DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DIVISION OF AIR AND WASTE MANAGEMENT

Statutory Authority: 7 Delaware Code, Chapter 60 (7 **Del.C.**, Ch. 60)
7 **DE Admin. Code** 1138

FINAL

Secretary's Order No.: 2010-A-0038
Date of Issuance: November 10, 2010
Effective Date of the Amendment: December 11, 2010

1138 Emission Standards for Hazardous Air Pollutants for Source Categories

Under the authority vested in the Secretary of the Department of Natural Resources and Environmental Control ("Department" or "DNREC") the following findings, reasons and conclusions are entered as an Order of the Secretary in the above-referenced rulemaking proceeding.

Background and Procedural History

This Order considers the proposed regulatory amendment to 7 **DE Admin. Code** 1138, Emission Standards for Hazardous Air Pollutants for Source Categories, Section 16.0, "Area Source Asphalt Processing and Asphalt Roofing Products Manufacturing Operations". This proposed new Section 16.0 is based upon a federal rule that the U.S. Environmental Protection Agency (EPA) promulgated at 40 CFR Part 63, Subpart AAAAAAA, and is applicable to new and existing asphalt processing operations and asphalt roofing manufacturing operations located at area sources.

This area source standard addresses the emissions of polycyclic aromatic hydrocarbons ("PAHs"), which represent a broad class of aromatic compounds. EPA has classified seven PAHs (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 probable human carcinogens. The major non-cancerous effects from chronic inhalation exposure are diseases associated with the respiratory tract. The purpose of this proposed regulatory action is to provide increased protection for Delaware citizens against the aforementioned potential adverse health effects linked to the aforementioned PAHs.

Facilities that will be subject to Section 16 include facilities that conduct asphalt processing operations, as well as facilities that manufacture roofing products, such as roofing shingles, rolled roofing and tar paper. Roofing companies that install built-up roofing systems on buildings are exempt from this proposed regulation, even if one of the layers is asphalt. Hot mix asphalt cement plants are also exempt from this regulation (asphalt cement is used in road construction, parking lots, and storage pads).

The proposed Section 16 specifies emissions limitations from the asphalt process operations and asphalt roofing products manufacturing operations. Asphalt roofing products manufacturing operations must also limit their emissions to either a particulate matter or polycyclic aromatic hydrocarbon level. Facilities have some freedom in choosing the control technology they wish to use to maintain their emissions below said limitations. Based on the already demonstrated use in the industry, the EPA has already approved the use of thermal oxidizers, high efficiency air filter, fiber bed filters, and electrostatic precipitators to control the emissions from asphalt processing operations and asphalt roofing products manufacturing operations. Should a facility wish to use a different control technology, the proposed regulation provides the procedure to follow to request the EPA's approval of alternative controls.

In addition to the above compliance requirements for facilities subject to Section 16.0, each such facility must be found compliant with the following four requirements as well:

- The development and implementation of a startup, shutdown, and malfunction plan, which shall provide appropriate operation instructions, proper corrective actions during malfunctions, required maintenance and inspection schedules, and proper maintenance procedures;

- The development and implementation of a site specific monitoring plan, which shall identify the appropriate monitoring locations, define the proper performance and equipment specification for the monitoring system, and document the various procedure needed to insure the quality of the data collected by the monitoring system;
- The demonstration of its initial compliance with the emission limitation for each operation, which is done by conducting a performance test and comparing the emission results of the performance test with the applicable emission limitation and
- The demonstration of its ongoing compliance with the emission limitation for each operation.

The Department's Division of Air Quality (DAQ) commenced the regulatory development process with Start Action Notice 2009-17. The Department published the proposed regulatory amendment in the September 1, 2010 *Delaware Register of Regulation* and held a public hearing on September 22, 2010. The Department's presiding hearing officer, Lisa A. Vest, prepared a Hearing Officer's Report dated November 1, 2010 (Report). The Report recommends certain findings and the adoption of the proposed Amendment as attached to the Report as Appendix A.

Findings and Discussion

I find that the proposed Amendment is well-supported by the record developed by the Department, and adopt the Report to the extent it is consistent with this Order. The Department's experts developed the record and drafted the proposed Amendment.

I find that the Department's DAQ expert fully developed the record to support adoption of this Amendment. With the adoption of the regulation amendment to 7 DE Admin. Code 1138, Emission Standards for Hazardous Air Pollutants for Source Categories, Section 16.0, "Area Source Asphalt Processing and Asphalt Roofing Products Manufacturing Operations", Delaware will be able to mirror the recently issued federal rule promulgated by the U.S. Environmental Protection Agency (EPA) at 40 CFR Part 63, Subpart AAAAAAA and provide increased protection for Delaware citizens against potential adverse health effects linked to long-term exposure to the aforementioned PAHs, which are (1) known probable human carcinogens; and (2) have additional non-cancerous effects from chronic inhalation exposure, including diseases associated with the respiratory tract.

In conclusion, the following findings and conclusions are entered:

1.) The Department has jurisdiction under its statutory authority to issue an Order adopting this proposed Amendment as final;

2.) The Department provided adequate public notice of the proposed Amendment, and provided the public with an adequate opportunity to comment on the proposed Amendment, including at a public hearing;

3.) The Department held a public hearing on September 22, 2010 on the proposed Amendment in order to any consider public comments before making any final decision;

4) The Department's Hearing Officer's Report, including its recommended record and the recommended Amendment as set forth in Appendix A, are adopted to provide additional reasons and findings for this Order;

5.) The recommended Amendment does not reflect any substantive change from the proposed regulation Amendment as published in the September 1, 2010, *Delaware Register of Regulations*;

6.) The recommended Amendment should be adopted as final regulation Amendment because Delaware will then be enabled to (1) mirror the recently issued federal rule promulgated by the U.S. Environmental Protection Agency (EPA) at 40 CFR Part 63, Subpart AAAAAAA; and (2) provide increased protection for Delaware citizens against potential adverse health effects linked to long-term exposure to the aforementioned PAHs, which are known probable human carcinogens, and have additional non-cancerous effects from chronic inhalation exposure, including diseases associated with the respiratory. Moreover, the regulation amendment is well supported by documents in the record; and

7.) The Department shall submit this Order approving the final regulation to the *Delaware Register of Regulations* for publication in its next available issue, and provide such other notice as the law and regulation require and the Department determines is appropriate.

