermal oxidizer outlet, parts per million by volume (dry), as measured by the test method specified in Table 3 of this subpart.

§ 63.8688 What are my monitoring installation, operation, and maintenance requirements?

(a) You must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the following:

(1) The CPMS 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.

(2) Have valid data from at least three of four equally spaced data values for that hour from a CPMS that is not out-of-control according to your site-specific monitoring plan.

(3) Determine the 3-hour average of all recorded readings for each operating day, except as stated in § 63.8690(c). You must have at least two of the three hourly averages for that period using only hourly average values that are based on valid data (i.e., not from out-of-control periods).

(4) Record the results of each inspection, calibration, and validation check.

(b) For each temperature monitoring device, you must meet the requirements in paragraph (a) of this section and the following:

(1) Locate the temperature sensor in a position that provides a representative temperature.

(2) For a noncryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.2° C or 0.75 percent of the temperature value, whichever is larger.

(3) Shield the temperature sensor system from electromagnetic interference and chemical contaminants.

(4) If a chart recorder is used, it must have a sensitivity in the minor division of at least 20° F.

(5) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's documentation. Following the electronic calibration, you must 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° C of the process temperature sensor's reading.

(6) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

(7) At least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.

(c) For each pressure measurement device, you must meet the requirements in paragraph (a) of this section and the following:

(1) Locate the pressure sensor(s) in, or as close as possible to, a position that provides a representative measurement of the pressure.

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a gauge with a minimum measurement sensitivity of 0.5 inch of water or a transducer with a minimum measurement sensitivity of 1 percent of the pressure range.

(4) Check pressure tap pluggage daily.

(5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(6) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.

(7) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(d) For monitoring parameters other than temperature and pressure drop, you must install and operate a CPMS to provide representative measurements of the monitored parameters.

(e) For each monitoring system 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 following:

(1) Installation of the CPMS 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).

(f) In your site-specific monitoring plan, you must also address the following:

(1) Ongoing operation and maintenance procedures in accordance with the general requirements of § 63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);

(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) and § 63.10(e)(1) and (e)(2)(i).

(g) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(h) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.

§ 63.8689 How do I demonstrate initial compliance with the emission limitations?

(a) You must demonstrate initial compliance with each emission limitation that applies to you according to Table 4 of this subpart.

(b) You must establish each site-specific operating limit in Table 2 of

this subpart that applies to you according to the requirements in § 63.8687 and Table 3 of this subpart.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.8692(e).

Continuous Compliance Requirements

§ 63.8690 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. This includes periods of startup, shutdown, and malfunction when the affected source is operating.

(c) 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 operation of the control device and associated control system.

§ 63.8691 How do I demonstrate continuous compliance with the operating limits?

(a) You must demonstrate continuous compliance with each operating limit in Table 2 of this subpart that applies to you according to methods specified in Table 5 of this subpart.

(b) You must report each instance in which you did not meet each operating limit in Table 5 of this subpart that applies to you. This includes periods of startup, shutdown, and malfunction. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in § 63.8693.

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

(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 in accordance with the SSMP. 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).

Notifications, Reports, and Records

§ 63.8692 What notifications must I submit and when?

(a) You must submit all of the notifications in §§ 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(f), and 63.9(b) through (f) and (h) that apply to you by the dates specified.

(b) As specified in § 63.9(b)(2), if you start up your affected source before [DATE OF PUBLICATION OF THE FINAL RULE IN THE **Federal Register**], you must submit an Initial Notification not later than 120 calendar days after [DATE OF PUBLICATION OF THE FINAL RULE IN THE **Federal Register**].

(c) As specified in § 63.9(b)(3), if you start up your new or reconstructed affected source on or after [DATE OF PUBLICATION OF THE FINAL RULE IN THE **Federal Register**], 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, opacity observation, visible emission observation, or other initial compliance demonstration as specified in Table 3 or 4 of this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii). 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).

§ 63.8693 What reports must I submit and when?

(a) You must submit each report in Table 6 of 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 6 of this subpart and according to the following dates:

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.8683 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 § 63.8683.

(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 § 63.8683.

(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 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 the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the following information:

(1) Company name and address.

(2) 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.

(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 SSMP, 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, operating limit, opacity limit, and visible emission limit) that apply 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 CPMS was out-of-control as specified in § 63.8(c)(7), a statement that there were no periods during the which the CPMS was out-of-control during the reporting period.

(d) For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and visible emission limit), you must include the information in paragraphs (c)(1) through (6) of this section, and the

information in paragraphs (d)(1) through (12) 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 CPMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time and duration that each CPMS 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 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 CPMS downtime during the reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that reporting period.

(8) An identification of each air pollutant that was monitored at the affected source.

(9) A brief description of the process units.

(10) A brief description of the CPMS.

(11) The date of the latest CPMS certification or audit.

(12) A description of any changes in CPMS, processes, or controls since the last reporting period.

(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 6 of 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 limitation (including any operating limit), 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) If acceptable to both the Administrator and you, you may submit reports and notifications electronically.

§ 63.8694 What records must I keep?

(a) You must keep the following records:

(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)(3)(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) You must keep the records in § 63.6(h)(6) for visible emission observations.

(c) You must keep the records required in Table 5 of this subpart to show continuous compliance with each operating limit that applies to you.

§ 63.8695 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

§ 63.8696 What parts of the General Provisions apply to me?

Table 7 of this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you.

§ 63.8697 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, 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.

(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 following authorities are retained by the Administrator of U.S. EPA:

(1) Approval of alternatives to the requirements in §§ 63.8681, 63.8682, 63.8683, 63.8684(a) through (c), 63.8686, 63.8687, 63.8688, 63.8689, 63.8690, and 63.8691.

(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.

§ 63.8698 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:

Adhesive applicator means the equipment used to apply adhesive to single-ply roofing shingles for producing laminated or dimensional roofing shingles.

Asphalt flux means the residual material from distillation of crude oil used to manufacture asphalt roofing products.

Asphalt loading rack means the equipment used to transfer asphalt from a storage tank into a tank truck, rail car, or barge.

Asphalt processing facility means any facility engaged in the preparation of asphalt at asphalt processing plants, petroleum refineries, and asphalt roofing plants. Asphalt preparation, called ''blowing,'' is the oxidation of asphalt flux by bubbling air through the heated asphalt. An asphalt processing facility includes the following processes: asphalt heating, blowing stills, asphalt flux storage tanks, oxidized asphalt storage tanks, and oxidized asphalt loading racks.

Asphalt roofing manufacturing line means the collection of equipment used to manufacture asphalt roofing products through a series of sequential process steps. An asphalt roofing manufacturing line includes the following equipment: a saturator (including wet looper and coater), a coating mixer, a sealant applicator, an adhesive applicator, and associated storage and process tanks. The number of asphalt roofing

manufacturing lines at a particular facility is determined by the number of saturators (or coaters) used. For example, an asphalt roofing manufacturing facility with two saturators would be considered to have two separate roofing manufacturing lines.

Asphalt storage tank means any tank used to store asphalt, including asphalt flux, oxidized asphalt, and modified asphalt, at asphalt roofing manufacturing plants, petroleum refineries, and asphalt processing plants. Storage tanks containing cutback asphalts (asphalts diluted with solvents to reduce viscosity for low temperature applications) and emulsified asphalts (asphalts dispersed in water with an emulsifying agent are not subject to this subpart.

Blowing still means the equipment in which air is blown through asphalt flux to change the softening point and penetration rate.

Coating mixer means the equipment used to mix coating asphalt and a mineral stabilizer, prior to applying the stabilized coating asphalt to the substrate.

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.

Modified asphalt means asphalt that has been mixed with plastic modifiers.

Oxidized asphalt means asphalt that has been prepared by passing air through liquid asphalt flux in a blowing still.

Responsible official means responsible official as defined in 40 CFR 70.2.

Saturator means the equipment in which asphalt is applied to a substrate to make asphalt roofing products. The term saturator includes the saturator, wet looper, and coater.

Sealant applicator means the equipment used to apply a sealant strip to a roofing product. The sealant strip is used to seal overlapping pieces of roofing product after they have been applied.

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.

As stated in § 63.8684(a), you must meet each emission limitation in the following table that applies to you:

TABLE 1 TO SUBPART LLLLL—EMISSION LIMITATIONS

For . . .	You must meet the following emission limitation . . .
1. Each blowing still, loading rack, and asphalt storage tank with a capacity of 1.93 megagrams (2.13 tons) of asphalt or greater at existing, new, and reconstructed asphalt processing facilities	a. Reduce total hydrocarbon mass emissions by 95 percent; or b. Route the emissions to a thermal oxidizer achieving a combustion efficiency of 99.6 percent.
2. Each coating mixer, saturator (including wet looper and coater), sealant applicator, and adhesive applicator at new and reconstructed asphalt roofing manufacturing lines	a. Reduce total hydrocarbon mass emissions by 95 percent or b. Route the emissions to a thermal oxidizer achieving, a combustion efficiency of 99.6 percent.
3. The total emmissions from the coating mixer, saturator (including wet looper and coater), sealant applicator, and adhesive applicator at each existing asphalt roofing manufacturing line [a]	a. Limit particulate matter emissions to 0.04 kilograms per megagram (0.08 pounds per ton) of asphalt shingle or mineral-surfaced roll roofing produced; or b. Limit particulate matter emmissions to 0.4 kilgrams per megagram (0.8. pounds per ton) of saturated felt or smooth-surfaced roll roofing produced.
4. Each saturator (including wet looper and coater) at an existing or new asphalt roofing manufacturing line [a]	a. Limit exhaust gases to 20 percent opacity; and saturator (including wet looper and coater) at an existing or new asphalt roofing manufacturing line.[a] b. Limit visible emissions from the emission capture system to 20 percent of any period of consecutive valid observations totaling 60 minutes.