David S. Small, Acting Sec. (for) Collin P. O'Mara, Secretary

1138 Emission Standards for Hazardous Air Pollutants for Source Categories

(Break in Continuity of Sections)

[~~11~~12]/11/10 **[*~~(Tentative effective date)~~*]**

16.0 Emission Standards for Hazardous Air Pollutants for Area Source Asphalt Processing and Asphalt Roofing Products Manufacturing Operations

16.1 Applicability.

16.1.1 The provisions of 16.0 of this regulation apply to each asphalt processing operation or asphalt roofing products manufacturing operation that is an area source of hazardous air pollutant (HAP) emissions.

16.1.2 An area source of HAP emissions is a source of hazardous air pollutants (HAPs) that is not a major source of HAP emissions, is not located at a major source of HAP emissions, and is not part of a major source of HAP emissions. A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in aggregate, 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAPs.

16.1.3 Operations or equipment described in 16.1.3.1 through 16.1.3.3 of this regulation are exempt from the provisions of 16.0 of this regulation.

16.1.3.1 Hot-mix asphalt operations that are used in the paving of roads or hardstand.

16.1.3.2 Built-up roofing operations where asphalt is used.

16.1.3.3 Asphalt processing or asphalt roofing products manufacturing operations conducted in research and laboratory facilities.

16.1.4 The provisions of 16.0 of this regulation apply to each new, reconstructed, or existing affected source. The affected source is specified in 16.1.4.1 and 16.1.4.2 of this regulation.

16.1.4.1 The affected source for asphalt processing operations is the collection of all blowing stills at the asphalt processing operation.

16.1.4.2 The affected source for asphalt roofing products manufacturing operations is the collection of all asphalt coating equipment at the asphalt roofing products manufacturing operation.

16.1.5 An affected source is a new affected source if the owner or operator commenced construction or reconstruction after July 9, 2009.

16.1.6 An affected source is a reconstructed affected source if it meets the definition of reconstruction in 3.2 of this regulation.

16.1.7 An affected source is an existing affected source if it is not a new or reconstructed affected source.

16.1.8 The owner or operator of an area source subject to 16.0 of this regulation is exempt from the obligation to obtain a Title V operating permit under 7 **DE Admin. Code** 1130 of State of Delaware "Regulations Governing the Control of Air Pollution", if the owner or operator is not required to obtain a Title V operating permit under 3.1 of 7 **DE Admin. Code** 1130 for a reason other than the owner or operator's status as an area source under 16.0. Notwithstanding the previous sentence, the owner or operator shall continue to comply with the provisions of 16.0.

16.2 Definitions.

Unless defined below, all terms in 16.0 of this regulation have the meaning given them in the Act or in 3.2 of this regulation.

"Asphalt coating equipment" means the saturators, coating mixers, and coaters used to apply asphalt to substrate in the manufacture of roofing products (e.g., shingles, roll roofing).

"Asphalt flux" means the organic residual material from distillation of crude oil that is generally used in asphalt roofing products manufacturing and paving and non-paving asphalt products.

"Asphalt preparation" means the oxidation of asphalt flux, achieved by bubbling air through the heated asphalt, to raise the softening point and to reduce penetration of the oxidized asphalt.

"Asphalt processing operation" means any operation engaged in the preparation of asphalt flux at stand-alone asphalt processing facilities, petroleum refineries, and asphalt roofing facilities. An asphalt processing operation includes one or more asphalt flux blowing stills.

"Asphalt roofing products manufacturing operation" means the collection of equipment used to manufacture asphalt roofing products through a series of sequential process steps. The equipment configuration of an asphalt roofing products manufacturing operation varies depending upon the type of substrate used (i.e., organic or inorganic). For example, an asphalt roofing products manufacturing operation that uses an organic substrate (e.g., felt) typically would consist of a saturator (and wet looper), a coating mixer, and a coater, although the saturator could be bypassed if the operation manufactures multiple types of products. An asphalt roofing products manufacturing operation that uses an inorganic substrate (e.g., fiberglass mat) typically would consist of a coating mixer and a coater.

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

"Built-up roofing operation" means any operation involved in the on-site (e.g., at a commercial building) assembly of roofing system components (e.g., asphalt, substrate, surface granules).

"Coater" means the equipment used to apply amended (filled or modified) asphalt to the top and bottom of the substrate (typically fiberglass mat) used to manufacture shingles and roll roofing products.

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

"Hot-mix asphalt operation" means any operation involved in mixing asphalt cement and aggregates to produce materials for paving roadways and hardstand (e.g., vehicle parking lots, prepared surfaces for material storage).

"Particulate matter (PM)" means, for the purposes of 16.0 of this regulation, any material determined gravimetrically using Method 5A in Appendix A-3 of 40 CFR Part 60.

"Polycyclic aromatic hydrocarbon (PAH)" means, for the purposes of 16.0 of this regulation, any material determined analytically using Method 23 in Appendix A-7 of 40 CFR Part 60 with analysis by SW–846 Method 8270D.

"Research and laboratory facility" means any stationary source whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

"Saturator" means the equipment used to impregnate a substrate (predominantly organic felt) with asphalt. Saturators are predominantly used for the manufacture of roll roofing products (e.g., saturated felt). For the purposes of 16.0 of this regulation, the term saturator includes impregnation vat and wet looper.

"Wet looper" means the series of rollers typically following the saturator used to provide additional absorption time for asphalt to penetrate the roofing substrate.

16.3 Compliance dates.

16.3.1 The owner or operator of an existing affected source shall be in compliance with the applicable provisions of 16.0 of this regulation no later than December **[2211]**, 2010.

16.3.2 The owner or operator of a new or reconstructed affected source that has an initial startup on or before December 2, 2009 shall be in compliance with the applicable provisions of 16.0 of this regulation no later than **[~~November~~ December]** 11, 2010.

16.3.3 The owner or operator of a new or reconstructed affected source that has an initial startup after December 2, 2009 shall be in compliance with the applicable provisions of 16.0 of this regulation immediately upon startup or **[~~November~~ December]** 11, 2010, whichever is later.

16.4 Standards.

16.4.1 On and after the applicable compliance date as defined in 16.3 of this regulation, the owner or operator of an existing, reconstructed, or new affected source subject to the provisions of 16.0 of this regulation shall at all time be in compliance with the applicable emission limitations in 16.4.2 of this regulation and the operating and maintenance requirements of 16.4.3 of this regulation.