[a] As an option to meeting the particulate matter and opacity limits, these emission sources may comply with the total hydrocarbon (THC) percent reduction or combustion efficiency standards.

As stated in § 63.8684(b), you must meet each operating limit in the following table that applies to you:

TABLE 2 TO SUBPART LLLLL—OPERATING LIMITS

For . . .	You must . . .
1. Thermal oxidizers	Maintain the 3-hour average combustion zone temperature at or above the operating limit established during the performance test.
2. Particulate matter control device	a. Maintain the 3-hour average inlet gas temperature at or below the operating limit established during the matter perforance test; and b. Maintain the 3-hour average pressure drop across device at or below the operating limit established during the performance test.
3. Control devices other than thermal oxidizers or particulate matter control devices.	Maintain the approved monitoring parameters within the operating limits established during the performance test.

As stated in § 63.8687(a), you must conduct each performance test in the following table that applies to you:

TABLE 3 TO SUBPART LLLLL—REQUIREMENTS FOR PERFORMANCE TESTS

For . . .	You must . . .	Using . . .	According to the following requirements . . .
1. All particulate matter, total hydrocarbon, carbon monoxide, and carbon dioxide emission tests.	a. Select sampling port's location and the number of traverse points.	i. Method 1 or 1A in appendix A to part 60 of this chapter.	A. For demonstrating compliance with the total hydrocarbon percent reduction standard, the sampling sites must be located at the inlet and outlet of the control device and prior to any releases to the atmosphere. B. For demonstrating compliance with the particulate matter mass emission rate or combustion efficiency standards, the sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.
2. All particulate matter and total hydrocarbon tests.	Determine velocity and volumetric flow rate.	Method 2, 2A, 2C, 2D, 2F, OR 2G, as appropriate, in appendix A to part 60 of this chapter.	
3. All particulate matter and total hydrocarbon tests.	Determine the gas molecular weight used for flow rate determination.	Method 3, 3A, 3B, as appropriate, in appendix A to part 60 of this chapter.	
4. All particulate matter, total hydrocarbon, carbon monoxide, and carbon dioxide emission tests.	Measure moisture content of the stack gas.	Method 4 in appendix A to part 60 of this chapter.	
5. All particulate matter, total hydrocarbon, carbon monoxide, and carbon dioxide emission tests.	Measure the asphalt processing rate or the asphalt roofing manufacturing rate and the asphalt content of the product manufactured, as appropriate		
6. Each control device used to comply with the particulate matter mass emission rate standard.	a. Measure the concentration of particulate matter.	i. Method 5A in appendix A to part 60 of this chapter.	A. If the final product is shingle or mineral-surfaced roll roofing, tests must be conducted while a nominal 106.6 kg (235 lb) shingle is being produced; or B. If the final product is saturated felt or smooth-surfaced roll roofing, the tests must be conducted while a nominal 6.8 kg (15 lb) felt is being produced; or C. If the final product is fiberglass shingle, the test must be conducted while a nominal 100 kg (220 lb) shingle is being produced.
7. Each saturated outlet at each existing asphalt roofing manufacturing line.	a. Conduct opacity observations of the saturator outlet.	Method 9 in appendix A to part 60 of this chapter.	For at least 3 hours and obtain 30, 6-minute averages.
	b. Conduct visible emission observations of the saturator emissions capture system.	Method 22 in appendix A to part 60 of this chapter.	Modify Method 22 such that readings are recorded every 15 seconds for a period of consecutive observations totaling 60 minutes.

TABLE 3 TO SUBPART LLLLL—REQUIREMENTS FOR PERFORMANCE TESTS—Continued

For . . .	You must . . .	Using . . .	According to the following requirements . . .
8. Each thermal oxidizer used to comply with the combustion efficiency standard.	a. Measure the concentration of carbon dioxide.	Method 3A in appendix A to part 60 of this chapter.	
	b. Measure the concentration of carbon monoxide.	Method 10 in appendix A to part 60 of this chapter.	
	c. Measure the concentration of total hydrocarbons.	Method 25A in appendix A to part 60 of this chapter.	
9. Each control device used to comply with the THC reduction efficiency standard.	Measure the concentration of total hydrocarbons.	Method 25A in appendix A to part 60 of this chapter.	
10. Each thermal oxidizer	Establish a site-specific combustion zone temperature limit.	Data from the CPMS and the applicable performance test method(s).	You must collect combustion zone temperature data every 15 minutes during the entire period of the initial 3-hour performance test, and determine the average combustion zone temperature over the 3-hour performance test by computing the average of all of the 15-minute readings.
11. Each particulate matter control device.	a. Establish a site-specific inlet gas temperature limit; and. b. Establish a site-specific limit for the pressure drop across the device.	Data from the CPMS and the applicable performance test method(s).	You must collect the inlet gas temperature and pressure drop data every 15 minutes during the entire period of the initial 3-hour performance test, and determine the average inlet gas temperature and pressure drop over the 3-hour performance test by computing the average of all of the 15-minute readings.
12. Each control device other than a thermal oxidizer or particulate matter control device used to comply with the THC percent reduction or PM emission limits.	Establish site-specific monitoring parameters.	Process data and data from the CPMS and the applicable performance test method(s).	You must collect monitoring parameter data every 15 minutes during the entire period of the initial 3-hour performance test, and determine the average monitoring parameter values over the 3-hour performance test by computing the average of all of the 15-minute readings.

As stated in § 63.8689(a), you must demonstrate initial compliance with each emission limitation in the following table that applies to you:

TABLE 4 TO SUBPART LLLLL—INITIAL COMPLIANCE WITH EMISSION LIMITATIONS

For . . .	For the following emission limitation . . .	You have demonstrated initial compliance if . . .
1. Each asphalt storage tank with a capacity of 1.93 megagrams (2.13 tons) of asphalt or greater, blowing still, and loading rack at existing, new, and reconstructed asphalt processing facilities; and.	a. Reduce total hydrocarbon mass emissions by 95 percent.	i. The total hydrocarbon emissions, determined using the equations in § 63.8687 and the test methods and procedures in Table 3 of this subpart, over the period of the performance test are reduced by at least 95 percent by weight; and
2. Each coating mixer, saturator (including wet looper and coater), sealant applicator, and adhesive applicator at new and reconstructed asphalt roofing manufacturing lines.	a. Reduce total hydrocarbon mass emissions by 95 percent.	ii. You have a record of the average control device operating parameters over the performance test during which emissions were reduced by at least 95 percent.
3. Each asphalt storage tank with a capacity of 1.93 megagrams (2.13 tons) of asphalt or greater, blowing still, and loading rack at existing, new, and reconstructed asphalt processing facilities; and.	a. Route the emissions to a thermal oxidizer achieving a combustion efficiency of 99.6 percent.	See 1.a.i. and ii. of this table.

TABLE 4 TO SUBPART LLLLL—INITIAL COMPLIANCE WITH EMISSION LIMITATIONS—Continued

For . . .	For the following emission limitation . . .	You have demonstrated initial compliance if . . .
4. Each coating mixer, saturator (including wet looper and coater), sealant applicator, and adhesive applicator at new and reconstructed asphalt roofing manufacturing lines.	a. Route the emissions to a thermal oxidizer achieving a combustion efficiency of 99.6 percent.	i. The combustion efficiency of the thermal oxidizer, determined using the equations in § 63.8687 and the test methods and procedures in Table 3 of this subpart, over the period of the performance test is at least 99.6 percent; and ii. You have a record of the average combustion zone temperature and carbon monoxide, carbon dioxide, and total hydrocarbon outlet concentrations over the performance test during which the combustion efficiency was at least 99.6 percent. See 3.a.i. and ii. of this table.
5. The total emissions from the coating mixer, saturator (including wet looper and coater), sealant applicator, and adhesive applicator at each existing asphalt roofing manufacturing line..	a. Limit particulate matter emissions to 0.04 kilograms per megagram (0.08 pounds per ton) of asphalt shingle or mineral-surfaced roll roofing produced.	i. The particulate matter emissions, determined using the equations in § 63.8687 and the test methods and procedures in Table 3 of this subpart, over the period of the performance test are no greater than the applicable emission limitation; and ii. You have a record of the average control device or process parameters over the performance test during which the particulate matter emissions were no greater than the applicable emission limitation.
	b. Limit particulate matter emissions to 0.4 kilograms per megagram (0.8 pounds per ton) of saturated felt or smooth-surfaced roll roofing produced11.	See 5.a.i. and ii. of this table.
6. Each saturator (including wet looper and coater) at an existing or new asphalt roofing manufacturing line.	Limit opacity emissions to 20 percent	The opacity, measured using Method 9, for each of the first 30 6-minute averages during the initial compliance period described in § 63.8686(b) does not exceed 20 percent.
7. Each saturator (including wet looper and center) at an existing or new asphalt roofing manufacturing line.	Limit visible emissions from the emission capture system to 20 percent of any period of consecutive valid observations totaling 60 minutes.	The visible emissions, measured using Method 22, for any period of consecutive valid observations totaling 60 minutes during the initial compliance period described in § 63.8686(b) do not exceed 20 percent.