16.4.2 Emission limitations for affected sources.

16.4.2.1 The owner or operator of a blowing still located at an asphalt processing operation shall not exceed the emission limitation in 16.4.2.1.1 or 16.4.2.1.2 of this regulation.

16.4.2.1.1 Limit PAH emissions to 0.003 pounds per ton of asphalt charged to the blowing still.

16.4.2.1.2 Limit PM emissions to 1.2 pounds per ton of asphalt charged to the blowing still.

16.4.2.2 The owner or operator of a coater-only operation located at an asphalt roofing products manufacturing operation shall not exceed the emission limitation in 16.4.2.2.1 or 16.4.2.2.2 of this regulation.

16.4.2.2.1 Limit PAH emissions to 0.0002 pounds per ton of asphalt roofing product manufactured.

16.4.2.2.2 Limit PM emissions to 0.06 pounds per ton of asphalt roofing product manufactured.

16.4.2.3 The owner or operator of a saturator-only operation located at an asphalt roofing products manufacturing operation shall not exceed the emission limitation in 16.4.2.3.1 or 16.4.2.3.2 of this regulation.

16.4.2.3.1 Limit PAH emissions to 0.0007 pounds per ton of asphalt roofing product manufactured.

16.4.2.3.2 Limit PM emissions to 0.30 pounds per ton of asphalt roofing product manufactured.

16.4.2.4 The owner or operator of a combined saturator and coater operation located at an asphalt roofing products manufacturing operation shall not exceed the emission limitation in 16.4.2.4.1 or 16.4.2.4.2 of this regulation.

16.4.2.4.1 Limit PAH emissions to 0.0009 pounds per ton of asphalt roofing product manufactured.

16.4.2.4.2 Limit PM emissions to 0.36 pounds per ton of asphalt roofing product manufactured.

16.4.3 The owner or operator of an affected source shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the affected source during periods of startup, shutdown, and malfunction and a program of corrective actions for malfunctioning processes, control devices, and monitoring equipment used to comply with 16.0 of this regulation. At a minimum, this plan shall include the following:

16.4.3.1 The specifications for each control device including the value or range of values for the control system parameters that define compliant operation.

16.4.3.2 The specifications for each of the continuous parameter monitoring systems.

16.4.3.3 The scheduled dates for performing the inspections on each control device and continuous parameter monitoring system.

16.4.3.4 The routine maintenance schedule and procedures for each control device and continuous parameter monitoring system developed in accordance with the manufacturer's recommendations.

16.4.3.5 The operational plan that describes, in detail, a program of corrective actions to be taken when monitoring results are outside the compliant range of values for the process or control system parameters.

16.4.3.6 The required recordkeeping requirements associated with the startup, shutdown, and malfunction plan.

16.4.3.7 The schedule for review and update of the startup, shutdown, and malfunction plan.

16.4.4 To satisfy the requirements of 16.4.3 of this regulation, the owner or operator may use the affected source's standard operating procedures manual, site-specific monitoring plan, or other plans, provided these alternatives meet all the requirements of 16.4.3 and are made available for inspection when requested by the Department.

16.5 Initial compliance demonstration.

16.5.1 Except as provided in 16.5.4 of this regulation, the owner or operator of an asphalt processing operation shall conduct a performance test to demonstrate initial compliance with the emission limitations in 16.4.2.1 of this regulation. The performance test shall be conducted in accordance with 3.7 and 16.5.8 of this regulation using the applicable test methods and procedures provided in 3.7 and 16.8 of this regulation.

16.5.2 Except as provided in 16.5.4 of this regulation, the owner or operator of an asphalt roofing products manufacturing operation that uses a control device to comply with 16.4 of this regulation shall conduct a performance test to demonstrate initial compliance with the emission limitations in 16.4.2.2, 16.4.2.3, or 16.4.2.4 of this regulation. The performance test shall be conducted in accordance with 3.7 and 16.5.8 of this regulation using the applicable test methods and procedures provided in 3.7 and 16.8 of this regulation.

16.5.3 Except as provided in 16.5.4 of this regulation, the owner or operator of an asphalt roofing products manufacturing operation that does not require a control device to comply with 16.4 of this regulation shall demonstrate initial compliance with the emission limitations in 16.4.2.2, 16.4.2.3, or 16.4.2.4 of this regulation in accordance with 16.5.3.1 or 16.5.3.2 of this regulation.

16.5.3.1 The owner or operator shall conduct a performance test to demonstrate initial compliance with the emission limitations in 16.4.2.2, 16.4.2.3, or 16.4.2.4 of this regulation. The performance test shall be conducted in accordance with 3.7 and 16.5.8 of this regulation using the applicable test methods and procedures provided in 3.7 and 16.8 of this regulation.

16.5.3.2 The owner or operator shall use process knowledge and engineering calculations in accordance with 16.5.5 of this regulation to demonstrate initial compliance with the emission limitations in 16.4.2.2, 16.4.2.3, or 16.4.2.4 of this regulation.

16.5.4 The owner or operator of an affected source is not required to conduct the initial performance test required in accordance to 16.5.1, 16.5.2, or 16.5.3 of this regulation, if a previously-conducted performance test meets the conditions of 16.5.4.1 through 16.5.4.4 of this regulation.

16.5.4.1 The previous performance test was conducted within the last 5 years;

16.5.4.2 No changes have been made to the process since the date of the previous performance test;

16.5.4.3 The operating conditions, test methods, and test procedures used for the previous performance test conform to the requirements of 3.7, 16.5.8, and 16.8 of this regulation; and

16.5.4.4 The data used to establish the value or range of values of the process or control system parameters, as specified in 16.6.1, 16.6.2, 16.6.4, 16.6.6, or 16.6.7 of this regulation, were recorded during the previous performance test.

16.5.5 If the owner or operator of an asphalt roofing products manufacturing operation is using process knowledge and engineering calculations to demonstrate initial compliance in accordance with 16.5.3.2 of this regulation, the owner or operator shall prepare written documentation that contains the data and any assumptions used to calculate the process emission rate that demonstrates compliance with the applicable emission limitations in 16.4.2.2, 16.4.2.3, or 16.4.2.4 of this regulation.

16.5.6 The owner or operator of an existing affected source shall demonstrate initial compliance no later than 180 calendar days after December 2, 2010.

16.5.7 The owner or operator of a new or reconstructed affected source shall demonstrate initial compliance no later than **[~~November~~ December]** 11, 2010 or within 180 calendar days after startup of the affected source, whichever is later.

16.5.8 When conducting the performance tests to demonstrate initial compliance with the applicable emission limitations in 16.4.2.1 through 16.4.2.4 of this regulation, the owner of operator of an affected source shall be in compliance with the requirements specified in 16.5.8.1 through 16.5.8.4 of this regulation.

16.5.8.1 The owner or operator of an affected source shall conduct the performance tests while manufacturing the product that generates the greatest PAH and PM emissions to the control device inlet or exiting the process, if the owner of operator is not using a control device to comply with the applicable emission limitations in 16.4.2.1 through 16.4.2.4 of this regulation.

16.5.8.2 The owner or operator of an affected source shall conduct a minimum of three separate test runs for each performance test specified in 16.5.1, 16.5.2, 16.5.3.1, and 16.5.4 of this regulation according to the requirements specified in 3.7.5.3 of this regulation. The sampling time and sample volume of each test run shall be as follows:

16.5.8.2.1 For asphalt processing operations, the sampling time and sample volume for each test run shall be at least 90 minutes or the duration of the asphalt preparation, whichever greater, and 2.25 dscm (79.4 dscf), respectively.

16.5.8.2.2 For asphalt coating operations, the sampling time and sample volume for each test run shall be at least 120 minutes and 3.00 dscm (106 dscf), respectively.

16.5.8.3 For asphalt processing operations, the owner or operator of an affected source shall use equations 16-1 and 16-2 of this regulation to calculate the asphalt charging rate (P_P).

$$P_P = (V * d)/(K' * t) \qquad (16\text{-}1)$$

Where:

P_P = asphalt charging rate to blowing still, ton/hr (Mg/hr).

V = volume of the asphalt charged, ft^3 (m^3).

d = density of the asphalt, lb/ft^3 (kg/m^3).

K' = conversion factor, 2000 lb/ton (1000 kg/Mg).

t = duration of test run, hr.

$$d = K_1\ K_2 * T_i \qquad (6\text{-}2)$$

Where:

d=density of the asphalt, lb/ft^3 (kg/m^3).

K_1=66.6147 lb/ft^3.

=1056.1 kg/m^3.

K_2=0.02149 $lb/(ft^3\ F)$.

=0.6176 $kg/(m^3\ C)$.

T_i=temperature at the start of the blow, F (C).

16.5.8.4 For asphalt roofing products manufacturing operations, the owner or operator of an affected source shall use equation 16-3 of this regulation to demonstrate compliance with the emission limitations in 16.4.2.2, 16.4.2.3, or 16.4.2.4 of this regulation:

$$E = (C * Q)/(P_C * K) \qquad (16\text{-}3)$$

Where:

E=emission rate of particulate matter, lb/ton (kg/Mg).

C=concentration of particulate matter, gr/dscf (g/dscm).

Q=volumetric flow rate of effluent gas, dscm/hr (dscf/hr).

P_C=average asphalt roofing products production rate, ton/hr (Mg/hr).

K=conversion factor, 7000 gr/lb (1000 g/kg).

16.6 Continuous compliance demonstration.

16.6.1 The owner or operator of an affected source that uses a thermal oxidizer to comply with an applicable emission limitation in 16.4.2 of this regulation shall establish the combustion zone temperature or the range of combustion zone temperatures that demonstrate continuous compliance by using the combustion zone temperature data recorded during the performance tests conducted in accordance with the requirements of 16.5.1, 16.5.2 or 16.5.4 of this regulation.

16.6.2 Except as provided in 16.6.3 or 16.6.6 of this regulation, the owner or operator of an affected source that uses a high-efficiency air filter or fiber bed filter to comply with an applicable emission limitation in 16.4.2 of this regulation shall establish the inlet gas temperature and the pressure drop across the filter or the ranges of inlet gas temperatures and pressure drops across the filter that demonstrate continuous compliance by using the inlet gas temperature data and the pressure drop data recorded during the performance test conducted in accordance with the requirements of 16.5.1, 16.5.2 or 16.5.4 of this regulation.

16.6.3 As an alternative to monitoring inlet gas temperature and the pressure drop across the filter to demonstrate continuous compliance, the owner or operator of an affected source that uses a high-efficiency air filter or fiber bed filter to comply with an applicable emission limitations in 16.4.2 of this regulation shall install, operate, and maintain a leak detection system that identifies when the filter media has been compromised.

16.6.4 Except as provided in 16.6.5 or 16.6.6 of this regulation, the owner or operator of an affected source that uses an electrostatic precipitator to comply with an applicable emission limitation in 16.4.2 of this regulation shall establish the voltage to the electrostatic precipitator or the range of voltages to the electrostatic precipitator that demonstrate continuous compliance by using the electrostatic precipitator voltage data recorded during the performance tests conducted in accordance with the requirements of 16.5.1, 16.5.2 or 16.5.4 of this regulation.

16.6.5 As an alternative to monitoring the voltage to the electrostatic precipitator to demonstrate continuous compliance, the owner or operator of an affected source that uses an electrostatic precipitator to comply with an applicable emission limitation in 16.4.2 of this regulation shall install electrostatic precipitator instrumentation, monitor the instrumentation for an indication (*e.g.* light, alarm) that the electrostatic precipitator must be cleaned or serviced, and maintain a record of the instrumentation on an hourly basis. Failure to clean or service the electrostatic precipitator within one hour of the indication is an exceedance of the applicable compliance requirement specified 16.6.9.3.2 of this regulation.

16.6.6 As an alternative to using performance test data to establish the operating value or range of operating values, the owner or operator of an asphalt roofing products manufacturing operation that uses a high-efficiency air filter, fiber bed filter, or electrostatic precipitator to comply with an applicable emission limitation in 16.4.2 of this regulation may use the control device manufacturer's performance specifications to establish the operating value or range of operating values that demonstrate continuous compliance.

16.6.7 The owner or operator of an affected source that does not require a control device to comply with an applicable emission limitation in 16.4.2 of this regulation shall establish the operating value or range of operating values of the process parameters that demonstrate continuous compliance in accordance with 16.6.7.1 and 16.6.7.2 of this regulation.