As stated in § 63.8691(a), you must demonstrate continuous compliance with each operating limit in the following table that applies to you:

TABLE 5 TO SUBPART LLLLL—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS

For * * *	For the following operating limit * * *	You must demonstrate continuous compliance by * * *
1. Each thermal oxidizer	a. Maintain the 3-hour average combustion zone temperature at or above the operating limit established during the performance test.	i. Passing the emissions through the control device; and ii. Collecting the combustion zone temperature data according to § 63.8688(b); and iii. Reducing combustion zone temperature data to 3-hour averages according to calculations in Table 3 of this subpart; and iv. Maintaining the 3-hour average combustion zone temperature within the level established during the performance test.
2. Particulate matter control devices	a. Maintain the 3-hour average inlet gas temperature and pressure drop across device at or below the operating limits established during the performance test.	i. Passing the emissions through the control device; and ii. collecting the inlet gas temperature and pressure drop data according to § 63.8688(b) and (c); and iii. reducing inlet gas temperature and pressure drop data to 3-hour averages according to calculations in Table 3 of this subpart; and iv. Maintaining the 3-hour average inlet gas temperature and pressure drop within the level established during the performance test.

TABLE 5 TO SUBPART LLLLL—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS—Continued

For * * *	For the following operating limit * * *	You must demonstrate continuous compliance by * * *
3. Control device other than a thermal oxidizer or particulate matter control device.	a. Maintain the monitoring parameters within the operating limits established during the performance test.	i. Passing the emissions through the control device; and ii. Collecting the monitoring parameter data according to § 63,8688(dd); and iii. Reducing the monitoring parameter data to 3-hour averages according to calculations in Table 3 of this subpart; and iv. Maintaining the monitoring parameters within the level established during the performance test.

As stated in § 63.8693(a), you must submit each report that applies to you according to the following table:

TABLE 6 TO SUBPART LLLLL—REQUIREMENTS FOR REPORTS

You must submit a(n)	The report must contain . . .	You must submit the report . . .
1. A compliance report	a. A statement that there were no deviations from the emission limitations during the reporting period, if there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit) that apply to you.	Semiannually according to the requirements in § 63.8693(b).
	b. 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 § 63.8693(b).
	c. If you have a deviation from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit), the report must contain the information in § 63.8693(c). If there were periods during which the CPMS was out-of-control, as specified in § 63.8(c)(7), the report must contain the information in § 63.8693(d).	Semiannually according to the requirements in § 63.8693(b).
	d. 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 § 63.8693(b).
2. An immediate startup, shutdown, and malfunction report if you have a startup, shutdown, or malfunction during the reporting period and actions taken were not consistent with your startup, shutdown, and malfunction plan.	The information in § 63.10(d)(5)(ii)	By fax or telephone within 2 working days after starting actions inconsistent with the plan followed by a letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority.

As stated in § 63.8696(a), you must comply with the General Provisions (GP) in §§ 63.1 through 63.13 that apply to you according to the following table:

TABLE 7 TO SUBPART LLLLL—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART LLLLL

Citation	Subject	Brief description	Applies to subpart LLLLL
§ 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/Reconstruction	Applicability; Applications; Approvals	Yes.
§ 63.6(a)	Applicability	GP apply unless compliance extension GP apply to area sources that become major.	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.

TABLE 7 TO SUBPART LLLLL—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART LLLLL—Continued