16.6.7.1 The process parameters and their corresponding operating values must correlate to the process emissions for an affected source that does not require a control device.

16.6.7.2 The owner or operator shall establish the operating value or the range of operating values that demonstrate continuous compliance by using the process parameter data recorded during the performance test conducted in accordance with the requirements of 16.5.3.1 or 16.5.4 of this regulation.

16.6.8 If the owner or operator of an affected source demonstrated initial compliance with an applicable emission limitation in 16.4.2 of this regulation under 16.5.3.2 of this regulation, the owner or operator of the affected source shall prepare written documentation that contains the data and all assumptions used to demonstrate that the process parameters and the corresponding operating value or range of operating values correlated with the process emissions.

16.6.9 The owner or operator of an affected source shall demonstrate continuous compliance with the applicable emission limitations in 16.4.2 of this regulation by being in compliance with the applicable requirements in 16.6.9.1 through 16.6.9.5 of this regulation.

16.6.9.1 If a thermal oxidizer is used to comply with an applicable emission limitation in 16.4.2 of this regulation, the owner or operator shall maintain the 3-hour average combustion zone temperature at or above the combustion zone temperature value established in 16.6.1 of this regulation.

16.6.9.2 If a high-efficiency air filter or fiber bed filter is used to comply with an applicable emission limitation in 16.4.2 of this regulation, the owner or operator shall be in compliance with 16.6.9.2.1 or 16.6.9.2.2 of this regulation.

16.6.9.2.1 The owner or operator shall maintain the 3-hour average inlet gas temperature and the 3-hour average pressure drop across the filter within the temperature range and pressure drop range established in 16.6.2 or 16.6.6 of this regulation.

16.6.9.2.2 The owner or operator shall operate and maintain a leak detection system that identifies when the filter media has been compromised.

16.6.9.3 If an electrostatic precipitator is used to comply with an applicable emission limitation in 16.4.2 of this regulation, the owner or operator shall be in compliance with 16.6.9.3.1 or 16.6.9.3.2 of this regulation.

16.6.9.3.1 The owner or operator shall maintain the 3-hour average electrostatic precipitator voltage at or above the electrostatic precipitator voltage value established in 16.6.4 or 16.6.6 of this regulation.

16.6.9.3.2 The owner or operator shall monitor the electrostatic precipitator instrumentation for an indication (*e.g.* light, alarm) that the electrostatic precipitator must be cleaned or serviced and shall clean or service the electrostatic precipitator within one hour of the indication.

16.6.9.4 If a control device is not required to comply with an applicable emission limitation in 16.4.2 of this regulation, the owner or operator shall maintain process parameters within the range of operating values established in 16.6.7 of this regulation.

16.6.9.5 If the owner or operator demonstrated initial compliance with an applicable emission limitation in 16.4.2 of this regulation under 16.5.3.2 of this regulation, the owner or operator shall maintain process parameters within the range of operating values established in 16.6.8 of this regulation.

16.7 Monitoring requirements.

16.7.1 If the owner or operator of an affected source is using a control device to comply with the emission limitations in 16.4.2 of this regulation, the owner or operator shall develop and make available for inspection by the Department, upon request, a site-specific monitoring plan for each monitoring system that addresses, at minimum, the requirements in 16.7.1.1 through 16.7.1.6 of this regulation.

16.7.1.1 Installation of the continuous parameter monitoring system (CPMS) 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).

16.7.1.2 Performance and equipment specifications for the probe or interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system.

16.7.1.3 Performance evaluation procedures and acceptance criteria (*e.g.,* calibrations).

16.7.1.4 Ongoing operation and maintenance procedures in accordance with the general requirements of 3.8.3.1, 3.8.3.3, 3.8.3.4.2, 3.8.3.7, and 3.8.3.8 of this regulation.

16.7.1.5 Ongoing data quality assurance procedures in accordance with the general requirements of 3.8.4 of this regulation.

16.7.1.6 Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 3.10.3, 3.10.5.1, and 3.10.5.2.1 of this regulation.

16.7.2 If the owner or operator of an affected source is using a control device to comply with the emission limitations in 16.4.2 of this regulation, the owner or operator shall install, operate, and maintain a continuous parameter monitoring system (CPMS) as specified in 16.7.2.1 through 16.7.2.4 of this regulation.

16.7.2.1 The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period.

16.7.2.2 To determine the 3-hour average, the owner or operator shall:

16.7.2.2.1 Have a minimum of four successive cycles of operation to have a valid hour of data.

16.7.2.2.2 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 site-specific monitoring plan.

16.7.2.2.3 Determine the 3-hour average of all recorded readings for each operating day, except as stated in 16.7.6 of this regulation. The owner or operator shall 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).

16.7.2.3 The 3-hour averaging period applies at all times other than startup and shutdown. Within 24 hours of a startup event, or 24 hours prior to a shutdown event, the owner or operator must normalize the emissions that occur during the startup or shutdown, when there is no production rate available to assess compliance with the lb/ton of product emission limitations, with emissions that occur when the process is operational. The emissions that occur during the startup or shutdown event must be included with the process emissions when assessing compliance with the emission limitations specified in 16.4.2 of this regulation.

16.7.2.4 The owner or operator shall record the results of each inspection, calibration, and validation check of the CPMS.

16.7.3 For each temperature monitoring device, the owner or operator shall comply with the CPMS requirements in 16.7.2.1 through 16.7.2.4 and 16.7.3.1 through 16.7.3.6 of this regulation.

16.7.3.1 Locate the temperature sensor in a position that provides a representative temperature.

16.7.3.2 For a noncryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.8 C (5.0 F) or 1.0% of the temperature value, whichever is larger.

16.7.3.3 If a chart recorder is used, the recorder sensitivity in the minor division must be at least 11.1 C (20 F).

16.7.3.4 Perform an accuracy check in accordance with 16.7.3.4.1, 16.7.3.4.2, 16.7.3.4.3, or 16.7.3.4.4 of this regulation at least semiannually or following an operating temperature deviation.

16.7.3.4.1 According to the procedures in the manufacturer's documentation.

16.7.3.4.2 By comparing the sensor output to redundant sensor output.

16.7.3.4.3 By comparing the sensor output to the output from a calibrated temperature measurement device.

16.7.3.4.4 By comparing the sensor output to the output from a temperature simulator.

16.7.3.5 Conduct accuracy checks or install a new temperature sensor any time the sensor exceeds the manufacturer's specified maximum operating temperature range.

16.7.3.6 Perform visual inspections of all components, if redundant sensors are not used, at least quarterly or following an operating temperature deviation.

16.7.4 For each pressure monitoring device, the owner or operator shall comply with the CPMS requirements of 16.7.2.1 through 16.7.2.4 and 16.7.4.1 through 16.7.4.7 of this regulation.

16.7.4.1 Locate the pressure sensor or sensors in, or as close as possible, to a position that provides a representative measurement of the pressure.

16.7.4.2 Use a gauge with a minimum measurement sensitivity of 0.12 kiloPascals or a transducer with a minimum measurement sensitivity of 5% of the pressure range.

16.7.4.3 Check pressure tap for blockage daily.

16.7.4.4 Perform an accuracy check in accordance with 16.7.4.4.1 or 16.7.4.4.2 of this regulation at least quarterly or following an operating pressure deviation.

16.7.4.4.1 According to the procedures in the manufacturer's documentation.

16.7.4.4.2 By comparing the sensor output to redundant sensor output.

16.7.4.5 Conduct accuracy checks or install a new pressure sensor any time the sensor exceeds the manufacturer's specified maximum operating pressure range.

16.7.4.6 Perform a leak check of all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage at least monthly or following an operating pressure deviation.

16.7.4.7 Perform visual inspections of all components, if redundant sensors are not used, at least quarterly or following an operating pressure deviation.

16.7.5 If the owner or operator of an affected source is using an electrostatic precipitator (ESP) to comply with the emission limitations in 16.4.2 of this regulation, the owner or operator shall install and operate a CPMS that meets the requirements of 16.7.2.1 through 16.7.2.4 of this regulation to provide representative measurements of the voltage supplied to the ESP.

16.7.6 If the owner or operator of an affected source is not using a control device to comply with the emission limitations in 16.4.2 of this regulation, the owner or operator shall develop and make available for inspection by the Department, upon request, a site-specific monitoring plan for each monitoring system. The plan must specify the process parameters established during the initial compliance demonstration in accordance with 16.5.3 or 16.5.4 and 16.6.7 of this regulation and how they are being monitored and maintained to demonstrate continuous compliance.

16.7.7 If the owner or operator of an affected source would like to use parameters or means other than those specified in 16.6 or 16.7 of this regulation to demonstrate continuous compliance with the emission limitations specified in 16.4.2 of this regulation, the owner or operator shall apply to the Administrator or the Department for approval of an alternative monitoring plan in accordance with 3.8.6 of this regulation. The alternative monitoring plan shall specify how process parameters established during the initial compliance demonstration will be monitored and maintained to demonstrate continuous compliance.

16.7.8 At all times the owner or operator of an affected source shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by 16.0 of this regulation have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

16.7.9 The owner or operator of an affected source shall conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan.

16.7.10 The owner or operator of an affected source shall operate and maintain the CPMS in continuous operation in accordance with the site-specific monitoring plan.

16.8 Test methods and procedures.

16.8.1 In conducting the performance tests required in 16.5 of this regulation, the owner or operator shall use the test methods in 16.8.2 of this regulation or other methods and procedures as specified in 3.7 of this regulation.

16.8.2 The owner or operator of an affected source shall determine compliance with the applicable emission limitations in 16.4.2 of this regulation, as follows:

16.8.2.1 Method 1 or 1A in Appendix A of 40 CFR Part 60 shall be used to select the sampling locations and the number of traverse points. The sampling locations must be located at the outlet of the process equipment (or control device, if applicable), prior to any releases to the atmosphere.

16.8.2.2 Method 2, 2A, 2C, 2D, 2F, or 2G, as appropriate, in Appendix A of 40 CFR Part 60 shall be used to determine the velocity and volumetric flow rate.

16.8.2.3 Method 3, 3A, or 3B, as appropriate, in Appendix A of 40 CFR Part 60 shall be used to determine the gas molecular weight used for flow rate determination.

16.8.2.4 Method 4 in Appendix A of 40 CFR Part 60 shall be used to measure the moisture content of the stack gas.

16.8.2.5 Method 5A in Appendix A of 40 CFR Part 60 shall be used to measure the PM emissions.

16.8.2.6 Method 23 in Appendix A of 40 CFR Part 60 shall be used to measure the PAH emissions, except that the toluene extraction step specified in Section 3.1.2.1 of Method 23 shall be omitted. The analysis shall be conducted in accordance with EPA SW-846 Method 8270D.

16.9 Notification requirements. The owner or operator of an affected source shall submit the notifications specified in 16.9.1 through 16.9.11 of this regulation.

16.9.1 The owner or operator of an affected source shall submit to the Department a notification of intent to construct or reconstruct in accordance with 3.5.2.4 of this regulation.

16.9.2 The owner or operator of an affected source shall submit to the Department a notification of the owner or operator's intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin in accordance with 3.7.2.1 and 3.9.5 of this regulation.

16.9.3 In the event the owner or operator is unable to conduct the performance test on the date specified in 16.9.2 of this regulation, the owner or operator shall submit to the Department a notification as soon as practicable and specify the date when the performance test is rescheduled to begin in accordance with 3.7.2.2 of this regulation.

16.9.4 The owner or operator of an affected source shall submit to the Department a notification of the date of the performance evaluation simultaneously with the notification of performance test date or, if no performance test is required, at least 60 calendar days before the performance evaluation is scheduled to begin in accordance with 3.8.5.2 and 3.9.7.1 of this regulation.

16.9.5 If the owner or operator of an affected source has permission to use an alternative for relative accuracy testing, the owner or operator shall submit to the Department a notification within 10 calendar days of the exhaust emissions having exceeded 70% of the applicable emission limitation in accordance with 3.8.6.6.3 and 3.9.7.3 of this regulation.

16.9.6 The owner or operator of an existing affected source shall submit an initial notification not later than **[~~November~~ December]** 11, 2010 in accordance with 3.9.2.2 of this regulation.

16.9.7 The owner or operator of a new or reconstructed affected source shall submit an initial notification not later than **[~~November~~ December]** 11, 2010 or 120 calendar days after startup, whichever is later, in accordance with 3.9.2.4 and 3.9.2.5 of this regulation.