Citation	Subject	Brief description	Applies to subpart LLLLL
§ 63.6(b)(5)	Notification	You 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 standards immediately upon becoming major, regardless of whether required to comply when they were an area source.	Yes.
§ 63.6(c) (1)–(2)	Compliance Dates for Existing Sources.	1. Comply according to date in subpart, which must be no later than 3 years after effective date.	Yes.
		2. For section 112(f) standards, comply within 90 days of effective date unless compliance extension has been granted.	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.
§ 63.6(d)	[Reserved]		
§ 63.6(e) (1)–(2)	Operation & Maintenance	1. Operate to minimize emissions at all times	Yes.
		2. Correct malfunctions as soon as practicable	Yes.
		3. 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 (SSM) Plan (SSMP).	1. Requirement for SSM and startup, shutdown, malfunction plan.	Yes.
		2. Content of SSMP	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)–(3)	Methods for Determining Compliance.	Compliance based on performance test, operation and maintenance plans, records, inspection.	Yes.
§ 63.6(g) (1)–(3)	Alternative Nonopacity Standard.	Procedures for getting an alternative nonopacity standard.	Yes.
§ 63.6(h)	Opacity/Visible Emission (VE) Standards.	Requirements for opacity and VE limits	Yes.
§ 63.6(h)(1)	Compliance with Opacity/VE Standards.	You must comply with opacity/VE emission limitations at all times except during SSM.	Yes.
§ 63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards.	If standard does not state test method, use Method 9 for opacity and Method 22 for VE.	No. The test methods for opacity and visible emissions are specified in § 63.8686.
§ 63.6(h)(2)(ii)	[Reserved]		
§ 63.6(h)(2)(iii)	Using Previous Tests to Demonstrate Compliance with Opacity/VE Standards.	Criteria for when previous opacity/VE testing can be used to show compliance with this rule.	Yes.
§ 63.6(h)(3)	[Reserved]		
§ 63.6(h)(4)	Notification of Opacity/VE Observation Date.	You must notify Administrator of anticipated date of observation.	Yes.
§ 63.6(h)(5)(i), (iii)–(v)	Conducting Opacity/VE Observations.	Dates and schedule for conducting opacity/VE observations.	Yes.
§ 63.6(h)(5)(ii)	Opacity Test Duration and Averaging Times.	You must have at least 3 hours of observation with thirty 6-minute averages.	Yes.
§ 63.6(h)(6)	Records of Conditions During Opacity/VE Observations.	You must keep records available and allow Administrator to inspect.	Yes.
§ 63.6(h)(7)(i)	Report Continuous Opacity Monitoring System (COMS) Data from Performance Test.	You must submit COMS data with other performance test data.	No. Subpart LLLLL does not require COMS.
§ 63.6(h)(7)(ii)	Using COMS instead of Method 9.	Can submit COMS data instead of Method 9 results even if rule requires Method 9, but must notify Administrator before performance test.	No. Subpart LLLLL does not require COMS.
§ 63.6(h)(7)(iii)	Averaging time for COMS during performance test.	To determine compliance, must reduce COMS data to 6-minute averages.	No. Subpart LLLLL does not require COMS.
§ 63.6(h)(7)(iv)	COMS requirements	Owner/operator must demonstrate that COMS performance evaluations are conducted according to § 63.8(e), COMS are properly maintained and operated according to § 63.8(c) and data quality as § 63.8(d)..	No. Subpart LLLLL does not require COMS.

TABLE 7 TO SUBPART LLLLL—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART LLLLL—Continued

Citation	Subject	Brief description	Applies to subpart LLLLL
§ 63.6(h)(7)(v)	Determining Compliance with Opacity/VE Standards.	COMS is probative but not conclusive evidence of compliance with opacity standard, even if Method 9 observation shows otherwise. Requirements for COMS to be probative evidence, proper maintenance, meeting PS 1, and data have not been altered.	No. Subpart LLLLL does not require COMS.
§ 63.6(h)(8)	Determining Compliance with Opacity/VE Standards.	Administrator will use all COMS, Method 9, and Method 22 results, as well as information about operation and maintenance to determine compliance.	Yes.
§ 63.6(h)(9)	Adjusted Opacity Standard	Procedures for Administrator to adjust an opacity standard.	Yes.
§ 63.6(i)	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 rule.	Yes.
§ 63.7(a)(1)–(2)	Performance Test Dates	Dates for conducting initial performance testing and other compliance demonstrations. You must conduct 180 days after first subject to rule.	No. Section 63.8686 specifies the performance test dates.
§ 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.	You 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 date.	Yes.
§ 63.7(c)	Quality Assurance/Test Plan.	1. Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with.	Yes.
		2. Test plan approval procedures	Yes.
		3. Performance audit requirements	Yes.
		4. Internal and External QA procedures for testing	Yes.
§ 63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
§ 63.7(e)(1)	Conditions for Conducting Performance Tests.	1. Performance tests must be conducted under representative conditions. Cannot conduct performance tests during SSM.	Yes.
		2. Not a violation to exceed standard during SSM	Yes.
§ 63.7(e)(2)	Conditions for Conducting Performance Tests.	You must conduct according to rule and EPA test methods unless Administrator approves alternative.	Yes.
§ 63.7(e)(3)	Test Run Duration	1. You must have three test runs of at least 1 hour each	Yes.
		2. Compliance is based on arithmetic mean of three runs.	Yes.
		3. 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.
§ 63.7(g)	Performance Test Data Analysis.	1. Include raw data in performance test report	Yes.
		2. Submit performance test data 60 days after end of test with the Notification of Compliance Status.	Yes.
		3. 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.	No. Subpart LLLLL does not require the use of continuous emission monitoring systems (CEMS).
§ 63.8(a)(3)	[Reserved].		
§ 63.8(a)(4)	Monitoring with Flares	Unless rule says otherwise, the requirements for flares in § 63.11 apply.	Yes.
§ 63.8(b)(1)	Monitoring	You must conduct monitoring according to standard unless Administrator approves alternative.	Yes.
§ 63.8(b)(2)–(3)	Multiple Effluents and Multiple Monitoring Systems.	1. Specific requirements for installing monitoring systems.	Yes.
		2. Install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise.	Yes.
		3. 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 (O&M).	Maintain monitoring system in a manner consistent with good air pollution control practices.	Yes.