16.9.8 The owner or operator of a new or reconstructed affected source shall submit a notification of actual startup not later than **[~~November~~ December]** 11, 2010 or 15 calendar days after startup, whichever is later, in accordance with 3.9.2.4 and 3.9.2.5 of this regulation.

16.9.9 The owner or operator of a new affected source that is subject to special compliance requirements shall notify the Department of the compliance obligations in accordance with 3.9.4 of this regulation.

16.9.10 The owner or operator of an affected source shall submit a notification of compliance status in accordance with 3.9.8.2 of this regulation. The owner or operator shall 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 in accordance with 3.10.4.2 of this regulation.

16.9.11 If the owner or operator of an affected source is using data from a previously-conducted performance test to serve as documentation of initial compliance with the emission limitations and operating requirements of 16.0 of this regulation, the owner or operator shall submit the previously-conducted performance test data in lieu of the initial performance test results with the notification of compliance status required under 16.9.10 of this regulation.

16.10 Reporting requirements. The owner or operator of an affected source shall submit compliance reports as specified in 16.10.1 through 16.10.4 of this regulation.

16.10.1 If the owner or operator of an affected source is using a control device to comply with an applicable emission limitation of 16.4.2 of this regulation, the compliance report must identify the controlled units (*e.g.*, blowing stills, saturators, coating mixers, coaters). If the owner or operator is not using a control device to comply with an applicable emission limitation of 16.4.2, the compliance report must identify the site-specific process parameters monitored to determine compliance with the applicable emission limitation.

16.10.2 During reporting periods for which there are no deviations from any emission limitation or any operating or maintenance requirement that apply to the affected source, the compliance report shall contain the information specified in 16.10.2.1 through 16.10.2.6 of this regulation.

16.10.2.1 Company name and address.

16.10.2.2 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.

16.10.2.3 Date of the report.

16.10.2.4 Beginning and ending dates of the reporting period.

16.10.2.5 A statement that there were no deviations from any emission limitation or any operating or maintenance requirement during the reporting period.

16.10.2.6 If there were no periods during which the continuous parameter monitoring system (CPMS) was out-of-control as specified in 3.8.3.7 of this regulation, a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

16.10.3 During reporting periods for which there is a deviation from an emission limitation or an operating or maintenance requirement that applies to the affected source, the compliance report shall contain the information specified in 16.10.3.1 through 16.10.3.6 of this regulation.

16.10.3.1 Company name and address.

16.10.3.2 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.

16.10.3.3 Date of the report.

16.10.3.4 Beginning and ending dates of the reporting period.

16.10.3.5 If there were no periods during which the CPMS was out-of-control as specified in 3.8.3.7 of this regulation, a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

16.10.3.6 For each deviation from an emission limitation or an operating or maintenance requirement, the owner or operator of an affected source shall include the information specified in 16.10.3.6.1 through 16.10.3.6.12 of this regulation.

16.10.3.6.1 The date and time that each deviation started and stopped.

16.10.3.6.2 The date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks.

16.10.3.6.3 The start and end dates and hours that each CPMS was out-of-control, including the descriptions of corrective actions taken.

16.10.3.6.4 Whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

16.10.3.6.5 A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the affected source's total operating time during that reporting period.

16.10.3.6.6 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.

16.10.3.6.7 A summary of the total duration of CPMS downtime during the reporting period and the total duration of CPMS downtimes as a percent of the affected source's total operating time during that reporting period.

16.10.3.6.8 An identification of each air pollutant that was monitored at the affected source.

16.10.3.6.9 A brief description of the process units.

16.10.3.6.10 A brief description of the CPMS.

16.10.3.6.11 The date of the latest CPMS certification or audit.

16.10.3.6.12 A description of any changes in CPMS or controls since the last reporting period.

16.10.4 Unless the Department has approved a different schedule for submission of reports under 3.10.1 of this regulation, the owner or operator of an affected source shall submit each report specified in 16.10 of this regulation according to the following dates:

16.10.4.1 The first compliance report shall cover the period beginning on the compliance date that is specified in 16.3 of this regulation 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 in 16.3.

16.10.4.2 The first compliance report shall 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 in 16.3 of this regulation.

16.10.4.3 Each subsequent compliance report shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

16.10.4.4 Each subsequent compliance report shall 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.

16.11 Recordkeeping requirements. The owner or operator of an affected source shall maintain the records specified in 16.11.1 through 16.11.10 of this regulation.

16.11.1 A copy of each notification and report that the owner or operator submitted to comply with 16.0 of this regulation, including all documentation supporting any initial notification or notification of compliance status that was submitted in accordance with the requirements in 3.10.2.2.14 of this regulation.

16.11.2 Copies of the results of performance tests used to demonstrate initial compliance and the performance evaluations as required in 3.10.2.2.8 of this regulation.

16.11.3 Documentation that shows that all the following conditions are true if the owner or operator uses a previously-conducted performance test to demonstrate initial compliance as specified in 16.5.4 of this regulation:

16.11.3.1 The test was conducted within the last 5 years.

16.11.3.2 No changes have been made to the process since the time of the performance test.

16.11.3.3 The operating conditions and test methods used for the previous performance test conform to the requirements of 16.0 of this regulation.

16.11.3.4 The data used to establish the value or range of values of the control system or process parameters, as specified in 16.6.1, 16.6.2, 16.6.4, or 16.6.7 of this regulation, were recorded during the performance test.

16.11.4 Documentation that identifies the applicable control system or process parameters and values specified in 16.6 of this regulation and that contains the data used to establish the value or range of values as specified in 16.6.1, 16.6.2, 16.6.4, or 16.6.7 of this regulation.

16.11.5 Copies of the written manufacturer's performance specifications used to establish operating value or range of values of the process parameters as specified in 16.6.6 of this regulation.

16.11.6 Documentation of the process knowledge and engineering calculations used to demonstrate initial compliance as specified in 16.5.5 of this regulation.

16.11.7 Documentation of the process knowledge and engineering calculations used to establish the operating value or range of operating values of the process parameters as specified in 16.6.8 of this regulation.

16.11.8 A copy of the site-specific monitoring plan required under 16.7.1 or 16.7.6 of this regulation.

16.11.9 A copy of the approved alternative monitoring plan required under 16.7.7 of this regulation, if applicable.

16.11.10 Records of the all applicable operating values required in 16.6 and 16.7 of this regulation to show continuous compliance.