TABLE 7 TO SUBPART LLLLL—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART LLLLL—Continued

Citation	Subject	Brief description	Applies to subpart LLLLL
§ 63.8(c)(1)(i)	Routine and Predictable SSM.	1. Follow the SSM plan for routine repairs	Yes.
		2. Keep parts for routine repairs readily available	Yes.
		3. Reporting requirements for SSM when action is described in SSM plan.	Yes.
§ 63.8(c)(1)(ii)	SSM not in SSP 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.	1. How Administrator determines if source complying with operation and Maintenance requirements.	Yes.
		2. Review of source O&M procedures, records, manufacturer's instructions, recommendations, and inspection of monitoring system.	Yes.
§ 63.8(c)(2)–(3)	Monitoring System Installation.	1. You must install to get representative emission and parameter measurements.	Yes.
		2. You 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. Section 63.8690 specifies the CMS requirements.
§ 63.8(c)(4)(i)–(ii)	CMS Requirements	1. 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.	No. Subpart LLLLL does not require the use of COMS.
		2. CEMS must have a minimum of one cycle of operation for each successive 15-minute period.	No. Subpart LLLLL does not require the use of CEMS.
§ 63.8(c)(5)	COMS Minimum Procedures.	COMS minimum procedures	No. Subpart LLLLL does not require the use of COMS.
§ 63.8(c)(6)	CMS Requirements	Zero and High level calibration check requirements	No. Section 63.8690 specifies the CMS requirements.
§ 63.8(c)(7)–(8)	CMS Requirements	Out-of-control periods, including reporting	Yes.
§ 63.8(d)	CMS Quality Control	1. Requirements for CMS quality control, including calibration, etc.	No. Section 63.8690 specifies the CMS requirements.
		2. Must keep quality control plan on record for the life of the affected source.	No. Section 63.8690 specifies the CMS requirements.
		3. Keep old versions for 5 years after revisions	No. Section 63.8690 specifies the CMS requirements.
§ 63.8(e)	CMS Performance Evaluation.	Notification, performance evaluation test plan, reports	No. Section 63.8690 specifies the CMS requirements.
§ 63.8(f)(1)–(5)	Alternative Monitoring Method.	Procedures for Administrator to approve alternative monitoring.	Yes.
§ 63.8(f)(6)	Alternative to Relative Accuracy Test.	Procedures for Administrator to approve alternative relative accuracy tests for CEMS.	No. Subpart LLLLL does not require the use of CEMS.
§ 63.8(g) (1)–(4)	Data Reduction.	1. COMS 6-minute averages calculated over at least 36 evenly spaced data points.	No. Subpart LLLLL does not require the use of COMS
		2. CEMS 1-hour averages computed over at least 4 equally spaced data points.	No. Subpart LLLLL does not require the use of CEMS.
§ 63.8(g)	Data Reduction	Data that cannot be used in computing averages for CEMS and COMS..	No. Section 63.8690 specifies the CMS requirements.
§ 63.9(a)	Notification Requirements	Applicability and State Delegation	Yes.
§ 63.9(b) (1)–(5)	Initial Notifications	1. Submit notification 120 days after effective date	Yes.
		2. Notification of intent to construct/reconstruct; notification of commencement of construct/reconstruct; notification of startup.	Yes.
		3. Contents of each	Yes.
§ 63.9(c)	Request for Compliance Extension.	Can request if cannot comply by date or if installed Best Available Control Technology/Lowest Achievable Emission Rate.	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.

TABLE 7 TO SUBPART LLLLL—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART LLLLL—Continued