16.12 Applicability of general provisions. The owner or operator of an affected source shall be in compliance with the applicable provisions in 3.0 of this regulation that are also applicable to affected sources subject to 16.0 of this regulation, as specified in Table 16-1 of this regulation.

16.13 [Reserved].

Table 16-1 - Applicability of 3.0 to 16.0 of this Regulation

General Provision Reference	Applies to 16.0	Comment
3.1 - 3.1.1	Yes	
3.1.1.1	Yes	Additional terms defined in 16.2 of this regulation; when overlap between 3.2 and 16.2 of this regulation occurs, 16.2 takes precedence.
3.1.1.2 - 3.1.1.3	Yes	
3.1.1.4	Yes	16.0 of this regulation clarifies the applicability of each provision in 3.0 of this regulation to sources subject to 16.0.
3.1.1.5	No	Reserved.
3.1.1.6	Yes	
3.1.1.7 - 3.1.1.9	No	Reserved.
3.1.1.10 - 3.1.1.12	Yes	
3.1.1.13 - 3.1.1.14	No	Reserved.
3.1.2.1 - 3.1.2.3	Yes	Applicability of 16.0 of this regulation is also specified in 16.1 of this regulation.
3.1.3 – 3.1.3.1	Yes	16.0 of this regulation clarifies the applicability of each paragraph in 3.0 of this regulation to sources subject to 16.0.
3.1.3.2	Yes	16.1.8 of this regulation exempts area sources from the obligation to obtain Title V operating permits.
3.1.3.3 - 3.1.3.4	No	Reserved.
3.1.3.5	Yes	
3.1.4	No	Reserved.
3.1.5	Yes	16.1.8 of this regulation exempts area sources from the obligation to obtain Title V operating permits.
3.2	Yes	Additional terms defined in 16.2 of this regulation; when overlap between 3.0 and 16.0 of this regulation occurs, 16.0 takes precedence.

3.3	Yes	
3.4 - 3.4.1.2	Yes	
3.4.1.3 - 3.4.1.5	No	Reserved.
3.4.2 - 3.4.2.2	Yes	
3.4.2.3	No	Reserved.
3.4.3	Yes	
3.5 - 3.5.2.1	Yes	
3.5.2.2	No	Reserved.
3.5.2.3 - 3.5.2.4	Yes	
3.5.2.5	No	Reserved.
3.5.2.6	Yes	
3.5.3	No	Reserved.
3.5.4 - 3.5.4.1.2.8	Yes	
3.5.4.1.2.9	No	Reserved.
3.5.4.1.2.10 - 3.5.6.1.1	Yes	
3.5.6.1.2 - 3.5.6.1.4	No	Reserved.
3.5.6.2	Yes	
3.6 - 3.6.2.5	Yes	16.3 of this regulation specifies the compliance dates.
3.6.2.6	No	Reserved.
3.6.2.7	Yes	
3.6.3 - 3.6.3.2	Yes	16.3 of this regulation specifies the compliance dates.
3.6.3.3 - 3.6.3.4	No	Reserved.
3.6.3.5	Yes	
3.6.4	No	Reserved.
3.6.5.1.1 - 3.6.5.1.2	No	
3.6.5.1.3	Yes	
3.6.5.2	No	Reserved.
3.6.5.3	No	16.4.3 of this regulation specifies the startup, shutdown, and malfunction plans requirements.
3.6.6	Yes	
3.6.6.1	No	The emission limitations apply at all times.
3.6.6.2 - 3.6.7	Yes	
3.6.8	No	16.0 of this regulation does not contain opacity or visible emission standards.
3.6.9 - 3.6.9.6.1.2.1	Yes	
3.6.9.6.1.2.2	No	Reserved.
3.6.9.6.1.2.3- 3.6.9.6.1.2.4	Yes	
3.6.9.6.1.3 - 3.6.9.6.1.4	No	Reserved.
3.6.9.6.2 - 3.6.9.14	Yes	
3.6.9.15	No	Reserved.
3.6.9.16 - 3.6.10	Yes	
3.7 - 3.7.1.2	Yes	
3.7.1.2.1 - 3.7.1.2.7	No	Reserved.
3.7.1.2.8 - 3.7.5	Yes	

3.7.5.1	No	16.0 of this regulation specifies the conditions under which performance tests must be conducted.
3.7.5.2 - 3.7.8	Yes	
3.8.1.1	Yes	
3.8.1.2	No	16.0 of this regulation does not allow continuous emissions monitoring systems.
3.8.1.3	No	Reserved.
3.8.1.4 - 3.8.3.3	Yes	
3.8.3.4	Yes	
3.8.3.4.1	No	16.0 of this regulation does not contain opacity or visible emission standards.
3.8.3.4.2	Yes	
3.8.3.5	No	16.0 of this regulation does not contain opacity or visible emission standards.
3.8.3.6	No	16.7 of this regulation specifies the continuous monitoring system requirements.
3.8.3.7 – 3.8.7.4	Yes	
3.8.7.5	No	All monitoring data must be included when calculating averages.
3.9 - 3.9.1.4	Yes	
3.9.1.4.1	No	Reserved.
3.9.1.4.2- 3.9.2.2.5	Yes	
3.9.2.3	No	Reserved.
3.9.2.4 - 3.9.2.4.1	Yes	
3.9.2.4.2 - 3.9.2.4.4	No	Reserved.
3.9.2.4.5 - 3.9.8.3	Yes	
3.9.8.4	No	Reserved.
3.9.8.5 - 3.9.10	Yes	
3.10 - 3.10.1.4	Yes	
3.10.1.4.1	No	Reserved.
3.10.1.4.2 - 3.10.3.1	Yes	
3.10.3.2 - 3.10.3.4	No	Reserved.
3.10.3.5 - 3.10.3.8	Yes	
3.10.3.9	No	Reserved.
3.10.3.10 - 3.10.4.4	Yes	
3.10.4.5	No	
3.10.5 - 3.10.5.3.1.2	Yes	
3.10.5.3.1.3	No	Reserved.
3.10.5.3.2 - 3.10.6	Yes	
3.11	Yes	
3.12	Yes	
3.13	Yes	
3.14	Yes	
3.15	Yes	