Citation	Subject	Brief description	Applies to subpart LLLLL
§ 63.9(e)	Notification of Performance Test.	Notify Administrator 60 days prior	Yes.
§ 63.9(f)	Notification of VE/Opacity Test.	Notify Administrator 30 days prior	Yes.
§ 63.9(g)	Additional Notifications When Using CMS.	1. Notification of performance evaluation	No. Section 63.8690 specifies the CMS requirements.
		2. Notification using COMS data	No. Section 63.8690 specifies the CMS requirements.
		3. Notification that the criterion for use of alternative to relative accuracy testing was exceeded.	No. Section 63.8690 specifies the CMS requirements.
§ 63.9(h) (1)–(6)	Notification of Compliance Status.	1. Contents	Yes.
		2. Due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after.	Yes.
		3. When to submit to Federal vs. State authority	Yes.
§ 63.9(i)	Adjustment of Submittal Deadlines.	Procedures for Administrator to approve change in dates when notifications must be submitted.	Yes.
§ 63.9(j)	Change in Previous Information.	You must submit within 15 days after the change	Yes.
§ 63.10(a)	Recordkeeping/ Reporting	1. Applies to all, unless compliance extension	Yes.
		2. When to submit to Federal vs. State authority	Yes.
		3. Procedures for owners of more than one source	Yes.
§ 63.10(b)(1)	Recordkeeping/Reporting	1. General requirements	Yes.
		2. Keep all records readily available	Yes.
		3. Keep for 5 years.	Yes.
§ 63.10(b)(2)(i)-(v)	Records related to Startup, Shutdown, and Malfunction.	1. Occurrence of each malfunction of operation (process equipment).	Yes.
		2. Occurrence of each malfunction of air pollution equipment.	Yes.
		3. Maintenance on air pollution control equipment	Yes.
		4. Actions during startup, shutdown, and malfunction	Yes.
§ 63.10(b)(2)(vi) and (x)-(xi).	CMS Records	1. Malfunctions, inoperative, out-of-control	Yes.
		2. Calibration checks	Yes.
		3. Adjustments, maintenance	Yes.
§ 63.10(b)(2)(vii)-(ix)	Records	1. Measurements to demonstrate compliance with emission limitations.	Yes.
		2. Performance test, performance evaluation, and visible emission observation results.	Yes.
		3. Measurements to determine conditions of performance tests and performance evaluations.	Yes.
§ 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	No. Subpart LLLLL does not require the use of CEMS.
§ 63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status.	Yes.
§ 63.10(b)(3)	Records	Applicability Determinations	Yes.
§ 63.10(c) (1)-(6), (9)-(15).	Records	Additional Records for CMS	No. Section 63.8694 specifies the CMS recordkeeping requirements.
§ 63.10(c) (7)-(8)	Records	Records of excess emissions and parameter monitoring exceedances for CMS.	No. Section 63.8694 specifies the CMS recordkeeping requirements
§ 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.
§ 63.10(d)(3)	Reporting Opacity or VE Observations.	What to report and when	Yes.
§ 63.10(d)(4)	Progress Reports	You must submit progress reports on schedule if under compliance extension..	Yes.
§ 63.10(d)(5)	Startup, Shutdown, and Malfunction Reports.	Contents and submission	Yes.
§ 63.10(e)(1)(2)	Additional CMS Reports	1. Must report results for each CEM on a unit	No. Subpart LLLLL does not require the use of CEMS or COMS.

TABLE 7 TO SUBPART LLLLL—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART LLLLL—Continued

Citation	Subject	Brief description	Applies to subpart LLLLL
		2. Written copy of performance evaluation	No. Subpart LLLLL does not require the use of CEMS or COMS.
		3. 3 copies of COMS performance evaluation	No. Subpart LLLLL does not require the use of CEMS or COMS.
§ 63.10(e)(3)	Reports	Excess Emission Reports	No. Section 63.8693 specifies the reporting requirements.
§ 63.10(e)(3)(1)–(iii)	Reports	Schedule for reporting excess emissions and parameter monitor exceedances (not defined as deviations).	No. Section 63.8693 specifies the reporting requirements.
§ 63.10(e)(3)(iv)–(v)	Excess Emissions Reports	1. Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations).	No. Section 63.8693 specifies the reporting requirements.
		2. Provision to request semiannual reporting after compliance for 1 year.	No. Section 63.8693 specifies the reporting requirements.
		3. Submit report by 30th day following end of quarter or calendar half.	No. Section 63.8693 specifies the reporting requirements.
		4. If there has not been an exceedance or excess emission (now defined as deviations), report content is a statement that there have been no deviations.	No. Section 63.8693 specifies the reporting requirements.
§ 63.10(e)(3)(iv)–(v)	Excess Emissions Reports	You must submit report containing all of the information in No. Section all of the information in §§ 63.10(c)(5)–(13) and 63.8(c)(7)–(8).	No. Section 63.8693 specifies the reporting requirements.
§ 63.10(e)(3)(vi)–(viii)	Excess Emissions Report and Summary Report.	1. Requirements for reporting excess emissions for CMS (not called deviations).	No. Section 63.8693 specifies the reporting requirements.
		2. Requires all of the information in §§ 63.10(c)(5)–(13) and 63.8(c)(7)–(8).	
§ 63.10(e)(4)	Reporting COMS data	You must submit COMS data with performance test data..	No. Subpart LLLLL does not require that use of COMS.
§ 63.10(f)	Waiver for Recordkeeping/ 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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